

**UNDERGRADUATE CATALOG
1998-99**

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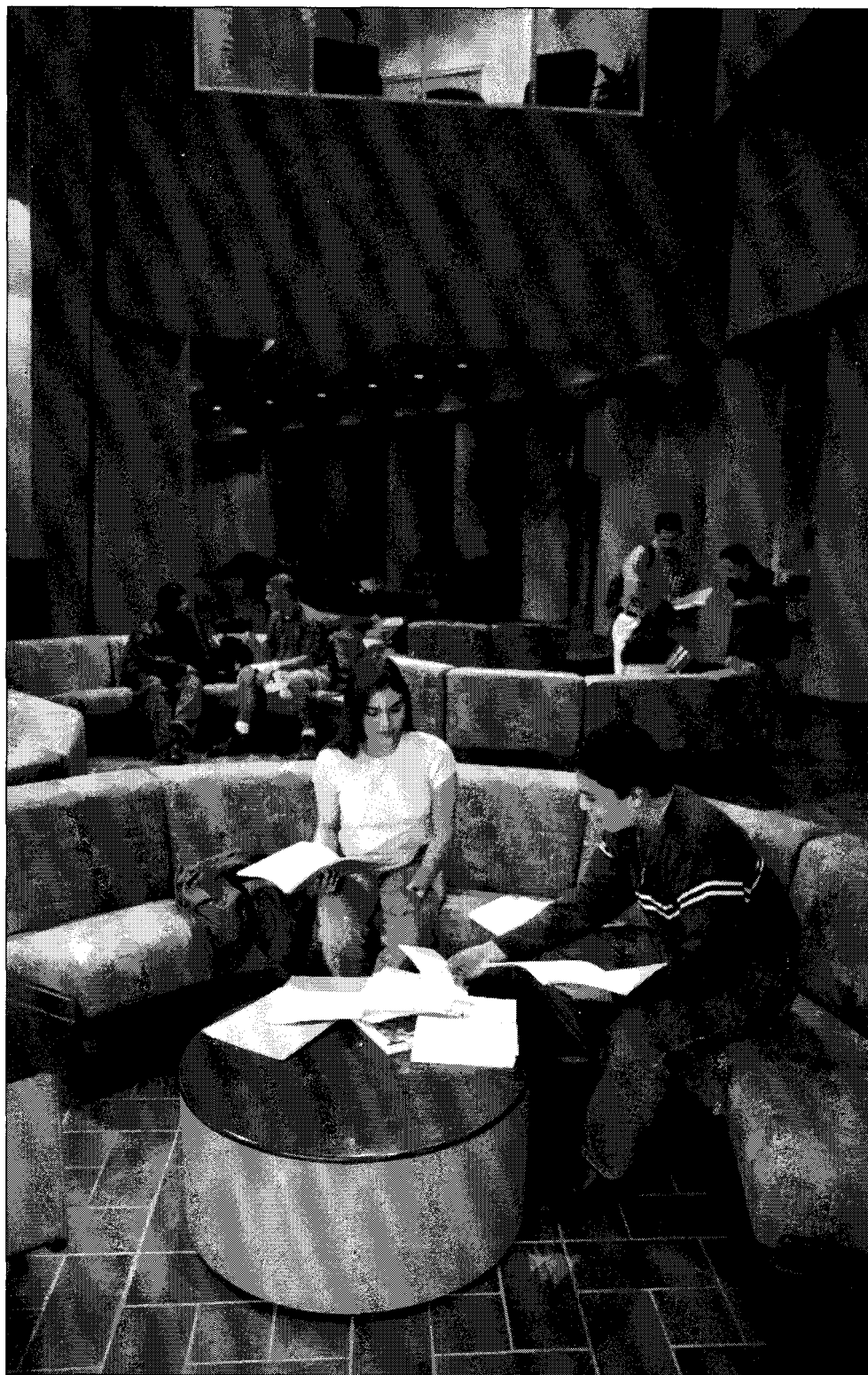
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1.
CALENDAR AND
INFORMATION



CALENDAR AND INFORMATION

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UNDERGRADUATE *FALL SEMESTER 1998

June 1	Monday. International student admission application deadline for Fall 1998.
June 15	Monday. Fall 1998 deadline to file Petition for Reinstatement for students who have been academically dismissed a second or subsequent time.
June 15–July 17	Priority Telephone Registration for Fall 1998.
July 1	Wednesday. Deadline to apply for admission and provide supporting documents for Fall 1998.
August 24	Monday. Classes begin.
September 7	Monday. Labor Day Holiday.
September 9	Wednesday. Census Date. Last day to drop or withdraw without a grade; choose credit/no-credit grading option; drop an individual course and receive a refund.
October 1	Thursday. Deadline for Fall 1998 degree candidates to apply for graduation.
October 23	Friday. Last day to drop an individual course or withdraw from all classes and receive an automatic grade of "W."
November 26–28	Thursday–Saturday. Thanksgiving Holidays.
November 30	Monday. Last day to withdraw from all classes.
December 5–11	Saturday–Friday. Final examinations.

*SPRING SEMESTER 1999

October 15	Thursday. International student admission application deadline for Spring 1999. Spring 1999 deadline to file Petition for Reinstatement for students who have been academically dismissed a second or subsequent time.
October 27– November 25	Priority Telephone Registration for Spring 1999.
December 1	Tuesday. Deadline to apply for admission and provide supporting documents for Spring 1999.
January 18	Monday. Martin Luther King, Jr. Holiday.
January 19	Tuesday. Classes begin.
February 1	Monday. Deadline for Spring 1999 degree candidates to apply for graduation.
February 3	Wednesday. Census Date. Last day to drop or withdraw without a grade; choose credit/no-credit grading option; drop an individual course and receive a refund.
March 15	Monday. Last day to drop an individual course or withdraw from all classes and receive an automatic grade of "W."
March 22–27	Monday–Saturday. Spring Break.
May 3	Monday. Last day to withdraw from all classes.
May 8–14	Saturday–Friday. Final Examinations.

*For the most current and detailed calendar of semester events, see the Schedule of Classes for each semester.

***SUMMER SESSION 1999**

- March 1** Monday. International student admission application deadline for Summer Sessions I and II 1999.
- March 15** Monday. Summer 1999 deadline to file Petition for Reinstatement for students who have been academically dismissed a second or subsequent time.
- April 13–30** Priority Telephone Registration for Summer Sessions I and II 1999.
- May 1** Saturday. Deadline to apply for admission and provide supporting documents for Summer Sessions I and II 1999.
- June 2** Wednesday. Classes begin for Summer Session I.
- June 7** Monday. Census Date. Last day in Summer Session I to drop or withdraw without a grade; choose credit/no-credit grading option; drop an individual course and receive a refund.
- June 15** Tuesday. Deadline for Summer 1999 degree candidates to apply for graduation.
- June 17** Tuesday. Last day for students enrolled in the first five-week term to drop an individual course or withdraw from all classes and receive an automatic grade of “W.”
- June 29** Tuesday. Last day to withdraw from all classes for the first five-week term.
- July 5–6** Monday–Tuesday. Final examinations for courses in the first five-week term.
- July 7** Wednesday. Classes begin for courses in Summer Session II.
- July 12** Monday. Census Date. Last day in Summer Session II to drop or withdraw without a grade; choose credit/no-credit grading option; drop an individual course and receive a refund.
- July 13** Tuesday. Last day for students enrolled in the 10-week term to drop an individual course or withdraw from all classes and receive an automatic grade of “W.”
- July 27** Tuesday. Last day for students enrolled in the second five-week term to drop an individual course or withdraw from all classes and receive an automatic grade of “W.”
- August 3** Tuesday. Last day to withdraw from all classes for the 10-week and second five-week terms.
- August 9–10** Monday–Tuesday. Final examinations for courses in the 10-week and second five-week terms.

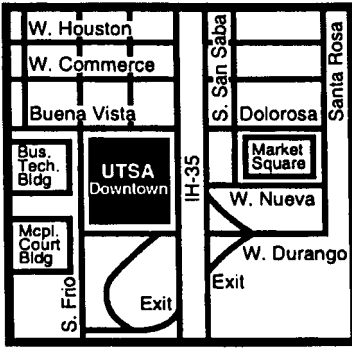
*For the most current and detailed calendar of semester events, see the Schedule of Classes for each semester.

INFORMATION DIRECTORY

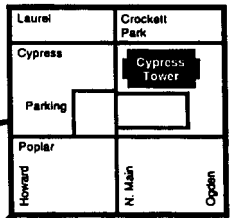
Requests for information should be directed to the offices below. The University's address is The University of Texas at San Antonio, 6900 North Loop 1604 West, San Antonio, TX 78249. The main telephone number is (210) 458-4011.

Academic Advisement

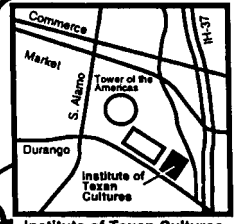
Declared majors	College Deans
Undeclared majors	Tomás Rivera Center for Student Success
New and transfer students	Tomás Rivera Center for Student Success
Academic Degree Programs and Courses	College Deans
Admission	
Undergraduate and Graduate	Director of Admissions
Career Planning	Director of Career Services
Changes in Enrollment	Registrar
Continuing Education	Director of Extended Education
Credit by Examination	Testing
Degree Application	Registrar
Financial Aid, Loans, or Scholarships	Office of Student Financial Aid
Financial Matters	Business Manager
General Information	Tomás Rivera Center for Student Success
Health Services	Student Health Services
International Students	Office of International Programs
Parking	University Police
Placement Service	
Teacher	Director, Office of Teacher Advising, Certification, and Placement
Nonteacher	Director of Career Services
Psychological Counseling	Director of Counseling Center
Recreational Activities	Director of Athletics
Refunds	Business Manager
Registration	Registrar
Residency	Registrar
Student Activities	Director of Student Activities
Student Employment	Office of Student Financial Aid, Director of Student Employment and Internships
Student Services, General	Vice President for Student Affairs
Students with Disabilities	Coordinator of Disability Services
Teacher Certification Program	Director, Office of Teacher Advising, Certification, and Placement
Transfer of Credit	Registrar
Transcripts	Registrar
Veterans' Affairs	Registrar
Withdrawal from the University	Registrar



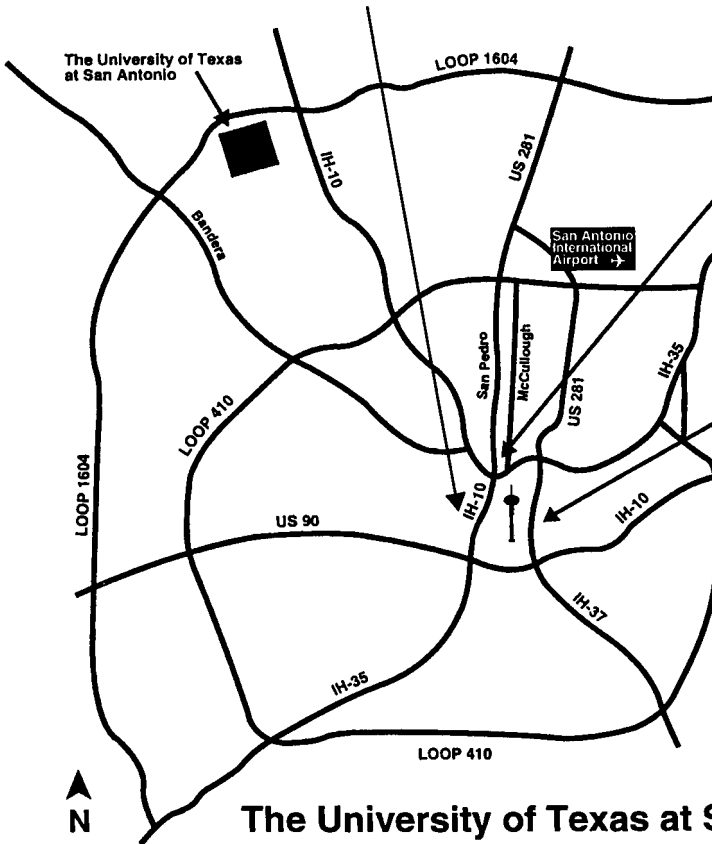
UTSA Downtown Campus



UTSA Downtown



Institute of Texan Cultures



**The University of Texas at San Antonio
Map of Campus Sites**

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Sylvia Rodriguez Associate Vice President for Enrollment Services

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Robert Burdick Associate Vice President for University Communications

Institute of Texan Cultures

Rex H. Ball Executive Director

COLLEGES AND DIVISIONS

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James E. Groff	Associate Dean
Martha A. Fasci	Associate Dean for the UTSA Downtown Campus
Lynda de la Viña	Associate Dean for Graduate Studies and Research
Russell F. Briner	Director, Division of Accounting and Information Systems
Lila J. Flory-Truett	Director, Division of Economics and Finance
Geralyn M. Franklin	Director, Division of Management and Marketing

College of Fine Arts and Humanities

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John A. Stoler	Associate Dean
Barbara A. Simerka	Associate Dean for the UTSA Downtown Campus
John D. Vander Weg	Associate Dean for Graduate Studies and Research
Richard Tangum	Acting Director, Division of Architecture and Interior Design
Jeanne C. Reesman	Director, Division of English, Classics, Philosophy, and Communication
John Stoler	Acting Director, Division of Foreign Languages
Clarence J. Stuessy	Director, Division of Music
James A. Broderick	Director, Division of Visual Arts

College of Sciences and Engineering

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Lex A. Akers	Director, Division of Engineering
Joe L. Martinez, Jr.	Director, Division of Life Sciences
Vacant	Director, Division of Mathematics and Statistics

College of Social and Behavioral Sciences

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Berry Sutherland	Associate Dean
Bertha Perez	Associate Dean for the UTSA Downtown Campus
Linda K. Pritchard	Associate Dean for Graduate Studies and Research
Harvey Graff	Director, Division of Behavioral and Cultural Sciences
Robert D. Milk	Director, Division of Bicultural-Bilingual Studies
Christopher A. Borman	Director, Division of Education
Derral Cheatwood	Director, Division of Social and Policy Sciences

2.
ABOUT UTSA



ABOUT UTSA

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HISTORY, MISSION, AND ORGANIZATION

History

UTSA celebrated its 25th anniversary in 1994. It was created by a mandate from the 61st Texas Legislature on June 5, 1969, to be a university of the first class offering bachelor's, master's, and doctoral degrees "as are customarily offered at leading American universities." The first class of 671 graduate students was admitted in June 1973; upper-division undergraduates were admitted in September 1975; and lower-division undergraduates were admitted in June 1976. The first commencement ceremony was in August 1974. The UTSA Alumni Association was formed in 1978.

UTSA received full accreditation by the Southern Association of Colleges and Schools in December 1976. UTSA's first endowed professorship was established in 1981 in the life sciences. The first endowed chair was established in 1985 in the College of Business. The UTSA Honors Program was initiated in September 1985.

UTSA now has 50 undergraduate degree programs, 31 master's degree programs, and 2 doctoral degree programs. With the support of the South Texas Border Initiative, UTSA will be introducing several new programs at each level during the next few years.

Ninety-nine percent of tenured and tenure-track faculty hold a doctorate or terminal degree in their fields. Forty-one UTSA faculty have won Fulbright Fellowships to teach and conduct research in foreign countries. UTSA is in the top 30 percent of public universities in the state in research expenditures.

UTSA is one of the fastest-growing universities in the state. The Fall 1997 enrollment was 17,494, and it is projected to reach over 20,000 by the year 2000. UTSA's growth in Hispanic students places it in the top nine of all Hispanic-serving public universities in the continental United States.

Space on both campuses now totals over 1.8 million square feet. Several new facilities, including a second building at the UTSA Downtown Campus, are being constructed.

Mission

UTSA, a comprehensive public metropolitan university, is committed to freedom of inquiry and the creation of an environment in which people can teach, discover, learn, and enrich themselves and their community. Through its instructional, research, and public service programs, UTSA seeks to fulfill its mission, serve the needs of the multicultural population of San Antonio and the South Texas region both at UTSA and the UTSA Downtown Campus, and emphasize programs that contribute to the technological, economic, and cultural development of the city, region, and state.

UTSA is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's, and doctoral degrees. It also seeks to offer other appropriate doctoral programs in selected fields. The University offers students the knowledge and skills required to succeed in their chosen fields. In

addition, UTSA provides the opportunity for all undergraduates to develop into truly educated individuals by mastering the newly redefined Core Curriculum.

UTSA provides access to its various degree programs to a broad constituency at multiple sites and maintains rigorous academic standards in requirements for successful completion of its programs. Through flexible scheduling, varied course offerings, and student support services, UTSA encourages attendance by both traditional and nontraditional students.

UTSA emphasizes a balance of excellent teaching, research and creative activities, and scholarship. To this end, UTSA recruits and retains faculty who exemplify this balance and encourages faculty to engage in public service activities appropriate to their academic fields. UTSA encourages and facilitates multidisciplinary instructional, research, and public service efforts through its administrative structure, degree programs, and personnel policies.

Through its broad research efforts, UTSA adds to the knowledge base through basic research and applies that knowledge to today's problems through applied research. UTSA seeks to facilitate the transfer of research findings into the work environment through continuing education and graduate-level programs for maintaining and upgrading specialized skills of professionals employed in San Antonio and the South Texas region.

UTSA seeks to enrich the cultural environment of the University and the community through its fine arts and humanities programming.

Organization

UTSA is a component institution of The University of Texas System. Governance of the University is vested in the nine-member Board of Regents of The University of Texas System, whose members are appointed biennially by the Governor, with the advice and consent of the Senate, for six-year, staggered terms.

The Board of Regents delegates administrative authority to the Chancellor of The University of Texas System. The administrative authority of each component institution, such as UTSA, is in turn delegated to the President of that component.

The President at UTSA is assisted by a staff including a Provost and Vice President for Academic Affairs, a Vice President for Business Affairs, a Vice President for Student Affairs, a Vice President for University Advancement, and an Executive Director of the Institute of Texan Cultures.

The Provost and Vice President for Academic Affairs provides the President with advice and counsel on academic matters, acts as a liaison between the Office of the President and faculty committees concerned with academic affairs, and has direct responsibility for the development, administration, and quality of all academic programs, the administration of the academic budget, development and implementation of academic policy, and all matters directly affecting faculty. The Associate Provost for the UTSA Downtown Campus has the responsibility for coordinating the development and delivery of the University's academic program at the UTSA Downtown Campus. The Vice President for Extended Education has

responsibility for development of UTSA's extended education programs and for the University's business assistance centers.

The Vice President for Business Affairs provides the President with advice and counsel on fiscal affairs and has direct responsibility for the business operation of the University, including operation of the Physical Plant, Information Technology, University Police, General Services, the Business Manager's Office, and Institutional Analysis. This officer is also responsible for budget preparation and analysis, contract and grant administration, and personnel administration.

The Vice President for Student Affairs is responsible for overseeing student affairs and enrollment management and for providing advice to top administrators on all aspects of student activities at UTSA.

The Vice President for University Advancement is responsible for all areas of advancement, including development, communications, and alumni affairs within the academic colleges and coordination with the University of Texas Institute of Texan Cultures.

The Executive Director of the Institute of Texan Cultures is responsible for the administration and management of all institute programs, activities, and exhibits; leadership in educational programming and content production; dissemination of historical and cultural information to the public and the schools; development and management of volunteer programs; and fund-raising.

UTSA Downtown Campus

The UTSA Downtown Campus has been in operation since January 1994 at its temporary Cypress Tower location and since 1997 at its permanent site on Durango Boulevard. Its mission is to offer bachelor's and master's degree programs in historically underserved areas; provide professional development and career advancement for adult learners; identify solutions for rapidly changing public sector needs; provide management and technical assistance for business entrepreneurs; foster expansion of the region's economic infrastructure; support technological and international growth; provide research and service to support teachers and transform schools; conduct public policy research; foster urban design creativity; and enhance cultural enrichment opportunities.

The Downtown Campus offers the Core Curriculum and programs or components of programs leading to bachelor's and master's degrees in a variety of fields. A broad range of undergraduate and graduate courses are provided in the humanities, social and behavioral sciences, education, and business.

Accreditation

The University of Texas at San Antonio is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's, and doctoral degrees.

ADMINISTRATIVE POLICIES AND SERVICES

Rules and Regulations of the Board of Regents

A student at UTSA neither loses the rights nor escapes the responsibilities of citizenship. Compliance is expected with both the penal and civil statutes of the state and federal governments, the *Rules and Regulations of the Board of Regents of The University of Texas System*, and the policies and procedures of the University.

All students of UTSA are subject to the rules and regulations governing student conduct and discipline as set out in Part One, Chapter VI of the *Rules and Regulations of the Board of Regents of The University of Texas System*, the *Handbook of Operating Procedures*, and the *Student Guide to UTSA*.

The *Rules and Regulations of the Board of Regents*, the *Handbook of Operating Procedures*, and the *Student Guide to UTSA* have full force and effect as they concern all UTSA students. The *Rules and Regulations of the Board of Regents* and the *Handbook of Operating Procedures* may be consulted in the offices of the President, the Vice Presidents, and the Deans, and in the UTSA Library. The *Student Guide to UTSA* is available from the Office of the Associate Vice President for Student Life.

Academic Advisement

All new and transfer freshman students (under 30 semester credit hours accepted by UTSA) must receive academic advisement in the Tomás Rivera Center for Student Success (UC 1.01.02, 458-5170) unless they have been accepted into the Honors Program or are scholarship athletes. Honors students will be advised by the director of the University Honors Program, and scholarship athletes will be advised by the academic counselor in the Department of Intercollegiate Athletics. Undeclared/undecided majors with 30–45 semester credit hours of coursework are offered advising in the Tomás Rivera Center for Student Success (TRC) but are not required to be advised.

New students entering UTSA with less than 30 semester credit hours may immediately declare a major or may elect to remain undeclared/undecided. After the first 30 semester credit hours, students will normally select majors and obtain advisement in the divisions or colleges that offer their major programs. Some programs encourage an early declaration of major, while others require one at a later point.

Effective Fall 1998, all students must have taken the *Texas Academic Skills Program (TASP)* or an institutionally approved alternative test before enrolling in college-level courses. All students with TASP deficiencies (a failure to pass the math, reading, or writing test sections) are required to complete their registration in TRC each semester they attend UTSA until they pass the TASP. Students with TASP deficiencies are required by state law to be enrolled in and to satisfactorily attend and participate in a university developmental education program. Students who initially fail one or more sections of the TASP must successfully complete the developmental program(s) prescribed and then retake the appropriate section(s) of the TASP. Students who fail the TASP may be allowed to take an approved college-level course.

Hazing

State law (§§ 37.151 through 37.157, Texas Education Code) defines hazing as “any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in an organization.”

The term includes

- any type of physical brutality, such as whipping, beating, striking, branding, electric shocking, placing of a harmful substance on the body, or similar activity
- any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics, or other activity that subjects a student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of a student
- any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or other substance that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student
- any activity that intimidates or threatens the student with ostracism; that subjects the student to extreme mental stress, shame, or humiliation; that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution; or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in this subdivision
- any activity that induces, causes, or requires the student to perform a duty or task that involves a violation of the Penal Code.

Under state law, individuals or organizations engaging in hazing could be subject to fines and charged with a criminal offense. According to the statute, a person commits a hazing offense

- by engaging in hazing
- by soliciting, directing, encouraging, aiding, or attempting to aid another in engaging in hazing
- by intentionally, knowingly, or recklessly allowing hazing to occur
- by failing to report in writing to the Associate Vice President for Student Life firsthand knowledge that a specific hazing incident is planned or has occurred.

The fact that a person consented to or acquiesced in a hazing activity is not a defense under the hazing law.

The penalty for failure to report hazing activities is a fine not to exceed \$2,000, up to 180 days in jail, or both. Penalties for other hazing offenses vary according to the severity of the injury that results; they range from individual fines of \$4,000 and/or up to one year in jail to individual fines of up to \$10,000 and/or a state jail term of not less than 180 days or more than two years. Organizational penalties include fines of not less than \$5,000 or more than \$10,000. If the organizational hazing activity resulted in personal injury, property damage, or other loss, the penalty is a fine of not

less than \$5,000 or more than double the amount lost or expenses incurred because of the injury, damage, or loss.

In an effort to encourage reporting of hazing incidents, the law grants immunity from civil or criminal liability to any person who reports a specific hazing event to the Associate Vice President for Student Life, and immunizes that person from participation in any judicial proceeding resulting from that report.

State law does not affect or in any way restrict the right of UTSA to enforce its own rules against hazing, and the University may take disciplinary action for conduct that constitutes hazing regardless of whether public authorities prosecute students under state law. Part One, Chapter VI, § 3.28 of the *Rules and Regulations of the Board of Regents* provides that hazing with or without the consent of the student whether on or off campus is prohibited, and a violation of that prohibition renders both the person inflicting the hazing and the person submitting to the hazing subject to discipline. Initiations or activities by organizations may include no feature that is dangerous, harmful, or degrading to the student, and a violation of this prohibition renders both the organization and participating individuals subject to discipline.

Disciplinary Actions

A student who has engaged in conduct that violates a rule, regulation, or administrative order of UTSA may have any one or more of the actions listed below imposed (Part One, Chapter VI, Section 3, *Rules and Regulations of the Board of Regents*). The disciplinary actions assessed in a particular case will be dependent upon the nature of the conduct involved, the circumstances and conditions that existed at the time the student engaged in such conduct, and the results that followed as a natural sequence of such conduct. For further explanation of each of the following actions, see the *Student Guide to UTSA*.

- disciplinary warning
- disciplinary probation
- withholding grades, official transcript, or degree
- bar against readmission or drop from current enrollment and bar against readmission
- restitution
- suspension of rights and privileges
- failing grade
- suspension
- expulsion
- educational programs
- revocation of degree, denial of degree, and/or withdrawal of diploma
- deferral of penalty
- other penalty as deemed appropriate under the circumstances

Solicitation and Distribution of Materials

No individual, group, association, or corporation may use the grounds, buildings, or facilities owned or controlled by any component institution or by the System, except as permitted by the provisions of the *Rules and Regulations of the Board of Regents* and approved institutional rules and regulations. The term "solicitation" means the sale, lease, rental, or offer for sale, lease, or rental of any property, product,

merchandise, publication, or service, whether for immediate or future delivery; an oral statement or the distribution or display of printed material, merchandise, or products that is designed to encourage the purchase, use, or rental of any property, product, merchandise, publication, or service; the oral or written appeal or request to support or join an organization other than a registered student, faculty, or staff organization; the receipt of or request for any gift or contribution; or the request to support or oppose or to vote for or against a candidate, issue, or proposition appearing on the ballot at any election held pursuant to state or federal law or local ordinances. Exceptions to the prohibition include, but are not limited to, collection of membership dues by faculty, staff, or student organizations and approved fund-raising performed by registered organizations.

Student Right-to-Know and Campus Security Act

In compliance with the Student Right-to-Know and Campus Security Act (20 U.S.C., § 1092(a), (e), and (f), as amended), UTSA collects specified information on campus crime statistics, campus security policies, and institutional completion or graduation rates.

Pursuant to the federal law, alleged victims of violent crime are entitled to know the results of campus student disciplinary proceedings concerning the alleged perpetrators. UTSA will make timely reports to the campus community on crimes considered to be a threat to students and employees and reported to campus police or local police agencies.

Every September, UTSA publishes and distributes a report of campus security policies and crime statistics to all current students and employees, provides copies of the report to applicants for enrollment or employment upon request, and submits a copy of the report to the Secretary of Education upon request. The annual campus crime statistics report references crimes that occur on property owned or controlled by UTSA and may be supplemented by listing crimes that occur off campus in buildings or property owned or controlled by student organizations that are registered by UTSA, when such statistics are available from local police departments. The annual security report contains UTSA's policy regarding sex-related offenses, including sexual assault prevention programs, education programs to promote awareness of sex offenders, administrative disciplinary procedures and sanctions for offenders, and counseling and student services for victims.

UTSA Student Graduation Rate

UTSA serves undergraduate and graduate students from a wide range of backgrounds. Some undergraduate students are recent high school graduates; others are completing a degree after pursuing other goals. Some students work full- or part-time and extend their education over a longer period of time, and some students enroll in classes for personal or professional enrichment but choose not to pursue a degree.

For the portion of UTSA's students who began their first semester of attendance at UTSA in Fall 1987 as first-time freshmen enrolled full-time as degree-seeking students, the graduation rate within a six-year period was 41.7 percent. This percentage includes students who transferred to another college to complete their studies. This percentage is not likely to include students who may have subsequently decided to

attend college part-time rather than full-time, extending their education over a longer time period; nor does it likely include students who later chose to become non-degree-seeking students. Additionally, not considered in the calculation of this graduation rate are students who initially enrolled at UTSA as part-time students, who transferred to UTSA to complete their degrees after attending elsewhere, or who attended for reasons other than to obtain a degree.

Student Grievances

UTSA students may need to pursue questions or concerns involving academic or nonacademic aspects of student life. General grievance procedures are set forth below. Students may consult with the Office of Student Life if additional information is needed concerning the pursuit of any grievance.

A student with a grade grievance should refer to the Grade Grievance Procedure section in the General Academic Regulations chapter of this catalog.

A student grievance may involve a UTSA employee or other students. A student with a grievance involving a University employee should first seek to resolve the problem with the employee. If the matter cannot be resolved with the employee, the grievance can be forwarded to the employee's supervisor. A student who believes another student has violated the *Student Code of Conduct* may institute a proceeding against a student by filing a complaint with the Office of Student Life.

Financial Aid

The Office of Student Financial Aid administers programs to assist students and parents in financing an education at UTSA. Financial aid programs for undergraduate students include Texas Public Education–State Student Incentive Grants and the Federal College Work Study program, Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, Federal Perkins Student Loans, Federal Family Education Loan Programs (FFELP), and various scholarships.

A yearly determination of eligibility and financial need is required for most forms of financial aid. To be considered for financial aid, a student must

1. be officially admitted to UTSA
2. file a Free Application for Federal Student Aid (FAFSA)
3. meet deadlines set by the Office of Student Financial Aid
4. not be in default on any Title IV, HEA loan made for attendance at any institution
5. not owe a refund on any Title IV, HEA grant received for attendance at any institution
6. make satisfactory academic progress as required to fulfill federal requirements for financial aid eligibility (please see Satisfactory Academic Progress Policy below)
7. be classified by the Office of Admissions as a degree-seeking student.

Further,

- Transfer students must submit a Financial Aid Transcript from each postsecondary school attended whether they received financial aid or not.
- Students who are not U.S. citizens must provide proof of eligibility.

- Students selected for “verification” by the Department of Education will be asked for additional documentation. This information must be provided to remain eligible for aid.

Once the application process is complete, students will automatically be considered for Pell Grants, Federal Stafford Loans, and all other major forms of financial aid, provided that funds are still available. Students are strongly encouraged to have their applications completed by March 31 of each year.

Further information and application forms are available from the Office of Student Financial Aid. A list of scholarships available to UTSA students is published each semester in the Schedule of Classes.

Scholarship Office

The Scholarship Office represents UTSA’s commitment to assist students with the cost of their education. The office provides students with information on scholarships and assistantships.

Applications are available at the Scholarship Office for the many UTSA scholarships it administers. In addition, it maintains a national database and a reference library to help students research scholarship and fellowship opportunities. The office also maintains a calendar of deadlines to help students with their planning.

Competitive Scholarships

Scholarship and fellowship recipients selected through a competitive process, according to state of Texas requirements, are also entitled to a waiver of their nonresident tuition (Texas Education Code, sec. 54.064). For a scholarship or fellowship to be considered competitive, it must meet the following requirements:

- nonresident students (out of state and international) must be in competition for the scholarships with other students, including Texas residents
- no money may be earmarked for nonresident students
- awarding and disbursement of the scholarship must be conducted by UTSA
- donors may not designate a particular individual to receive a scholarship or fellowship award
- scholarship and fellowship committees must be officially recognized by UTSA
- recipients must receive a total of \$1,000 or more in one or a combination of competitive scholarships

In addition to specific qualifications required for various competitive scholarships and fellowships awarded by UTSA, the committee responsible for selection of a given scholarship or fellowship may consider factors such as the following in designating recipients:

- major
- classification
- financial need
- residency
- cumulative grade-point average

- institutional grade point average
- high school rank
- SAT and/or ACT score
- participation in extracurricular activities and community service
- leadership positions
- first-generation college student status
- work experiences

Veterans' Assistance

Educational benefits are available to veterans, eligible dependents of veterans, and personnel on active service in the Armed Forces. The Office of Veterans Affairs provides the necessary forms and current information about the benefits provided under the law.

Students receiving veterans' assistance must keep themselves informed of and meet the academic standards of progress required of all VA recipients. These standards are set by Veterans Administration regulations and are monitored by the Texas Workforce Commission.

Identification Cards

Student identification cards are mandatory. Upon receiving a UTSA Card, a student may participate in a declining balance program that allows use of the card for purchases at UTSA retail outlets. Students must apply in person at the UTSA Card Office on the first floor of the John Peace Library Building

The card is valid as long as the student remains enrolled at UTSA. A \$10 charge is assessed to replace a lost or stolen card. For information on identification cards, contact the UTSA Card Office.

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. §1232g, and the Texas Public Information Act, Texas Government Code §552.001 et seq., are respectively federal and state laws providing for the review and disclosure of student educational records. In accordance with these laws, the University has adopted the following policy. Individuals are informed of their rights under these laws through this policy, which is included in the *Handbook of Operating Procedures*, the *Student Guide to UTSA*, and the graduate and undergraduate catalogs. The *Student Guide to UTSA* is available in the Office of the Associate Vice President for Student Life, catalogs are available in the Office of Admissions and Registrar, and the *Handbook of Operating Procedures* is available in the UTSA Library and most administrative offices.

The University will not permit access to or the release of personally identifiable information contained in student education records to any party without the written consent of the student, except as authorized by FERPA. FERPA's authorizations for release without consent include the following:

1. to appropriate University officials who require access to educational records in order to perform their legitimate educational duties
2. to officials of other schools in which the student seeks or intends to enroll, upon request of these officials and upon the condition that the student is notified and receives a copy of the record if desired
3. to federal, state, or local officials or agencies authorized by law
4. in connection with a student's application for or receipt of financial aid
5. to accrediting organizations or organizations conducting educational studies, provided that these organizations do not release personally identifiable data and destroy such data when it is no longer needed for the purpose it was obtained
6. to the parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954, provided a reasonable effort is made to notify the student in advance
7. in compliance with a judicial order or subpoena, provided a reasonable effort is made to notify the student in advance unless such subpoena specifically directs the institution not to disclose the existence of a subpoena
8. in an emergency situation if the information is necessary to protect the health or safety of the students or other persons
9. to an alleged victim of any crime of violence, the results of the alleged perpetrator's disciplinary proceeding may be released.

The University releases information in student education records to appropriate University officials as indicated in item 1 above when such records are needed by administrators, faculty, or staff to further the educational or business purposes of the student or the University.

A record of requests for disclosure and such disclosure of personally identifiable information from student education records is maintained by the Office of Admissions and Registrar for each student and is made available for inspection pursuant to this policy. If the University discovers that a third party who has received student records from UTSA has released or failed to destroy such records in violation of this policy, access to educational records is prohibited for five years. Respective records no longer subject to audit or presently under request for access are purged according to regular schedules.

Directory Information

At its discretion, the University may release directory information, including the following:

Name, address, telephone number
 Date and place of birth
 Major field of study
 Participation in officially recognized activities and sports
 Dates of attendance
 Most recent previous educational institution attended
 Classification
 Degrees and awards received
 Date of graduation
 Physical factors (height and weight) of athletes
 Class schedules

Students may have any or all directory information withheld by notifying the Office of Admissions and Registrar in writing each semester during the first 12 days of class of a Fall or Spring Semester, or the first four class days of a Summer Session. Request for nondisclosure is honored only for the current enrollment period; therefore, a request to withhold directory information must be filed each semester or term in the Office of Admissions and Registrar.

Access to File

Upon written request, the University will provide a student with access to his or her educational records. The Vice President for Business Affairs coordinates the inspection and review procedures for student education records, including admissions, academic, and financial files. Students wishing to review their education records must make written requests to the Vice President for Business Affairs listing the item(s) of interest. Education records covered by the act are made available within 45 days of the request.

A list of education records and those officials responsible for the records is maintained at the Office of Admissions and Registrar. The list includes the following:

Academic Records

- Office of Admissions and Registrar
- College, division, and faculty offices

Student Services Records

- Director, Counseling Center
- Director, Office of Student Leadership and Activities
- Associate Vice President for Student Life, Office of Student Life

Financial Records

- Vice President for Business Affairs, Office of Business Affairs
- Director, Office of Student Financial Aid

Educational records do not include the following:

1. financial records of the student's parents or guardian
2. confidential letters of recommendation placed in the educational records of a student before January 1, 1975
3. records of instruction, administrative, and educational personnel kept in the sole possession of the maker and not accessible or revealed to any other individual except a temporary substitute for the maker
4. records of law enforcement units
6. medical and psychological records
7. thesis or research papers
8. records that only contain information about an individual after the individual is no longer a student at the institution.

Challenge to Record

Students may challenge the accuracy of their educational records. Students who believe their education records contain inaccurate or misleading information, or information that is otherwise in violation of their privacy or other rights, may discuss their problems

informally with the Office of Admissions and Registrar. If agreement is reached with respect to the student's request, the appropriate records will be amended. If not, the student is notified within a reasonable period of time that the records will not be amended and is informed by the Associate Vice President for Student Life of his or her right to a formal hearing.

Student requests for a formal hearing must be made in writing to the Associate Vice President for Student Life, who, within a reasonable period of time after receiving such requests, will inform students of the date, place, and time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more people of their choice, including attorneys, at the students' expense. The hearing officer who adjudicates such challenges is appointed by the Vice President for Student Affairs in nonacademic matters and by the Provost and Vice President for Academic Affairs in academic matters.

Decisions of the hearing officer are final, are based solely on the evidence presented at the hearing, consist of the written statements summarizing the evidence and the reasons for the decisions, and are delivered to all parties concerned.

The education records are corrected or amended in accordance with the decision of the hearing officer if the decision is in favor of the student. If the student finds the decision unsatisfactory, he or she may include with the education records statements commenting on the information in the records, statements setting forth any reasons for disagreement with the decision of the hearing officer, or both.

The statements are placed in the education records, maintained as part of the student's records, and released whenever the records in question are disclosed.

Students who believe that the adjudications of their challenges are unfair or are not in keeping with the provisions of the act may request in writing assistance from the University President.

Copies

Students may have copies of their educational records and this policy. Copies will be made at the student's expense at rates authorized in the Texas Public Information Act, with the exception of official transcripts, which cost \$5. Official copies of academic records or transcripts are not released for students who have a delinquent financial obligation or financial "hold" at the University.

Complaints

Complaints regarding alleged failures to comply with the provisions of the FERPA may be submitted in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue S.W., Washington, DC 20202-4605.

Students with Disabilities

UTSA does not discriminate on the basis of disability. Special assistance is provided to students with disabilities through Disability Services.

Lost and Found

All abandoned articles found on the UTSA campus are stored in the University Police Office. Lost items may be claimed by showing proper identification of ownership. UTSA will dispose of items that are not claimed within 60 days.

CAMPUS RESOURCES

UTSA Libraries

The UTSA libraries' goals are to support and enhance University instructional, research, and public service activities by supplying the full range of services necessary to provide access to information and resources for learning and scholarship to University students, faculty, and staff. The libraries also contribute to the general advancement of knowledge by participating actively in local, state, and national programs for resource sharing; by studying new methods for service delivery; and by providing interpretive services to the public.

The collections of the UTSA Library and the UTSA Downtown Library include approximately 500,000 volumes, 130 electronic databases, 100,000 government publications (federal, state, and local), 2.3 million microforms, and 2,300 periodical subscriptions.

The libraries' collections reflect the broad range of academic programs offered at UTSA and strong and increasing emphasis on electronic access and delivery of information. The libraries are also designated federal and state document depositories. The Special Collections and Archives Department focuses on Western Americana, Texana, and San Antonio history. Notable is the John Peace Collection, which documents the history of Texas during the Spanish colonial period, the Mexican Republic, and the Republic of Texas.

The libraries' catalog is available online and may be accessed through the campus network, the Internet, or modem. Services enabling patrons to access materials not owned by the libraries include the Online Library System, the libraries' home page on the Internet, interlibrary loan (including document delivery), and a variety of cooperative agreements with other libraries including TexShare, the UT System Electronic Reference Center, and the Council of Research and Academic Libraries.

Tomás Rivera Center for Student Success

The Tomás Rivera Center for Student Success (TRC) combines academic advising functions with an array of student support services. The TRC (UC 1.01.02, 458-5170) assigns each incoming freshman or transfer freshman (including those on academic probation or admitted provisionally) to an individual advisor who advises the student until 30 semester credit hours are completed (up to 45 if the student remains undecided about his or her major). Advising for all students with fewer than 30 semester credit hours is required each semester before registration.

New students entering UTSA with fewer than 30 semester credit hours may immediately declare a major or may elect to remain undeclared/undecided. Some

programs encourage an early declaration of major, while others require one at a later point.

Effective Fall 1998, *all* students must have taken the *Texas Academic Skills Program (TASP)* test or an institutionally approved alternative test before enrolling in college-level courses. *All* students with *TASP deficiencies* (a failure to pass the math, reading, or writing test sections) are required to complete their registration in the TRC each semester until they pass the TASP. Students with TASP deficiencies are required by state law to be enrolled in and satisfactorily attend and participate in a university developmental education program. Students who initially fail one or more sections of the TASP must successfully complete the developmental program(s) prescribed and then retake the appropriate section(s) of the TASP. Students who fail the TASP may be allowed to take an approved college-level course. Students who earn a grade of "B" (3.0 on a 4.0 scale) or better in such a course in the skill area in which the deficit was assessed shall not be required to achieve the minimum passing standard on the TASP and shall not be prohibited from graduating or continuing with their program of study.

The TRC provides academic assistance programs designed to help students develop the skills they need to succeed in college work. It oversees the UTSA Mentoring Program and coordinates the Academic Development Program, a summer program for selected provisionally admitted students.

Learning Assistance, in the TRC, offers academic tutorial instruction in specific subject areas and general instruction on successful study habits and techniques. Learning Assistance also coordinates Supplemental Instruction classes, which provide small group discussion and study skills to students in historically difficult classes. Individual and group tutoring sessions are provided in support of freshman and sophomore classes not covered by Supplemental Instruction. Self-paced computer software programs are available on a walk-in basis for students who want to review concepts and practice skills. Study skills workshops and in-class preparations are also provided on a variety of topics.

Office of Academic Technology

The University-wide support services for classes are provided by the Office of Academic Technology. In addition to providing equipment, from overhead projectors to mobile multimedia stations, for use in all classrooms, this office provides two facilities: the Audio/Video Lab, where faculty and students can create and edit audio and video productions, and the New Media Lab, where faculty have access to the latest in academic technology (such as desktop video teleconferencing, multimedia authoring software, 3D and animation software, World Wide Web page builders, and digital video editing software) to assist them in developing materials supporting their teaching efforts. Personnel operating these labs provide tutorial and general assistance to faculty and students developing projects on campus. This office is also responsible for supporting special events scheduled at the University and the development of the distance learning program at UTSA.

Office of Extended Education

The Office of Extended Education serves the region's adult, noncredit, professional, and continuing education needs through a range of targeted programs that match the

University's unique resources with the lifelong learning needs of the region. Operating out of the Downtown Campus, the Office of Extended Education works collaboratively with academic and nonacademic units of the University to develop and present seminars, short courses, conferences, and programs for the general public, professionals, governmental agencies, and businesses. Instructional staff includes UTSA faculty and other professionals. Seminars, short courses, and programs are scheduled at convenient times and locations throughout the city. The UTSA Extended Education bulletin, published semiannually, provides information on seminars, short courses, and programs that are open to the public. The Office of Extended Education also provides specialized training to businesses, government agencies, and nonprofit organizations needing customized programs for their employees.

Office of International Programs

The Office of International Programs supports international components in undergraduate and graduate academic programs; promotes international research by students and faculty; develops and manages cooperative agreements and programs for academic exchanges; provides special services to international exchange students to maximize their academic success and intercultural exchange; maintains active relationships with its international alumni and past participants in study abroad and exchange programs; and provides assistance in obtaining financial aid for students and faculty wishing to study, teach, or conduct research abroad. The office also coordinates the Fulbright Scholar Program and the National Security Exchange Program.

Study Abroad Office

The Study Abroad Office is a component of the Office of International Programs. The advisor in this office assists undergraduate and graduate students in locating universities overseas and preparing materials so students can study in foreign universities. The advisor also oversees the application process for international students interested in completing a one-year exchange program at UTSA. The office provides limited support for international visiting faculty and is responsible for international outreach programs in South Texas schools and communities.

Exchange Programs

UTSA maintains cooperative programs with the University of British Columbia (Vancouver, Canada), the National Autonomous University of Mexico (UNAM—Mexico City), the Autonomous University of Nuevo León (UANL—Monterrey, Mexico), Queensland University of Technology (Brisbane, Australia), Keele University (England), and Kyoto University of Foreign Studies (Japan). UTSA is in the process of forming partnerships with the Université d'Aix Marseille (France), and the Instituto Tecnológico y de Estudios Superiores de Monterrey (Monterrey, Mexico). Additional cooperative linkages are being developed in Western Europe, Russia, Asia, and Mexico.

UTSA is a member of the National Student Exchange program, which provides students the opportunity to study at over 140 campuses in all 50 states, Guam, Puerto Rico, and the U.S. Virgin Islands. Member institutions include the University of Alaska system, the University of Hawaii, the University of Maryland, the University of Massachusetts, the University of Oregon, and State University of New York—Stony

Brook. Participating UTSA students pay in-state tuition and fees at UTSA or the host exchange institution.

Office of Minority Affairs

The Office of Minority Affairs provides college transition support services to help minority students and other underrepresented groups have successful and rewarding college experiences.

In addition, the office presents programs that educate the UTSA and San Antonio communities about the varied cultural backgrounds of University students, offering culturally diverse students a sense of self-pride and belonging. It seeks to heighten sensitivity to multiculturalism and respect for individual differences.

Disability Services

Disability Services (DS) coordinates support services and equipment for students with disabilities. Its goal is to help qualified students participate as fully as possible in university life. Some of the services and equipment available include registration assistance, note-taking, test accommodation, TDD, motorized scooters, adaptive computers, CCTVs, and a Braille printer.

Eligible students should contact DS before the beginning of the semester to discuss their needs and make appropriate arrangements. A disability verification letter and an interview with the director begin the process for obtaining services.

UTSA Art Gallery

The UTSA Art Gallery enhances the teaching, research, and outreach missions of the Division of Visual Arts and the College of Fine Arts and Humanities. Exhibitions and presentations in the gallery provide a forum for the consideration and interpretation of art works and for the cultural enrichment of the University and San Antonio communities.

The UTSA Art Gallery is concerned with the education of students pursuing a career in art. Programs reflect the academic curriculum, provide avenues for research, and present opportunities for the interpretation, design, preparation, and installation of exhibits.

In addition to sponsoring a variety of curated art exhibitions of regional and national interest, the UTSA Art Gallery also presents a biennial exhibition of works by art faculty and occasionally serves as a setting for special presentations, including poetry readings, award ceremonies, and lectures.

University Bookstore

The University Bookstore, operated by Barnes and Noble Bookstores, Inc., is located on the first level of the University Center. The bookstore maintains a complete inventory of all required and recommended books for UTSA courses. In addition, the bookstore carries a complete line of general school supplies, writing instruments, art materials, soft goods, decals, greeting cards, and a variety of gift items.

The University Bookstore at the Downtown Campus is located on the first level of the Frio Street Building and will move to its permanent location on the first floor of the Buena Vista Street Building in January 1999.

Computer Store

A UTSA-owned and -operated computer store is located on the first floor of the University Center and offers computer systems and software at educational discounts to students, faculty, and staff.

Campus Dining

Dining facilities are available in the University Center, the John Peace Library Building, the Humanities and Social Sciences Building, and the Business Building. Menu selections at the various dining locations include homemade entrees and vegetables, full self-serve salad bar, burgers, grilled sandwiches, a deli bar, assorted desserts, and beverages.

A declining balance cash-card system, the Roadrunner Express Card, is available to all students, faculty, and staff and can be used at all campus dining locations. An account can be opened with a minimum of \$25. Bonus bucks are available for those purchasing over \$100 at a time. Purchases may be made with cash, Visa, MasterCard, or Discover Card. Campus Dining offices are located on the first floor of the University Center (open 8 a.m. to 5 p.m. Monday through Thursday and 8 a.m. to 4 p.m. Friday). Applications for the Roadrunner Express Card can be made at this location. For more information, call (210) 458-4206.

Information Technology (Computing Resources)

Computing resources at UTSA include a Hitachi EX44, IBM 4381-M1, a Sun 670 UNIX server, two modern student computing laboratories with 300 networked personal computers, and 40 terminals for academic IBM and UNIX use. Both student computing facilities are open and available for use 24 hours a day. Specialized facilities in the College of Sciences and Engineering include a Scientific Visualization Lab with Silicon Graphics workstations, a CAD/CAE lab with Sun and DEC workstations, and a high-performance computing lab. Other specialized student computing facilities supported by colleges and divisions are located in various buildings on campus.

A campuswide fiber-optic backbone network connects all facilities and provides links to wide-area networks (Internet, THENet) with electronic mail, file transfer, and remote login capabilities. Off-campus access is supported via dial-up modems that connect to all mainframe systems and UNIX resources.

Administration information systems and the University Library On-Line Catalog (NOTIS) are supported on the Hitachi EX44 System. Services include automated telephone registration, integrated online student information, and other administrative support systems.

STUDENT LIFE

University Center

The University Center is located on the West Paseo between the Humanities and Social Sciences Building and the Physical Education Building. The 139,000-square-foot community center provides essential programs, services, and amenities for students, faculty, and staff. The building includes the following administrative offices: Student Leadership and Activities, Minority Affairs, Associate Vice President for Student Life, New Student Programs, Student Judicial Affairs, Assistant to the Vice President for Student Affairs for Planning and Special Programs, Special Assistant to the Vice President for Student Affairs, Counseling Center, Alumni Programs, Career Services, Campus Dining, Tomás Rivera Center for Student Success, and University Center administration.

Services in the University Center include the UTSA Bookstore, food service outlets including Chick-Fil-A, a game room, lounge space, television rooms, a video arcade, an information desk, an ATM, and a TicketMaster outlet.

Space dedicated to student volunteer activities includes the Student Organizations complex, a computer room, a graphics room, the Campus Activities Board office, the Student Government office, the V.O.I.C.E.S. office, and a central mailbox area for all campus Registered Student Organizations.

Student Leadership and Activities

Student activities enhance the classroom educational experience, assist students in developing leadership qualities and interpersonal skills, and create a stimulating campus environment. UTSA recognizes more than 140 student organizations involving more than 5,000 students. These Registered Student Organizations (RSOs) represent a variety of interest areas including academic, service, cultural and minority, honorary, military, political, professional, religious, social, sports and recreation, and special interest.

The Office of Student Leadership and Activities provides administrative and advisory support for the Registered Student Organizations in addition to Student Government, the Campus Activities Board, the Volunteer Organization Involving Community Education and Services (V.O.I.C.E.S.), the Greek community, and leadership development programs.

UTSA Alumni Association

The UTSA Alumni Association seeks to strengthen its ties among the University; past, present, and future students; and the community in the interests of academic excellence. It provides scholarships to new and current students. Alumni-sponsored activities include an annual awards dinner, the Dollars for Scholars 5K Run, and receptions for admitted students and career connections.

The association was established in 1977 and incorporated in 1978. It is a dues-paying membership organization governed by a 21-member elected board of governors. The Office of Alumni Programs manages the daily operations.

Intercollegiate Athletics

UTSA fields men's and women's teams for intercollegiate competition in Division I of the NCAA. Men's sports include basketball, baseball, cross country, golf, indoor and outdoor track, and tennis. Women's sports are basketball, cross country, indoor and outdoor track, softball, volleyball, and tennis.

All currently enrolled students receive free admission to any on-campus UTSA athletic event.

Intramural and Recreational Activities

UTSA offers a wide range of intramural programs and recreational activities. The facilities available in the Convocation Center and the Physical Education Building include gymnasiums for basketball, badminton, and volleyball; two weight rooms; ample indoor jogging space; an outdoor 400-meter synthetic-surfaced track with a grass playing infield; intramural fields for soccer, flag football, and softball; and a tennis center. A softball and baseball complex is adjacent to the outdoor track.

Intramural sports offered include tennis, track, volleyball, badminton, shuffleboard, table tennis, softball, soccer, flag football, basketball, and billiards.

Living Accommodations

On-Campus. UTSA, in partnership with the private sector, has developed a contemporary approach to campus housing. Residence hall and apartment housing is available on campus.

Campus Housing—Residence Hall. Chisholm Hall is open to all students and offers traditional-style accommodations with two-person rooms with private baths. All utilities are included. Residents may make 24-hour-a-day use of the adjacent Activity Center, with TV, game room, and study lounge. A junior olympic-size swimming pool is open 15 hours a day. For additional residence hall information, contact Chisholm Hall at (210) 458-6700.

Campus Housing—Apartments. University Oaks Apartments offers efficiencies and one-, two-, and four-bedroom units. Other amenities include a swimming pool, jacuzzi, basketball and volleyball courts, and limited-access gates. Housing in University Oaks is available year-round and offers various types of 9- and 12-month leases. For additional on-campus apartment information, contact the University Oaks Housing Office at (210) 354-7676.

Off-Campus. Student Housing Services, located within the Office of Student Life, distributes an off-campus housing directory to help students find accommodations in the San Antonio area. Contact the Office of Student Life at (210) 458-4720 for on- or off-campus housing information.

HEALTH AND COUNSELING

Student Health Services

Services and Costs. The focus of Student Health Services is to provide first aid for injuries and limited medical and nursing care for minor illnesses. In cases of severe illness or a serious accident, the student will be transferred to a local hospital for treatment and will be responsible for the expenses incurred, including transportation. The student medical service fee allows free medical coverage for general use of the student clinic and for on-campus physician visits. There are reasonable charges for student clinic laboratory tests and medications.

Student Health Services emphasizes interdisciplinary health education, health promotion, prevention, wellness, and outreach programs to the student population and uses nonphysician and physician providers for primary health care.

Immunizations and Insurance. Incoming students must return the Health Information form included in UTSA's application for admission to Student Health Services. Current immunization for TD (tetanus-diphtheria) and MMR (measles, mumps, rubella) is highly recommended. Student Health Services can provide instructions on the quickest and most economical method to complete immunizations. International students must have a tuberculosis (T.B.) test within 90 days of admission. Students are advised to carry health and accident insurance. A UTSA group plan is available. All international students are required to maintain approved comprehensive health insurance while enrolled at UTSA. For information on cost and coverage, contact Student Health Services.

HIV/HBV. UTSA recognizes that Human Immunodeficiency Virus (HIV) and Hepatitis B virus (HBV) are serious public health threats. UTSA's policy on HIV and HBV infection, as well as educational pamphlets about methods of transmission and prevention of HIV and HBV infections, are available at Student Health Services.

Counseling Center

The Counseling Center provides confidential professional services to help meet the personal and developmental needs of currently enrolled students. Staff psychologists and professional counselors use counseling techniques, psychological assessment, and other aids. All services are confidential and voluntary, and most are free to enrolled students.

Services include individual sessions for personal and educational concerns, services to couples with relationship difficulties, and regularly scheduled group sessions on topics such as vocational choice, assertion training, interpersonal communication skills, stress management, understanding sexual orientation, and living with HIV. The Counseling Center also helps students assess career choices or identify possible learning disabilities. In addition, self-help cassette tapes are available (in person or by phone) on a variety of topics, ranging from friendship building to managing anxiety and depression.

New Student Programs

The mission of the Office of New Student Programs is to provide academic and support services for freshmen during their first 30 semester hours at UTSA. All freshmen with no previous college credit hours are required to participate in orientation before registering for classes.

Orientation programs are offered for freshmen and transfer students each semester. During the summer, freshmen entering UTSA in the fall participate in two-day orientation programs that include tours of the campus, academic advising, registration, and exposure to campus services and programs. The summer program also includes family orientation programs designed to inform family members about UTSA services and programs and to assist in the transition of having a family member at college. Summer and spring orientation programs are also conducted.

Other programs include Roadrunner Camp, an off-campus leadership development program for new freshmen entering UTSA in the Fall Semester, and the Start-Up Seminar, a program that emphasizes study skills development for students reentering college life. Special programs and services just for freshmen include a Freshman Phone-a-thon during the fifth week of classes, a new student newsletter called the *New Student Notebook*, and a parent and family newsletter titled *Family Focus*. In addition, this office coordinates the College Success Seminar (EDP 1702), which focuses on academic issues and life and study skills to assist students with their transition to college.

Testing

The testing office provides University-wide testing services. Standardized tests are given on national and state testing dates. Institutional placement tests are regularly scheduled. Calendar dates for all tests are available at the office.

Students are encouraged to satisfy degree requirements through credit by examination (see General Academic Regulations). The testing office offers a brochure on credit by examination at UTSA that covers the various tests accepted for credit.

Career Services

Career Services provides comprehensive career planning, job search, and employment-related services to students and alumni.

Career planning services help individuals explore career options compatible with their personal goals, interests, and abilities. The sooner students seek career guidance, the better. All freshmen are encouraged to make use of this service sometime during their first year. Career-related testing, counseling, and job market information are available to students needing assistance in selecting a major, clarifying career goals, and confirming their choice of major.

Employment-related services are designed to help students conduct a successful job search. For students who need to work while going to school, information on job openings is available through the computerized UTSA Job Bank in Career Services.

As students progress in their coursework, they are encouraged to consider paid internships and cooperative education, which enable them to gain hands-on experience in their chosen field before graduation. Information about intern and co-op positions, job search workshops, resumé development, and career counseling are available. Students may also interview on campus with intern and co-op employers.

For seniors, finding a full-time, entry-level career position becomes increasingly important. Since many companies recruit during the Fall Semester for December, May, and summer graduates, seniors should contact Career Services two semesters before their planned graduation date to begin their search. Services include career counseling, access to on-campus interviews, resumé development, resumé-faxing services, and job search workshops.

Special career days and fairs throughout the year bring a large number of employers to campus. At these events, students may find out about available jobs, apply for positions, and learn more about companies for which they may want to work.

Teacher Placement Service

The Teacher Placement Service is located in the Office of Teacher Advising, Certification, and Placement. It assists all undergraduates, graduates, or alumni who seek employment in the field of education by coordinating communication between students and employers and acting as a clearinghouse for student placement files. The office also sponsors a semiannual teacher job fair.

Information concerning services and fees for placement files is available through the Office of Teacher Advising, Certification, and Placement.

RESEARCH ORGANIZATIONS

Research Center for the Visual Arts

The activities of the Research Center for the Visual Arts encompass the visual arts, art and architectural history, and art criticism, with a primary focus on historical studies of Iberian and Interamerican arts.

Institute for Music Research (IMR)

The Institute for Music Research was established to sponsor research primarily in the areas of music psychology and music technology. Activities of the IMR include providing a variety of computer services, hosting national and international conferences, conducting research, publishing conference proceedings and other research projects, and making presentations at state, national, and international meetings. Online computer services are available worldwide via the Internet and World Wide Web and include a bibliographic database of music research literature and a database of music-related computer software. Conferences include annual music technology conferences, an international music medicine conference, and a conference on music and the brain. Research projects include a variety of projects in music psychology and music technology, such as a PET scan of musicians and development

of multimedia programs for music instruction. Publications and presentations also represent a wide variety of research activities in these fields.

Institute for Studies in Business (ISB)

The Institute for Studies in Business is the research component of the College of Business. Its major objectives are to offer the opportunity for faculty and students of the University to have a superior research environment, to encourage interaction between the business community and the University, and to provide applied economics and business training to students. While the institute is an integral part of the College of Business, it interacts with the faculty of the other colleges to provide an interdisciplinary approach to research and business education. The focus of activity is on application of theories and research techniques to applied problems encountered in both public and private decision making. Specialized data files are maintained on a continuing basis, while a research library and computer systems guide interested users to sources of information. The knowledge and experience of the University's faculty and professional staff are utilized to undertake specific research projects in the broad categories of marketing, economic analysis and modeling, human resource planning, information systems, financial analysis, and economic development research. The institute, therefore, draws upon the creative resources, energy, and talent of the faculty, institute staff, and students.

Metropolitan Research and Policy Institute

The Metropolitan Research and Policy Institute, located on the Downtown Campus, conducts applied science research on policy issues, provides training and issue-based education for individuals and agencies involved in policy-making, and provides direct services to nonprofit agencies and community groups in San Antonio and South Texas. Training programs include executive training seminars, conferences and colloquia, and pro bono seminars for community groups and neighborhood associations.

Center for Professional Excellence (CPE)

The Center for Professional Excellence coordinates efforts within the College of Business to support the personal and professional growth of those who will share the responsibility of keeping our institutions vital and on the road to competitive survival. Its mission is to bring University faculty, students, and practitioners together to create a lifelong learning resource that serves their mutual needs.

The CPE offers extracurricular courses, workshops, conferences, seminars, consulting, and research programs to support professional excellence in business and other community institutions. In the spirit of a joint venture with community stakeholders, the CPE conducts focus groups and supports learning communities to define needs and explore ways in which University and community resources can be effectively coupled to address them.

Institute for Research in Sciences and Engineering (IRSE)

The IRSE serves as the research center for the College of Sciences and Engineering; it identifies research opportunities, assembles multidisciplinary teams from within

the College of Sciences and Engineering and other colleges, and assists in the development of grants and contracts. It interacts with the San Antonio community when additional expertise is required and participates in the Southwest Research Consortium. Specialized research centers are created when a research team becomes self-sustaining.

IRSE distributes information on federal, regional, and local funding sources bimonthly in the IRSE Newsletter. It also offers assistance to faculty in the preparation of proposals and the management of projects.

Center for Water Research

The Center for Water Research is a component of the College of Sciences and Engineering and was organized in January 1987. Major areas of research include hydrogeology, surface water hydrology, geochemistry, geophysics, and geotechnical engineering. Research is conducted by engineers and scientists on the center's staff, members of the faculty, and undergraduate and graduate students.

Research and analysis capabilities include stable isotope geochemistry, water chemistry, borehole geophysical logging, surface geophysical surveys, structural geology of aquifer systems, microbiology of bioremediation, leakage and contaminant studies, mathematical modeling of groundwater flow and contaminant transport, surface-water modeling, economic analysis of water usage, formulation of decision models for water planning, and study of municipal water supply and treatment systems.

Center for Archaeological Research

The Center for Archaeological Research, located in the College of Social and Behavioral Sciences, was established in September 1974. Among its objectives are (1) to provide the opportunity for students to train in archaeology; (2) to promote archaeological research in the South and South Central Texas regions, the Greater Southwest, and Mesoamerica; (3) to carry out archaeological research and services for private, federal, state, and local agencies as required by legislation; (4) to conduct public outreach and education programs for schools and other groups through its Legacy program; and (5) to sponsor conferences.

The center's staff includes about 35 professionals and graduate and undergraduate students who have conducted archaeological investigations throughout Texas and in other states and countries. Results of center investigations are published in more than 300 volumes in 10 publications series: *Archaeological Survey Reports*; *Regional Studies*; *Special Reports*; *Guidebooks in Archaeology*; *Choke Canyon Series*; *Colha Project Interim Reports*; *Colha Project*; *Belize, Working Papers*; *Papers of the Colha Project*; *Rio Azul Reports*, *Rio Azul Project*, *Guatemala*; and the *Archaeology and History of the San Juan Bautista Mission Area, Coahuila, and Texas*.

The center has administered more than 400 contracts and grants to date, including a two-year study of the archaeology and ethnohistory of the Spanish mission complex at Guerrero, Mexico; a multiyear study of the prehistory and history of the Choke Canyon Reservoir area in southern Texas; a study of the early Mogollon farming sites in the Southwest; five seasons of excavation at the Maya site of Colha in Belize, Central America; studies of the Rio Azul site in Guatemala; numerous projects at

San Antonio's five Spanish missions; and studies of historic downtown San Antonio. Several projects have also been carried out in Louisiana and New Mexico.

In 1985 the center launched its Friends of Archaeology program of public participation in support of archaeological research. Through this program, the center is able to provide seed grants for faculty and students, and research assistant stipends for graduate and undergraduate anthropology majors. The program also allows the center to sponsor lectures and research projects and to publish special reports. In 1994 the center enhanced its educational outreach activities by launching its Legacy program.

Center for Learning and Development Research in Education

The Center for Learning and Development Research in Education, in the College of Social and Behavioral Sciences, is designed to stimulate basic and applied research on learning and development, particularly as it relates to the educational process. Faculty and students from this college and other colleges of the University are encouraged to use the center to help them study problems appropriate to this area. The objectives of the center include promotion of research in learning and development in education; development of cooperative faculty-student research; cooperation with school districts, social service agencies, and community agencies on problems of mutual interest; and solicitation of funds for appropriate activities.

The center helps identify and coordinate faculty, student, and community interests, needs, and resources. Many of the projects undertaken through the center involve cooperative efforts among UTSA, local school districts, and the community.

Center for the Study of Women and Gender

The Center for the Study of Women and Gender is located in the College of Social and Behavioral Sciences. The only institution of its kind in Texas, the center promotes multidisciplinary, multicultural, and global research on topics related to women and gender. Specifically, the center promotes, facilitates, and disseminates research by UTSA faculty and independent scholars on women and gender; promotes collaboration among academic institutions, corporate America, and the public sector on issues such as women's health, sexual harassment, affirmative action, and promotion and pay inequities; helps elementary and secondary schools, as well as institutions of higher education, integrate scholarship on women and gender into their curricula; collects primary historical sources relating to women and gender in San Antonio and throughout South Texas; and sponsors public programming—such as events for Women's History Week—and public conferences that explore a variety of women and gender policy issues.

Center for Educational Development and Excellence (CEDE)

The Center for Educational Development and Excellence (CEDE), established in 1992 as a collaborative endeavor of educational and community institutions in San Antonio, is dedicated to the continuous lifelong development of teachers as learners in a culturally diverse, technologically enriched environment. The CEDE is dedicated to serving the teachers of the greater San Antonio and South Central Texas area with innovative teacher education programs that are field based and technology oriented in order to meet the educational needs of the area's multicultural population.

UTSA is in partnership with four other universities (University of the Incarnate Word, Our Lady of the Lake University, St. Mary's University, and Trinity University); six school districts (Edgewood ISD, Harlandale ISD, North East ISD, Northside SD, San Antonio ISD, and South San Antonio ISD); Education Service Center, Region 20; Alliance for Education; and the local business community (USAA). CEDE partners are currently working in 22 Professional Development Schools. UTSA's CEDE site is located in the College of Social and Behavioral Sciences, and the CEDE central office is located on the UTSA campus.

Hispanic Research Center

The Hispanic Research Center operates under the auspices of the Provost and Vice President for Academic Affairs. Its mission is to provide an interdisciplinary University focus on research regarding Latinos. The center's goal is to stimulate research and conduct forums on Latino populations in the United States and Texas. Research areas include issues of social equality, political access, education, substance abuse, culture, linguistics, business, economic development, mental health, and United States–Mexico relations.

Institute of Texan Cultures

The institute was established as the official State of Texas exhibit at San Antonio's HemisFair '68 and was transferred to The University of Texas System Board of Regents by the 61st Legislature in 1969. On February 14, 1986, the Regents approved an enhanced educational mission for the University of Texas Institute of Texan Cultures, along with an administrative affiliation of the institute with UTSA.

Since its inception, the institute has served as an educational center for the interpretation of Texas history and folk culture. Displays of art and artifacts become a teaching laboratory as professionally trained staff members and volunteers use the exhibits as a setting for living history. Outreach programs touch the lives of Texans, especially students, through traveling exhibits, TexKit presentations, and "Lifetimes: The Texas Experience," an ITC/UTSA statewide radio program. The annual Texas Folklife Festival, held on the institute's grounds for four days each August, attracts more than 10,000 participants and 70,000 visitors every year.

3.
TUITION, FEES, CHARGES,
AND DEPOSITS



TUITION, FEES, CHARGES, AND DEPOSITS

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TUITION AND FEE CHANGE

All tuition and fee amounts are subject to change by legislative action or by action of the Board of Regents of The University of Texas System. Changes will be effective upon the date of enactment and will be reflected in fees charged.

METHODS OF PAYMENT

Students are entitled to enter class or laboratory only after payment of their tuition and fees has been arranged using one of the alternatives discussed in this section. Once a payment option has been selected by the student at registration, no change in the payment plan will be allowed during the semester.

Full Payment

Under this option, the student makes full payment of all tuition and fees in advance of the beginning of the semester.

Installment Program

Under the installment option, the student pays one-half of the tuition and eligible fees in advance of the beginning of the semester and one-fourth before the start of the sixth and 11th class weeks. There is a service charge of \$16 for this payment option.

A late fee of \$10 will be added to the student's bill if an installment payment is not made by the due date. A student who fails to make full payment before the end of the semester may not receive credit for the work done that semester and will not be allowed to register for future semesters until the delinquent amount is paid.

Not all fees are eligible for payment in installments. The fees for parking, installment, orientation, I.D. card, add/drop, and the property deposit are not eligible for the installment payment program and must be paid in full on the initial billing.

Installment payments may be chosen only during Fall and Spring Semesters. If the student chooses to use the installment option, a promissory note must be completed and on file in the Fiscal Services Office before the registration process can be considered complete.

All financial aid will be applied to total tuition and fees before calculation of the payment plan. Partial installment payments will not be accepted. However, prepayment in full of an installment or of total installments will be accepted any time after registration.

Refunds from the add/drop process will be prorated for remaining installments. Additional fees incurred from the add/drop process will be added to the balance due from registration, and the installment payments will be recalculated.

Accepted Forms of Payment

Payment may be made by credit card or personal check for the exact amount due, provided the bank transit number is encoded on the check in compliance with revised Federal Reserve Bank regulations. Students may not obtain cash by writing a check for a larger amount.

A bad check, whether written by mistake or otherwise, unless it is the admitted error of the bank concerned, is likely to delay actual payment and thus result in a penalty (see Returned Check Fee). If a check used for payment of advance registration is returned and is not cleared before the start of the semester, a late registration fee of \$15 will be charged to the student.

Personal checks up to \$5 may be cashed in the University Bookstore. Many local merchants will not cash out-of-town checks. It is recommended that students establish checking accounts in local banks before enrolling so that they can easily cash checks in the city.

PAYMENT AND REFUND POLICIES

All policies regarding the payment or refunding of tuition, fees, and charges are approved by the Board of Regents of The University of Texas System and comply with applicable state statutes. If a person desires clarification of any matter relating to payment or refund of such charges, he or she should contact the office or administrative unit from which the charge or refund originated.

Residence Regulations

Students' status as residents or nonresidents will be made in accordance with Title 3 of the Texas Education Code. Questions regarding residence regulations or residence status should be directed to the Office of Admissions and Registrar.

A student entering or reentering UTSA may be required to file a residence questionnaire. Once residence is established, no change can be made in residence classification without the express authorization of the Registrar.

Refund Policy for Withdrawal or Dropped Courses

Withdrawing from UTSA

Withdrawing is the formal discontinuance of a student's enrollment at UTSA and involves the student's dropping *all* classes. Depending on the time of withdrawal, a student may be entitled to a refund of some part of the tuition and certain fees. The forms and exit survey needed for withdrawing from UTSA may be obtained in the Office of Admissions and Registrar.

The following table presents the descending scale of refund amounts for students withdrawing from UTSA. Students who wish to withdraw from a Summer Session must withdraw from all courses for which they are registered in both terms of the session.

UTSA will refund tuition and fees paid by a sponsor, donor, or scholarship to the source rather than directly to the student who has withdrawn if the funds were made available through the institution.

Semester	Time of Withdrawing	Amount of Refund of Tuition and Returnable Fees*
Regular (Fall or Spring) Semester	Prior to the first class day	100% of applicable tuition and returnable fees
	During the first 5 class days	80% of applicable tuition and returnable fees
	During the second 5 class days	70% of applicable tuition and returnable fees
	During the third 5 class days	50% of applicable tuition and returnable fees
	During the fourth 5 class days	25% of applicable tuition and returnable fees
	After the fourth 5 class days	No refund of tuition or fees
Summer Session	Prior to the first class day	100% of applicable tuition and returnable fees
	During the first, second, or third class day	80% of applicable tuition and returnable fees
	During the fourth, fifth, or sixth class day	50% of applicable tuition and returnable fees
	After the sixth class day	No refund of tuition or fees

Dropping Courses

Dropping refers to the removal of one or more individual courses from a student's schedule while that student remains enrolled in at least one course. Refunds of applicable tuition and fees will be made for courses which a student drops on or before the Census Date, provided the student remains enrolled for that semester or term. No refund will be given for individual classes dropped after the Census Date.

Refunds for courses dropped by a student who withdraws from UTSA later in the semester or term will be calculated according to the percentage schedules in the refund policy above. Refund of tuition for dropped courses will be made only if the original payment exceeds the established minimum amount.

*Supplementary, laboratory, student services, University, medical services, Recreation Center, library resources, publication, international education, and class related

Summer terms are considered as one session for refund and drop purposes. If courses are to be dropped in either summer term, please refer to Census Dates for refund purposes.

No refunds are made until 15 days have elapsed from the Census Date. Refund checks are mailed to the address indicated when the student withdraws from the University. Students entitled to refunds should allow 10 working days after the 15-day clearing period for receipt of the refund.

Concurrent Tuition

Students who register concurrently at more than one public institution of higher education in Texas may receive the benefits of a lower tuition rate. If, at the time of registration, a student can produce evidence of having already paid his or her tuition at another public institution of higher education in Texas, the student should present such evidence at the Fee Assessment Station during registration.

Exemption from Tuition and Fees

The statutes of the state of Texas prescribe certain cases in which students can be exempted from tuition and/or certain fees. The various types of exemptions and the fees to which such exemptions apply are described below; however, in each case it is the student's responsibility to initiate the action of applying for an exemption through the Registrar's Office and providing satisfactory evidence that all conditions required for the exemption have been met. Until such time as the exemption is granted, a student will be required to pay all tuition and fees from his or her own funds.

Students who might be eligible for an exemption should apply for the exemption at the Registrar's Office at least one month before registration for the term in which they plan to utilize the exemption provision. (Applications for the Good Neighbor Scholarship are accepted in the Office of Student Financial Aid in January and February before the academic year in which students plan to attend UTSA.)

Description	Eligibility	Tuition and Fees Exempted
Accredited School Scholarship	Highest-ranking graduate of an accredited Texas high school following graduation	Tuition during first two regular (Fall and Spring) semesters
Texas ex-serviceman	<ol style="list-style-type: none"> 1. Texas resident for 12 months before registration 2. Bona fide resident of Texas at the time of entering the service 3. Served in the armed forces in World War I; World War II; the Korean War; the Cold War; the Grenada, Lebanon and Panama eras; or the Persian Gulf War 4. Honorably discharged 5. Not eligible for federal educational benefits 	Tuition Laboratory fees Supplementary fees

Description	Eligibility	Tuition and Fees Exempted
Children of disabled Texas firefighters and peace officers	Child (under 21) of full-paid or volunteer firefighters; full-paid municipal, county, or state peace officers; custodians of the Department of Corrections; or game wardens who died or became disabled in the line of duty	Tuition Required fees*
Students who are blind or deaf	Person who is blind; person whose hearing is nonfunctional	Tuition Required fees* General Property Deposit
Children of Texas veterans	<ol style="list-style-type: none"> 1. Either <ul style="list-style-type: none"> - child of a member of the armed forces who died in service during World War I or II; the Korean War; the Cold War; the Vietnam, Grenada, Lebanon, or Panama eras; or the Persian Gulf War - orphan of members of the Texas National Guard killed since January 1, 1946, while on active duty 2. Not eligible for federal educational benefits 	Tuition Laboratory fees Supplementary fees
Good Neighbor Scholarship	<ol style="list-style-type: none"> 1. Native-born students from other designated nations of the American hemisphere** 2. The following must be provided: <ul style="list-style-type: none"> - evidence of native citizenship and proof of five years' residency in that country - scholastic eligibility - valid student visa - other documentation as required (inquire at the Office of Student Financial Aid) <p>Applications are available only in January and February for the following Summer, Fall, and Spring Semesters. Applications are reviewed and granted by the Texas Higher Education Coordinating Board on a semester-by-semester basis</p>	Tuition

*Supplementary, laboratory, general, student services, University, medical services, Recreation Center, library resources, publication, international education, and class related

**The University is limited to 235 Good Neighbor Scholarship recipients a year.

Description	Eligibility	Tuition and Fees Exempted
Firefighters enrolled in fire science courses	Enrolled in course offered as part of the fire science curriculum	Tuition Laboratory fees Supplementary fees
Students in foster care	Student in foster or other residential care under the conservatorship of the Department of Protective Services on or after the day preceding the student's 18th birthday	Tuition Required fees General Property Deposit
Children of Prisoners of War or Persons Missing in Action	Child (under 21) or dependent who receives majority of support from parent; parent must be classified by Department of Defense as a Prisoner of War or Missing in Action at time of registration	Tuition Required fees*

Title IV Program Refund

As an institution participating in programs under Title IV of the Higher Education Act of 1965 as amended, The University of Texas at San Antonio is required to refund unearned tuition, fees, room and board, and other charges to certain students attending the institution for the first time who have received a grant, loan, or work assistance under Title IV of the act or whose parents have received a loan on their behalf under 20 U.S.C. § 1087-2. The refund is required if the student does not register for, withdraws from, or otherwise fails to complete the period of enrollment for which the financial assistance was intended. No refund is required if the student withdraws after a point in time that is 60 percent of the period of enrollment for which the charges were assessed. A student who withdraws before that time is entitled to a refund of tuition, fees, room and board, and other charges that is the larger of the amount provided for in § 54.006, Texas Education Code, or a pro rata refund calculated pursuant to § 484B of the act, reduced by the amount of any unpaid charges and a reasonable administrative fee not to exceed \$25. UTSA will use the pro rata method for determining refunds of tuition and fees, as in the following example:

Fall Semester			
Week	% Refund	Week	% Refund
1	90	5 and 6	60
2 and 3	80	7 and 8	50
4	70	9	40

*Supplementary, laboratory, student services, University, medical services, Recreation Center, library resources, publication, international education, and class related

Nonpayment of Debts

Students who fail to pay full tuition and fees, including late fees, on the due date are subject to one or more of the following actions at the University's option:

1. denial of readmission, including further registration
2. withholding of official transcripts
3. withholding a degree to which the student would otherwise be entitled
4. withholding of grades
5. all penalties and actions authorized by law.

When a student has any of the above actions against his or her record, it is the student's responsibility to clear any obligations with UTSA and see that the Registrar's Office is notified. No further services of the University will be provided until all obligations are cleared.

A student who pays tuition and fees with a check that is not subsequently honored by a bank and the fault is not that of the bank, and who does not make payment within 15 days, will be withdrawn from the University by the Registrar for nonpayment of tuition and fees.

PROCEDURAL FEES

Add/Drop Fee

A \$5 fee will be charged for each add or drop transaction processed during the add/drop period (beginning the first class day and ending on the Census Date). The fee will not be charged during the priority registration period and the alternate registration period or for transactions initiated by UTSA. This fee is nonrefundable.

Application Fee

UTSA charges a nonrefundable application fee of \$25 for all students applying for admission or readmission to the University. The fee is also charged upon reapplication for admission following academic dismissal.

Auditing Fee

All auditors of courses must submit for approval a Request for Audit form to the Registrar. Students registered at UTSA may, with the approval of the instructor and Dean of the college in which the course is offered, audit courses by paying an auditing fee of \$25 per course. The audit fee is not refundable.

Upon approval of a Request for Audit form, a nonstudent auditor must pay an auditing fee of \$50 per course. The fee is nonrefundable. Nonstudents over 65 are permitted to audit without paying a fee, provided space is available and a Request for Audit form is approved. Nonstudent auditors who wish to have library privileges may receive them by filling out a Friends of the UTSA Library application at the circulation desk in the UTSA Library, John Peace Library Building, second floor, and by paying a

nonrefundable fee. There are limits on the services offered to Friends of the UTSA Library cardholders; further details are available from the circulation desk.

Permission to audit may be obtained and fees paid beginning the first day of class through the Census Date.

All auditors of courses must register their vehicles and obtain parking permits from the University Police Traffic Office.

Credit by Examination Fee

A fee of \$20 per examination is required of students who challenge UTSA undergraduate courses. Procedures for challenging courses by examination are in chapter 5 (General Academic Regulations) of this catalog.

Degree Application Fee

A \$30 application fee is required of candidates for a degree. Application for a degree must be made at the Office of Admissions and Registrar and the fee paid according to the specific dates listed in chapter 6 (Bachelor's Degree Regulations). This fee is nonrefundable and must be paid each time an application for degree is filed. The degree application fee does not cover cap and gown rental or purchase.

Duplicate Diploma Fee

A \$15 fee will be charged for each request for a duplicate diploma.

International Student Application Fee

An initial nonrefundable international student application fee of \$100 is required of all prospective international students applying for admission to the University. If no additional evaluation of international coursework is required, international students applying for readmission are required to pay only the \$25 nonrefundable application fee.

Late Registration Fee

A late registration fee of \$5 is charged for the first day of late registration, and an additional \$2.50 per day is assessed thereafter. The maximum late registration fee for any one term is \$15. This fee may be waived only in extenuating circumstances by the President or his delegate. The late registration fee is not refundable.

SEMESTER FEES

Mandatory Semester Fees

First Semester Only

Students are assessed the following onetime charges in their first semester at UTSA.

General Property Deposit. Every student must make a general property deposit of \$10 at the time of initial registration to protect the University from losses such as property loss, damage, or breakage; violation of rules in any University library or laboratory; failure to return keys furnished by the University; or damage to or loss of any other University property.

The deposit is refunded upon request, less outstanding charges, only when the student officially withdraws from school or graduates. When the property deposit refund is requested, the student has the option to elect that the property deposit be used to pay his or her first year's dues in the UTSA Alumni Association. The form for requesting a refund or that the deposit to be used for association dues is available at the Bursar's Office.

A general property deposit that remains without call for refund for a period of four years from the date of last attendance at UTSA shall be forfeited, and the deposit shall become operative to the permanent use and purpose of student scholarships.

International Student Program Fee. A \$45 fee is assessed new international students for programs in the Office of Minority Affairs.

Orientation Fee. An orientation fee of \$55 is assessed all new freshmen and transfer students when they are admitted to UTSA. Orientation programs provide information about UTSA's academic requirements, campus services, and student activities. Almost all of the programs also include academic advising and registration. Students must preregister for these programs. Further information is available from the Office of New Student Programs.

Every Semester

Certain services and benefits are provided every semester by UTSA to all students. These are supported by tuition and the following fees: student services, University Center, automated services and computer access, library resources, Recreation Center, university publication, international education, and medical services. All students are assessed these fees each semester. Refer to the Tuition and Mandatory Fees tables on pp. 67–68 for semester totals.

Tuition. Pursuant to Subchapter B, Chapter 54, Texas Education Code, each student who registers at UTSA is required to pay tuition according to the number of semester credit hours for which registration is completed and according to his or her residence classification (see Tuition and Mandatory Fees).

Student Services Fee. A compulsory student services fee is charged to all students enrolled at UTSA. This fee provides services and activities that are separate and apart from the regularly scheduled academic functions of the University and directly involve or benefit students. These services and activities include recreational activities, intramural and intercollegiate athletics, artists and lecture series, cultural entertainment series, student government, and any other student activities and services specifically authorized and approved by the Board of Regents. Students are assessed this fee based on the number of semester credit hours they register for (see Tuition and Mandatory Fees).

*See Exemption from Tuition and Fees in this chapter.

University Center Fee. The University Center fee is \$4 per semester credit hour. The minimum fee is \$20 and the maximum is \$44 per semester.

Automated Services and Computer Access Fee. Each student who registers at UTSA is required to pay a \$11 per semester credit hour fee. The minimum fee is \$44 and the maximum fee is \$132 per semester.

International Education Fee. A \$1 per semester fee will be assessed all students enrolled at UTSA to cover the costs of the international education program.

Library Resources Fee. A fee of \$1 per semester credit hour is charged all students who register at UTSA to defray costs of providing increased direct services and supplies, including online access to full-text databases, academic indexes, and increased printed books and journals.

Medical Services Fee. A \$15 per semester fee is assessed all students for medical services provided at Student Health Services.

Recreation Center Fee. The Recreation Center fee is \$1 per semester credit hour, with a maximum of \$30 per semester.

Student Photo Identification Charge. A fee of \$3 per student is assessed each regular semester (Fall and Spring) and \$1.50 each summer term for the issuance of a student photo identification card.

University Publication Fee. A \$5 per semester fee will be assessed all students enrolled at UTSA to cover the costs of providing catalogs, class schedules, and other official publications.

Possible Additional Semester Fees

Depending on the major pursued or the courses selected by a student, additional fees may be required. Students should become aware of additional fees incurred by their major or course selection. Some (not all) of these fees are noted by the course listing in the Schedule of Classes.

Architecture Studio Use Fee

A fee of \$25 per course is assessed students enrolled in courses in the architecture curriculum who use any of the studios under the direction of the Division of Architecture and Interior Design.

Architecture Resource Fee

A \$25 fee is assessed students who are registered in certain architecture courses to provide materials and supplies for various projects and experiments.

Communication Materials Fee

A \$5 fee is assessed students who are registered in certain communication courses to provide materials and supplies used during the semester.

Educational Field Instruction Fee

A \$45 fee will be assessed all students during their semester of student teaching and students in special education practicum settings, counseling practicums, and student internships.

EIS Auxiliary Fee

A \$20 per course fee is assessed international students taking courses in English for International Students (EIS).

Field Trip Fee

A supplementary fee is assessed students in certain courses to pay for the expenses of field trips.

Foreign Language Multimedia Learning Center Fee

Each student who registers at UTSA in a foreign language course is required to pay a \$7 per course fee.

Foreign Student Insurance Fee

All international students are required to purchase the UT System Medical Insurance Plan for students, which covers basic medical expenses for injury and sickness. The plan is in compliance with the United States Information Agency's regulations. The fee is assessed as part of the regular tuition and fee charges. A waiver of this fee is available, provided (1) the student provides proof of coverage by a comparable U.S. health plan, and (2) UTSA approves the comparable health coverage.

Graphic Art Centre Fee

A fee of \$1,666 per semester is assessed students who participate in ART 4593 at the Santa Raparata Graphic Art Centre.

Installment Payment Plan Fee

A \$16 charge is assessed when a student elects to pay tuition and fees under the installment payment plan. This charge is normally included in the first installment payment.

Instrument User Fee

In certain music courses, an instrument user fee of \$20 per course may be charged. A notation of this fee appears with the course listing in the Schedule of Classes.

Laboratory Fee

In certain courses a laboratory fee, not to exceed the actual cost of materials and supplies and no less than \$2 or more than \$30, may be charged. When a laboratory fee is charged, the Schedule of Classes indicates the associated fee.

Music Course Fee

A \$10 per course fee for nonmusic majors is assessed students who are registered in a course that uses equipment for instruction purposes. All music majors are charged \$25 per semester to defray the cost of equipment maintenance.

Parking Fees

All vehicles parked on campus must comply with UTSA Parking and Traffic Regulations. Copies of these regulations are available during registration and in the University Police Traffic Office. Parking fees for students are shown in the table below.

Class	Amount	Type of Permit
G	\$44	General permit (purchased in Fall Semester)
	\$24	General permit (purchased in Spring Semester)
	\$19	General permit (purchased in Summer Session)
D	No fee	No fee for permanently disabled persons or disabled veterans
H	\$19	Motorcycle, motor scooter, motorbike permit (purchased in Fall Semester)
	\$16	Motorcycle, motor scooter, motorbike permit (purchased in Spring Semester)
	\$11	Motorcycle, motor scooter, motorbike permit (purchased in Summer Session)
W	\$6	Bicycle permit (purchased at any time)

Parking permits are available for persons with disabilities in accordance with applicable statutory law and UTSA Parking and Traffic Regulations.

Refunds for unused portions of parking permits must be requested on the Refund Request form available in the University Police Traffic Office. Refunds will be made in accordance with the current UTSA Parking and Traffic Regulations, Section 6, para. I.

Physical Education Fees

Physical Education Activity Fee. A fee of \$10 for a semester or summer term is required for all physical education courses or activities. Lockers, towels, and locks are provided.

Equipment and Lane Fee. A fee of \$60 for a semester or summer term is required for physical education bowling courses.

Driving Range Fee. A fee of \$44 for a semester or summer term is required for physical education golf activity courses.

Swimming Pool Fee. A fee of \$22 for a semester or summer term is required for physical education swimming activity courses.

Studio Art Fee

A fee of \$25 per course is assessed students enrolled in art (ART) courses in the visual arts curriculum that will use any of the studios under the direction of the Division of Visual Arts.

Supplementary and Special Fees

Some art, music, and other courses may require supplementary or special fees. When such fees are charged, the Schedule of Classes indicates the associated fee.

Visual Resource Collections Fee

A charge of \$7 per course is assessed to defray the costs of course support materials, such as the slide library, for art history and criticism (AHC) courses.

Writing Materials Fee

A \$5 per course fee is assessed for English composition courses.

FEEES FOR RESOURCE USE

Foreign Language Testing Fee

A charge of \$10 per course is assessed for testing to evaluate students for placement in foreign language programs.

Locker Fee

Students who wish to use lockers in the library and in the music, architecture and interior design, and visual arts divisions will be required to pay a \$15 per semester fee.

Placement Test Fee

Certain courses require a placement test before course enrollment. Students should contact the Testing Center (458-4125) for information about placement testing and test fees.

TASP Alternative Test Fee

Students taking a TASP alternative test will be assessed a fee not to exceed \$29.

Teacher Placement Service Fee

Currently enrolled students and alumni may register for teacher placement services with the Office of Teacher Advising, Certification, and Placement for a setup fee of

\$5. Others who wish to establish a placement file are charged a setup fee of \$35. A handling fee of \$5 is charged for each set of credentials provided after initial registration. All fees are payable in advance.

Transcript Fee

A charge of \$5 is made for each UTSA transcript to be processed and mailed within 48 hours. A charge of \$8 is required if the transcript is to be provided within one hour. This fee must be paid before a transcript will be issued.

UTSA Athletic Facility Use Fee

Athletic facilities available are the physical education gymnasiums, weight rooms, Tennis Center, and track. Lockers, locks, and towels are provided. In order to use these facilities, a current UTSA student identification card or membership card must be presented. Currently enrolled students may use the athletic facilities at no cost during normal hours of operation. Athletic facility memberships are available to faculty, staff, alumni association members, and spouses. Memberships may be purchased at the P.E. Equipment Room located on the lower level of the Physical Education Building.

Each authorized user may be accompanied by two guests per visit. Guest fee is \$5 per visit.

All persons using the athletic facilities must be at least 18 years old. All fees are nonrefundable.

Category of User	Annual Cost
UTSA student—currently enrolled	No cost
UTSA student—spouse	\$12
UTSA faculty or staff member	\$24
UTSA faculty or staff spouse	\$12
UTSA Alumni Association member	\$24
UTSA Alumni Association member spouse	\$12
Guests	\$5 per visit

TUITION AND MANDATORY FEES—FALL AND SPRING SEMESTERS/TEN-WEEK SUMMER SESSIONS

Number of Hours	Tuition: Resident/Military	Tuition: Nonresident	Student Services Fee	University Center Fee	Medical Services Fee	Automated Services Fee	Other Fees	Totals: Resident/Military	Totals: Nonresident
1	\$151.00	\$280.00	\$14.00	\$20.00	\$15.00	\$44.00	\$8.00	\$252.00	\$381.00
2	182.00	560.00	28.00	20.00	15.00	44.00	10.00	299.00	677.00
3	213.00	840.00	42.00	20.00	15.00	44.00	12.00	346.00	973.00
4	268.00	1,120.00	56.00	20.00	15.00	44.00	14.00	417.00	1,269.00
5	335.00	1,400.00	70.00	20.00	15.00	55.00	16.00	511.00	1,576.00
6	402.00	1,680.00	84.00	24.00	15.00	66.00	18.00	609.00	1,887.00
7	469.00	1,960.00	98.00	28.00	15.00	77.00	20.00	707.00	2,198.00
8	536.00	2,240.00	112.00	32.00	15.00	88.00	22.00	805.00	2,509.00
9	603.00	2,520.00	126.00	36.00	15.00	99.00	24.00	903.00	2,820.00
10	670.00	2,800.00	140.00	40.00	15.00	110.00	26.00	1,001.00	3,131.00
11	737.00	3,080.00	140.00	44.00	15.00	121.00	28.00	1,085.00	3,428.00
12	804.00	3,360.00	140.00	44.00	15.00	132.00	30.00	1,165.00	3,721.00
13	871.00	3,640.00	140.00	44.00	15.00	132.00	32.00	1,234.00	4,003.00
14	938.00	3,920.00	140.00	44.00	15.00	132.00	34.00	1,303.00	4,285.00
15	1,005.00	4,200.00	140.00	44.00	15.00	132.00	36.00	1,372.00	4,567.00
16	1,072.00	4,480.00	140.00	44.00	15.00	132.00	38.00	1,441.00	4,849.00
17	1,139.00	4,760.00	140.00	44.00	15.00	132.00	40.00	1,510.00	5,131.00
18	1,206.00	5,040.00	140.00	44.00	15.00	132.00	42.00	1,579.00	5,413.00
MIN	\$151.00	—	\$14.00	\$20.00	—	\$44.00	—	—	—
MAX	—	—	\$140.00	\$44.00	—	\$132.00	—	—	—
Per Cred. Hour	\$67.00	\$280.00	\$14.00	\$4.00	—	\$11.00	—	—	—

Tuition and fee amounts are subject to change by legislative action or by action of the Board of Regents of The University of Texas System. Changes in tuition and fees will be effective upon the date of enactment. Refer to each semester's Schedule of Classes for current tuition and fee amounts. Other semester fees include the library resources fee, \$1 per semester credit hour; Recreation Center fee, \$1 per semester credit hour; publication fee, \$5; and international education fee, \$1.

TUITION AND MANDATORY FEES—FIVE-WEEK SUMMER SESSION

Number of Hours	Tuition: Resident/Military	Tuition: Nonresident	Student Services Fee	University Center Fee	Medical Services Fee	Automated Services Fee	Other Fees	Totals: Resident/Military	Totals: Nonresident
1	\$91.00	\$280.00	\$14.00	\$20.00	\$7.50	\$44.00	\$5.00	\$241.50	\$370.50
2	134.00	560.00	28.00	20.00	7.50	44.00	7.00	288.50	666.50
3	201.00	840.00	42.00	20.00	7.50	44.00	9.00	335.50	962.50
4	268.00	1,120.00	56.00	20.00	7.50	44.00	11.00	406.50	1,258.50
5	335.00	1,400.00	70.00	20.00	7.50	55.00	13.00	500.50	1,565.50
6	402.00	1,680.00	70.00	24.00	7.50	66.00	15.00	584.50	1,862.50
7	469.00	1,960.00	70.00	28.00	7.50	66.00	17.00	657.50	2,148.50
8	536.00	2,240.00	70.00	32.00	7.50	66.00	19.00	730.50	2,434.50
9	603.00	2,520.00	70.00	36.00	7.50	66.00	21.00	803.50	2,720.50
10	670.00	2,800.00	70.00	40.00	7.50	66.00	23.00	876.50	3,006.50
11	737.00	3,080.00	70.00	44.00	7.50	66.00	25.00	949.50	3,292.50
12	804.00	3,360.00	70.00	44.00	7.50	66.00	27.00	1,018.50	3,574.50
13	871.00	3,640.00	70.00	44.00	7.50	66.00	29.00	1,087.50	3,856.50
14	938.00	3,920.00	70.00	44.00	7.50	66.00	31.00	1,156.50	4,138.50
15	1,005.00	4,200.00	70.00	44.00	7.50	66.00	33.00	1,225.50	4,420.50
16	1,072.00	4,480.00	70.00	44.00	7.50	66.00	34.00	1,293.50	4,701.50
17	1,139.00	4,760.00	70.00	44.00	7.50	66.00	35.00	1,361.50	4,982.50
18	1,206.00	5,040.00	70.00	44.00	7.50	66.00	36.00	1,429.50	5,263.50
MIN	\$91.00	—	\$14.00	\$20.00	—	\$44.00	—	—	—
MAX	—	—	\$70.00	\$44.00	—	\$66.00	—	—	—
Per Cred. Hour	\$67.00	\$280.00	\$14.00	\$4.00	—	\$11.00	—	—	—

Tuition and fee amounts are subject to change by legislative action or by action of the Board of Regents of The University of Texas System. Changes in tuition and fees will be effective upon the date of enactment. Refer to each semester's Schedule of Classes for current tuition and fee amounts. Other semester fees include the library resources fee, \$1 per semester credit hour; Recreation Center fee, \$1 per semester credit hour; publication fee, \$5; and international education fee, \$1.

PENALTY FEES

Late Payment Fee

A late fee of \$10 is added to a student's bill when an installment payment is not paid by the due date.

Library Fines for Overdue Materials and Lost or Damaged Items

Fines are charged for overdue library materials and library items that are lost or damaged. UTSA Library regulations on borrowing and fines are available at the circulation desk.

Parking Fines

Unpaid parking fines place a financial hold on student records and will interfere in the registration or transcript release processes.

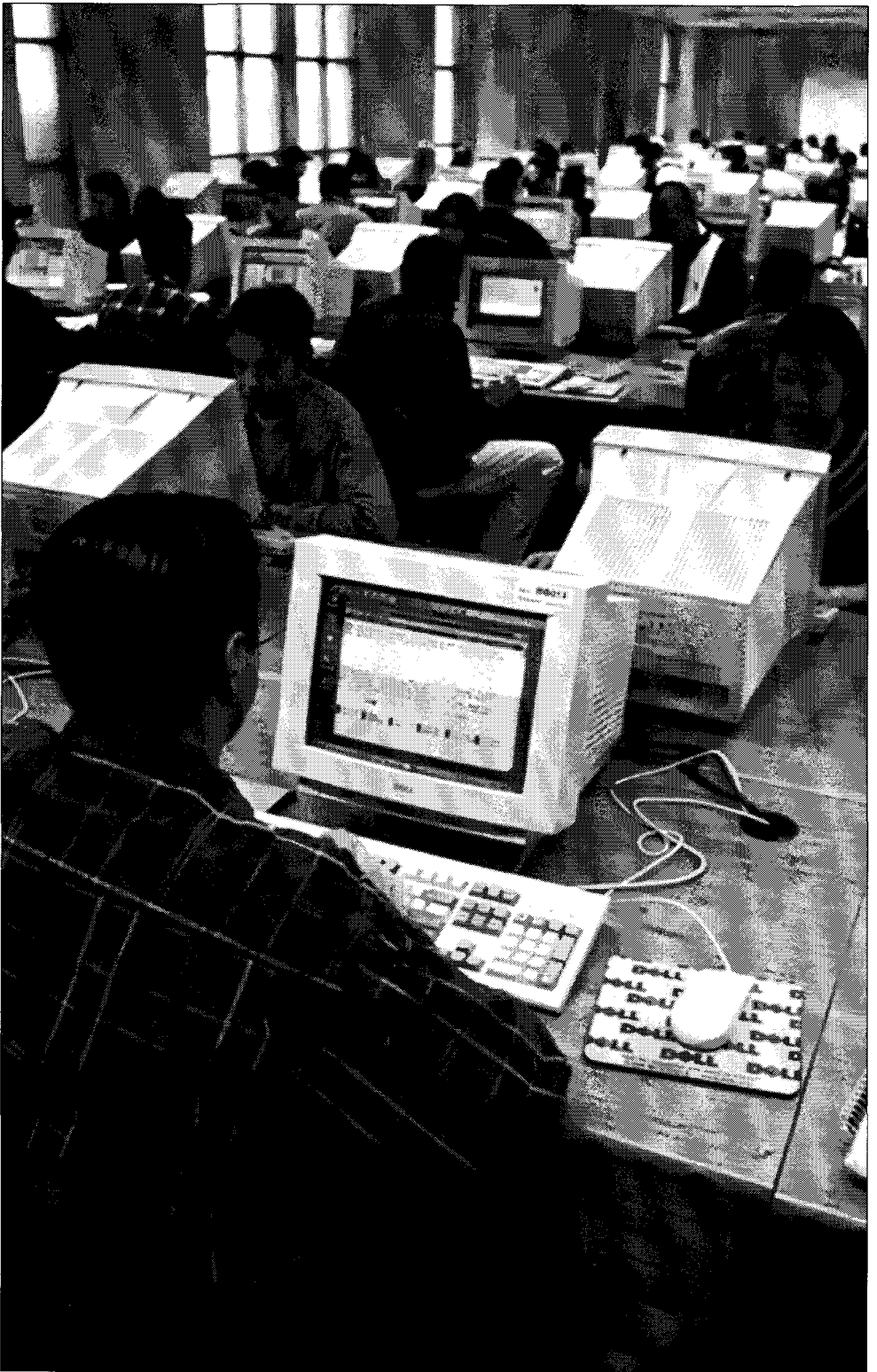
Property Damage Charges

Property damage charges are assessed to students for property loss, damage, or breakage; violation of rules in any University library or laboratory; failure to return keys issued by the University; or damage to or loss of any other UTSA property. Charges are billed directly to the student or are collected by the department upon reissue of supplies or property. Failure to pay the charges promptly results in denial of the student's readmission or reenrollment and in the University's refusal to issue the student's transcript.

Returned Check Fee

A charge of \$15 is assessed for each returned check to offset the cost of handling. The University will not accept a check from a student who wittingly or unwittingly has previously written two bad checks.

4.
ADMISSION



ADMISSION

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PHILOSOPHY

Admission requirements for undergraduate study at UTSA are designed to give admitted applicants an opportunity to demonstrate that they can perform college-level work. Each admission case is reviewed individually, and exceptional circumstances should be discussed with an admissions counselor. UTSA will admit all applicants who are holders of bona fide University of Texas at San Antonio scholarships designated by the President of the University.

CLASSIFICATIONS AND REQUIREMENTS

The criteria for the various classifications of admission are set forth in the following section.

First-Time Freshmen

First-time freshmen are students who have never attended a college or university before their application for admission to UTSA. Basic requirements for first-time freshmen depend on the length of time between their date of graduation or General Educational Development (GED) test and their date of application. If applicants have graduated within five years of application, a minimum rank-in-class and either a Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Testing Program (ACT) score are required. If applicants graduated more than five years before application, admission is based on graduation from an accredited high school. If applicants earned a GED within five years of application, an SAT/ACT score is required. Applicants who earned a GED more than five years before application are not required to take the SAT/ACT.

High school seniors who have their SAT/ACT test scores sent to UTSA are provided admission information and, if applicable, a preprinted application for admission. Where possible, a tentative admission decision is made based on SAT/ACT scores.

High School Graduates

Applying within Five Years of Graduation

In-State. This category covers applicants who have graduated from an accredited Texas high school within five years of the date of application to UTSA and who have never attended another college or university. An accredited high school is one that has been accredited by the Texas Education Agency or by an accrediting association approved by the Texas Education Agency. UTSA will also consider any student who graduates from a high school accredited by any of the regional accrediting associations similar to the Southern Association of Colleges and Schools.

The following table shows the minimum total scores required, based on high school rank-in-class and on either the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Testing Program (ACT).

High School Rank-in-Class	Minimum Total SAT Score	Minimum Total SAT Score (Recentered)	Minimum Total ACT Score (Enhanced)
Top 10%	No minimum required, but scores must be submitted	No minimum required, but scores must be submitted	No minimum required, but scores must be submitted
Top 25% (not in top 10%)	700	830R	17
Second 25%	750	870R	18
Third 25%	800	920R	19
Fourth 25%	850	970R	20
GED test	850	970R	20

Texas resident students who are in the top 10 percent of their high school graduating class at an accredited high school are admitted with no ACT or SAT minimum score requirements, but their scores must be submitted to UTSA. Students scoring 20 on the ACT, 850 on the SAT, or 970R on the Recentered SAT, contingent upon high school graduation, will be admitted. Students scoring below 20 on the ACT, 850 on the SAT, or 970R on the Recentered SAT will need to meet the requirements for rank-in-class as shown in the above chart.

Effective with the Fall 1999 semester, if a first-time freshman does not meet the admissions criteria above, the Office of Admissions and Registrar may also take into consideration the following factors to determine admission:

- first-generation college student status
- financial status of applicant's school district
- extracurricular activities
- leadership
- community activities
- work experience
- socioeconomic background
- experience surmounting obstacles to pursue higher education.

All applicants must complete a UTSA application, enclose a sixth- or seventh-semester high school transcript and \$25 nonrefundable application fee, and send it to the Office of Admissions and Registrar early in their senior year.

Out-of-State. An applicant who applies from out of state must graduate from a high school accredited by that state's accreditation division. That division's mission and scope must be similar to that of the Texas Education Agency. UTSA will also consider the applications of students who graduate from a high school accredited by any of the regional accrediting associations similar to the Southern Association of Colleges and Schools.

Out-of-state applicants for admission who have graduated within five years of the date of first enrollment at UTSA and who have not attended another college or

university must be in the top half of their graduating class. Minimum SAT or ACT scores must correspond to those required of in-state applicants in the first or second 25 percent of their class.

Applying More Than Five Years after Graduation. Both in-state and out-of-state applicants for admission whose graduation from high school was more than five years before their application for admission and who have never attended another college or university are eligible for admission regardless of both high school rank-in-class and SAT or ACT scores. These applicants must submit a completed application, an official high school transcript, and a nonrefundable application fee to the Office of Admissions and Registrar.

GED Applicants

Applicants who did not graduate from an accredited high school but who received a General Educational Development (GED) test certificate may be eligible for admission to UTSA. Along with a completed application and nonrefundable application fee, these applicants must submit official GED scores and SAT or ACT scores if applicable.

Applicants are required to have an average standard GED score of 45 or above on the five tests, with no score lower than 35 on any individual test. If the GED test was taken within five years of application, GED applicants must also furnish official SAT or ACT scores. A minimum composite score of 850 on the SAT or 20 on the ACT is required in order to be eligible for admission. Applicants who received their GED more than five years before application to UTSA are not required to submit SAT or ACT scores; admission for these students is based on satisfactory GED scores as outlined above.

Recommended Preparation

UTSA expects each applicant to be prepared for academic work at the university level. High school students who plan to apply to UTSA are strongly encouraged to prepare for university study by taking courses in language skills, quantification skills, and other subjects contributing to a broad academic background (English, foreign languages, speech, social sciences, history, mathematics, sciences, and the fine arts).

The suggested nature and number of high school units (a year of study in one subject at an accredited secondary school) follow:

Subject	Units
English	4
Mathematics (algebra, geometry, trigonometry, and advanced mathematics)	3 or more
One foreign language	2 or more
Natural science	2 or more
Social science	2 or more
Fine arts	1 or more

These specific units, although not required for admission, are recommended. Students who enroll at UTSA and who have knowledge in certain subjects may be able to earn credit toward graduation through the credit by examination program outlined in chapter 5 (General Academic Regulations) of this catalog.

Early Admission

Applicants for admission as first-time freshmen who are attending high school at the time of application and who meet the rank-in-class and SAT/ACT requirements during their senior year are admitted pending certification of high school graduation. Applicants for early admission who do not meet the requirements before graduation will be reconsidered for admission upon submission of final transcripts or new test scores.

Admission by Individual Approval

Graduation from an accredited high school is the typical minimum requirement for admission to UTSA. However, Texas residents who have scored at least 850 on the SAT, 970 on the Recentered SAT, or 20 on the ACT but are graduates of unaccredited high schools or home school programs may be considered for admission. Each applicant is reviewed individually; exceptional circumstances should be discussed with an admissions counselor.

Provisional Admission

Applicants who are Texas residents, first-time freshmen, and graduates of any accredited high school, but who do not qualify for admission because of inadequate SAT/ACT scores or high school records, may be admitted to a Spring Semester or summer term on a provisional basis.

When admitted on a provisional basis, students are given an opportunity to demonstrate that they can perform college-level work and can reasonably be expected to make progress toward a degree. Applicants must demonstrate their ability to perform at the college level by obtaining an overall "C" average (2.0 on a 4.0 scale) in 12 semester credit hours of college-level work. Upon successful completion of 12 semester credit hours of work from approved courses, students are allowed to request degree-seeking status in a subsequent semester.

Enrollment Requirements. While students are expected to complete the 12-semester-credit-hour requirement in their initial semester of enrollment at UTSA, the absolute minimum initial enrollment is 6 college-level semester credit hours. If initially enrolling in a Summer Session, the student must register for both summer terms.

A student who enrolls for between 6 and 12 semester credit hours and does not earn a 2.0 grade-point average must earn at least a 1.5 grade-point average to continue as a provisional student the next term. When 12 semester credit hours are completed, the student must have attained a cumulative grade-point average of 2.0. Students not reaching a 2.0 grade-point average will be placed on academic dismissal. For consideration of reinstatement, a student must submit a transcript from other colleges or universities attended showing at least 30 semester credit hours of coursework with at least a 2.0 grade-point average.

If a student enrolls for more than 12 semester credit hours in the initial semester, all grades will be calculated in the final grade-point average during the semester in which the 12th hour is completed.

Course Requirements. Once a student has been admitted under the Provisional Admission Program, advisement is provided through the Tomás Rivera Center for Student Success. Students in the program must take courses selected from English, mathematics, natural sciences, social sciences, humanities, and foreign languages.

Enrollment in EDP 1702, a 2-semester-credit-hour study skills course, is recommended; however, EDP 1702 may not be counted toward the 12-semester-credit-hour requirement.

Applicants must not have previously enrolled in credit courses in any other institution of higher education. However, previous enrollment in developmental education courses is permitted. Neither previous developmental education courses nor educational development courses taken at UTSA may count toward the 12-semester-credit-hour requirement.

Until a student's provisional status is removed, courses in disciplines other than English, mathematics, natural sciences, social sciences, humanities, and foreign languages may not be taken. Students will be dropped from courses in any other disciplines.

Transfer Students

Students should apply for admission as transfer students if they have previously completed any credit courses at the college level. Applicants may be currently attending another accredited college or university at the time of their application to UTSA.

Applicants for admission as transfer students must have at least a "C" (2.0 on a 4.0 scale) admission grade-point average. When calculating an admission grade-point average for transfer students, repeats and duplicates are excluded from the calculation except in cases where the course is allowed to be repeated for credit. Courses completed at another regionally accredited college or university in which grades of "D" or "F" were earned may be repeated at the same institution with the better grade counted in the admission grade-point average. In the case of a student repeating a course with a grade of "C" or better, the later attempt is considered a duplicate course and is excluded from the grade-point calculation.

Applicants who are enrolled at another regionally accredited college or university at the time of application and have at least a "C" admission grade-point average may be admitted pending receipt of final transcripts verifying the grade-point average and good standing. For applicants who are currently enrolled in another college or university and do not meet these requirements, determination of eligibility for admission may be deferred until all final transcripts are received.

Once transfer students have met all of the admissions requirements listed in the UTSA Undergraduate Catalog, they will be granted admission.

With Less Than 30 Semester Credit Hours

Applicants for admission who have earned less than 30 semester credit hours from accredited colleges or universities must

1. meet the same rank-in-class (or GED) and SAT/ACT requirements as first-time freshmen
2. have at least a "C" (2.0 on a 4.0 scale) admission grade-point average
3. be in good standing at the last institution attended
4. be eligible to return (i.e., free of suspension, dismissal, or enforced withdrawal) to all previous institutions attended.

With 30 or More Semester Credit Hours

Applicants for admission to UTSA who have earned 30 or more semester credit hours from accredited colleges or universities must

1. have at least a "C" (2.0 on a 4.0 scale) admission grade-point average
2. be in good standing at the last institution attended
3. be eligible to return (e.g., free of suspension, dismissal, or enforced withdrawal) to all previous institutions attended.

Declaration of Previous College Work Attempted

Students are not at liberty to disregard previous college work attempted. All students transferring to UTSA *must* list *all* colleges attended on their UTSA application for admission. Failure to do so results in the rejection of the application, withdrawal of any offer of acceptance, cancellation of enrollment, permanent dismissal from UTSA, or other appropriate disciplinary action.

2+2 Program

This program is designed to help students attending certain community colleges graduate from UTSA without losing credit in the transfer. Students must meet the general admission requirements set forth in this catalog as well as any additional specific admission requirements of the various degree programs.

UTSA has established 2+2 transfer programs with San Antonio College, Palo Alto College, St. Philips College, Southwest Texas Junior College, Del Mar College, the Victoria College, Laredo Junior College, Bee County Community College, and Austin Community College.

Students completing the first two years of a recommended plan of study that appears in the 2+2 brochures for one of the above colleges may complete the remaining years at UTSA and earn a bachelor's degree in their respective discipline from UTSA.

Academic Fresh Start

Texas residents may apply for admission to UTSA under the Academic Fresh Start statute (Texas Education Code, § 51.929). Under this program, academic course credits or grades earned 10 or more years before the semester for which the student seeks enrollment are not considered for admission purposes.

Applicants seeking admission under the Academic Fresh Start statute must inform the Office of Admissions and Registrar in writing of their intent. Students admitted under this program will not receive any credit for courses taken 10 or more years before enrollment. Students with 3 or more semester credit hours awarded before the Fall 1989 semester are exempt from the Texas Academic Skills Program (TASP) regardless of any election of Academic Fresh Start.

Students who plan to pursue graduate degrees should note that if their baccalaureate degree was earned under the Academic Fresh Start statute, only the grade-point average of the coursework that applied to the baccalaureate degree as stated under the Academic

Fresh Start restrictions will be evaluated. However, other standard evaluation criteria for graduate study will apply.

International Students

Definition

All applications from individuals holding nonpermanent visas will be processed as International. This includes applications received from other countries as well as applications received from persons currently attending U.S. high schools, colleges, or universities.

International Freshmen

All applicants for admission to UTSA as international first-time freshmen must

1. Have qualifications equivalent to those of students entering from accredited secondary schools in the United States, as determined by the Office of Admissions and Registrar.
2. Have superior grades on work done in secondary school, as determined by the Office of Admissions and Registrar.
3. Submit scores from the Test of English as a Foreign Language (TOEFL). A minimum score of 500 on the TOEFL is required. TOEFL scores may be waived for
 - a. international students from countries where English is the primary language of instruction *and* the principal language spoken in the home, or
 - b. noncitizens of the United States graduating from U.S. high schools and satisfactorily completing a minimum of two years in English (classes in English as a Second Language do not count toward this waiver requirement).
4. Participate in UTSA's English Language Assessment Program before registration if they earn a TOEFL score below 600. Based on this assessment, students requiring additional instruction in English are placed in English for International Students (EIS) courses.
5. Submit an SAT/ACT test score corresponding to rank-in-class requirements for in-state, first-time freshman applicants if they graduated from a U.S. high school. SAT or ACT scores are strongly recommended from schools abroad.
6. Submit a statement guaranteeing the student's ability to pay all expenses while at UTSA. The statement may be sent from a parent, guardian, or sponsor when endorsed by a bank or other reliable institution, or from a U.S. citizen who accepts responsibility for the student's financial needs.
7. Submit evaluation of foreign credentials. Request information regarding the designated evaluation agency from the Office of Admissions and Registrar.

8. Have all application materials (application, evaluation of foreign credentials, \$25 nonrefundable application fee, and supporting documents) on file in the Office of Admissions and Registrar by the application deadlines:

Fall Semester	June 1
Spring Semester	October 15
Summer Session	March 1

International Transfer Students

Transferring from Schools Outside the United States. International transfer students who have attended a college or university in a country *other* than the United States must

1. Have qualifications equal to those required for transfer from a college or university in the United States.
2. Submit scores from the Test of English as a Foreign Language (TOEFL). A minimum score of 500 on the TOEFL is required. TOEFL scores may be waived for
 - a. international students from countries where English is the primary language of instruction **and** the principal language spoken in the home, or
 - b. noncitizens of the United States graduating from U.S. high schools and satisfactorily completing a minimum of two years in English (classes in English as a Second Language do not count toward this waiver requirement).
3. Participate in UTSA’s English Language Assessment Program before registration if they earn a TOEFL score below 600. Based on this assessment, students requiring additional instruction in English are placed in English for International Students (EIS) courses.
4. Submit an SAT/ACT test score corresponding to rank-in-class requirements for in-state, first-time freshman applicants if they graduated from a U.S. high school. SAT or ACT scores are strongly recommended for all other international students. (International transfer students who have successfully completed one year of full-time university study do not need to submit SAT/ACT scores.)
5. Submit a statement guaranteeing the student’s ability to pay all expenses while at UTSA. The statement may be sent from a parent or guardian when endorsed by a bank or other reliable institution, or from a U.S. citizen who accepts responsibility for the student’s financial needs.
6. Submit evaluation of foreign credentials. Request information regarding the designated evaluation agency from the Office of Admissions and Registrar.
7. Have all application materials (application, evaluation of foreign credentials, \$25 nonrefundable application fee, and supporting documents) on file in the Office of Admissions and Registrar by the application deadlines:

Fall Semester	June 1
Spring Semester	October 15
Summer Session	March 1

Transferring from Schools within the United States. International transfer students who have attended another college or university in the United States must

1. Have completed at least 30 semester credit hours with a “C” average (2.0 on a 4.0 scale) on all college work attempted.
2. Submit scores from the Test of English as a Foreign Language (TOEFL). A minimum score of 500 on the TOEFL is required. TOEFL scores are not required for

- a. international students from countries where English is the primary language of instruction *and* the principal language spoken in the home, or
 - b. students who have successfully completed 45 or more semester credit hours of transferrable college-level credit with a U.S. college or university, or
 - c. noncitizens of the United States graduating from U.S. high schools and satisfactorily completing a minimum of two years in English (classes in English as a Second Language do not count toward this waiver requirement), or
 - d. noncitizens of the United States graduating from U.S. colleges or universities with at least a bachelor's degree.
3. Participate in UTSA's English Language Assessment Program before registration if they earn a TOEFL score below 600. Based on this assessment, students requiring additional instruction in English are placed in English for International Students (EIS) courses.
 4. Submit a statement guaranteeing the student's ability to pay all expenses while at UTSA. The statement may be sent from a parent or guardian when endorsed by a bank or other reliable institution, or from a U.S. citizen who accepts responsibility for the student's financial needs.
 5. Submit evaluation of foreign credentials. Request information regarding the designated evaluation agency from the Office of Admissions and Registrar.
 6. Have all application materials (application, evaluation of foreign credentials, \$25 nonrefundable application fee, and supporting documents) on file in the Office of Admissions and Registrar by the application deadlines:

Fall Semester
Spring Semester
Summer Session

June 1
October 15
March 1

Special Students

Special students are transfer students who enroll in courses only at the undergraduate level without pursuing a degree at UTSA. First-time freshmen and international students may not apply as special students. Because special students are not working toward a degree, they may be ineligible for financial assistance.

Applicants with less than 30 semester credit hours attempted at an accredited college or university must meet the same admission requirements as first-time freshmen, have at least a "C" average (2.0 on a 4.0 scale) on all college-level coursework, and be in good standing at the last institution attended.

Applicants who have attempted 30 or more semester credit hours must have at least a "C" average (2.0 on a 4.0 scale) on the last 30 hours attempted and be in good standing at the last accredited college or university attended. Even though admission is based on the last 30 semester credit hours attempted, students must list all colleges and universities attended on the admission application.

To verify that requirements of the Texas Academic Skills Program (TASP) have been fulfilled, all special students must provide transcripts showing satisfactorily completed courses before Fall 1989, even if the courses are not part of the last 30 semester credit hours attempted.

Special students may later be admitted as regular degree-seeking students by applying for admission and meeting the same admission requirements as those listed for transfer students. Classification changes from "special undergraduate" to "degree-seeking" must be submitted to the Office of Admissions and Registrar by the Automatic "W" Date and are effective the same semester if approved.

High School Students

Selected high school students may be admitted under the Concurrent UTSA/High School Enrollment Program and enroll in UTSA courses while completing their high school studies. To qualify for the concurrent enrollment program, students must take either the SAT or ACT test and earn the following scores:

High School Class	Minimum Total SAT Score	Minimum Total ACT Score
Senior	1100	24
Junior	1180	26
Sophomore	1270	28

A letter of recommendation from a high school counselor or principal is required. Applicants must submit a UTSA application for admission, a letter of recommendation, an official high school transcript, SAT or ACT test scores, and a \$25 nonrefundable application fee by the application deadline. The director of University Honors Programs must approve specific course selections. Scholarships are available through the Office of University Honors Programs and are awarded solely on the basis of financial need.

APPLICATION DATES

Students are urged to apply for admission as early as possible so that matters regarding admission can be resolved well in advance of the beginning of a semester. Students must have all application materials (application, \$25 nonrefundable application fee, and all required supporting documents) on file in the Office of Admissions and Registrar by the application deadlines:

Fall Semester	July 1
Spring Semester	December 1
Summer Session	May 1

Failure to meet these application deadlines will defer admission until a subsequent semester. Students' files completed by the following priority application deadlines will be guaranteed registration accessibility before the close of Priority Telephone Registration:

Fall Semester	June 1
Spring Semester	November 1
Summer Session	April 1

ADMISSION PROCEDURES

Each applicant for admission is responsible for ensuring that all required application materials (completed application form, \$25 nonrefundable application fee, test results, required transcripts, etc.) are on file in the Office of Admissions and Registrar by the application deadlines. Admission is not granted until the applicant's file is complete. All documents submitted in support of an application become the property of UTSA and cannot be returned.

Students who apply for admission for any term and do not register for courses must complete a Change of Term form if they want to enroll for the next semester. For subsequent semesters, students must complete a new application for admission. Any subsequent application for admission must be in accordance with current admission requirements. New transcripts, test scores, and other supporting documents may be required since files for admitted students who do not register for courses are not retained indefinitely.

The University reserves the right to decline admission to applicants with criminal convictions.

READMISSION

Former UTSA students who have not been in attendance for one or more long semesters (fall or spring) must file an application for readmission, along with a \$25 nonrefundable application fee, by the application deadline.

All former students returning to UTSA who have attended other institutions of higher education since they were last enrolled at UTSA must submit an official transcript from each institution. Eligibility for readmission depends on the student's academic status at the conclusion of the last UTSA semester of enrollment and performance on any subsequent college or university work attempted.

ADMISSION TO SPECIAL PROGRAMS (IN ADDITION TO UTSA ADMISSION)

University Honors Program

The University Honors Program is an interdisciplinary, four-year curriculum of special classes, supervised research, and ongoing faculty advisement. The program provides superior students with the opportunity to obtain an education that challenges them to think, question, and excel. The program offers small classes with greater opportunities for student participation, increased student-faculty contact, greater individual attention, lively discussions of important issues, special interdisciplinary classes, and research opportunities. Honors students are also eligible for special scholarships, including Presidential Honors Scholarships, book awards, and Lecture Patrons Scholarships.

Program participants choose from a unique selection of interdisciplinary seminars and Core Curriculum courses while fulfilling their major requirements. Students

who fulfill all course requirements of the University Honors Program, including the completion of an Honors thesis, and who maintain a grade-point average of 3.25 or above, graduate with University Honors Program Honors. This special distinction appears on the student's transcript and is recognized at the Student Honors Convocation in the student's senior year.

Students wishing to apply for admission to the University Honors Program should contact the director of Honors Programs. Applications are reviewed and honors students are selected by the Honors Faculty Advisory Committee. Selection is based on grades, standardized test scores, letters of recommendation, and a writing sample.

Students currently enrolled at UTSA are eligible for admission if they have a grade-point average of 3.3 or above. High school students are eligible for admission if they expect to graduate in the top 10 percent of their class and have a combined SAT (recentered) score of 1000 or an ACT score of 22, *or* if they expect to graduate in the top 20 percent of their high school class and have an SAT (recentered) score of 1200 or an ACT score of 27. Although students are admitted on a continuing basis, high school students must submit their applications by February 1 to be considered for Presidential Honors Scholarships.

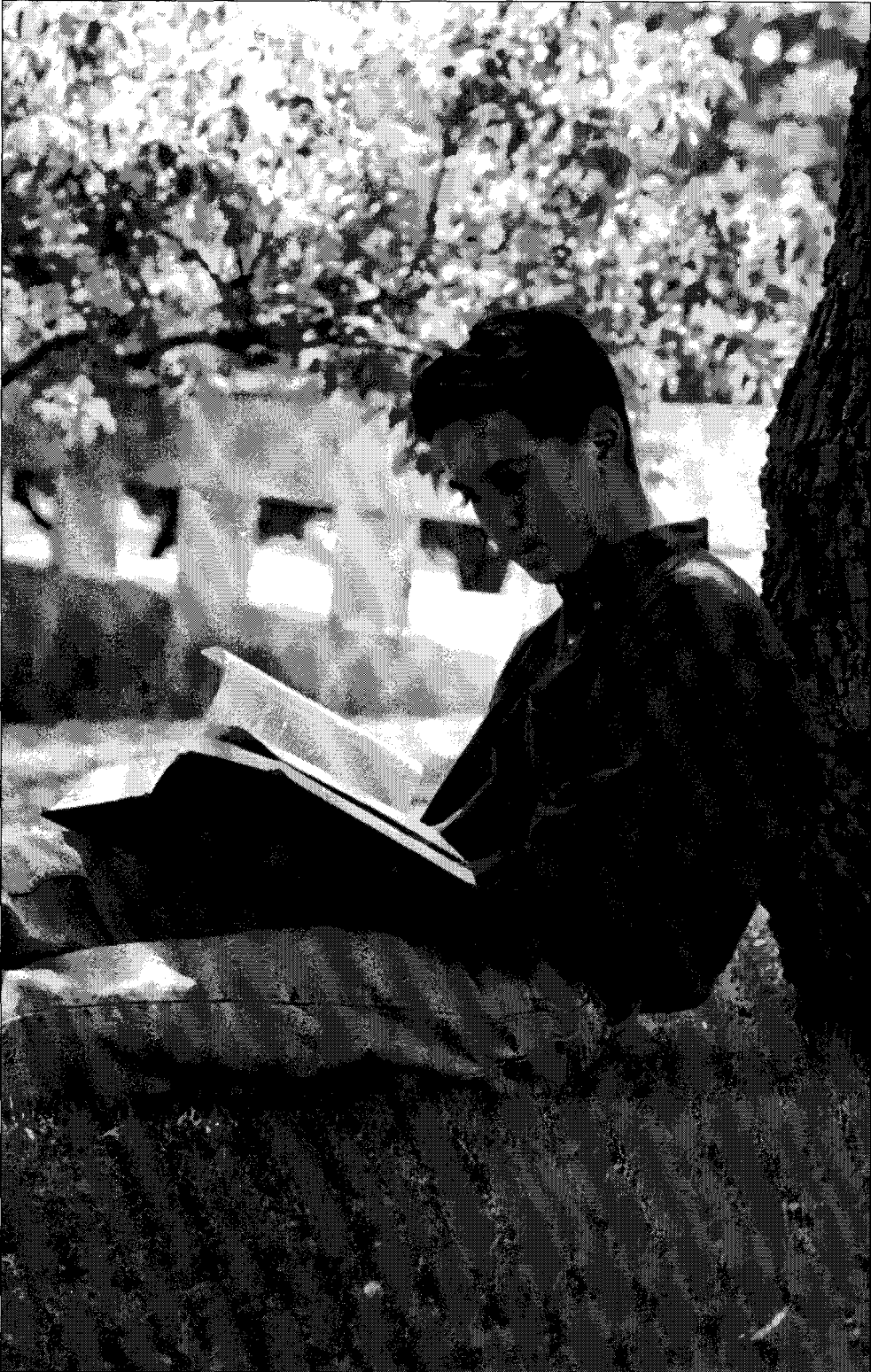
Teacher Certification Programs

UTSA is approved by the Texas Education Agency to recommend students for teaching certificates in various baccalaureate degree areas. Students preparing for a provisional or professional teaching certificate or seeking certification endorsements should apply for admission to the certification program through the Office of Teacher Advising, Certification, and Placement in the Division of Education. Applicants may be either degree-seeking or special students.

Specific information regarding admission requirements to the Teacher Certification undergraduate, postbaccalaureate, and professional certification programs may be obtained in the Office of Teacher Advising, Certification, and Placement. As soon as they are admitted to UTSA, students are encouraged to seek advising regarding the Texas Academic Skills Program (TASP) required of all teacher candidates in Texas, the semester credit hours required for admission, grade-point average requirements, and the appropriate sequence of study.

Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree as outlined in this catalog. Individuals seeking secondary certification should complete the bachelor's degree requirements in their academic specialization while coordinating with the Office of Teacher Advising, Certification, and Placement to fulfill certification requirements. Students wishing to add additional teaching fields and endorsements to their provisional teaching certificate or graduate students seeking professional certification must also coordinate with the office.

5.
GENERAL ACADEMIC
REGULATIONS



GENERAL ACADEMIC REGULATIONS

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REGISTRATION PROCEDURES

Registration for Classes

Before registration, new freshmen and transfer students with less than 30 semester credit hours of college coursework are required to obtain advisement at the Tomás Rivera Center for Student Success. All students who attend classes at UTSA must be officially registered or approved as auditors. Registration instructions are included in the Schedule of Classes issued each semester. Questions regarding registration should be directed to the Office of Admissions and Registrar.

UTSA does not guarantee the availability of particular courses or sections, and admission to classes is permitted only until the maximum number of students allowed in any section has been reached. UTSA reserves the right to cancel any course or section in which the number of registrants does not warrant its continuation.

Texas Academic Skills Program (TASP) Examination

The TASP is designed to determine whether students possess the basic skills in reading, writing, and mathematics necessary for university courses. In accordance with Texas Education Code, Section 51.306, all students in the following categories who enter public institutions of higher education and have not earned at least 3 college-level semester credit hours before Fall 1989 must take the TASP prior to enrollment, unless exempt: all full-time and part-time freshmen enrolled in a degree program; and any other student, including transfers from private or out-of-state institutions. The TASP fee is paid by the student. The law exempts the following categories of students:

- those who have earned at least 3 college-level semester credit hours or the equivalent before Fall 1989
- those who have a composite score on the TAAS, ACT, or SAT at or above the level set by the Texas Higher Education Coordinating Board:

Effective Fall 1997 Semester		
Test	Minimum scores required*	
ACT*	Composite score of 23, with	
	Individual English score	19
	Individual mathematics score	19
SAT* (recentered scale for tests taken April 1995 and following)	Composite score of 1070, with	
	Verbal score	500
	Mathematics score	500

*For exemption purposes, a TAAS score is valid for three years and a SAT or ACT score is valid for five years. Tests may be retaken, but the exempted scores must be achieved in a single administration of the ACT or SAT or the first attempt of the TAAS.

Effective Fall 1997 Semester		
Test	Minimum scores required*	
SAT* (for tests taken before April 1995)	Composite score of 970, with	
	Verbal score	420
	Mathematics score	470
TAAS*	Reading	Texas Learning Index of 89
	Writing	Scale score of 1770
	Mathematics	Texas Learning Index of 86

- visually-impaired and hearing-impaired students who have earned at least 3 college-level credits before September 1995
- students who enroll on a temporary basis and are also enrolled in a private or independent institution of higher education or an out-of-state institution of higher education when the appropriate documentation is submitted
- those who have earned a bachelor's or higher degree and enroll on a temporary basis
- students age 55 years or more who are not seeking a degree and request an exemption
- students with documented cases of dyslexia or other related disorders or a specific learning disability in mathematics who have completed the requirements as mandated by the Texas Higher Education Coordinating Board.

Students with 3 or more semester credit hours or the equivalent awarded before the Fall 1989 semester are exempt from the Texas Academic Skills Program regardless of any election pursuant to the Academic Fresh Start statute, Section 51.929, Texas Education Code.

A student whose performance on the TASP is below the standard set by the Texas Higher Education Coordinating Board for a tested skill area must participate in an advising and developmental education program and, unless excepted pursuant to law or regulation, may not enroll in upper-division courses, completion of which would give the student 60 or more semester credit hours, until the student meets or exceeds the minimum standards set in all test sections.

All sections of the TASP must be passed before completion of and award of a degree. Any student seeking a teaching certificate must pass the TASP. For further information on requirements for teachers, students should contact the Office of Teacher Advising, Certification, and Placement.

*For exemption purposes, a TAAS score is valid for three years and a SAT or ACT score is valid for five years. Tests may be retaken, but the exempted scores must be achieved in a single administration of the ACT or SAT or the first attempt of the TAAS.

Freshmen and transfer students who have not sent TASP results to the Office of Admissions and Registrar before the application deadline have a registration hold that prevents them from registering until they have taken the TASP. It is essential that students respond early to this requirement in order to obtain the best possible schedule.

Additional TASP information, including the rules adopted by the Texas Higher Education Coordinating Board, and information about special provisions relating to certain disabilities is available in the Tomás Rivera Center for Success. Information on TASP examination dates is available from the Testing Center and the Tomás Rivera Center for Student Success.

Late Registration

Late registration permits students who have been admitted to UTSA to register for classes during an allotted time indicated in the Schedule of Classes, which is issued each semester. Instructions for late registration are available at the Office of Admissions and Registrar. *Students are not permitted to register after the close of the late registration period.*

Students who register late are charged an additional \$5 the first day of late registration and an additional \$2.50 a day thereafter, to a maximum of \$15 for any one term. This fee is nonrefundable.

Students who register late are responsible for completing work missed while the courses were in session before they registered. In addition, since many courses will have been closed at capacity, late registrants may need to select their courses from a reduced schedule.

Adding Courses

Students who are registered for courses may add courses to their schedules for a limited time at the beginning of the semester. In Fall or Spring Semesters, courses may be added during the first week of classes. In summer terms, classes may be added during the first two days of the term. Adding a course requires the approval of the course instructor, the student's advisor, and the director of the division offering the course.

After the Census Date in any semester, students may not add courses except in extremely rare and extenuating circumstances as approved by the Dean. The Census Date for Fall or Spring Semesters is the 12th class day; for summer terms, the fourth class day. The University Calendar in the Schedule of Classes, issued each semester, indicates the deadline dates for adding courses.

There is a processing fee for adding courses. The fee is only charged from the first through the 12th class days in Fall or Spring Semesters and from the first through the fourth class days in summer terms. See the Schedule of Classes for information on the fee amount and the procedure for adding courses.

Undergraduates seeking to register for or to add a graduate course in any of these time periods must obtain the special approvals specified in the section Enrollment in Graduate Courses in chapter 6 (Bachelor's Degree Regulations) of this catalog.

Dropping Courses

Students may drop courses from their schedules for a limited time each semester. The University Calendar in the Schedule of Classes, issued each semester, indicates the deadlines for students to drop courses each term.

Courses officially dropped before the Census Date do not appear on a student's transcript. The Census Date for Fall or Spring Semesters is the 12th class day; for summer terms, the fourth class day. There is a processing fee for dropping courses from the first day of classes through the Census Date.

Students who drop courses between the Census Date and the Automatic "W" Date have a record of the courses on their transcripts with an automatic grade of "W." The Automatic "W" Date is the last day of the ninth week of the Fall or Spring Semesters, or of the third week of a five-week summer term, or of the sixth week of a 10-week summer term. The change becomes official after it is processed by the Office of Admissions and Registrar. Students dropping courses after the Census Date are not charged the processing fee. Students may not elect to drop an individual course after the Automatic "W" Date. Students withdrawing from the University should refer to Withdrawal from the University in this chapter.

Administrative Drops

Administrative drops are not student options. Instructors may drop a student for nonattendance during the regular drop period (through the first nine weeks of Fall or Spring Semesters, the first three weeks of a five-week summer term, or the first six weeks of a 10-week summer term). The student will receive a grade of "W."

After the official drop period, an instructor may recommend to the Dean that a student be dropped from class when the instructor can show that unusual circumstances exist to warrant such action. If the Dean grants the drop, the student receives a grade of "W" (if passing at the time of the drop) or a grade of "F" (if failing at the time of the drop).

Auditing Courses

UTSA students and nonstudents who wish to audit a course may do so with the approval of the instructor and the director of the division in which the course is offered, provided there is a space in the classroom after all registered students have been accommodated. A course must achieve its minimum size without auditors.

Auditing entitles a student to listen and observe. Participation of an auditor in class is at the discretion of the instructor. No UTSA credit is granted for courses that are audited; no official record is made of enrollment in classes on an audit basis. Due to the format of studio/laboratory use, auditors are not approved for art courses. Students not enrolled in courses at the University are not allowed to audit courses that require the use of the University computing system.

All auditors must submit a Request to Audit form to the Office of Admissions and Registrar. A UTSA student pays an auditing fee of \$25 a course; auditors who are not registered UTSA students must pay an auditing fee of \$50 a course. People over 65 years of age are permitted to audit without paying an auditing fee if space is available.

Permission to audit must be obtained and fees paid beginning the first day of class through the Census Date. Students who register for a course and later want to change the course to an audit must officially drop that course before submitting a Request to Audit form.

Nonstudent auditors who want library privileges may receive them by filling out a Friends of the UTSA Library application at the circulation desk in the UTSA Library and paying a nonrefundable fee. There are limits on the services offered to the Friends of the UTSA Library cardholders; further details are available from the circulation desk. Nonstudent auditors who want UTSA parking privileges should go to the University Police Traffic Office with their validated Request to Audit form.

Cancellation of Enrollment

Students who fail to fulfill admission, registration, or financial requirements or who otherwise fail to adhere to academic regulations may have their enrollment for the term canceled. Students may apply for readmission to a subsequent term provided they have resolved the cause of cancellation.

Withdrawal from the University

Students who find it necessary to withdraw from UTSA (drop all courses for which they are enrolled during a specific term) must complete a Withdrawal form in the Office of Admissions and Registrar.

Students may not withdraw from UTSA later than the first day of the week preceding final examinations. Students who officially withdraw from UTSA during the regular drop period (through the first nine weeks of Fall or Spring Semesters, the first three weeks of a five-week summer term, or the first six weeks of a 10-week summer term) receive a grade of "W" in all classes. Students who officially withdraw after the regular drop period receive a grade of "W" for each class they are passing at the time of withdrawal and a grade of "F" for each class they are not passing.

Students who withdraw from all classes are subject to UTSA's academic probation and dismissal regulations. Students withdrawing should refer to the regulations on refunds of tuition and fees, readmission policies, and requirements for maintaining registration. Students withdrawing from the University, regardless of the date, are not charged the add/drop processing fee.

RECORDS AND CLASSIFICATION OF STUDENTS

Classification Terms

UTSA students are classified according to the following table.

Classification Terms		Number of semester credit hours earned
Upper-division	Senior	90 or more
	Junior	60 to 89
Lower-division	Sophomore	30 to 59
	Freshman	0 to 29

Definition of Full-Time Undergraduate

A full-time undergraduate student is one enrolled in 12 or more semester credit hours during a Fall or Spring Semester, or an entire Summer Session.

Verification of Enrollment

Currently enrolled students with outstanding student loans should have a verification of enrollment sent to their lending agencies each semester. Currently enrolled students who are receiving grants or scholarships should check to see if their providers require a verification of enrollment each semester.

Students should make requests for verification in writing to the Office of Admissions and Registrar. All verifications are prepared and mailed after the Census Date (the 12th class day of Fall or Spring Semesters and the fourth class day of a summer term).

Transcripts

Official transcripts of all coursework taken at UTSA are available in the Office of Admissions and Registrar. Requests for transcripts must be made in writing and bear the signature of the student whose record is requested. A fee is charged for each copy of the transcript and must be paid in advance.

Transcripts from other institutions submitted to UTSA become the property of the University and are not reproduced or mailed to other institutions, agencies, or individuals as an official transcript.

Documents submitted by students whose last attendance at UTSA was before Summer 1993 are no longer available for duplication.

Official transcripts are not issued for students who have a financial obligation or other commitment outstanding to the University until the obligation is cleared.

Release of Academic Records

All official certifications with regard to the academic performance or status of a student or former student of UTSA are made by the Office of Admissions and Registrar.

UTSA transcripts and other information from a student's academic records are released by the Office of Admissions and Registrar only upon written request from the student or other person authorized by law under the Family Educational Rights and Privacy Act of 1974 and when payment of the appropriate fee is made. Exceptions may be made in response to a subpoena or court order, under other circumstances as allowed under the Family Educational Rights and Privacy Act of 1974, or as provided in the policy on releasing directory information set forth in chapter 2 (About UTSA) of this catalog.

Change of Major, Degree, or Classification

Students who wish to change their majors, degree objectives, or classifications must obtain the required forms at the Office of Admissions and Registrar. The change is not official until the form has been completed and filed with the Office of Admissions and Registrar and the student is admitted to the new degree program, certification program, or classification. Classification changes ("special undergraduate" to "degree-seeking") requested during any semester will not be effective until the following semester.

The College of Business has specific requirements for admission. Students seeking to enter the College of Business should consult the College of Business Undergraduate Advising Office.

Change of Name

A student's name on official records at UTSA is the name under which the student applied for admission, unless a Change of Name form has been processed through the Office of Admissions and Registrar. The official University transcript will carry the current name and the most immediate previous name, if any. Change of Name forms should be supported by appropriate legal documentation, except that upon marriage the student may declare the newly taken name.

Change of Address

Currently enrolled students who have changed their addresses *must* notify the Office of Admissions and Registrar on the appropriate form. Official notification of change of address is necessary for proper identification of students' records and for accurate mailing of correspondence, grade reports, transcripts, registration instructions, and information pertaining to graduation requirements. Students who have a degree application on file in the Office of Admissions and Registrar should specify if the address change also affects the address to which the diploma is to be mailed.

COURSES

Course Numbering System

All courses are designated by four-digit numbers following a two- or three-letter abbreviation of the subject the course is in. The first digit indicates the level of the course. Courses beginning with "0" are developmental education courses and may

not be counted toward a degree. Courses beginning with "1" or "2" are lower-division (freshman and sophomore level). Courses beginning with "3" or "4" are upper-division (junior and senior level). Courses beginning with a "5" or higher are graduate-level courses.

The second and third digits in the course numbers are used within the colleges by each division to distinguish individual courses. The fourth digit indicates the semester-credit-hour value of each course.

The number of lecture and laboratory contact hours per week are provided in parentheses in the course description sections immediately following the course number and title. For example, (3-0) indicates three hours of lecture and zero hours of laboratory per week.

Common Course Numbering

UTSA is a participant in the Texas Common Course Numbering (TCCN) System. This system aids in the transfer of lower-division academic courses among colleges and universities in Texas. Common courses are identified by a common TCCN designation composed of a discipline identifier and a course number. Equivalent TCCN designations are listed with all relevant UTSA courses in the course description sections of this catalog.

Developmental Education Courses

Students who have not been exempted from the Texas Academic Skills Program (TASP) test and who have not passed all parts of the test must be enrolled in at least one developmental education course (or an approved alternate developmental activity) each semester or summer term of enrollment until they pass all parts of the test. Developmental education courses cannot be used as degree credit. All developmental education courses are graded on a credit/no-credit basis and will not be included in the student's grade-point average. Students may not drop a developmental education course. Class attendance in these courses is mandatory.

Prerequisites

Prerequisites are stated for many courses listed in this catalog. Prerequisites advise students of the background expected of all students in the course. It is the student's responsibility to be sure that all prerequisites are met before enrolling in any course. When a student has not met the specific prerequisites listed, he or she may, under special conditions, obtain permission from the instructor of the course to register.

Extended Education Courses

The Office of Extended Education develops and presents seminars, short courses, conferences, and programs for the general public, professionals, governmental agencies, and businesses. It also provides specialized training to businesses, government agencies, and nonprofit organizations needing customized programs for their employees. These courses are not offered for academic credit. For information, contact the Office of the Vice President for Extended Education.

Correspondence Courses

UTSA does not offer correspondence courses at this time. For UTSA policies on transfer and credit limitations on such courses, see the Transfer of Credit and Minimum UTSA Residence Requirements sections in chapter 6 (Bachelor's Degree Regulations) of this catalog.

GRADES

Explanation of Credit, Grading System, and Symbols

Hours Attempted. The number of hours attempted is the total number of semester credit hours for which a student has enrolled and received grades of "A," "B," "C," "D," or "F," except as provided for repeated courses.

Hours Earned. The hours earned by a student are the number of semester credit hours in which grades of "A," "B," "C," "D," or "CR" have been received.

Grade-Point Average. The UTSA grade-point average (GPA) is determined by dividing the number of grade points earned at UTSA by the number of semester credit hours attempted at UTSA. Credits and grades for work completed at other institutions or credits earned by examination are not included in the UTSA grade-point average.

The following table explains UTSA grade symbols.

Grade Symbol	Grade Points	Meaning of Grade Symbol
A	4	<i>Outstanding</i>
B	3	<i>Above Average</i>
C	2	<i>Average</i>
D	1	<i>Below Average but Passing</i> (see credit/no-credit grading policy)
F	0	<i>Failure</i>
CR	0	<i>Credit.</i> Indicates successful credit by examination or credit received under the credit/no-credit option.
NC	0	<i>No Credit.</i> Indicates unsuccessful credit by examination or no credit received under the credit/no-credit option.
W	0	<i>Withdrawal.</i> Indicates that the student was passing at the time of withdrawal or drop.
IN	0	<i>Incomplete.</i> Assigned at the discretion of the instructor; see details on next page.

Grade Symbol	Grade Points	Meaning of Grade Symbol
NR	0	<i>No Report.</i> Assigned only by the Registrar when unusual circumstances do not allow a student's grade to be entered by the deadline for processing grades. It is replaced with the official grade as soon as possible.
EP	0	<i>Postponement of Final Examination.</i> Indicates that a student has been allowed to postpone a final exam. Procedures for such postponement are covered in this catalog.
EX	0	<i>Expelled</i>

Incomplete. The grade "IN" is given by an instructor to indicate that some part of the work of a student in a course has, for good reason, not been completed, while the rest of the student's work in the course was satisfactorily completed. The Incomplete allows a student to complete the course without repeating it. Incomplete may not be assigned when a definite grade can be given for the work done. The student must have been in attendance at least three-fourths of the term.

Whenever a grade of Incomplete is assigned, the instructor is required to file a Requirements for Removal of Incomplete report with the Office of Admissions and Registrar.

Incomplete work must be made up no later than the end of the final examination period one year from the semester the Incomplete was received and before the student's graduation. If the work is not completed within this time, the "IN" is automatically changed to a grade of "F" or "NC."

IN NO CIRCUMSTANCES WILL GRADES BE CHANGED AFTER ONE CALENDAR YEAR.

Repeating Courses

The policy for repeating courses, as stated below, only applies to courses completed and repeated at UTSA.

Certain courses in the catalog state in their course description that they "may be repeated for credit." These are the only courses where repeating is not a duplication. All semester credit hours and grade points from every instance of taking these courses count in the student's record.

To improve their grade, students may only repeat a course in which they received a grade of "D" or "F." However, credit can be counted for only one of the courses. The highest grade earned is used in calculating the student's overall grade-point average. Receipt of a higher grade in a subsequent semester does not alter the student's academic standing in the semester when the original grades were earned. Students may repeat

any course in which they received a grade of "NC" in order to improve their grade; however, this does not alter the student's overall grade-point average.

If a student reenrolls in a course in which a "D" was received and earns a higher grade, the semester credit hours from the original "D" are excluded from the student's grade-point average. However, if the student earns another "D" or a lower grade, then the repeated course grade is not used in computing the grade-point average, and the course is marked as "Duplication" on the student's official record.

If a student reenrolls in a course in which an "F" has been received and earns a higher grade, the semester credit hours from the original "F" are excluded from the student's grade-point average. However, if the student earns another "F," the repeated course grade is not used in computing the grade-point average, and the course is marked as "Duplication" on the student's official record.

Credit by Examination

A student at UTSA may, through satisfactory performance on an examination, show a knowledge of the content of an undergraduate course and be awarded credit by examination for that course. Credit by examination may be used to satisfy Core Curriculum and specific degree requirements.

Credit earned in this way does not satisfy minimum UTSA residence requirements (except for credits earned by challenging UTSA courses; see section on challenging courses). Credit by examination is not included in the calculation of the student's UTSA grade-point average. The symbol "CR" (Credit) is awarded for all credit earned by examination. Unsuccessful attempts to earn credit by examination do not become part of the student's official academic record.

Credit by examination cannot duplicate or repeat credit already earned for college or university courses. Students may not receive credit for a course for which credit by examination has already been awarded. It is not necessary to be a UTSA student to take credit by examination; however, credit is not awarded until the individual is registered at UTSA.

A brochure on credit by examination at UTSA is available from the Testing Center. It describes the various tests that may be accepted for credit at the University, the types of tests available, when and where they are given, their costs, procedures for having test scores submitted for consideration for credit, the amount of credit that may be earned, and how to obtain additional information on each test.

Challenging a UTSA Course

Students enrolled at UTSA may "challenge," or request an examination in, any UTSA undergraduate course for which they have not already received credit. Not all courses, however, consist of materials in which comprehension can be evaluated by means of examination. The option of whether or not to grant the request rests with the instructor of the course and may be further limited by policies set by the college.

Credits earned by challenging UTSA undergraduate courses by examination apply to degree requirements as though the courses had been completed in the normal manner,

except that since a grade of "CR" is awarded such courses are not included in the UTSA grade-point average. These credits are also counted toward the minimum UTSA residence requirements. Students may challenge the same UTSA course only once.

To challenge a UTSA undergraduate course, the student must enroll in the course and request the challenge examination from the instructor. A Request for Challenge Examination form must be filed with the Office of Admissions and Registrar and the test must be administered within the first three weeks of a Spring or Fall Semester or the first week of a Summer Session. A charge of \$20 is made for each course challenged.

If the student's performance on the examination is at the grade level of "C" or higher, a grade of "CR" (Credit) is submitted at the end of the term by the instructor on the grade report for the course along with a credit by examination notation. Unsuccessful attempts to earn credit by challenge examination do not become part of the student's official academic record.

Students who fail the challenge examination must either drop the course or complete the course on a regular basis following the evaluation of the examination for the course challenged. Requesting credit by examination puts the class on a credit/no-credit grading option for the student. Therefore, if a student elects to complete the course, the Office of Admissions and Registrar must be notified to remove the credit/no-credit grading option in writing by the Automatic "W" Date.

Students admitted under the Provisional Admission Program may request to challenge courses by examination in those disciplines to which their enrollment is restricted. However, credit earned by examination does not fulfill the minimum of 12 college-level semester credit hours that must be successfully completed under the Provisional Admission Program.

Credit/No-Credit Option

The credit/no-credit grading option is provided to encourage undergraduate students to expand their knowledge of fields outside their major areas of interest. The following guidelines apply:

1. A maximum of four courses may be attempted on a credit/no-credit basis.
2. Credit/no-credit courses appear on the permanent record as a grade of "CR" if the student's grade is an "A," "B," or "C," or as a grade of "NC" if the student's grade is "D" or "F." Neither grade will affect the student's grade-point average at UTSA. The credit/no-credit grade cannot be changed to a regular grade once the credit has been awarded.
3. Students must choose to take the course on a credit/no-credit basis at registration and must complete a Credit/No-Credit Option Request form. *After the time limits for adding courses have passed, students will not be allowed to request the credit/no-credit option or remove the option and take the course on a regular basis.*
4. Only free electives may be taken on a credit/no-credit basis. Courses to be applied to the Core Curriculum or to major or support work must be taken on a regular basis.
5. Transfer students who transfer to UTSA for their last 30 semester credit hours may not count credit/no-credit courses toward their 30-hour minimum UTSA residency requirement.

6. The Office of Admissions and Registrar requires students to affirm by signature that they understand the credit/no-credit policies and agree to abide by them.

NOTE: Some graduate schools place students who have taken courses on a credit/no-credit basis at a disadvantage in computing grade-point averages for admission.

Mandatory Credit/No-Credit Courses. Some academic divisions will require certain courses to be graded on a mandatory credit/no-credit basis. Enrollment in any of these courses does not count toward a student's credit/no-credit limit of four free electives. Courses offered on a mandatory credit/no-credit basis are so designated in this catalog.

Administrative Procedures

Reporting of Grades by Faculty

Grades are reported by course instructors every term and are due in the Office of Admissions and Registrar 48 hours after the final examination. Final grades cannot be withheld nor can reporting of them be deferred. Absence from a final examination should be reported as "EP" if a postponed examination has been authorized in accordance with Postponement of Final Examination Procedures set forth in this catalog.

Grade Reports

The Office of Admissions and Registrar mails final grades as soon as they are compiled after the close of each semester and each summer term. The grade report reflects the grade that appears on the instructor's final grade sheet; subsequent changes are not included. Grades are mailed to the address on file in the Office of Admissions and Registrar. Only one grade report is mailed; additional copies are not available. Grade reports may be withheld from any student who owes tuition and fees to the University.

Change of Grades

Grade changes from "IN" (Incomplete) to a letter grade must be made no later than the end of the final exam period, one year from the semester the Incomplete was received, and before the student's graduation. The instructor must complete a Removal of Incomplete form and file it with the Office of Admissions and Registrar within that time.

Grade changes from "EP" (Postponement of Final Examination) to a letter grade should be made within 30 days after the student has taken the authorized postponed final examination. The instructor may change the "EP" to a letter grade by completing a Change of Grade form and filing it with the Office of Admissions and Registrar. If a postponed final examination is not taken before the end of the next long semester (Fall or Spring) following the one for which it was approved, the grade in the course will be changed to an "F."

Any other change of grade must be initiated by the instructor on the required form available in the Office of Admissions and Registrar and the Offices of the Deans. All requests for a change of grade should be accompanied by a statement explaining the requested change. It is the policy to change a grade (other than Incomplete) only in

the case of error. Additional work performed by a student may not be used to raise a grade that has been reported to the Office of Admissions and Registrar. Requests for change of grade require the approval of the Dean and Director of the division in which the course is offered before the Registrar will make the change in the student's record.

IN NO CIRCUMSTANCES WILL GRADES BE CHANGED AFTER ONE CALENDAR YEAR.

Class Participation Policy

Students are expected to regularly attend and participate in all meetings of courses for which they are registered. The instructor is responsible for communicating the participation requirements for each course to students. Subject to UTSA policies on class absences related to observance of the religious holy days, the instructor determines classroom participation requirements and policies on making up work missed during an absence.

Students who expect to be absent from class for observance of a holy day must notify the instructor of the course(s) no later than the 15th day of classes. The notification must be in writing and must be delivered by the student either personally to the instructor of each class, or by certified mail, return receipt requested, addressed to the instructor of each class. A religious holy day is a day observed by a religion whose places of worship are exempt from property taxation under §§ 11, 20, Tax Code. Instructors shall allow a student who is absent from classes for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

When, in the judgment of the instructor, a student has been absent excessively, the instructor should report the absences to the Dean of the college in which the course is offered and recommend dropping the student from the course with a grade of "W" or "F." If the Dean approves the recommendation, it is reported to the Office of Admissions and Registrar, which advises the instructor and student of the action taken.

Students who enroll for a course and do not attend are considered absent from class until they officially drop the course, and they will receive a grade of "F."

Grade Grievance Procedure

In resolving any student grievance regarding grades or evaluations, the student must first make a serious effort to resolve the matter with the faculty member with whom the grievance originated. Individual faculty members retain primary responsibility for assigning grades and evaluations. The faculty member's judgment is final unless compelling evidence shows discrimination, differential treatment, or factual mistake. If evidence warrants appeal, the normal academic channels are Division Director, Dean, and Provost and Vice President for Academic Affairs.

Grade appeals to the Division Director must be submitted in writing on the Student Academic Grievance for Appeal of a Grade form, available in the Division Director offices.

IN NO CIRCUMSTANCES WILL GRADES BE CHANGED AFTER ONE CALENDAR YEAR.

Postponement of Final Examination Procedures

Students who are compelled to be absent from a final examination because of illness or other imperative reason should petition their academic Dean for permission to postpone the examination. This request requires prior approval by the instructor and should be made to the Dean as soon as it is known the student will be compelled to be absent.

The instructor records the symbol "EP" on the final grade report for a student who has been permitted to postpone an examination.

The examination should be given as soon as possible, preferably during the same examination period, but not later than 30 days after the original examination period. If for good reason the student cannot take the examination within the 30-day period, the examination may be scheduled at any time convenient to the instructor, except that in no case will it be given later than the Fall or Spring Semester following the one for which the postponement was approved. If a postponed examination is not taken before the end of the next Fall or Spring Semester, the grade in the course is changed to "F."

Honor Roll and Dean's List

Full-Time Student Honor Roll. Undergraduate students who achieve scholastic distinction in a semester, as evidenced by a grade-point average of 3.5 or higher in at least 12 semester credit hours, excluding grades of "CR," and who receive no grades of "D," "F," "EP," "IN," or "NC."

Part-Time Student Honor Roll. Undergraduate students who enroll in 6 to 11 semester credit hours and maintain a grade-point average of 3.5 or higher, excluding grades of "CR," and who receive no grades of "D," "F," "EP," "IN," or "NC."

Full-Time Student Dean's List. Undergraduate students who complete at least 12 semester credit hours and who achieve a grade-point average of 3.75 or higher for a semester.

Part-Time Student Dean's List. Undergraduate students who complete 6 to 11 semester credit hours and who achieve a grade-point average of 3.75 or higher for a semester.

Neither the Honor Roll nor the Dean's List are prepared for Summer Sessions. To determine eligibility for graduation with honors, see Graduation with Honors in chapter 6 (Bachelor's Degree Regulations) of this catalog.

ACADEMIC STANDING

Minimum Grade Requirements

Students are expected to maintain a level of scholastic achievement that would allow them to meet the grade requirements for graduation. Students who fail to maintain the minimum required grade-point average of 2.0 in all work attempted at UTSA will be placed on academic probation or on academic dismissal as appropriate.

Academic Probation

Students whose overall UTSA grade-point average falls below 2.0 are placed on academic probation. Academic probation will be cleared when a student achieves a 2.0 overall grade-point average.

Students placed on academic probation must make a term grade-point average of 2.0 or above in each semester of probation in order to remain enrolled. Students on academic probation whose term grade-point average is below 2.0 will be placed on academic dismissal.

Students cannot graduate while on academic probation.

Academic Dismissal

Students on academic probation who earn a grade-point average below 2.0 at the end of any term will be placed on academic dismissal. Students placed on academic dismissal must petition for reinstatement or readmission for future enrollment.

Petition for Reinstatement

All students who have been reinstated from an academic dismissal are reinstated on academic probation and must meet academic probation grade-point requirements.

First Academic Dismissal. Students placed on academic dismissal for the first time may be reinstated after not attending UTSA for one regular semester (Fall or Spring). Students seeking reinstatement must file an application for admission along with a \$25 nonrefundable application fee by the appropriate deadline. Students on academic dismissal from UTSA may not attend other institutions for the purpose of raising their UTSA grade-point averages.

However, a student who is dismissed for the first time at the end of a Spring Semester may attend the UTSA first five-week summer term in an attempt to raise his or her grade-point average to a level that would permit reinstatement in the Fall Semester. Before Summer Session reinstatement can occur, the student must complete the Registration Request for Dismissed Students form in the Academic Advising component of the Tomás Rivera Center for Student Success before the beginning of summer classes.

Subsequent Academic Dismissals. Students placed on academic dismissal for a second or subsequent time may be reinstated after not attending UTSA for one calendar year. After this year, students may petition for reinstatement to the Dean of the college in which they are majoring or intend to major. Undeclared majors petition the University Committee on Probation and Reinstatement. Petition forms may be obtained in the Deans' offices or the Office of Admissions and Registrar.

Petition Procedures. Petition for Reinstatement forms must be filed by the following deadlines:

October 15	Spring Semester
March 15	Summer Session
June 15	Fall Semester

If the petition for reinstatement is disapproved, a student may not file another petition until the following semester. Appeal of a denial for reinstatement may be made to the Provost and Vice President for Academic Affairs within two weeks after notice of the denial is mailed by the Office of Admissions and Registrar. The decision of the Provost and Vice President for Academic Affairs is final.

SCHOLASTIC DISHONESTY

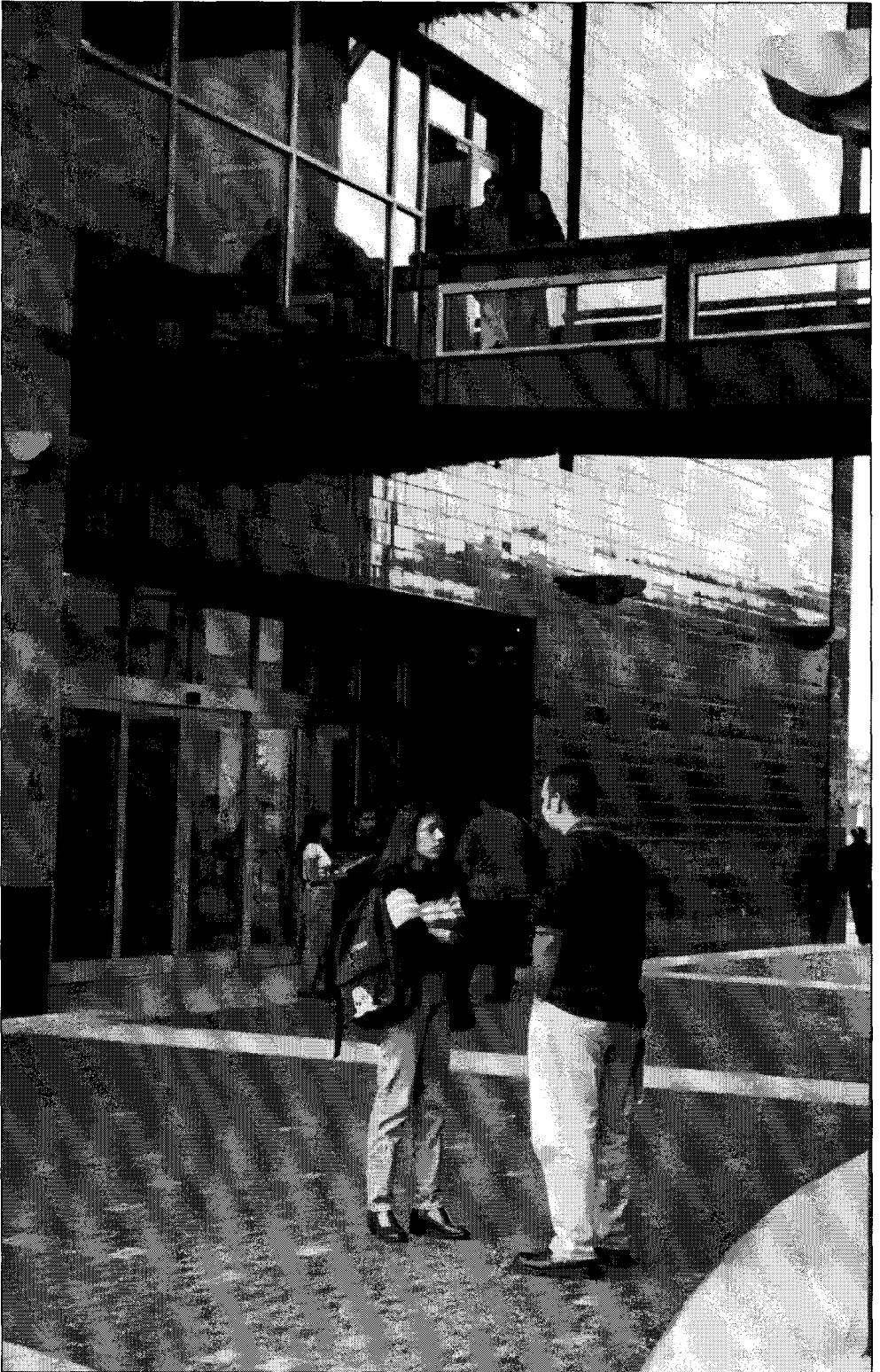
The integrity of a university degree depends on the integrity of the work done for that degree by each student. The University expects a student to maintain a high standard of individual honor in all scholastic work (*Rules and Regulations of the Board of Regents*, Chapter VI, 3.(17)).

“Scholastic dishonesty” includes, but is not limited to

- cheating on a test or other class work
- plagiarism (the appropriation of another’s work and the unauthorized incorporation of that work in one’s own written work offered for credit)
- collusion (the unauthorized collaboration with another person in preparing college work offered for credit).

If a student is accused of academic dishonesty, the faculty member may initiate disciplinary proceedings through the Division Director, the Dean of the college, and the Student Judicial Affairs Coordinator.

6.
BACHELOR'S DEGREE
REGULATIONS



BACHELOR'S DEGREE REGULATIONS

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DEGREE REQUIREMENTS

Overall Requirements

In order to receive a bachelor's degree from UTSA, a student must meet these minimum requirements:

1. Complete a minimum of 120 semester credit hours, at least 39 of which must be upper-division level.
2. Complete the University Core Curriculum requirements outlined in this chapter.
3. Complete the major and support work requirements and the free elective requirements for the desired degree. Free electives refer to any semester credit hours accepted by UTSA in transfer or awarded by UTSA that, for degree purposes, are not applied to Core Curriculum, major, minor, or support work requirements. The only restrictions placed upon courses used as free electives are as follows:
 - a. that a specific number of free elective credits must be at the upper-division level for some degree programs
 - b. that a maximum of 6 semester credit hours of physical activities courses can be applied to the free electives allowed for any UTSA degree program
 - c. that a maximum of 9 semester credit hours of military science can be applied to the free electives allowed for any UTSA degree program.
4. Meet all requirements for a degree as put forth by the Texas State Education Code, including the following:
 - a. All students must complete 6 semester credit hours of American or Texas history. Only 3 semester credit hours with a grade of "CR" may be applied toward this requirement.
 - b. All students must complete 6 semester credit hours of government or political science, including the Constitution of the United States and constitutions of states, with special emphasis on Texas. Only 3 semester credit hours with a grade of "CR" may be applied toward this requirement.
5. Meet the minimum UTSA residence requirements.
6. Achieve an overall 2.0 grade-point average in all work attempted at UTSA and a 2.0 grade-point average in all work included in the major.
7. Be in good academic standing at UTSA.
8. Apply formally for the degree before the deadline in the Office of Admissions and Registrar and pay the required fee.

Minimum UTSA Residence Requirement

The following minimum UTSA residence requirements are in accordance with requirements established for all institutions in The University of Texas System and are requirements for all bachelor's degrees.

1. A minimum of 30 semester credit hours of UTSA courses must be completed before a degree can be conferred.
2. 24 of the last 30 semester credit hours applied to the degree program must be completed in residence, with the exception that among University of Texas System components, a student may, with the approval of the appropriate Dean, transfer additional coursework to the program at the degree-granting institution.
3. Of the minimum 39 upper-division semester credit hours required in all degree programs, 18 must be earned in UTSA courses.

4. At least 6 semester credit hours of upper-division coursework in the major must be completed at UTSA. Additional hours in the major sequence may be required under individual UTSA degree plans.

Core Curriculum

The Core Curriculum is the part of each student's degree program in which he or she takes courses that meet requirements common to all UTSA undergraduates. All candidates for a bachelor's degree must achieve Core objectives by completing the Core Curriculum. Most students will accomplish the Core objectives by fulfilling the requirements that follow. Students majoring in art, architecture, interdisciplinary studies, interior design, music, civil engineering, electrical engineering, and mechanical engineering will accomplish Core objectives in a manner specified in their degree plans. All students should consult with an academic advisor to determine the recommended sequence of courses in the Core Curriculum and the major.

The actual number of courses students need to meet Core Curriculum requirements will vary, depending on previous preparation and choices made among courses. It is expected that most students will fulfill the Core Curriculum requirements by completing 54 to 55 semester credit hours of coursework.

Goals

The Core Curriculum reflects the educational goals of the University. It is designed to enable students to assess the perspectives and accomplishments of the past and to move to the future with an informed and flexible outlook. It promotes intellectual adaptability, ethical awareness, and transfer among diverse modes of thought.

An essential aim of the Core Curriculum is to cultivate the verbal, numerical, and visual skills necessary to analyze and synthesize information, construct arguments, and identify and solve problems. Another essential aim is to foster understanding of the intellectual and cultural pluralism of modern society as it is reflected in natural science and mathematics; behavioral, cultural, and social science; and language, literature, and artistic expression. By encouraging interdisciplinary study, the Core Curriculum seeks to develop critical awareness of the continuities and discontinuities of human thought, history, and culture, helping prepare students to meet the demands of change.

The University reviews Core courses for their success in promoting the goals of the Core, and it encourages students to select Core courses that will best achieve these goals. Beyond the Core, each student must fulfill the requirements of a major.

Expectations for Entering Students

The Core Curriculum is built on the assumption that the foundations of the general part of a student's education are laid in secondary school. Appropriate levels of proficiency in important subjects have been established as prerequisites for many of the key courses in the Core, especially in the areas of rhetoric, mathematics, and language. Students who are unable to demonstrate proficiency may be required to take additional coursework before qualifying to take courses that meet Core Curriculum requirements. Entering students are also expected to possess proficiency in reading,

knowledge of research and library tools, and acquaintance with the operation of microcomputers. Students unable to demonstrate such proficiency and knowledge may be required to enroll in noncredit programs developed by UTSA to correct deficiencies in these areas.

Rhetoric

To achieve the objectives of the rhetoric segment, students must demonstrate competence in writing English; critical proficiency in oral and graphic communication; competence in constructing valid arguments and criticizing arguments; and critical proficiency in using diverse theoretical perspectives to identify and formulate problems and draw conclusions.

Students must complete the following courses, for a total of 6 semester credit hours:

ENG	1013	Freshman Composition
ENG	1023	Discourse across the Disciplines

Domain I: Science, Technology, and Mathematics

To achieve the objectives of Domain I, students must demonstrate knowledge of higher mathematics sufficient to understand the basis of mathematical reasoning; knowledge of the methods, intellectual approaches, social significance, and history of the physical and natural sciences; an understanding of the role of technology and of the relationship between science and technology; and competence in the use of computers and/or acquaintance with the elements of logic.

Students will normally complete the requirements for Domain I in 12 semester credit hours of coursework.

A. **Mathematics.** Students must complete one of the following courses (or another mathematics course at an equivalent or more advanced level):

COR	1103	Topics in Mathematics
MAT	1033	Algebra with Calculus for Business
MAT	1063	College Algebra
STA	1053	Basic Statistics
STA	1063	Basic Statistics for Business and Economics
STA	1073	Statistics for Psychology
STA	1993	Statistical Methods for the Life and Social Sciences

B. **Science and Technology.** Students must complete two courses from the following lists. At least one of the courses must be chosen from Level Two.

Level One

ANT	2033	Introduction to Physical Anthropology
ANT	2043	Introduction to Archaeology
BIO	1023	Human Sex and Reproduction
BIO	1033	Drugs and Society
BIO	1203	Biology I

CHE	1053	Chemistry of Ordinary Things
COR	1113	Topics in Science and Technology: Level One
ES	2013	Introduction to Environmental Systems
GEO	1013	The Third Planet
PHY	1014	Conceptual Physics and Civilization
PSY	1203	Principles of Psychology

Level Two

AST	1013	Introduction to Astronomy
BIO	1223	Biology II
BIO	3283	Principles of Ecology
CHE	1103	General Chemistry
CHE	1303	Chemical Principles
COR	2103	Topics in Science and Technology: Level Two
GEO	1103	Introduction to Earth Systems
GEO	1123	Earth History
PHY	1603	General Physics I
PHY	1623	General Physics II
PHY	1904	Technical Physics I
PHY	1924	Technical Physics II

- C. **Computer Science/Logic.** Students must complete one of the following courses (3 semester credit hours):

COR	1123	Topics in Computer Science and Logic
CS	1033	Microcomputer Applications
CS	1073	Introductory Computer Programming for Scientific Applications
CS	1713*	Introduction to Computer Science
CS	1711*	Introduction to Computer Science Recitation
CS	2073	Computer Programming with Engineering Applications
IDS	2083	Technology for Liberal Arts and Social Sciences
IS	3003	Principles of Information Systems for Management
PHI	2043	Introductory Logic

Domain II: Society and Culture

To achieve the objectives of Domain II, students must demonstrate critical understanding of the political and economic dimensions of social life; knowledge of United States history sufficient for understanding current developments in American society within a historical context; substantial knowledge of social, racial, cultural, and gender diversity in the United States and Texas; and knowledge of the history, theory, methods, and intellectual approaches of the social and behavioral sciences, including similarities and differences with respect to one another and to other modes of understanding.

*Concurrent enrollment required in these two courses

Students will normally fulfill the requirements of Domain II in 18 semester credit hours of coursework.

- A. ***United States History and Diversity.*** Each student must complete two of the following courses, for a total of 6 semester credit hours. In meeting this requirement, students will fulfill the statutory requirement in United States or Texas history.

HIS	1043	United States History: Pre-Columbus to Civil War Era
HIS	1053	United States History: Civil War Era to Present
HIS	2053	Texas History

- B. ***Political Studies.*** Students must complete the following course:

POL	1013	Introduction to American Politics
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By taking POL 1013 and one of the following required courses, students will fulfill the statutory requirement in United States and Texas government.

POL	1023	The Politics of the American Economy
POL	1063	Ethics in America
POL	1083	The United States in the World
POL	1133	Texas Politics and Society
POL	1173	States, Communities, and Public Policy
POL	2023	Civil Liberties in American Law and Practice

- C. ***Social and Behavioral Sciences.*** Students must complete one of the following courses:

AMS	2013	Basic Issues in American Culture
ANT	1013	Human Adaptation
BBL	2003	Language, Culture, and Society
COR	2203	Topics in Social and Behavioral Sciences
CRJ	1113	The American Criminal Justice System
GRG	1013	Fundamentals of Geography
IDS	2103	The Individual, Family, and Community
IDS	2113	Society and Social Issues
PSY	1003	Knowledge and Learning
PSY	1013	Introduction to Psychology
SOC	1013	Introduction to the Study of Society
SOC	2013	Social Problems

- D. ***Economics.*** Students must complete one of the following courses:

ECO	2003	Introduction to Political Economy
ECO	2013	Introductory Macroeconomics
ECO	2023	Introductory Microeconomics

Domain III: Literature, the Arts, and Language

To achieve the objectives of Domain III, students should demonstrate functional ability in the basic skills (listening, speaking, reading, and writing) of a language other

than English; an understanding of the conceptual approaches and history of at least one of the arts, as a means of comprehending the aesthetic patterns that underlie human creativity; and an understanding of literary concepts and contemporary trends in interpretation, as a way of comprehending the metaphoric or analogical potential of human language.

Students may fulfill the requirements of Domain III by taking as few as 6 semester credit hours of coursework (in sections A and B) if the language requirement (in section C) is met entirely by proficiency examination. Students who demonstrate no proficiency in languages other than English will require 20 semester credit hours to complete Domain III.

A. **Literature.** Students must complete one of the following courses:

CLA	2033	Introduction to Classical Literature
COR	2303	Topics in Literature
CSH	1103	Literary Masterpieces of Western Culture I
CSH	1113	Literary Masterpieces of Western Culture II
ENG	2013	Introduction to Literature
ENG	2213	Literary Criticism and Analysis
ENG	2383	Minority Voices in American Literature
ENG	2423	Literature of Texas and the Southwest
FRN	3333	French Literature in English Translation
FRN	3413	French Literature and Culture until 1800
FRN	3423	French Literature and Culture since 1800
GER	3333	German Literature in English Translation
GER	3413	German Literature and Culture I: Middle Ages to 1700
GER	3423	German Literature and Culture II: 1700 to the Present
IDS	2303	World Literature I, The Narrative Mode
IDS	2313	World Literature II, Dramatic and Lyric Modes
ITL	3333	Italian Literature in English Translation
RUS	3333	Russian Literature in English Translation
SPN	3333	Hispanic Literature in English Translation
SPN	3413	Spanish Literature to 1700
SPN	3423	Spanish Literature since 1700
SPN	3463	Latin American Literature to Modernism
SPN	3473	Latin American Literature since Modernism

B. **The Arts.** Students must complete one of the following courses:

AHC	1033	Masterworks in Art
AHC	1113	Survey of Art and Architecture from Prehistoric Times to 1350
AHC	1123	Survey of Art and Architecture in Europe and the New World from 1350 to 1750
AHC	1133	Survey of Modern Art
ARC	2413	History of Architecture I
ARC	2423	History of Architecture II
ARC	3613	History of Modern Architecture
COR	2313	Topics in the Arts
MUS	2643	Introduction to Opera and Oratorio
MUS	2663	History and Styles of Jazz

MUS	2673	History and Styles of Rock
MUS	2683	Masterpieces of Music

- C. **Language.** Students must demonstrate proficiency in a language other than English by completing a language course at the fourth-semester college level or by achieving an equivalent score on an approved proficiency examination. Students may meet the prerequisites for fourth-semester (and lower-level) courses through credit by examination, transfer credit, an appropriate score on a UTSA placement test, or completion of the prerequisite course sequence at UTSA. It is expected that most students who follow admissions guidelines for recommended preparation will have achieved sufficient language proficiency in secondary school for placement in at least the second semester of a language course sequence at UTSA. Students with no proficiency in languages other than English must complete the full four-semester, elementary- and intermediate-level course sequence in a language of their choice.

NOTICE: UTSA cannot ensure that all courses leading to fulfillment of the Core Curriculum language requirement will be offered every semester. Students intending to complete the language requirement of Domain III C at UTSA by an expected graduation date should carefully plan with their advisor.

The following are the fourth-semester language courses:

ASL	2023	American Sign Language: Intermediate II
CHN	2023	Intermediate Chinese II
CLA	2123	Intermediate Latin II
FL	2023	Culture and Communication in a Foreign Language
FRN	2023	Intermediate French II
GER	2023	Intermediate German II
ITL	2023	Intermediate Italian II
JPN	2023	Intermediate Japanese II
RUS	2023	Intermediate Russian II
SPN	2006	Intermediate Spanish—Accelerated
SPN	2023	Intermediate Spanish II
SPN	2103	Intermediate Conversation and Composition
SPN	2513	Spanish for Special Purposes
SPN	2523	Hispanic Culture and Communication

Not every course listed above is offered on a regular basis.

Students who are not U.S. citizens and whose native language is not English are assumed to have completed the language requirement with two or more years of high school or two or more years of tertiary education in a non-English language country. Other situations will be handled by petition.

Domain IV: Interdisciplinary Studies

To achieve the objectives of Domain IV, students should demonstrate intellectual flexibility, explore the bridges and barriers among various forms of understanding, and understand the nature and limits of different ways of knowing and different academic fields. Students should obtain a broad acquaintance with the cultures of major portions of the world (including non-Western cultures), knowledge of the contexts of international relations, and a knowledge of world geography.

Students will normally fulfill the requirements of Domain IV by completing 6 semester credit hours of coursework. Students must complete one course from each of the following lists:

A. *Diversity of Thought*

ANT	2063	Language, Thought, and Culture
ARC	1423	Architecture and Thought
COM	2343	Introduction to Mass Communication
COR	3403	Topics in Intellectual Diversity
HON	3203	Honors Seminar on Diversity of Thought
IDS	2003	Modes of Inquiry across the Fields of Study
IDS	3003	Science and Humanity
MGT	4893	Management Strategy and Policy
WGS	2013	Introduction to Women and Gender Studies

B. *Diversity of Culture*

ANT	2053	Introduction to Cultural Anthropology
ARC	1413	Architecture and Culture
BBL	3033	The Mexican American in the Southwest
COR	2213	Engineering and Civilization
COR	3413	Topics in Cultural Diversity
CSH	1203	Introduction to Hispanic Cultures
CSH	1213	Topics in World Cultures
CSH	2113	The Foreign Film
FL	4013	Cross-Cultural Communication and Foreign Languages
GRG	1023	World Regional Geography
HIS	2533	Introduction to Latin American Civilization
HIS	2543	Introduction to Islamic Civilization
HIS	2553	Introduction to East Asian Civilization
HIS	2573	Introduction to African Civilization
HON	3213	Honors Seminar on Diversity of Culture
HUM	3093	World Religions
IDS	2203	World Civilization to the Fifteenth Century
IDS	2213	World Civilization since the Fifteenth Century
PHI	3073	Asian Philosophy

Catalog of Graduation

Students have seven years from their term of original registration to complete a degree program under the catalog in effect when they initially registered. If a student drops out for one or more regular (fall or spring) semesters and returns to UTSA as a former student, he or she may choose a subsequent catalog under which to complete graduation requirements, providing the student completed at least one course during a semester in which the selected catalog was in effect with a letter grade other than "W," "NR," or "EP." Choosing a new catalog begins a new seven-year time limit. Students who graduate under one catalog and begin a second degree must begin the new degree under the catalog in effect at that time.

Multiple Degrees

Pursuing One Degree Covering More Than One Major

A student completing one type of baccalaureate degree at UTSA (i.e., Bachelor of Arts, Bachelor of Science) may elect to concurrently complete other majors of that type. In such cases, only one bachelor's degree, which includes all majors, is awarded.

If a student wishes to pursue more than one major, all requirements for a single degree and major, plus the additional requirements for the other major(s), must be completed. It is unlikely that a student fulfilling more than one major can complete all requirements within the same number of semester credit hours required for a single major.

Pursuing Two Degrees Concurrently

Students pursuing degrees of different types (i.e., a Bachelor of Arts *and* a Bachelor of Science) at the same time are required to follow specific catalog requirements for each degree, with only Core Curriculum requirements being used jointly.

Pursuing Additional Degrees after Graduation

A student holding a baccalaureate degree from UTSA or another accredited institution may receive an additional bachelor's degree from UTSA as long as it is in a different major, regardless of the concentration. Such a student continues to be classified as an undergraduate and must

1. Complete a minimum of 30 semester credit hours of UTSA courses (of which at least 12 must be at the upper-division level in the major field) for each baccalaureate degree sought beyond the first.
2. Complete all requirements for the additional major(s), as set forth in this catalog.
3. Complete all requirements for the additional degree(s), including grade-point average requirements, Core Curriculum requirements, support courses, elective courses, and upper-division courses, as set forth in this catalog.
4. Complete requirements under the catalog in effect at the time of beginning the second degree.

MINORS

UTSA offers formal minors in a variety of disciplines and in several interdisciplinary fields. Declaration of a minor is entirely voluntary. To declare a minor, a student must file a Change of Major or Degree Information form with the Office of Admissions and Registrar. At least 6 semester credit hours of upper-division coursework in a declared minor must be completed at UTSA. Additional semester credit hours in the minor sequence may be required under individual UTSA degree plans. Students who declare minors must graduate under a catalog that includes minors and must meet any additional requirements listed in that catalog. They must fulfill all requirements for the minor at graduation; a minor cannot be added to a student's degree program once he or she graduates. Descriptions of minor requirements are included in chapter 7 (Undergraduate Program Requirements and Course Descriptions) of this catalog.

TRANSFERRING COURSES

To prevent unnecessary loss of time and credit, prospective transfer students are encouraged to research as early as possible UTSA's admission policies and degree requirements in their areas of interest. Questions regarding the transferability of courses should be addressed to the Office of Admissions and Registrar.

Students attending community colleges should also note the core curricula designed and adopted by the Texas Higher Education Coordinating Board to simplify the transfer of credit. Copies of these core curricula are available through most community college counselors.

Evaluation Procedures

An official evaluation of transfer credit is supplied to each new student as soon as possible following admission. This evaluation shows the equivalency of courses completed elsewhere to courses at UTSA and indicates their applicability to the UTSA Core Curriculum.

The Texas Higher Education Coordinating Board has approved core curricula in the following areas: arts and sciences (including mathematics and natural sciences), business administration, engineering, art, and criminal justice. Although the courses in these core curricula at various institutions may not be precisely equivalent to courses in the UTSA Undergraduate Catalog, students who have successfully completed the core curricula at other institutions are given full credit toward the appropriate degree at UTSA.

Students who do not receive transfer credit for specific courses should review the policies for credit by examination or contact the Office of Admissions and Registrar. Grades earned at other institutions are not averaged with grades earned at UTSA to determine a student's grade-point average.

Resolution of Transfer of Credit Disputes

The Texas Higher Education Coordinating Board has established the following procedure for Texas public colleges and universities to follow in resolving transfer of credit disputes for lower-division courses. (The individual courses covered by this procedure are defined by the coordinating board's guides: "Transfer of Credit Policies and Curricula" and "Common Course Numbering System Guide.")

If a transfer course covered by the coordinating board policy is not accepted in transfer to UTSA, the student should contact the Office of Admissions and Registrar for further explanation. The Office of Admissions and Registrar, the student, and the sending institution will attempt to resolve the transfer of course credit in accordance with coordinating board rules.

If the transfer credit question is not resolved satisfactorily in the opinion of the student or the sending institution within 45 days of notification, the Office of Admissions and Registrar states the reasons for the course denial to the Commission of Higher Education. The commissioner or a designee then provides a final written decision

about the transfer course(s) in question to UTSA, the student, and the sending institution.

Course Types and Acceptability

Undergraduate college credits completed at other U.S. institutions are evaluated for transfer to UTSA by the Office of Admissions and Registrar on the basis of UTSA equivalency tables and according to the guidelines in this section. All work transferred must be from a college or university accredited by a regional accrediting association.

Credits completed at institutions outside the U.S. must be evaluated on an individual basis, at the student's expense, by the foreign credentials evaluation service designated by the Office of Admissions and Registrar. Transfer credit from foreign institutions is accepted by UTSA on the basis of this evaluation.

Generally Accepted

Courses from an Accredited College or University. Any academic course from an accredited college or university in which a passing grade has been earned is accepted for transfer credit if it meets all other criteria of this section. Only those hours that apply toward a specific baccalaureate degree program count toward minimum degree requirements.

The applicability of particular courses completed at other institutions toward specific course requirements for a bachelor's degree at UTSA depends upon equivalency of such courses offered by UTSA. Other academic courses are transferred as electives; credit for these courses counts toward minimum degree requirements only if they satisfy requirements of the student's degree program. Credit is not given for duplication or repetition of courses.

All course requirements at UTSA designated as upper-division may be transferred to UTSA only from senior-level institutions. For credit to be transferred as an upper-division course, the institution where credit was earned must be an accredited senior-level institution and the course must be described in the institution's catalog as being upper-division.

If the equivalent of a *required* upper-division UTSA course is completed at an accredited institution as a lower-division course, the course need not be repeated, but another upper-division course, as approved by the student's advisor, must be completed at UTSA in substitution.

Credit by Examination. Credit by examination awarded at another accredited college or university transfers if the institution equates the results of the examination to a specific course and the course is transferable. Such credit is subject to all other transfer provisions, including the 66-semester-credit-hour transfer limitation from junior colleges.

Accepted on a Limited Basis

Physical Activities Courses. Credits earned for physical activities courses can be transferred, within other UTSA transfer provisions, as free elective credit up to a maximum of 6 semester credit hours.

Extension or Correspondence Courses. Credit earned by extension or correspondence through accredited colleges and universities for college-level academic courses is evaluated and accepted for transfer if the course is equivalent to UTSA courses and acceptable to the student's degree program, and if all other transfer provisions of this section are met. However, the maximum credit accepted through a combination of extension and correspondence courses is 30 semester credit hours (18-semester-credit-hour maximum by correspondence). No more than 6 semester credit hours of correspondence credit may be applied to the major.

Students currently enrolled at UTSA are not normally permitted to take correspondence or extension courses and transfer the credit to UTSA. Exceptions to this rule must be approved by the student's advisor and Dean, and such courses can be taken only in the event that the student is about to graduate and cannot obtain the course in residence.

Junior College Courses. Transfer credit for junior college work may not exceed 66 semester credit hours. Students who have completed more than 66 acceptable semester credit hours may apply specific completed, transferable courses to specific course requirements to avoid having to repeat the courses. The semester credit hours for additional courses may not be applied toward the minimum semester credit hour requirements for a baccalaureate degree.

No upper-division credit may be earned at a junior college.

Military Service Training School Courses. As a Serviceman's Opportunity College (SOC) institution, UTSA awards credit on a limited basis for military coursework. In order for credit to be awarded, a student submits to UTSA an official Army/American Council on Education Registry Transcript System (AARTS) transcript listing all military coursework completed. The Office of Admissions and Registrar evaluates the AARTS transcript and determines the transferability of coursework. Credit is awarded for military coursework that is deemed parallel to academic coursework. Credit is not awarded for military experience based upon a Military Occupational Specialty (MOS) or for coursework that is solely technical in nature. Awarding of credit for military coursework does not guarantee its applicability to a degree at UTSA. A student who has taken military courses that do not transfer may challenge by examination those UTSA courses that appear equivalent to those already completed (see Challenging a UTSA Course in chapter 5, General Academic Regulations, of this catalog).

Credit for R.O.T.C. or military science, when awarded by another accredited college or university, is accepted by UTSA as free elective credit within the limitations of the student's degree program (for a maximum of 9 semester credit hours). See individual degree requirements and the R.O.T.C. program requirements in this catalog for limits on military science courses as free electives.

Courses from an Institution Undergoing Accreditation or a Nonaccredited Institution. Credits earned in colleges and universities that are candidates for accreditation may be considered for transfer to UTSA on an individual basis and as applicable to the student's degree program. Any such credit accepted in transfer must be validated by 30 semester credit hours of coursework in residence at UTSA, with a grade-point average of 2.0 or higher in that work.

UTSA reserves the right to refuse recognition of credit from a college or university that is a candidate for accreditation or from a nonaccredited institution.

Not Accepted

Developmental Education, Orientation, Life Experience, High School Level, Below-Algebra Mathematics, or Vocational-Technical Courses. Credits for developmental education, orientation, life experience, high school level, mathematics below the college algebra level, or vocational-technical courses are not acceptable for transfer credit. Where vocational-technical courses support a student's degree program, the student may make a written request to the Dean of the college to approve those courses as free elective credit. No transfer credit is granted for the General Educational Development (GED) test.

ENROLLMENT IN GRADUATE COURSES

For Undergraduate Credit

With approval of the student's advisor, the instructor, the Division Director, and the Dean of the college in which the course is offered, an exceptional undergraduate student may enroll in a graduate course and apply the credit earned to an undergraduate degree. Approval forms are available in the Deans' offices and the Office of Admissions and Registrar.

For Graduate Credit

An undergraduate student lacking no more than 12 semester credit hours for graduation may enroll in a graduate course and earn graduate credit under the following conditions:

1. All hours required for the student's undergraduate degree must be completed in the term in which the graduate course is being taken.
2. In order to earn graduate credit, the student must graduate at the end of the semester in which the course(s) are taken; otherwise, the course(s) count as undergraduate credit.
3. If graduate credit is earned, the semester credit hours are not considered part of the baccalaureate degree program.
4. The student must obtain permission from the student's advisor and the Dean of the college in which the course(s) to be taken is offered. Approval forms are available in the Deans' offices and the Office of Admissions and Registrar. The form must be filed with the Office of Admissions and Registrar by the time of registration. Students are encouraged to begin seeking appropriate authorizations before the registration period.

GRADUATION

Graduation Dates

Degrees are conferred at the end of each semester and at the end of the Summer Session. Public commencement ceremonies are held at the end of the Fall and Spring Semesters. Students who have graduated the previous summer may participate in commencement ceremonies at the close of the Fall Semester. Information on the procedures to be followed is available in the Office of Admissions and Registrar.

Students may not participate in ceremonies before their actual date of graduation.

Applying for the Degree

The student must apply for a degree at the Office of Admissions and Registrar as soon as possible after completing 90 semester credit hours. The Office of Admissions and Registrar is responsible for preparing a Degree Audit and Advisement System (DAAS) worksheet to see that uniform requirements for each degree are met.

The Degree Audit and Advisement System worksheet is not intended as a substitute for academic advisement. Students seeking information about remaining degree requirements should consult with their academic advisor and refer to the DAAS worksheet on a regular basis.

The student is responsible for completing all coursework and providing any adjustments to the DAAS worksheet to the Office of Admission and Registrar by the end of the term in which graduation is expected.

A degree candidate waiting until the final semester of enrollment to apply for graduation must apply no later than October 1 for the Fall Semester, February 1 for the Spring Semester, or June 15 for the Summer Session. The application for graduation of any student submitted after the established deadlines for that semester is processed for graduation for the following semester.

Students who apply for the degree in a given term but do not fulfill all requirements must submit a new degree application with the appropriate fee before the deadline for the next term in which they intend to graduate.

Graduation with Honors

Undergraduate students who complete degree requirements and who have earned an overall grade-point average of 3.5 in all semester credit hours attempted at UTSA are eligible for graduation cum laude.

Those who have earned a grade-point average of 3.75 in all semester credit hours attempted at UTSA are eligible for graduation magna cum laude.

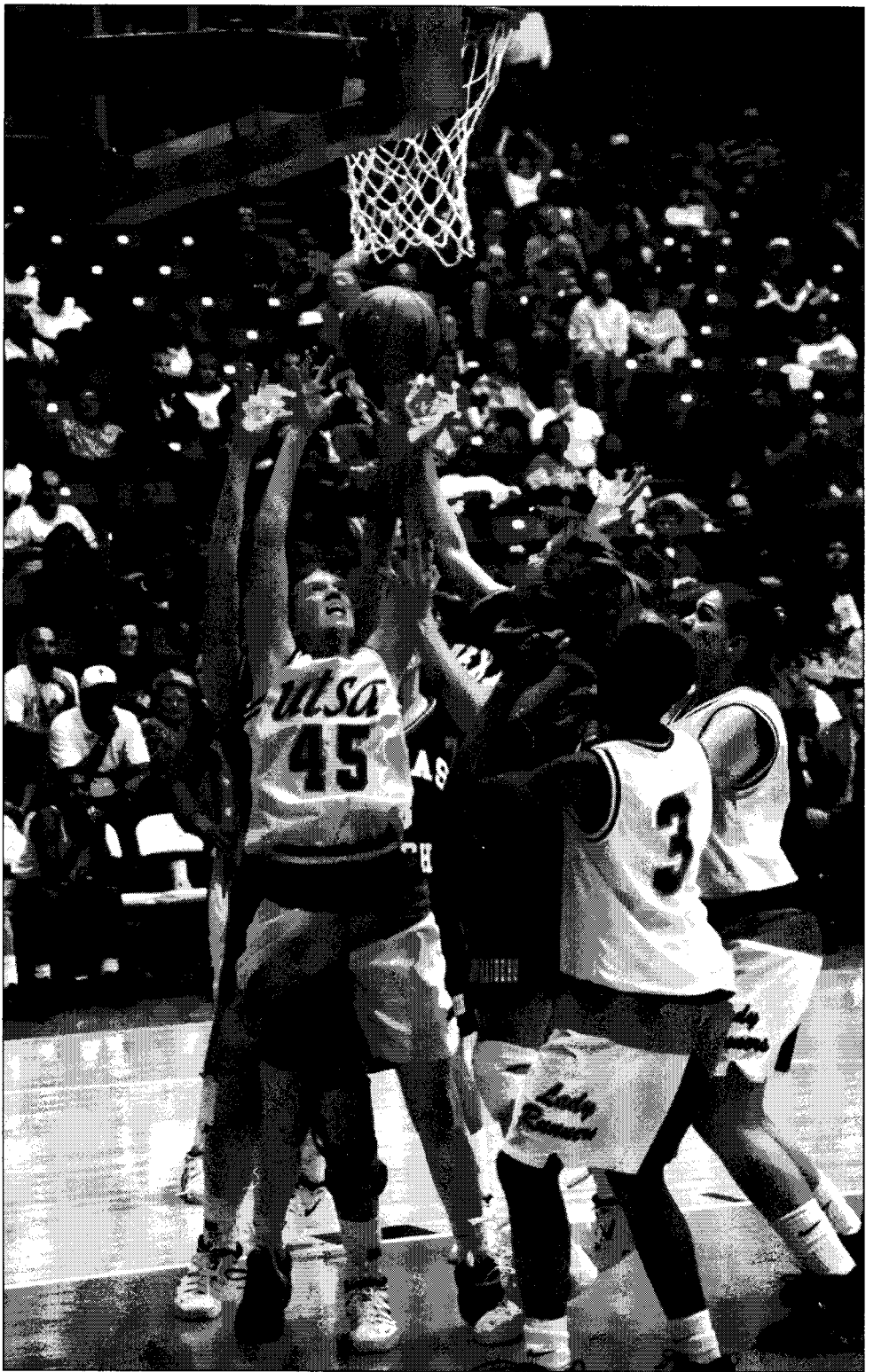
Those who have earned a grade-point average of 4.0 in all semester credit hours attempted at UTSA are eligible for graduation summa cum laude.

Candidates who have completed some portion of the requirements for the baccalaureate degree at other collegiate institutions may graduate with honors when they meet the requirements listed above, in addition to completing a minimum of 45 semester credit hours at UTSA (excluding courses challenged by examination or taken on a credit/no-credit basis in which only the symbol "CR" is recorded).

Tentative degree candidates must meet all requirements the semester before graduation in order to be recognized at the commencement ceremony.

No degree candidate shall be eligible for graduation with honors if, at the time of graduation, disciplinary action has been taken against the student by the University.

7.
UNDERGRADUATE
PROGRAM REQUIREMENTS
AND
COURSE DESCRIPTIONS



UNDERGRADUATE PROGRAM REQUIREMENTS AND COURSE DESCRIPTIONS

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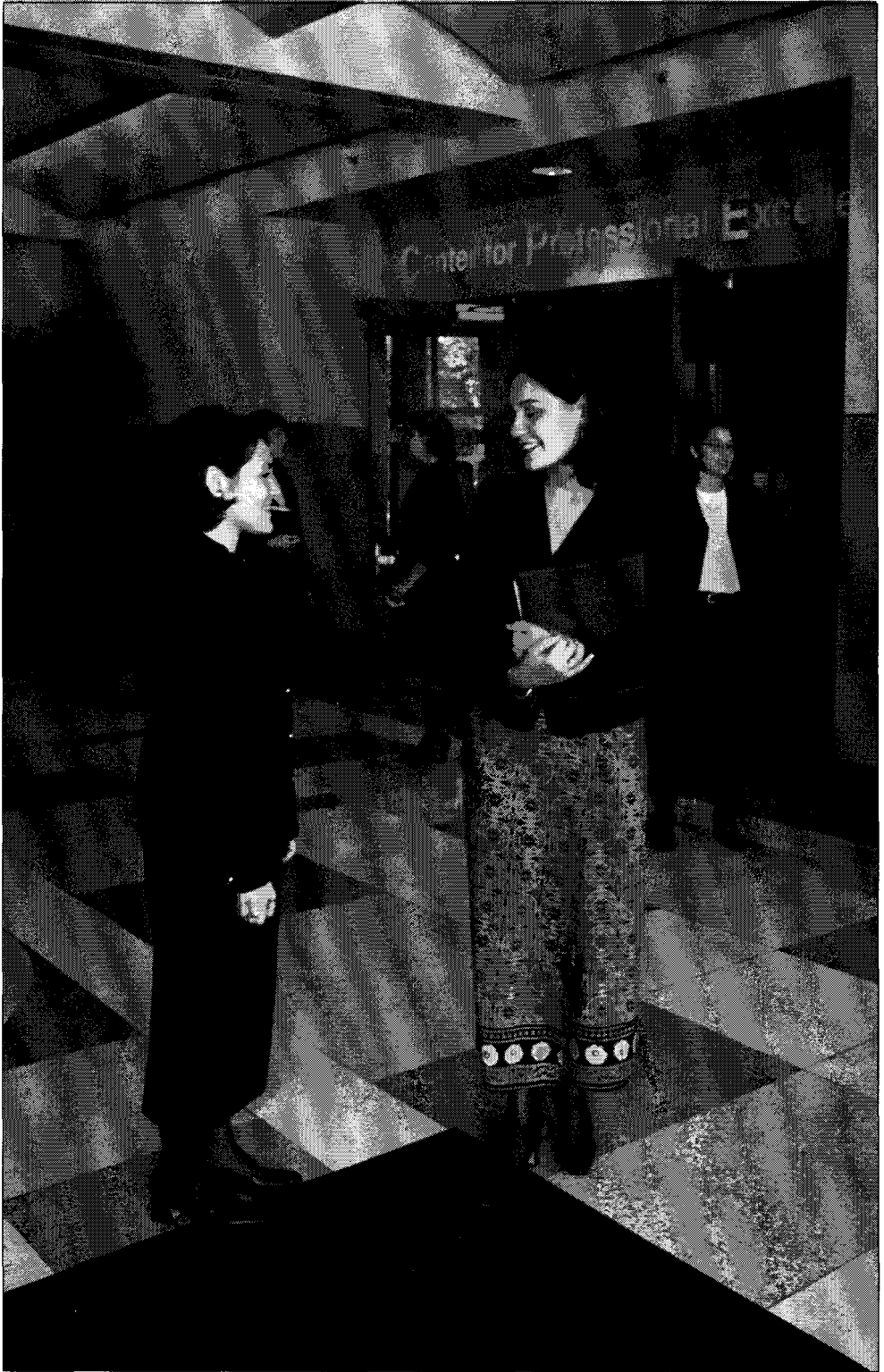
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COLLEGE OF BUSINESS



COLLEGE OF BUSINESS

Mission Statement

The mission of the College of Business is to offer graduate and undergraduate programs of high quality that meet the needs of students, in terms of their general education as well as in their preparation for productive and rewarding professional careers. This focus requires that the college be alert and responsive to local, regional, and national issues and to the needs of business, government, and the community at large. Its faculty approaches the challenge of education not only through their classroom and advising efforts but by active scholarship in their respective disciplines and through service to the University, their profession, and the community.

All undergraduate degrees in the College of Business are accredited by the American Assembly of Collegiate Schools of Business and conform to its recommended guidelines. Consistent with American Assembly of Collegiate Schools of Business guidelines, at least 50 percent of the business semester credit hours required for the College of Business degree must be taken at UTSA.

Students in the College of Business may not enroll in specified 3000- and 4000-level courses in the College of Business before declaring a major. Students majoring in fields outside the College of Business may not take more than 27 semester credit hours in this college without approval of the Dean of the College of Business.

Declaration of a major in the College of Business is limited to those students who meet the following minimum requirements:

1. Completion of 45 semester credit hours
2. Cumulative grade-point average of 2.5
3. Completion of the following eight courses or their equivalents with a grade-point average of 2.25 (2.0 for the B.B.A. in General Business):

ACC	2013	Accounting Principles I
ACC	2033	Accounting Principles II
ECO	2013	Introductory Macroeconomics
ECO	2023	Introductory Microeconomics
MAT	1033	Algebra with Calculus for Business
STA	1063	Basic Statistics for Business and Economics
IS	3003	Principles of Information Systems for Management
COM	1043	Introduction to Communications

Once these requirements are met, a student must request a declaration of major through the Undergraduate Business Advising Office.

Students seeking a Bachelor of Business Administration degree in the College of Business must take the following courses as part of their Core Curriculum requirement:

MAT	1033	Algebra with Calculus for Business (Domain I)
IS	3003	Principles of Information Systems for Management (Domain I)
ECO	2013	Introductory Macroeconomics (Domain II)
MGT	4893	Management Strategy and Policy (Domain IV) (taken in semester of graduation)

Students with a Building/Development Concentration must complete PHY 1603 General Physics I and PHY 1611 General Physics I Laboratory to meet part of the Core Curriculum science requirement.

All students seeking a B.B.A. degree in the College of Business must complete the following Common Body of Knowledge (CBK) courses in addition to the Core Curriculum:

Course or Requirement			Semester Credit Hours
STA	1063	Basic Statistics for Business and Economics	3
COM	1043	Introduction to Communication	3
ACC	2013	Accounting Principles I	3
ACC	2033	Accounting Principles II	3
BLW	3013	Business Law	3
ECO	2023	Introductory Microeconomics	3
FIN	3013	The Finance Function	3
MGT	3013	Introduction to Organization Theory, Behavior, and Management	3
MS	3033	Management Science and Production Management	3
MGT	3043	Business Communications	3
MKT	3013	Principles of Marketing	3
PHI	2053	Business Ethics	3

Students completing degree course requirements with less than 120 semester credit hours will augment their program with electives taken outside the College of Business to reach that total.

Bachelor of Business Administration Degree in General Business

The Bachelor of Business Administration degree in General Business is an interdisciplinary program within the College of Business. The minimum number of semester credit hours is 129. In addition to the Core Curriculum requirements and requirements of the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 39 semester credit hours.

A. 30 semester credit hours of required courses:

ACC	2043	Introduction to Accounting Topics
ECO	3033	Economics of Managerial Decisions
FIN	3313	Money and Banking
BLW	3023	Business Organizations and Commercial Law
MGT	3023	Organizational Behavior
MKT	4013	Marketing Management

12 additional semester credit hours of upper-division courses in the College of Business, of which no more than 6 hours can be in any one discipline in the college and at least 3 must be at the 4000 level.

- B. ENG 2413 Technical Writing
- C. 6 semester credit hours of electives outside the College of Business

Minor in General Business

A Minor in General Business is open to all nonbusiness majors in the University. Business majors are not eligible to pursue a Minor in General Business. Students pursuing this minor should elect to take ECO 2013 Introductory Macroeconomics (Domain II) and IS 3003 Principles of Information Systems for Management (Domain I) as part of their Core Curriculum requirements. In addition to those two courses, the following 21 semester credit hours are required in the College of Business:

ACC	2003	Foundations of Accounting
MGT	2003	Introduction to Business
ECO	2023	Introductory Microeconomics
FIN	3003	Survey of Finance
BLW	3013	Business Law
MGT	3013	Introduction to Organization Theory, Behavior, and Management
MKT	3013	Principles of Marketing

DIVISION OF ACCOUNTING AND INFORMATION SYSTEMS

Mission Statement

The mission of the accounting programs within the Division of Accounting and Information Systems is to offer graduate and undergraduate accounting programs of high quality which meet the needs of the students in preparing those students for professional careers in accounting. This mission includes providing a broad-based education as well as education in current business and accounting topics. The division is responsive to the needs of employers and other constituents of its programs. The division is also alert to the current issues in the local, regional, and national environment and plans and implements changes in the educational process to respond to those issues when needed. The faculty of the accounting programs assist in accomplishing this mission through a planned integration of their teaching, intellectual, and service contribution.

DIVISION HONORS

The Division of Accounting and Information Systems offers the opportunity for certain of its outstanding students to achieve the designation of Honors in Major and provides the opportunity for advanced study under close faculty supervision.

Selection for honors designation is based on the student's academic performance and recommendation by the Division Academic Policy and Curriculum Committee (APCC) in consultation with the faculty of the student's major discipline. To be eligible for the designation, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.5 in their major. To enroll in honor's thesis courses and to graduate with the honors designation, a minimum grade-point average must be maintained. Students applying for Honors in Major are expected to enroll in the appropriate honors thesis course during the final two semesters. The completed thesis must be approved by the supervising faculty sponsor from the student's discipline and the APCC. Students interested in this program should contact the APCC through the Division of Accounting and Information Systems office for additional information. Division honors can be attained independent of or in addition to University Honors.

Bachelor of Business Administration Degree in Accounting

The minimum number of semester credit hours for the Bachelor of Business Administration degree in Accounting is 120. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

A. 24 semester credit hours of accounting courses in the major:

- ACC 3023 Intermediate Financial Accounting I
 - ACC 3033 Intermediate Financial Accounting II
 - ACC 3043 Federal Income Tax Accounting
 - ACC 3113 Accounting Information Systems
 - ACC 3123 Cost Analysis
 - ACC 4013 Principles of Auditing
 - ACC 4153 Corporate and Partnership Taxation
- 3 semester credit hours of upper-division accounting electives

B. 3 semester credit hours of support work:

- ENG 2413 Technical Writing

C. 3 semester credit hours of electives outside the College of Business

Notes for students who intend to take the CPA examination:

1. Because of the topical coverage of the CPA examination, BLW 3023 Business Organizations and Commercial Law is recommended as an elective for students who anticipate taking the CPA examination.
2. The educational requirements for candidates applying for the CPA examination in Texas are regulated by the Texas State Board of Public Accountancy. Students with questions about requirements or eligibility should contact the Texas State Board of Public Accountancy, 333 Guadalupe, Tower III, Suite 900, Austin, TX 78701.

COURSE DESCRIPTIONS ACCOUNTING (ACC)

2003 Foundations of Accounting

(3-0) 3 hours credit.

A study of accounting as the "language of business." The focus is on accounting as a tool for communicating financial information for planning, control, and decision making. This course is designed for nonbusiness majors and cannot be applied toward a degree in the College of Business.

2013 Accounting Principles I

(3-0) 3 hours credit.

An introduction to the fundamental concepts of financial accounting. Designed to provide students an opportunity to understand accounting as an information development and communication function that supports economic decision making. [TCCN: ACCT 2301.]

- 2033 Accounting Principles II**
(3-0) 3 hours credit. Prerequisite: ACC 2013.
A continuation of the study of fundamental concepts of financial accounting and management's use of accounting to provide information for planning, controlling, and decision making. [TCCN: ACCT 2302.]
- 2043 Introduction to Accounting Topics**
(3-0) 3 hours credit. Prerequisite: ACC 2033.
An introduction to more advanced accounting topics such as federal taxation and cost accounting. May not be applied to a major in accounting. (Formerly ACC 3003. Credit cannot be earned for both ACC 2043 and ACC 3003.)
- 2153 Accounting for the Tourism Industry**
(3-0) 3 hours credit. Prerequisite: ACC 2033.
An investigation of specialized accounting topics in accommodations, attractions, restaurant, transportation, and other tourism-related industries. May not be applied to a major in accounting.
- 3023 Intermediate Financial Accounting I**
(3-0) 3 hours credit. Prerequisite: ACC 2033.
An in-depth study of promulgated accounting theory and concepts with an emphasis on corporate financial accounting and reporting.
- 3033 Intermediate Financial Accounting II**
(3-0) 3 hours credit. Prerequisite: A grade of "C" or better in ACC 3023.
A continuation of the in-depth study of promulgated accounting theory and concepts with an emphasis on corporate financial accounting and reporting.
- 3043 Federal Income Tax Accounting**
(3-0) 3 hours credit. Prerequisite: A grade of "C" or better in ACC 3023.
Fundamentals of federal income tax accounting for individuals. Topics include income and exclusions, statutory deductions, depreciation, sale of business assets, capital gains and losses, and computation of tax.
- 3113 Accounting Information Systems**
(3-0) 3 hours credit. Prerequisites: ACC 2033 and IS 3003.
Examines the role of accounting information systems within the organizational structure. A conceptual framework for integrating elements required to support accounting information systems. (Formerly IS 3013. Credit cannot be earned for both ACC 3113 and IS 3013.)
- 3123 Cost Analysis**
(3-0) 3 hours credit. Prerequisite: ACC 2033.
A study of advanced cost-accounting systems, including cost allocation, unit cost determination, variance analysis, capital budgeting, inventory control, and other related quantitative methods.

- 3143 International Accounting**
(3-0) 3 hours credit. Prerequisite: ACC 2033.
A comparative study of international financial accounting, managerial accounting, and auditing practices. Specific accounting issues include foreign currency translation and inflation accounting. May not be applied to a major in accounting.
- 4013 Principles of Auditing**
(3-0) 3 hours credit. Prerequisites: A grade of “C” or better in both ACC 3033 and 3113.
A study of auditing theory, professional ethics, audit programs, evidential matter, and professional reports.
- 4033 Advanced Financial Accounting Topics**
(3-0) 3 hours credit. Prerequisite: A grade of “C” or better in ACC 3033.
A study of advanced topics such as business combinations and consolidations, partnerships, and foreign currency translation. (Formerly ACC 3063. Credit cannot be earned for both ACC 4033 and ACC 3063.)
- 4053 Accounting for Governmental and Not-for-Profit Organizations**
(3-0) 3 hours credit. Prerequisite: ACC 3033.
A study of accounting, budgeting, fiscal procedures, and financial records of governmental agencies and private not-for-profit organizations.
- 4073 Intermediate Financial Accounting III**
(3-0) 3 hours credit. Prerequisite: A grade of “C” or better in ACC 3033.
A study of specialized financial reporting topics, including the application of professional standards and case-study analyses.
- 4083 Budgeting, Planning, and Forecasting**
(3-0) 3 hours credit. Prerequisite: ACC 3123 or an equivalent.
A study of advanced cost-accounting topics (managerial, behavioral, and quantitative) for profit planning and control. Specific forecasting models and computer applications are addressed.
- 4153 Corporate and Partnership Taxation**
(3-0) 3 hours credit. Prerequisite: A grade of “C” or better in ACC 3043.
A study of the taxation of C and S Corporations and Partnerships. Topics include the formation, income taxation, and liquidation of corporations and partnerships.
- 4173 Estate and Gift Taxation**
(3-0) 3 hours credit. Prerequisite: ACC 3043.
Introduction to the federal estate and gift tax laws, with an emphasis on the applicable code sections and regulations.
- 4183 EDP Auditing and Advanced Problems**
(3-0) 3 hours credit. Prerequisite: ACC 4013.
An in-depth analysis of the Statements of Auditing Standards, with special emphasis on evaluating internal control in an EDP environment and computer-assisted auditing.

4911-3 Independent Study

1 to 3 hours credit. Prerequisite: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for the required forms.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Accounting

3 hours credit. Prerequisites: ACC 3033, an overall 2.5 grade-point average, and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

The opportunity to gain knowledge through experiential activities in professional life. Joint cooperation with business and governmental institutions in structuring and monitoring work experience aimed at supplementing the classroom learning process. Internships may be repeated once (for a total of 6 semester credit hours) provided the internships are with different organizations.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by a division faculty member.

Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval. No more than 3 semester credit hours can apply toward accounting major requirements.

**Bachelor of Business Administration Degree
in Information Systems**

The minimum number of semester credit hours for the Bachelor of Business Administration degree in Information Systems is 123. In addition to the Core Curriculum requirements and the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 33 semester credit hours.

A. 21 semester credit hours of information systems courses in the major:

IS	3063	Data Base Management for Information Systems
IS	3073	Application Development
IS	4053	Analysis and Design of Information Systems
IS	4063	Advanced Topics in Information Systems
IS	4123	Introduction to Telecommunications for Business

6 additional semester credit hours of upper-division information systems coursework

B. 6 semester credit hours of information systems support work:

- IS 2033 Introduction to Computer Concepts for Information Systems
- IS 2043 Data Structures and File Processing

C. 3 semester credit hours of support work:

- MGT 3023 Organizational Behavior

D. 3 semester credit hours of electives taken outside the College of Business

COURSE DESCRIPTIONS INFORMATION SYSTEMS (IS)

- 2033 Introduction to Computer Concepts for Information Systems**
(3-0) 3 hours credit.
An introduction to programming with procedural languages. Addresses basic elements of structured programming, including control structures, arrays, lists, sequential file access and update, and modular design.
- 2043 Data Structures and File Processing**
(3-0) 3 hours credit. Prerequisite: IS 2033.
An introduction to principles of file organization, including file structures, access methods, abstract data types, and object-oriented methods. A procedural language will be used to develop applications using these concepts.
- 3003 Principles of Information Systems for Management**
(3-0) 3 hours credit. Prerequisite: Familiarity with spreadsheet software.
An analysis of managerial/organizational information needs. Systematic procedures for developing information systems are covered. Includes coverage of hardware and software tools, information structures, and formal problem-solving techniques. Issues related to organizational controls, security, and globalization as a result of changing technologies are discussed. Cases will be assigned to illustrate the use of specific tools and techniques for problem solving.
- 3063 Data Base Management for Information Systems**
(3-0) 3 hours credit. Prerequisite: IS 2043.
A study of data base management systems (DBMS) features, functions, and architecture, including logical design, data models, normalization, object-oriented data, and data base administration. A DBMS product will be used to illustrate principles.
- 3073 Application Development**
(3-0) 3 hours credit. Prerequisite: IS 2043.
A study of the use of information systems techniques to solve managerial problems. Includes cases where students are asked to design and implement

information systems that address various classes of analytic problems. Principles of decision theory are addressed.

3093 Computer Support of Groups

(3-0) 3 hours credit. Prerequisite: IS 3003.

This course is designed to examine the ways in which computers can be used to support the communication, coordination, and decision-making needs of groups. The course will study the problems that face-to-face and distributed groups encounter in an organizational environment and will review the technology available to address these problems.

4053 Analysis and Design of Information Systems

(3-0) 3 hours credit. Prerequisite: IS 3063.

An introduction to systems theory and development techniques. Topics include problem definition, object-oriented design, issues for cost/benefit analyses, and CASE tools.

4063 Advanced Topics in Information Systems

(3-0) 3 hours credit. Prerequisite: 15 semester credit hours of information systems courses.

Survey of recent developments in information technology. Analysis will focus on applications in the business community and theoretical developments that relate to those applications. Ordinarily taken during semester of graduation.

4073 The Information Resource

(3-0) 3 hours credit. Prerequisite: MGT 3023.

A study of the principles and concepts involved in the management of organizational information systems resources. Topics include project control, CIO functions, information systems planning, strategic impact of information systems, multinational organizations, and relevant legal, professional, and ethical issues.

4123 Introduction to Telecommunications for Business

(3-0) 3 hours credit. Prerequisite: 9 semester credit hours of information systems courses.

Includes an in-depth look at basic telecommunications terminology and concepts. Introduction to voice and data networks, signaling, and modulation/multiplexing. Network topologies and protocol fundamentals and architectures (including the OSI model, TCP/IP, and SNA) are presented and compared. Frame Relay, X.25, and ATM packet technologies are introduced. Network security issues are explored.

4133 Advanced Telecommunications for Business

(3-0) 3 hours credit. Prerequisite: IS 4123.

This course provides a foundation in the issues and principles of network design and management, including network planning, initialization, and configuration management; fault management; usage accounting; and network security. Current networking and network management products and the role played by network management protocols and products will be discussed.

- 4153 Electronic Commerce**
 (3-0) 3 hours of credit. Prerequisite IS 3003.
 A study of issues related to the use of electronic networks to facilitate inter- and intraorganizational business activities. Topics include the nature of the network, of business activities, and of the emerging technologies relevant to the business activities. Current impediments to expansion or implementation of electronic commerce and the technological, social, and policy changes needed to overcome these impediments will also be discussed.
- 4163 Advanced Programming Concepts**
 (3-0) 3 hours credit. Prerequisite: IS 3063.
 A survey of programming languages and application development facilities. Topics may include procedural languages as well as very high-level languages, end-user application development languages, object-oriented languages, logic programming languages, and expert system shells.
- 4183 Advanced Data Base Concepts**
 (3-0) 3 hours credit. Prerequisite: IS 3063.
 In-depth consideration of concepts governing the design and management of data base systems. Topics include data base design, distributed data bases, data base administration, object-oriented data modeling, and performance evaluation.
- 4911-3 Independent Study**
 1 to 3 hours credit. Prerequisite: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for the required forms.
 Independent research in an information systems topic under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933 Internship in Information Systems**
 3 hours credit. Prerequisites: 9 semester credit hours of information systems or business data systems courses, an overall 2.5 grade-point average, and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.
 The opportunity to gain knowledge through experiential activities in professional life. Joint cooperation with business and governmental institutions in structuring and monitoring work experience aimed at supplementing the classroom learning process.
- 4953 Special Studies in Information Systems**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by a division faculty member.

Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval. No more than 3 semester credit hours may apply toward information systems major requirements.

DIVISION OF ECONOMICS AND FINANCE

DIVISION HONORS

The Division of Economics and Finance offers the opportunity for certain of its outstanding students to achieve the designation of Honors in Major and provides the opportunity for advanced study under close faculty supervision.

Selection for honors designation is based on the student's academic performance and recommendation by the Division Academic Policy and Curriculum Committee (APCC) in consultation with the faculty of the student's major discipline. To be eligible for the designation, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. To enroll in honor's thesis courses and to graduate with the honors designation, these minimum grade-point averages must be maintained. Students applying for Honors in Major are expected to enroll in the appropriate honors thesis course during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor from the student's discipline and the APCC. Students interested in this program should contact the Division of Economics and Finance office for additional information. Division honors can be attained independent of or in addition to University Honors.

Bachelor of Business Administration Degree in Economics

The minimum semester credit hours for the Bachelor of Business Administration degree in Economics is 126. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 36 semester credit hours. Thirty-nine of the total hours required for the degree must be at the upper-division level.

A. 21 upper-division semester credit hours in the major:

ECO	3033	Economics of Managerial Decisions
ECO	3053	Aggregate Economic Analysis
ECO	3113	Introduction to Mathematical Economics
ECO	3123	Forecasting Techniques in Business and Economics
9 additional semester credit hours of upper-division electives in economics		

B. 15 semester credit hours of support work:

ACC	2043	Introduction to Accounting Topics
ACC	3023	Intermediate Financial Accounting I
3 semester credit hours of College of Business upper-division electives		
6 semester credit hours of electives from outside the College of Business		

Bachelor of Arts Degree in Economics

The minimum semester credit hours for the Bachelor of Arts degree in Economics is 120. In addition to the Core Curriculum requirements, all candidates for the degree must complete the following 66 semester credit hours. Thirty-nine of the total hours required for the degree must be at the upper-division level.

A. 30 semester credit hours of required courses in the major:*

ECO	2013	Introductory Macroeconomics
ECO	2023	Introductory Microeconomics
ECO	3013	Theory of Price
ECO	3053	Aggregate Economic Analysis
ECO	3113	Introduction to Mathematical Economics
ECO	3123	Forecasting Techniques in Business and Economics

12 additional semester credit hours in economics, as approved by the student's advisor

B. 24 semester credit hours of support work (students wishing to pursue a graduate degree in economics should consult with a faculty advisor in economics when planning their support work):

6 required semester credit hours:

ACC	2013	Accounting Principles I
ACC	2033	Accounting Principles II

18 semester credit hours distributed as follows:

6 semester credit hours in the College of Business

12 semester credit hours of social science selected from American studies (AMS), anthropology (ANT), bicultural-bilingual studies (BBL), criminal justice (CRJ), geography (GRG), history (HIS), political science (POL), psychology (PSY), sociology (SOC), and social science (SSC)

C. 15 semester credit hours taken as follows:

COM	1043	Introduction to Communication
STA	1063	Basic Statistics for Business and Economics

9 semester credit hours of free electives

*Only 27 semester credit hours are outside the Core Curriculum. ECO 2013 satisfies the Domain II Core Curriculum requirement.

Minor in Economics

All students pursuing the Minor in Economics must complete 18 semester credit hours.

A. 6 semester credit hours of required courses:

ECO	2013	Introductory Macroeconomics
ECO	2023	Introductory Microeconomics

B. 12 additional semester credit hours of upper-division economics courses

To declare a Minor in Economics, obtain advice, and seek approval of substitutions for course requirements, students must consult the Undergraduate Business Advising Office.

COURSE DESCRIPTIONS ECONOMICS (ECO)

2003 Introduction to Political Economy

(3-0) 3 hours credit.

A nontechnical introduction to economic concepts such as scarcity, costs and benefits, supply and demand, trade, employment, and growth, with applications to current economic issues and policies. May not be counted toward a major in economics, but may be counted as a free elective for College of Business students. [TCCN: ECON 1301.]

2013 Introductory Macroeconomics

(3-0) 3 hours credit. Prerequisite: Placement into a college-level mathematics course.

Economic analysis at the national level, including the determination of aggregate income and employment, operation of the domestic and international monetary systems, short-term income fluctuations, and long-term economic growth. [TCCN: ECON 2301.]

2023 Introductory Microeconomics

(3-0) 3 hours credit. Prerequisite: Placement into a college-level mathematics course.

An introduction to the economic theory of decision making by consumers and business firms; an analysis of the domestic and international market systems and their roles in allocating goods and services; and problems of market failure. [TCCN: ECON 2302.]

3013 Theory of Price

(3-0) 3 hours credit. Prerequisites: ECO 2013, ECO 2023, and MAT 1033, or their equivalents.

Operations of individual markets, market structure, theory of the firm, theory of production, demand theory, general equilibrium, and welfare economics.

- 3033 Economics of Managerial Decisions**
(3-0) 3 hours credit. Prerequisites: ECO 2013, ECO 2023, and MAT 1033, or their equivalents.
Managerial economic decisions in firms and related entities. Topics include demand analysis, least-cost production, profit strategy, the influence of various market structures on the firm, advanced issues in pricing, and the impact of the international sector.
- 3053 Aggregate Economic Analysis**
(3-0) 3 hours credit. Prerequisites: ECO 2013 and 2023, or their equivalents.
Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment; short-term income fluctuations; and long-term growth.
- 3113 Introduction to Mathematical Economics**
(3-0) 3 hours credit. Prerequisites: Completion of or concurrent enrollment in ECO 3013, 3033, 3053, or an equivalent; MAT 1033 or an equivalent; or consent of instructor.
Systematic approach to economic analysis using basic mathematical tools; treatment of optimizing behavior with applications to consumer and business firms; emphasis on understanding and application of analytical techniques.
- 3123 Forecasting Techniques in Business and Economics**
(3-0) 3 hours credit. Prerequisites: MAT 1033, STA 1063, and IS 3003, or their equivalents.
Measurement in economics and business that strives to mix the development of technique with its application to economic analysis. Major topics include the nature of economic and business data, specific forms of modeling and forecasting, and the use of microcomputer programs in econometric modeling and forecasting.
- 3163 Evolution of Economic Thought**
(3-0) 3 hours credit.
Development of economic theories, models, and schools of thought from the birth of market economies to the present, with an emphasis on the historical, institutional, and social forces shaping economic thinking and public policy.
- 3183 Economic History of the United States**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2013, 2023, or an equivalent.
The growth and development of the American economy from colonial times to the present; emphasis on applying a variety of economic concepts to a topical study of the economic forces that shaped the country's history.
- 3193 The International Economy**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2013, 2023, an equivalent, or consent of instructor.
Principles of international trade; significance of geographic, economic, social, and political influences; current problems in international trade and payments; tariffs and commercial policy; and the role of international organizations.

- 3213 Government Regulation of Industry**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2023, an equivalent, or consent of instructor.
Theory and practice of governmental regulation, deregulation, and privatization; economic, legal, and ethical concerns regarding private-sector output; and pricing as influenced by public policy and marketing structure.
- 3253 Economics of Public and Social Issues**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2013, 2023, an equivalent, or consent of instructor.
A seminar on applying economic reasoning and models to a wide variety of public, ethical, and social issues. Uses advanced techniques in political economy.
- 3263 Industrial Organization**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2023, or an equivalent.
Theory and empirical evidence relating to the structure of American industry and its effect on the firm's conduct and performance, government policy, and regulation.
- 3273 Public Sector Economics**
(3-0) 3 hours credit. Prerequisites: One of the following: ECO 2003, 2023, or an equivalent.
Role of government in the marketplace; cost-benefit analysis; spending and regulatory alternatives; efficiency and equity analysis of taxes; incentives within government; public policy issues.
- 3283 Labor Economics**
(3-0) 3 hours credit. Prerequisite: ECO 2003, 2013, 2023, an equivalent, or consent of instructor.
Theories of wages and employment determination. U.S. labor history, comparative labor movements, and contemporary labor problems.
- 4273 Environmental and Resource Economics**
(3-0) 3 hours credit. Prerequisite: ECO 2003, 2023, or an equivalent.
Economic principles applied to natural resource and environmental problems; relationship of market and nonmarket forces to environmental quality and demands for natural resources; and development of tools for policy analysis.
- 4303 Economic Problems of Developing Countries**
(3-0) 3 hours credit. Prerequisite: One of the following: ECO 2003, 2013, an equivalent, or consent of instructor.
Specific economic problems of developing countries and national groupings; basic approaches to economic development; major proposals for accelerating development; role of planning; and trade, aid, and economic integration.

4473 Doing Business in Mexico

(3-0) 3 hours credit.

An overview of international business activities in Mexico, including such topics as the economics of Mexico, the Mexican legal system, NAFTA, Mexican accounting and taxation, international joint ventures, cross-cultural differences, and business protocol.

4913 Independent Study

3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the College of Business.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Economics

3 hours credit. Prerequisites: 12 semester credit hours of upper-division economics and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

This opportunity for work experience in research or applied economics may be undertaken either in private business or a public agency; opportunities are developed in consultation with the faculty advisor and Division Director and require approval of both. This course will not count as a required economics course. Internships may be repeated (a total of 6 semester credit hours) provided the internships are with different organizations.

4953 Special Studies in Economics

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by a division faculty member.

Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval.

Bachelor of Business Administration Degree in Finance

The minimum number of semester credit hours for the Bachelor of Business Administration degree in Finance is 129. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 42 semester credit hours.

A. 21 upper-division semester credit hours in the major:

FIN	3033	Principles of Investment
FIN	3313	Money and Banking

15 additional semester credit hours of finance electives; FIN 4873 Computer Modeling of Financial Applications is recommended as one of these finance electives

B. 12 semester credit hours of support work:

ACC	3023	Intermediate Financial Accounting I
ACC	3033	Intermediate Financial Accounting II
ECO	3033	Economics of Managerial Decisions

3 semester credit hours of College of Business upper-division electives

C. 9 semester credit hours of electives, which must be taken outside the College of Business

Minor in Finance

All students pursuing the Minor in Finance must complete 27 semester credit hours.

A. 18 semester credit hours of required courses:

ACC	2013	Accounting Principles I
ACC	2033	Accounting Principles II
FIN	3013	Principles of Finance
FIN	3033	Principles of Investment
FIN	3313	Money and Banking
MAT	1033	Algebra with Calculus for Business

B. 9 additional semester credit hours of upper-division finance electives

To declare a Minor in Finance, obtain advice, and seek approval of substitutions for course requirements, students must consult the Undergraduate Business Advising Office.

COURSE DESCRIPTIONS

FINANCE

(FIN)

2003 Consumer Finance in American Society

(3-0) 3 hours credit.

Examines various aspects of consumer finance choices in a market economy, including broad coverage of the following consumer decisions: assets such as bank accounts; major purchases such as housing and vehicles; management of credit cards and consumer loans; selecting life, health, and

property insurance; investing in stocks, bonds, and mutual funds; and retirement, estate, and tax planning. This course cannot be applied toward a major in finance but may be counted as a free elective for College of Business students. [TCCN: BUSI 1307.]

3003 Survey of Finance

(3-0) 3 hours credit.

A basic survey course focusing on three aspects of finance: the financial system, corporate finance, and investments. The financial environment will be described along with how the financial system interacts with the economy. Business decisions, efficient allocation of financial resources, and fundamentals of investment will be introduced. This course cannot be applied toward a major in the College of Business.

3013 Principles of Business Finance

(3-0) 3 hours credit. Prerequisites: ACC 2013, ACC 2033, and MAT 1033, or their equivalents.

Introduction to financial management techniques. Topics may include time value of money, valuation of stocks and bonds, risk and return, capital budgeting analysis, financing alternatives, financial planning, ratio analysis, short-term financial decisions, working capital, sources and uses of funds, capital structure, dividend policy, lease analysis, options, international financial management, and other topics associated with successful business finance decisions in an internationally competitive environment.

3023 Intermediate Corporate Finance

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Advanced discussion of subjects essential to corporate financial management, including short-term credit policies, capital budgeting, risk, sources of long-term funds, financial leverage, and the cost of capital. Special topics such as mergers, bankruptcy, and reorganization may also be considered.

3033 Principles of Investment

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Introduction to securities markets; analysis of money market instruments, mutual funds, stocks, bonds, options, futures, and other securities; investment management in the light of tax considerations, timing, and selected portfolio needs.

3043 Capital Structure and Budgeting

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Application of long-term economic decision analysis to financial planning in both profit and nonprofit institutions; development of allocation criteria for sources and uses of scarce financial resources. (Formerly FIN 4403. Credit cannot be earned for both FIN 3043 and FIN 4403.)

- 3313 Money and Banking**
(3-0) 3 hours credit. Prerequisite: ECO 2013 or an equivalent.
Elements of monetary theory; relationships between money, prices, production, and employment; factors determining money supply; and operation of capital markets with reference to the United States.
- 3403 Cases in Financial Management**
(3-0) 3 hours credit. Prerequisites: FIN 3033 and 3313, or their equivalents.
Advanced analysis of financial cases based on actual business problems and the application of financial theory and techniques are used to illustrate the process required to formulate financial decisions.
- 3413 Financial Markets**
(3-0) 3 hours credit. Prerequisite: FIN 3313 or an equivalent.
Analysis of financial management principles, theories, and techniques as they apply to the peculiarities of the financial firm; emphasis on asset and liability management in a changing environment of regulation, competition, and financial intermediation.
- 3423 Security Analysis**
(3-0) 3 hours credit. Prerequisite: FIN 3033 or an equivalent.
Advanced financial analysis; examination of statements and supplementary data of industrial, commercial, financial intermediary, and public enterprises; preparation of reports relevant to achieving an understanding of financial management policies.
- 3433 Principles of Real Estate**
(3-0) 3 hours credit.
General introduction to the subject matter and terminology of real estate as a business and profession; federal, state, and local laws governing housing discrimination, equal credit opportunity, and community reinvestment.
- 4313 Commercial Bank Management**
(3-0) 3 hours credit. Prerequisite: FIN 3313 or an equivalent.
Direction and coordination of the various functions of the commercial bank, including money position, lending, capital management, and trust and auxiliary functions.
- 4423 Investment Portfolio Management**
(3-0) 3 hours credit. Prerequisite: FIN 3033 or an equivalent.
Application of investment principles to management of investment portfolios of individuals and institutions; consideration of business cycles, investment constraints, portfolio construction, investment timing, and securities selection. Analysis of derivative securities and their use in the portfolio context.
- 4523 Introduction to Risk Management**
(3-0) 3 hours credit. Prerequisite: FIN 3013 or consent of instructor.
Analysis of risk management tools as an integral part of corporate financial decisions; alternatives for spreading risk such as insurance, retention funds, and external funds.

4613 Introduction to International Finance

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Study of underlying forces in international financial relations and the unique problems of international trade, investments, and operations; examination of multinational business finance and its economic, legal, and political dimensions.

4713 Mortgage Banking and Real Estate Finance

(3-0) 3 hours credit. Prerequisites: FIN 3013 and 3433 or 3033, or consent of instructor.

Planning, structure, and analysis of real estate financing from the viewpoints of both the users and suppliers of funds; examination of various techniques and legal instruments; institutional constraints and their effects on real estate lending activities; and federal, state, and local laws governing housing discrimination, equal credit opportunity, and community reinvestment.

4723 Real Estate Investment

(3-0) 3 hours credit. Prerequisites: FIN 3013 and 3433 or 3033, or consent of instructor.

Analysis of real estate investment alternatives; feasibility and site analysis; tax considerations; income and expense analysis; discounted cash flow analysis; profitability measurement; and forms of ownership. (Formerly FIN 3503. Credit cannot be earned for both FIN 3503 and FIN 4723.)

4813 Property-Liability Insurance Finance

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Analysis and management of risk and insurance, including the insurance contract, property insurance, liability insurance, business insurance, the insurance agency, financial structure and management of property-liability companies, and contemporary problems of property-liability insurance.

4823 Life and Health Insurance Finance

(3-0) 3 hours credit. Prerequisite: FIN 3013 or an equivalent.

Philosophy of the life risk is developed, as well as an understanding of the special character of life and health insurance, human life value, the customary and special uses of life insurance, and the history of life insurance companies. Life, health, and disability insurance contracts are investigated in addition to term and whole life insurance, agency structure, and current issues of life and health insurance.

4853 Real Estate Appraisal

(3-0) 3 hours credit. Prerequisites: FIN 3013 and 3433, their equivalents, or consent of instructor.

Functions and methods of property valuation, including comparable sales analysis, cost depreciation analysis, and income capitalization; residential and income property appraisal techniques and reporting.

- 4873 Computer Modeling of Financial Applications**
 (3-0) 3 hours credit. Prerequisites: FIN 3013 and IS 3003, or their equivalents.
 Provides the opportunity to develop computer modeling skills and techniques for analyzing financial situations encountered in business. Corporate decisions such as the analysis of financial statements, financial planning and forecasting, capital budgeting, and financing alternatives are modeled. Investment analysis topics include the valuation of stocks, bonds, and options, as well as performance analysis and portfolio management. Simulation techniques examine financial issues involving uncertainty.
- 4913 Independent Study**
 3 hours credit. Prerequisites: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933 Internship in Finance**
 3 hours credit. Prerequisites: 12 semester credit hours of upper-division finance courses and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.
 The opportunity for work experience in research of financial operations, including real estate and insurance, may be undertaken in either private business or a public agency; opportunities are developed in consultation with the faculty advisor and Division Director and require approval of both. Internship may be repeated once (for a total of 6 semester credit hours) provided the internships are with different organizations, but only 3 hours may count toward the 21 hours of finance required for the major.
- 4953 Special Studies in Finance**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Thesis**
 3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by a division faculty member.
 Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval.

COURSE DESCRIPTIONS BUSINESS LAW (BLW)

- 2003 Gender Law**
(3-0) 3 hours credit.
The administrative agency, judicial decisions, and legislation involving gender issues, including women and children, women and marriage, and women in the workplace.
- 3003 Business in Its Legal Environment**
(3-0) 3 hours credit. This course may be taken in lieu of BLW 3013.
Study of the legal environment of business, including the social and ethical responsibility of business, legal process concepts, case law and legislative jurisprudence, and constitutional perspectives of doing business. Credit cannot be earned for both BLW 3003 and BLW 3013.
- 3013 Business Law**
(3-0) 3 hours credit.
The contemporary environment of business law, including the origin and development of law, the law of contracts and Article 2 of the Uniform Commercial Code, and the judicial processes; and an introduction to the legal structure of business organizations and related topics in light of social, ethical, political, economic, and global perspectives. Credit cannot be earned for both BLW 3013 and BLW 3003.
- 3023 Business Organizations and Commercial Law**
(3-0) 3 hours credit. Prerequisite: BLW 3013 or an equivalent.
Detailed study of topics under the Uniform Commercial Code, commercial paper, documents of title, investment contracts, secured transactions, and also bankruptcy, securities regulations, accountants' liability, and the legal operation of the general and limited partnership and the business corporation.
- 3213 Legal Relations of Business**
(3-0) 3 hours credit. Prerequisite: BLW 3013 or an equivalent.
Study of government regulations affecting employees and employers, competition, unfair and deceptive trade practices, and social responsibilities of business; regulation of property through wills, trusts and estates, deeds and mortgages, and other related legal mechanisms; and the current trends of government regulation of business, particularly as affected by social, political, and ethical perspectives, including an introduction to international law.
- 3423 Insurance Law**
(3-0) 3 hours credit. Prerequisite: BLW 3013 or an equivalent.
Offers the opportunity to learn the fundamentals of insurance law, including the concept of insurance, the marketing of insurance, indemnity and subrogation, protected interests and persons, identification of risk, problematic insurance policy provisions, the process of claims and settlements, insurance regulations, and the resolution of disputed claims.

- 3523 Real Estate Law**
(3-0) 3 hours credit. Prerequisite: BLW 3013 or an equivalent.
Legal environment of real property ownership and transfer and legal brokerage; estates in land; sales contracts; mortgage transactions; title conveyances; landlord and tenant; restrictions and zoning; eminent domain; federal, state, and local laws governing housing discrimination; and equal opportunity and community reinvestment.
- 4153 Tourism Law**
(3-0) 3 hours credit. Prerequisite: BLW 3013 or an equivalent.
An investigation of the legal aspects of the accommodation, attraction, destination management organization, restaurant, and transportation industries.
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Business Law**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

DIVISION OF MANAGEMENT AND MARKETING

DIVISION HONORS

The Division of Management and Marketing offers the opportunity for certain of its outstanding students to achieve the designation of Honors in Major and provides the opportunity for advanced study under close faculty mentorship.

Selection for honors designation is based on the student's academic performance and recommendation by the Division Academic Policy and Curriculum Committee (APCC) in consultation with the faculty of the student's major discipline. To be eligible for the designation, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. To enroll in honor's thesis courses and to graduate with the honors designation, these minimum grade-point averages must be maintained. Students applying for Honors in Major are expected to enroll in the appropriate honors thesis course during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor from the student's discipline and the APCC. Students interested in this program should contact the APCC through the Division of Management and Marketing office for additional information. Division honors can be attained independently of and in addition to University Honors.

Bachelor of Business Administration Degree in Management with an International Business Concentration

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Management with an International Business Concentration is 120. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

A. 18 upper-division semester credit hours of international courses in the College of Business:

MGT	4073	International Management
MGT	4083	Comparative International Management Practices
MKT	4073	International Marketing

9 semester credit hours selected from the following:

ACC	3143	International Accounting
ECO	3193	The International Economy
ECO	4303	Economic Problems of Developing Countries
ECO	4953	Special Studies in Economics (international topics only)
FIN	4613	Introduction to International Finance
MGT	3023	Organizational Behavior
MKT	4953	Special Studies in Marketing (international topics only)

or other international business electives as approved by Division of Management and Marketing faculty

B. 12 semester credit hours of directed elective support work outside the College of Business, as follows (some of these courses may be taken to fulfill Core Curriculum requirements):

1. 3 semester credit hours from the following:

GRG	1023	World Regional Geography*
GRG	3123	Geography of Latin America
GRG	3133	Geography of Europe
GRG	3213	Cultural Geography
GRG	3613	Conservation of Resources
GRG	3633	Geography of Development

2. 3 semester credit hours from the following:

HIS	2533	Introduction to Latin American Civilization
HIS	2543	Introduction to Islamic Civilization
HIS	2553	Introduction to East Asian Civilization
HIS	2563	Introduction to European Civilization
HIS	2573	Introduction to African Civilization
HIS	3283	Twentieth-Century Europe
HIS	3303	History of Mexico
HIS	3523	European Cultural History
HIS	3823	History of American Foreign Policy
IDS	2213	World Civilization since the Fifteenth Century*

3. 3 semester credit hours from the following:

POL	2083	Current Issues in World Politics
POL	2603	International Politics
POL	2633	Comparative Politics
POL	3393	Latin American Politics
POL	3403	European Politics
POL	3433	Governments and Politics of Southeast Asia
POL	3443	Governments and Politics of East Asia
POL	3493	Politics of the Middle East

4. Plus 3 semester credit hours from any of these or other international courses, including foreign languages, offered in the University and approved by the Division of Management and Marketing faculty

Bachelor of Business Administration Degree in Management with a Leadership and Administration Concentration

The minimum number of semester credit hours required for this degree is 120. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

*This course also meets part of the Core Curriculum requirement.

A. 15 required upper-division semester credit hours in the major:

MGT	3023	Organizational Behavior
MGT	4073	International Management
MGT	4203	Business and Society
MGT	4213	Advanced Organization Theory
MS	4343	Production/Operations Management
		or
MS	4363	Quality Management and Control

B. 6 semester credit hours of support work within the College of Business:

ACC	2043	Introduction to Accounting Topics
FIN	3313	Money and Banking

C. 3 semester credit hours of communication taken from the following:

COM	2113	Public Speaking
COM	2343	Introduction to Mass Communication
Any upper-division course in communication (COM)		

D. 6 semester credit hours of College of Business upper-division electives, in addition to the Core Curriculum and CBK requirements

Bachelor of Business Administration Degree in Management with a Building/Development Concentration

The Bachelor of Business Administration degree in Management with a Building/Development Concentration is offered with joint support of the architecture program. Architecture courses are described in the Division of Architecture and Interior Design section. The minimum number of semester credit hours for this degree is 135.

To meet the Domain I Science requirement of the Core Curriculum, students must complete PHY 1603 and PHY 1611, General Physics I and General Physics I Laboratory, and one course from the following:

CHE	1053	Chemistry of Ordinary Things
CHE	1103	General Chemistry
GEO	1013	The Third Planet
GEO	1103	Introduction to Earth Systems
GEO	3163	Oceanography
PHY	1014	Physics and Civilization
PHY	1623	General Physics II
AST	1003	Universes
AST	1013	Introduction to Astronomy
ES	2013	Introduction to Environmental Systems
ES	3023	Man and His Natural Resources
BIO	1203	Biology I

BIO	3273	Biology of Flowering Plants
BIO	3283	Principles of Ecology

In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 45 semester credit hours.

A. 15 upper-division semester credit hours of courses:

ARC	3203	Housing Design and Development
ARC	4613	Construction Management
FIN	3433	Principles of Real Estate
FIN	4713	Mortgage Banking and Real Estate Finance
BLW	3523	Real Estate Law

B. 24 semester credit hours of support work:

ACC	2043	Introduction to Accounting Topics
ARC	2213	Construction Materials and Concepts
ARC	4013	Building Construction Estimating
ARC	4113	Project Development
ARC	4513	Professional Practice and Ethics
FIN	4723	Real Estate Investment
GRG	3523	Introduction to Urban Planning
MGT	3023	Organizational Behavior

C. 6 additional semester credit hours of electives selected from the following:

ARC	4223	Computer Applications in Design
ARC	4233	Computer Projects in Design
ARC	4333	Practicum

Bachelor of Business Administration Degree in Management with a Small Business and Entrepreneurship Concentration

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Management with a Small Business and Entrepreneurship Concentration is 126. In addition to the Core Curriculum requirements and requirements from the College of Business Common Body Knowledge (CBK), all candidates for the degree must complete the following 36 semester credit hours.

A. 15 semester credit hours of required courses in the College of Business:

MGT	2003	Introduction to Business
MKT	3113	Retailing
MGT	3613	Personnel Administration
MGT	4873	Entrepreneurship
MGT	4883	Small Business Management

B. 9 semester credit hours of support work within the College of Business as follows:

ECO 3053 Aggregate Economic Analysis
FIN 3313 Money and Banking
BLW 3023 Business and Commercial Law
or courses as approved by the faculty of the Division of Management and Marketing

C. 6 semester credit hours of support work:

COM 2113 Public Speaking
ENG 2413 Technical Writing

D. 6 semester credit hours of practicum:

MGT 4903 Practicum in Small Business and Entrepreneurship

Minor in Management

The Minor in Management is for business majors only. All students pursuing the minor must complete 18 semester credit hours.

A. 9 semester credit hours of required courses:

MGT 3013 Introduction to Organization Theory, Behavior, and Management
MGT 3023 Organizational Behavior
MGT 3043 Business Communications

B. 9 semester credit hours selected from the following:

MGT 3123 Organizational Communications
MGT 3253 Interpersonal Communication
MGT 3613 Personnel Administration
MGT 4073 International Management
MGT 4203 Business and Society
MGT 4213 Advanced Organization Theory
MGT 4233 Current Topics in Leadership and Administration
MGT 4863 Ethical and Social Issues in Management
MGT 4883 Small Business Management

To declare a Minor in Management and seek approval of courses, students should consult any full-time management faculty. Advisement and other questions should be directed to the Undergraduate Business Advising Office.

Bachelor of Business Administration Degree in Human Resource Management

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Human Resource Management is 120. In addition to the Core Curriculum Requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

A. 21 upper-division semester credit hours in the major:

MGT	3613	Personnel Administration
MGT	4613	Compensation Management
MGT	4633	Labor Relations
MGT	4803	Human Resources Management
MGT	4643	Human Resources Law
		or
BLW	4953	Employment Law

6 additional semester credit hours of human resource electives chosen from the following:

MGT	4623	Recruiting and Selection
MGT	4663	Training and Safety
MGT	4813	Current Topics in Human Resource Management

To substitute another course for one of these human resource electives, a student must submit a petition to the Undergraduate Business Advising Office and receive approval from a human resource management full-time faculty member before registering for the course.

B. 9 semester credit hours of support work:

ENG	2413	Technical Writing
COM	2113	Public Speaking

3 semester credit hours from the following:

MGT	3023	Organizational Behavior
MS	3313	Statistical Applications in Business
PSY	3203	Industrial and Organizational Psychology
POL	3703	Personnel Administration in the Public Sector
MGT	4703	Personnel Management in Tourism

Bachelor of Business Administration Degree in Tourism Management

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Tourism Management is 129. In addition to the Core

Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 39 semester credit hours.

A. 15 upper-division semester credit hours in the major:

MGT	3703	Survey of the Tourism/Hospitality Industry
MKT	3733	Tourism Marketing
		or
MKT	3743	Marketing Tourism Destinations
MGT	4703	Personnel Management in Tourism
MGT	4783	Management Strategies in Tourism

3 additional semester credit hours from the following:

MGT	3713	Accommodations Management
MGT	3723	Attractions Management
MGT	3733	Restaurant Management
MGT	3743	Destination Management

B. 6 additional semester credit hours of support work:

ACC	2153	Accounting for the Tourism Industry
BLW	4153	Tourism Law

C. 6 additional semester credit hours of tourism-related coursework from the following:

MGT	3713	Accommodations Management
MGT	3723	Attractions Management
MGT	3733	Restaurant Management
MGT	3743	Destination Management
MKT	3743	Marketing Tourism Destinations
MKT	3753	Strategic Tourism Topics
MGT	4713	International Tourism
MGT	4723	Public Policy Analysis and the Tourism Industry
MGT	4933	Internship

D. Work experience requirement:

In addition to formal coursework, students are required to complete a minimum of 800 clock hours of practical work experience in the tourism industry. Both paid and volunteer hours may apply. Students may not apply any internship hours toward this requirement. Work experiences should be varied (a minimum of three types of work), technical, and hands-on, as well as in a business that directly serves tourists. Work experience guidelines are available in the Undergraduate Business Advising Office and in the office of the tourism management program.

- E. 12 semester credit hours of nonbusiness electives as approved in writing by any tourism management full-time faculty member in the Division of Management and Marketing.

COURSE DESCRIPTIONS MANAGEMENT (MGT)

- 2003 Introduction to Business**
(3-0) 3 hours credit.
This course provides a conceptual overview of the dynamics of business and explores the elements of business operations as well as the ways owners can cope with opportunities and challenges.
- 2033 Management Applications for Personal Computing**
(3-0) 3 hours credit.
The application of personal computer-based software to business problem-solving. The course aids the student in developing business applications for existing software that address applied problems in the modern workplace. Application areas may include health care management, human resource management, operations management, small business management, marketing, and tourism management. Application topics will be drawn from issues and problems across all areas. Application software may include spreadsheets, databases, multimedia presentation software, graphics programs, and Internet access.
- 3013 Introduction to Organization Theory, Behavior, and Management**
(3-0) 3 hours credit.
A study of the complex role managers play in creating and maintaining organizations. Organization theory and behavior are explored within the context of changing technological, social, and political/legal environments and the internationalization of the economy. Some introduction to strategic analysis, planning, and decision making. Attention is given to the ethical dimensions of management and social responsibility.
- 3023 Organizational Behavior**
(3-0) 3 hours credit. Prerequisite: MGT 3013.
A critical examination of behavioral theory as it relates to the management of individuals, dyads, and groups in organizations. Investigation of the organization as an open system of tasks, structures, tools, and people in states of continuous change.
- 3043 Business Communications**
(3-0) 3 hours credit. Prerequisite: MGT 3013.
Introduction to the basic interpersonal communication process through the written medium, with practical applications for business organizations. Emphasis is on planning, researching, organizing, writing, editing, and revising reports and proposals and other business-related messages. Linking

meaning and understanding between writer and reader is stressed through audience analysis. Oral presentations are required. The role of ethics in business communication is explored.

3123 Organizational Communication

(3-0) 3 hours credit. Prerequisites: MGT 3013 and 3023.

Introduction to organizational communication and its relevance to the survival of today's businesses. Examine communication models, perspectives, and concepts; barriers to effective communication; group and interpersonal communication; and information flows through the formal and informal networks of organizations. The course will also stress the means of evaluating organizational communication effectiveness.

3253 Interpersonal Communication

(3-0) 3 hours credit. Prerequisite: MGT 3043.

Dynamics of interpersonal communication. The course stresses the social context of communication and gives emphasis to the effects of status, rank, culture, group affiliation, and attraction on the communicating parties. Both verbal and nonverbal interactions are explored in terms of consequences to the communication process.

3613 Personnel Administration

(3-0) 3 hours credit. Prerequisite: MGT 3013.

Analysis of the management of personnel systems, with special focus on policy and planning considerations. Designed to provide a comprehensive understanding of the functional areas of personnel and the integration of these functions into an effective and efficient personnel system.

3703 Survey of the Tourism/Hospitality Industry

(3-0) 3 hours credit.

Historical development and organizational structure of the tourism/hospitality industry.

3713 Accommodations Management

(3-0) 3 hours credit.

A managerial overview of the accommodations industry, history, development, and types of accommodation facilities with emphasis on the concepts of organizational behavior and quality management as they relate to the operational, financial, and marketing functions.

3723 Attractions Management

(3-0) 3 hours credit.

A managerial overview of the attractions industry and the history, development, and types of commercial attractions with emphasis on the concepts of organizational behavior and quality management as they relate to the operational, financial, and marketing functions.

3733 Restaurant Management

(3-0) 3 hours credit. A study of the procedures to research, develop, and operate a restaurant from concept to opening with emphasis on market research, site development, financial feasibility, operations, and system analysis.

- 3743 Destination Management**
(3-0) 3 hours credit.
The management and planning concepts necessary to successfully manage conventions and visitors bureaus, regional tourism associations, and state tourism offices.
- 3803 Strategic Management of Nonprofit Organizations**
(3-0) 3 hours credit.
Analysis of administrative structure, decision making, and program delivery for nonprofit organizations. Includes management of agency operations in areas of leadership, strategic planning, staffing, personnel selection and policies, volunteers, boards, and community relations.
- 4073 International Management**
(3-0) 3 hours credit. Prerequisite: MGT 3013.
Management in a multinational context. The study of international business strategy, structure, organization options, staffing, communications, cultural dimensions, and different countries' objectives and political and legal frameworks. Emphasis on thinking globally and competitively.
- 4083 Comparative International Management Practices**
(3-0) 3 hours credit. Prerequisite: MGT 3013.
The study of management practices of other countries, including their cultural, social, political and legal, and industrial economic perspectives. Emphasis on different international regions at different times and their impact on American and global management practices.
- 4203 Business and Society**
(3-0) 3 hours credit. Prerequisite: Upper-division standing in the College of Business or consent of instructor.
A study of the impact of societal influences on the business decision-making process. Special attention given to business-government relationships and the role of the organization in the community.
- 4213 Advanced Organization Theory**
(3-0) 3 hours credit. Prerequisites: MGT 3013, 3023, and 3043.
Study of the antecedents and consequences of organizational design and structure. Emphasis on the implications for managing behavior in a rapidly changing, global environment.
- 4233 Current Topics in Leadership and Administration**
(3-0) 3 hours credit. Prerequisites: MGT 3013 and 3023.
Analysis of current trends, issues, or events affecting the management of organizations in complex and changing environments. May be repeated for credit when topics vary.
- 4613 Compensation Management**
(3-0) 3 hours credit. Prerequisite: MGT 3613 or consent of instructor.
Development and administration of wage and salary programs for organizations. Emphasis on objectives, policies, organization, and control of compensation systems. Credit cannot be earned for both MGT 3623 and MGT 4613.

4623 Recruiting and Selection

(3-0) 3 hours credit. Prerequisite: MGT 3613.

The theory and practice of staffing organizations. Topics include applicant attraction, recruitment sources, design and implementation of selection instruments, the Uniform Guidelines on Employee Selection Procedures, and the hiring process.

4633 Labor Relations

(3-0) 3 hours credit. Prerequisites: MGT 3613.

A contemporary analysis of the union-management relationship in both business and nonbusiness organizations. Topics include organizing activities, collective bargaining, alternative dispute resolution, and agreement administration.

4643 Human Resources Law

(3-0) 3 hours credit. Prerequisite: MGT 3613.

An analysis of historical and contemporary laws in the United States that affect the personnel function. Integration of labor and employment law with the social and economic forces shaping the current labor-management environment.

4663 Training and Safety

(3-0) 3 hours credit. Prerequisite: MGT 3613.

A study of the process of attaining effective work performance. The course exposes students to training techniques that may be used to improve work performance and to the legal requirements for providing a safe work environment.

4703 Personnel Management in Tourism

(3-0) 3 hours credit.

Examination and analysis of personnel management as it relates specifically to all levels of a tourism enterprise with an emphasis on accommodations, attractions, destination management organizations, and restaurants.

4713 International Tourism

(3-0) 3 hours credit. Prerequisites: MGT 3013 and ECO 2023.

The social, economic, and cultural effects of tourism on societies and the management of tourism investments.

4723 Public Policy Analysis and the Tourism Industry

(3-0) 3 hours credit.

Theories that attempt to explain public policy formulation at the local, state, and federal level affecting the tourism industry, and guidelines for assuring that a tourism enterprise is in compliance with administrative rules and regulations.

- 4783 Management Strategies in Tourism**
 (3-0) 3 hours credit. Prerequisite: Completion of work experience requirement.
 Emphasis on strategic considerations as a guide to complex managerial problems in a tourism enterprise with an emphasis on accommodations, attractions, destination management organizations, and restaurants.
- 4803 Human Resources Management**
 (3-0) 3 hours credit. Prerequisites: MGT 3613, 3623, and 4633, or their equivalents.
 The theory and practice of human resource planning and strategy, including forecasting, compliance management, and selection, development, and benefit programs. Emphasis is on integrating functions into a comprehensive human resource program.
- 4813 Current Topics in Human Resource Management**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 Analysis of current trends in human resources management. Critical analysis of personnel/human resources. Primary consideration given to developments in theory and activities of regulating agencies and the courts. Analysis of ethical, social, and public policy aspects of personnel management. May be repeated for credit when topics vary.
- 4863 Ethical and Social Issues in Management**
 (3-0) 3 hours credit. Prerequisite: Upper-division standing in the College of Business or consent of instructor.
 Challenges students to order their thoughts, values, and behavior in operational, directional, and constitutional contexts. Develops a moral frame of reference that offers individual and operational guidance contributing to social justice.
- 4873 Entrepreneurship**
 (3-0) 3 hours credit.
 Examines how and why entrepreneurs develop and/or grow a business as facilitated by the objectives and resources of the entrepreneur. Topics include new ventures, acquisitions, strategy formulation, growth, and unique ways in which the development of a sustainable competitive advantage can be achieved in small business.
- 4883 Small Business Management**
 (3-0) 3 hours credit. Prerequisites: MGT 3013 and MKT 3013.
 Focuses on the operation of small businesses. Analyzes the accounting, finance, production, and marketing functions as they pertain to entrepreneurial endeavors. Develops overall managerial awareness and analytical skills in small-business problem solving. Provides an opportunity to work with a small business as a student consultant.

4893 Management Strategy and Policy

(3-0) 3 hours credit. Prerequisites: Student must be in semester of graduation and have consent of instructor.

A study of the processes involved in the formulation and implementation of policy and strategy in realistic organizational settings. Students are required to integrate their functional knowledge with the social, political, ethical, technological, and international dimensions of managerial decision making and relate it to problems concerning the relationship between the total organization and its environment. Creative analytical skills and effective communication in light of current management thinking are emphasized.

4903 Practicum in Small Business

(3-0) 3 hours credit. Prerequisite: MGT 4883.

This practicum within the concentration will allow students to gain valuable experience in the field. Drawing upon the resources of the Small Business Development Centers, the practicum facilitates an integrative experience through interaction with entrepreneurs and small business owners. Students engage in research projects, examining relevant issues and problems that entrepreneurs confront. (Practicum may be repeated once for a total of 6 semester credit hours.)

4912,3 Independent Study

2 or 3 hours credit. Prerequisites: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Management

3 hours credit. Prerequisites: 2.5 grade-point average, 9 semester credit hours of management courses, and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

The opportunity for managerial work experience. Requires a semester-long experience in private business or a public agency and a written component. Opportunities and output requirements are developed in consultation with a faculty advisor and the Division Director and require approval of both. Internship may be repeated once (for a total of 6 semester credit hours), provided the internships are with different organizations.

4953 Special Studies in Management

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by a division faculty member.
Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval.

Bachelor of Business Administration Degree in Management Science

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Management Science is 120. Management science is a general discipline that supports and supplements human decision-making abilities. It uses computers, mathematics, and statistics for the purposes of analyzing, understanding, visualizing, and interpreting data. It seeks to provide a rational basis for decision analysis across a broad spectrum of decision problems.

In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

A. 12 semester credit hours of required management science courses:

MS	3063	Decision Support Systems for Management
MS	4323	Simulation Applications in Business
MS	4343	Production/Operations Management
MS	4573	Management Science Applications in Business

B. 18 semester credit hours of electives—of which a minimum of 6 hours must be management science courses—chosen from the following:

MS	3023	Quantitative Methods in Business
MS	3313	Statistical Applications in Business
MS	4363	Quality Management and Control
MS	4583	Current Technology: Issues in Business
MS	4913	Independent Study
MS	4933	Internship in Management Science
MS	4953	Special Studies in Management Science
ECO	3113	Introduction to Mathematical Economics
ECO	3123	Forecasting Techniques in Business and Economics
FIN	4873	Computer Modeling of Financial Applications
IS	3063	Data Base Management for Information Systems
MGT	3613	Personnel Administration
MKT	3023	Marketing Analysis for Decision Making
MKT	3083	Marketing Research
MKT	4183	Advanced Market Research

To substitute another course for one of the above electives, a student must submit a petition to the Undergraduate Business Advising Office and receive approval

from any management science full-time faculty member before registering for the course.

Minor in Management Science

The Minor in Management Science is for business majors only. All students pursuing the minor must complete 18 semester credit hours.

A. 6 semester credit hours of required management science courses:

MS	3033	Management Science and Production Management
MS	4573	Management Science Applications in Business

B. 12 semester credit hours of electives chosen from the following. A minimum of 6 hours must be management science courses.

MS	3023	Quantitative Methods in Business
MS	3063	Decision Support Systems for Management
MS	3313	Statistical Applications in Business
MS	4323	Simulation Applications in Business
MS	4343	Production/Operations Management
MS	4363	Quality Management and control
MS	4583	Current Technology: Issues in Business
MS	4913	Independent Study
MS	4933	Internship in Management Science
MS	4953	Special Studies in Management Science
ECO	3113	Introduction to Mathematical Economics
ECO	3123	Forecasting Techniques in Business and Economics
FIN	4873	Computer Modeling of Financial Applications
IS	3063	Data Base Management for Information Systems
MGT	3613	Personnel Administration
MKT	3023	Marketing Analysis for Decision Making
MKT	3083	Marketing Research
MKT	4183	Advanced Market Research

To substitute another course for one of the above electives, a student must submit a petition to the Undergraduate Business Advising Office and receive approval from any management science full-time faculty member before registering for the course.

COURSE DESCRIPTIONS MANAGEMENT SCIENCE (MS)

- 3023 Quantitative Methods in Business**
(3-0) 3 hours credit.
Directed toward extending the understanding of quantitative methods and the use of mathematical reasoning in business applications. Emphasizes the understanding of analytical techniques for problems that arise in marketing, manufacturing, finance, economics, operations management, information systems, and management. Applications-oriented course focuses on formulating problems rather than on theory.
- 3033 Management Science and Production Management**
(3-0) 3 hours credit.
An introductory course in management science and production operations management. This course emphasizes model building as a foundation for rational decision making and problem solving. Techniques such as linear programming, forecasting, decision theory, inventory models, project scheduling, and simulation are covered. Computer software is used to apply these techniques in the analysis of a wide variety of decision problems. (Formerly MGT 3033. Credit cannot be earned for both MS 3033 and MGT 3033.)
- 3063 Decision Support Systems for Management**
(3-0) 3 hours credit.
A study of the modern computer hardware and software currently used in managerial and personal/professional decision processes. Topics include expert systems, artificial intelligence, and communication networks. Emphasis is given to the concept of decision support systems and to hands-on experience using techniques and microcomputer tools to build systems that can support decision processes. (Formerly MGT 3063. Credit cannot be earned for both MS 3063 and MGT 3063.)
- 3313 Statistical Applications in Business**
(3-0) 3 hours credit.
Emphasizes application of statistics in problem-solving situations involving management, marketing, human resources, finance, and operations management. Useful techniques include analysis of variance, simple and multiple regression, chi-square distribution, nonparametric tests, times series and forecasting, and quality control. Students use computer software such as SPSS or SAS in their analyses. (Formerly MGT 3313. Credit cannot be earned for both MS 3313 and MGT 3313.)
- 4323 Simulation Applications in Business**
(3-0) 3 hours credit. Prerequisite: MS 3033.
A study of the techniques for modeling and analysis of business processes using computer simulation and animation. Selected example applications from financial, marketing, and operations functions. Emphasis on the use

of computer simulation in support of the management decision process. (Formerly MGT 4323. Credit cannot be earned for both MS 4323 and MGT 4323.)

4343 Production/Operations Management

(3-0) 3 hours credit. Prerequisite: MS 3033.

A study of the production operations management function in business. Traditional topics in manufacturing and service organizations are investigated. Includes a survey of modern production technologies. Attention is given to management practices and philosophies used in other countries to contrast and learn more effective ways to solve problems in operations management. (Formerly MGT 4343. Credit cannot be earned for both MS 4343 and MGT 4343.)

4363 Quality Management and Control

(3-0) 3 hours credit. Prerequisite: MS 3033.

Investigates the fundamental nature of quality and its implications for business. Topics include statistical methods for quality improvement in manufacturing and service operations. Emphasis given to both the technical and managerial issues in understanding and implementing quality as a component for success in today's global business environment. (Formerly MGT 4363. Credit cannot be earned for both MS 4363 and MGT 4363.)

4573 Management Science Applications in Business

(3-0) 3 hours credit. Prerequisite: MS 3033.

The application of decision analysis to problems from a wide variety of business disciplines. Emphasis is on providing students with capabilities for applying management science techniques to problems from their own areas of interest. (Formerly MGT 4573. Credit cannot be earned for both MS 4573 and MGT 4573.)

4583 Current Technology: Issues for Business

(3-0) 3 hours credit. Prerequisite: MS 3033.

Survey of state-of-the-art technology in today's organizations from a sociotechnical perspective. Topics include manufacturing systems, expert systems, artificial intelligence, office automation, and microcomputer systems and networks. Emphasis is on examining the social dimensions and effects of technologies and on exploring future trends and consequences. (Formerly MGT 4583. Credit cannot be earned for both MS 4583 and MGT 4583.)

4913 Independent Study in Management Science

3 hours credit. Prerequisites: Permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Management Science

3 hours credit. Prerequisites: 2.5 grade-point average, permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms. Supervised full- or part-time work experience in management science. Offers opportunities for applying management science in private businesses or public agencies. May be repeated for credit, but not more than 6 semester credit hours will apply to a bachelor's degree.

4953 Special Studies in Management Science

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary.

Bachelor of Business Administration Degree in Marketing

The minimum number of semester credit hours required for the Bachelor of Business Administration degree in Marketing is 120.

In addition to the Core Curriculum requirements and requirements from the College of Business Common Body of Knowledge (CBK), all candidates for the degree must complete the following 30 semester credit hours.

A. 21 upper-division semester credit hours in the major:

MKT	3023	Marketing Analysis for Decision Making
MKT	3083	Marketing Research
MKT	4073	International Marketing
MKT	4093	Consumer Behavior
MKT	4893	Marketing Strategy

6 additional semester credit hours of marketing electives

B. 9 semester credit hours of the following support work:

ACC	2043	Introduction to Accounting Topics
ECO	3053	Aggregate Economic Analysis
FIN	3313	Money and Banking

Minor in Marketing

All students pursuing the Minor in Marketing must complete 18 semester credit hours.

A. 6 semester credit hours of required courses:

MKT	3013	Principles of Marketing
MKT	4013	Marketing Management

B. 12 semester credit hours from the following courses:

MKT	3043	Advertising
MKT	3023	Marketing Analysis for Decision Making
MKT	3083	Marketing Research
MKT	3113	Retailing
MKT	4073	International Marketing
MKT	4093	Consumer Behavior
MKT	4953	Special Topics

COURSE DESCRIPTIONS MARKETING (MKT)

- 3013 Principles of Marketing**
(3-0) 3 hours credit.
Introduction to basic principles of marketing. An examination of market analysis methods and their use to develop the organization's product mix and the integration of the communication, distribution, and pricing strategies to achieve goals.
- 3023 Marketing Analysis for Decision Making**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
A focus on the analysis and evaluation of the marketplace, emphasizing secondary data sources and decision models. Factors that may influence business decisions are examined, and market segmentation models are used to select market targets. Personal computers are integrated into a marketing decision framework.
- 3043 Advertising**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
The course stresses planning advertising strategy, developing messages, selecting media, and testing effectiveness. Also explores the theory, history, social and economic aspects, and problems of ethics and truth in advertising.
- 3063 Persuasive Communication in Marketing**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
Focuses on professional salesmanship. Fundamentals of persuasive interpersonal communication and buyer motivation are stressed as the foundation to effective selling.
- 3083 Marketing Research**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
Theory and methodology of conducting and interpreting qualitative and quantitative marketing studies. Includes problem definition, research design, sampling, data analysis, and presentation of research findings. (Formerly MKT 4083. Credit cannot be earned for both MKT 3083 and MKT 4083.)

- 3113 Retailing**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
Examination of retailing as a specialized economic and social institution within the distribution process. Emphasis is on strategy and resource management for the retail firm; critical variables, forces, and processes are examined from a managerial perspective.
- 3733 Tourism Marketing**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
The conceptualization, design, delivery, and evaluation of marketing plans for tourism enterprises, including marketing mix, tourism product, consumer behavior, communications and media uses, and procedures for advertising and public relations campaigns to develop leisure travel, incentive travel, and the meetings and convention market.
- 3743 Marketing Tourism Destinations**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
Emphasizes a strategic approach to marketing tourism destinations: communities, regions, attractions, and resorts. Focus on the optimal planning, development, and marketing of destination image and position in the context of the overall marketing plan. Includes consideration of environmental and resource requirements, as well as tourism's social and cultural ramifications.
- 3753 Strategic Tourism Topics**
(3-0) 3 hours credit. Prerequisite: MKT 3013.
The course focuses on strategically positioning tourism products and services to retain existing markets and expand the share of emerging markets. In addition to examining the basics of strategic marketing—environmental, market, and competitive analysis; product evaluation; and goal setting—this course investigates the translation of contemporary social trends into tourism strategy by establishing techniques for effectively segmenting the tourism marketplace.
- 4013 Marketing Management**
(3-0) 3 hours credit. Prerequisite: MKT 3013
An examination of consumer and industrial market strategies and processes effective in serving stakeholder needs. Focus is on the strategic analysis of customers, competitors, suppliers, and intermediaries. Demand conditions in growth, mature, and declining markets are examined, and appropriate strategies are developed.
- 4043 Advertising Management**
(3-0) 3 hours credit. Prerequisite: MKT 3043.
Emphasizes the management of advertising and the key decision variables supporting the advertising strategy process. Examines the nature and scope of advertising campaigns, including case histories.

4073 International Marketing

(3-0) 3 hours credit. Prerequisite: MKT 3013.

An overview of concepts, processes, and strategies necessary to successfully market goods and services in the global marketplace. Focus is on analyzing and assessing political, economic, technological, cultural, and competitive climates in global markets; defining the nature of important needs within the consumer and/or business segments of the country; the selection of countries or regions for market expansion strategies; the selection of target customers; and the design of strategies to facilitate market entry and subsequent expansion.

4093 Consumer Behavior

(3-0) 3 hours credit. Prerequisite: MKT 3013.

Focus on the customer as a primary consideration in strategic marketing decisions. Analysis of variation in personal and environmental variables in the customer's world as the basis for market segmentation and subsequent formulation of the marketing mix.

4183 Advanced Market Research

(3-0) 3 hours credit. Prerequisites: MKT 3083 and 9 additional semester credit hours in marketing.

A project-oriented course emphasizing application of the marketing research process. Includes preparation and presentation of a research report.

4893 Marketing Strategy

(3-0) 3 hours credit. Prerequisites: MKT 3013, senior standing, and 15 additional semester credit hours in marketing.

This marketing capstone course focuses on integrating marketing functions, processes, and concepts into a coherent and effective marketing strategy. Satisfies degree requirements for MKT 3073 in earlier catalogs.

4913 Independent Study

3 hours credit. Prerequisites: MKT 3013, 9 additional semester credit hours in marketing, senior standing, and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Marketing

3 hours credit. Prerequisites: MKT 3013, 2.5 grade-point average, 9 additional semester credit hours in marketing, and permission in writing from the instructor, the Division Director, and the Dean of the College of Business. See Undergraduate Business Advising Office for required forms.

The opportunity to gain knowledge through the experiential activities of organizational life. Joint cooperation with business, government, and health science institutions in structuring and monitoring work experience aimed at supplementing the learning process. Opportunities are developed in consultation with the faculty advisor and Division Director and require

approval of both. Internship may be repeated once (for a total of 6 semester credit hours) provided the internships are with different organizations, but only 3 hours may count toward the 21 hours of marketing required for the major.

4953 Special Studies in Marketing

(3-0) 3 hours credit. Prerequisite: MKT 3013.

An organized course offering the opportunity for specialized study not normally available as part of the regular course offerings. Could include topics such as marketing channels of distribution, sales management, industrial marketing, current developments in marketing theory, and analysis of ethical, social, and public policy aspects of marketing. May be repeated for credit when topics vary, but not more than 6 semester credit hours will apply to a bachelor's degree.

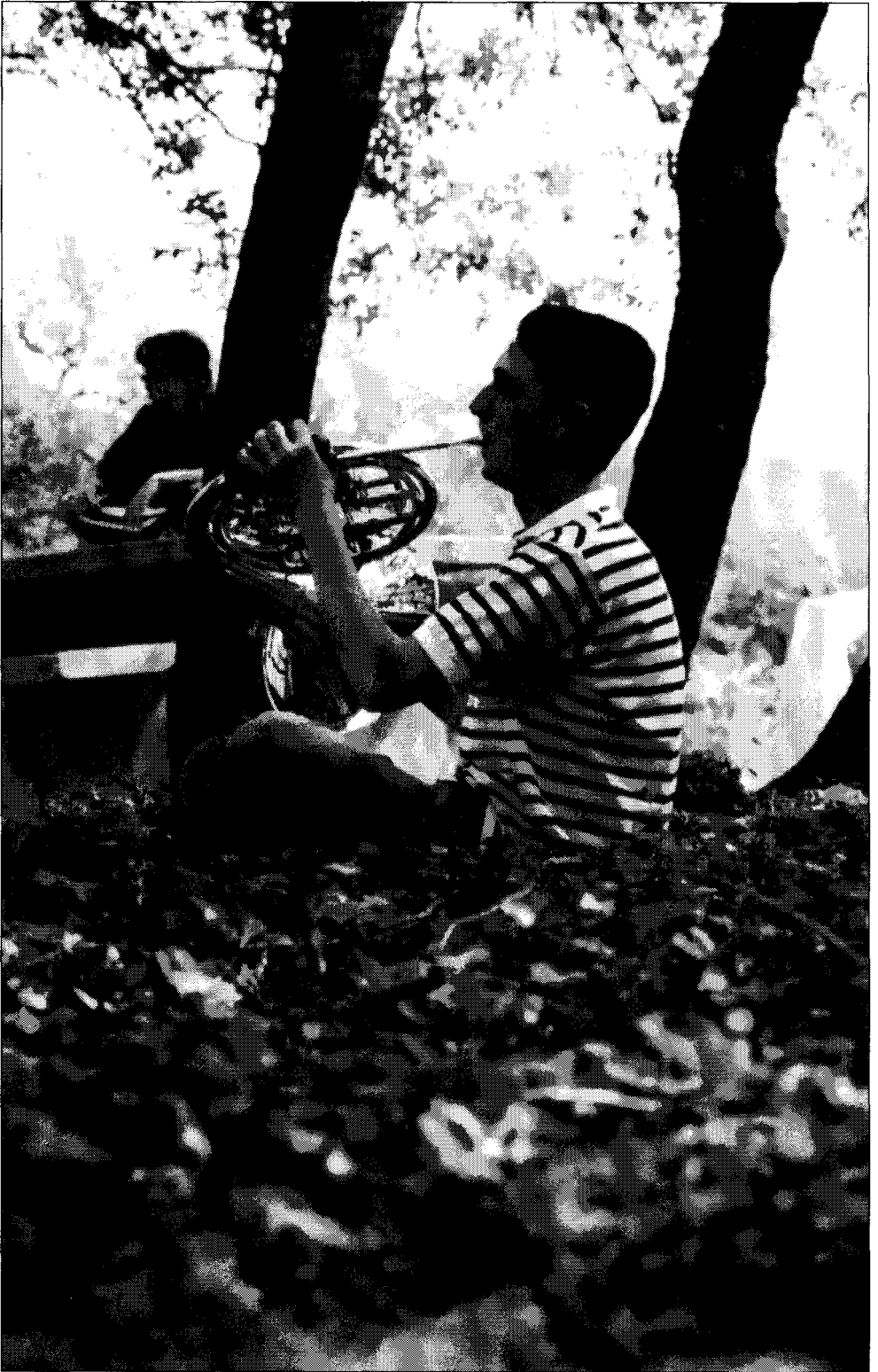
4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to honors program students with sponsorship by division faculty member.

Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval.



**COLLEGE OF FINE ARTS
AND HUMANITIES**



COLLEGE OF FINE ARTS AND HUMANITIES

DIVISION OF ARCHITECTURE AND INTERIOR DESIGN

Bachelor of Science Degree in Architecture

The Bachelor of Science in Architecture is a four-year preprofessional degree. The minimum number of semester credit hours required for the degree, including Core Curriculum requirements, is 139 plus the language requirement.

The division reserves the right to retain, exhibit, and reproduce work submitted by students. Work submitted for grading is the property of the division and remains such until it is returned to the student.

All transfer students must submit a bound portfolio (maximum size 11 inches x 17 inches) to the Division of Architecture and Interior Design as soon as admittance to the University is approved. The portfolio must clearly demonstrate creative and communicative skills in graphic and written form. A complete transcript of all professional courses accompanied by the catalog descriptions from the originating university must be included. Do not send slides or original work. A post-paid, self-addressed return envelope must be included for return of work to the candidate. The portfolio will be reviewed by a faculty committee to determine the student's placement in the studio sequence.

All candidates for the degree must complete the following.

Core Curriculum requirements: Students seeking the Bachelor of Science degree in Architecture must fulfill University Core Curriculum requirements by taking the following courses or their equivalents.

Rhetoric (6 semester credit hours)*

Domain I: Science, Technology, and Mathematics

Mathematics (3 semester credit hours):

MAT 1093 Precalculus

Science (7 semester credit hours):

PHY 1603, 1611 General Physics I and Laboratory
or
PHY 1904, 1911 Technical Physics and Laboratory

*Architecture students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

One other science course. The following are recommended:

ANT	2033	Introduction to Physical Anthropology
ANT	2043	Introduction to Archaeology
CHE	1053	Chemistry of Ordinary Things
CHE	1103	General Chemistry
GEO	1013	The Third Planet
GEO	1103	Introduction to Earth Systems
PHY	1014	Conceptual Physics and Civilization
PHY	1623	General Physics II
AST	1013	Introduction to Astronomy
ES	2013	Introduction to Environmental Systems
BIO	1203	Biology I
BIO	3283	Principles of Ecology

Computer Science/Logic (3 semester credit hours):

PHI	2043	Introductory Logic
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Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)*

Political Studies (6 semester credit hours)*

Economics (3 semester credit hours)*

Social and Behavioral Sciences (incorporated in Domain IV)

Domain III: Literature, the Arts, and Language

Language (semester credit hours vary)*

Literature (incorporated in Domain IV)

The Arts (incorporated in Domain IV)

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):

ARC	1423	Architecture and Thought
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Diversity of Culture (3 semester credit hours):

ARC	1413	Architecture and Culture
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Major requirements:

A. 78 semester credit hours in the major passed with a grade of "C" or better in each course:

1. 27 semester credit hours of required lower-division architectural courses:

ARC	1233	Design Fundamentals I
ARC	1313	Visual Communication I
ARC	1323	Visual Communication II

*Architecture students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

ARC	2113	Design Fundamentals II
ARC	2123	Design Fundamentals III
ARC	2213	Construction Materials and Concepts
ARC	2223	Structures I
ARC	2413	History of Architecture I
ARC	2423	History of Architecture II

2. 21 semester credit hours of required upper-division architectural courses:

ARC	3233	Structures II
ARC	3243	Structures III
ARC	3343	Environmental Systems I
ARC	3353	Environmental Systems II
ARC	3613	History of Modern Architecture
ARC	4313	Construction Graphics
ARC	4513	Professional Practice and Ethics

3. 6 semester credit hours of upper-division architecture electives selected from the following:

ARC	3113	Presentation Graphics
ARC	3123	Advanced Visual Communications
ARC	3203	Housing Design and Development
ARC	4013	Building Construction Estimating
ARC	4113	Project Development
ARC	4143	Architecture Topics
ARC	4153	Topics in International Architecture
ARC	4223	Computer Applications in Design
ARC	4233	Computer Projects in Design
ARC	4333	Practicum
ARC	4423	History and Theory of Urban Form
ARC	4613	Construction Management
ARC	4911,3	Independent Study
ARC	4953,6	Special Studies in Architecture

4. 24 semester credit hours of the following required upper-division design courses:

6 semester credit hours of ARC 3216	Architecture Studio I
6 semester credit hours of ARC 3226	Architecture Studio II
6 semester credit hours of ARC 4246	Architecture Systems Studio
6 semester credit hours of ARC 4256	Architecture Senior Studio

B. 21 semester credit hours of electives

C. Portfolio Review Requirement:

Students must obtain written authorization from the Portfolio Review Committee prior to enrollment in any ARC 3000 or higher level studio course. Students must submit a portfolio that includes work from previous and current classes in

design and visual communication and a transcript showing substantial completion of lower-division coursework. In addition, a student may include supplementary material that gives evidence of design, graphic, and professional accomplishments, but is requested not to submit slides or original artwork.

If, after review, the portfolio is not accepted, the student may submit a revised portfolio at the next announced review period.

Upon entering any 4000-level studio course, students must submit updated portfolios. Instructor approval of the portfolio is required for each student to remain in the course.

National Architectural Accrediting Board (NAAB) guidelines:

“Most states require that an individual intending to become an architect hold an accredited degree. There are two types of degrees that are accredited by the National Architectural Accrediting Board: (1) The Bachelor of Architecture, which requires a minimum of five years of study, and (2) The Master of Architecture, which requires a minimum of three years of study following an unrelated bachelor’s degree or two years following a related preprofessional bachelor’s degree. These professional degrees are structured to educate those who aspire to registration and licensure to practice as architects.

“The four-year preprofessional degree, where offered, is not accredited by NAAB. The preprofessional degree is useful for those wishing a foundation in the field of architecture, as preparation for either continued education in a professional degree program or for employment options in fields related to architecture” (*NAAB Guidelines*, 1995: 57–58).

“Candidacy is a status granted by Board action to new programs which intend to seek initial accreditation. Candidacy status is intended to define, as early in a program’s development as possible, the necessary components of an accredited professional program in architecture. The conditions for accreditation define minimum standards which form the basis for initial accreditation and a foundation for the program’s future development and enrichment. Acceptance of a program’s candidacy status by NAAB indicates only that the plan proposed by the applicant institution, if properly implemented, should enable program’s subsequent accreditation” (*NAAB Guidelines*, 1995: 35).

The graduate program has been granted candidacy status for the Master of Architecture degree.

Bachelor of Science Degree in Interior Design

The Bachelor of Science in Interior Design is a four-year degree. The minimum number of semester credit hours required for the degree, including Core Curriculum requirements, is 132 plus the language requirement.

The division reserves the right to retain, exhibit, and reproduce work submitted by students. Work submitted for grading is the property of the division and remains such until it is returned to the student.

All transfer students must submit a bound portfolio (maximum size 11 inches x 17 inches) to the Division of Architecture and Interior Design as soon as admittance to the University is approved. The portfolio must clearly demonstrate creative and communicative skills in graphic and written form. A complete transcript of all professional courses accompanied by the catalog descriptions from the originating university must be included. Do not send slides or original work. A post-paid, self-addressed return envelope must be included for return of work to the candidate. The portfolio will be reviewed by a faculty committee to determine the student's placement in the studio sequence.

All candidates for the degree must complete the following.

Core Curriculum Requirements: Students seeking the Bachelor of Science degree in Interior Design must fulfill Core Curriculum requirements by taking the following courses or their equivalents.

Rhetoric (6 semester credit hours)*

Domain I: Science, Technology, and Mathematics

Mathematics (3 semester credit hours)*

Science (6 semester credit hours)*

Computer Science/Logic (3 semester credit hours):

ARC 4223 Computer Applications in Design

or

PHI 2043 Introductory Logic

Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)*

Political Studies (6 semester credit hours)*

Economics (3 semester credit hours)*

Social and Behavioral Sciences (incorporated in Domain IV)

Domain III: Literature, the Arts, and Language

Language (semester credit hours vary)*

Literature (incorporated in Domain IV)

The Arts (incorporated in Domain IV)

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):

ARC 1423 Architecture and Thought

Diversity of Culture (3 semester credit hours):

ARC 1413 Architecture and Culture

*Interior design students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

Major requirements:

A. 84 semester credit hours in the major passed with a grade of "C" or better in each course:

1. 24 semester credit hours of required lower-division architectural courses:

ARC	1233	Design Fundamentals I
ARC	1313	Visual Communication I
ARC	1323	Visual Communication II
ARC	2113	Design Fundamentals II
ARC	2123	Design Fundamentals III
ARC	2213	Construction Materials and Concepts
ARC	2413	History of Architecture I
ARC	2423	History of Architecture II

2. 30 semester credit hours of required upper-division interior design courses:

ARC	3013	Color and Light
ARC	3143	Interior Materials I
ARC	3153	Interior Materials II
ARC	3213	History of Interiors and Furniture
ARC	3343	Environmental Systems I
ARC	3353	Environmental Systems II
ARC	3613	History of Modern Architecture
ARC	4203	Interior Design Details
ARC	4313	Construction Graphics
ARC	4513	Professional Practice and Ethics

3. 6 semester credit hours of electives selected from the following:

ARC	2223	Structures I
ARC	3113	Presentation Graphics
ARC	3123	Advanced Visual Communication
ARC	4133	Interior Design Topics
ARC	4143	Architecture Topics
ARC	4233	Computer Projects in Design
ARC	4333	Practicum
ARC	4953,6	Special Studies in Architecture

4. 24 semester credit hours of the following required upper-division design courses:

- 6 semester credit hours of ARC 3236 Interior Design Studio I
- 6 semester credit hours of ARC 3246 Interior Design Studio II
- 6 semester credit hours of ARC 4266 Interior Design Systems Studio
- 6 semester credit hours of ARC 4276 Interior Design Senior Studio

B. 9 semester credit hours of electives

C. Portfolio Review Requirement:

Students must obtain written authorization from the Portfolio Review Committee prior to enrollment in any ARC 3000 or higher level studio course. Students must submit a portfolio that includes work from previous and current classes in design and visual communication and a transcript showing substantial completion of lower-division coursework. In addition, a student may include supplementary material that gives evidence of design, graphic, and professional accomplishments, but is requested not to submit slides or original artwork.

If, after review, the portfolio is not accepted, the student may submit a revised portfolio at the next announced review period.

Upon entering any 4000-level studio course, each student must submit an updated portfolio. Instructor approval of the portfolio is required for each student to remain in the course.

COURSE DESCRIPTIONS ARCHITECTURE AND INTERIOR DESIGN (ARC)

- 1233 Design Fundamentals I**
(1-5) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in ARC 1313.
Introduction to architectural theories and principles, design fundamentals, perception, scale, space, and color in two- and three-dimensional design. The use of drawings and models as tools for thinking and communication is stressed. Includes a weekly one-hour lecture on design theory. (Formerly ARC 1213 and ARC 1223. Credit cannot be earned for ARC 1233 and both ARC 1213 and ARC 1223.)
- 1313 Visual Communication I**
(0-6) 3 hours credit.
Introduction to methods and techniques used by architects and interior designers to give graphic expression to spatial ideas. Introduction to freehand drawing, including representational and diagrammatic sketching; principles of orthographic projection in plan, section, and elevation; axonometrics; and perspective. Completion of or concurrent enrollment in this course is required in order to take ARC 1233. [TCCN: ARCH 1307.]
- 1323 Visual Communication II**
(0-6) 3 hours credit. Prerequisites: ARC 1233 and 1313.
A continuation of ARC 1313. Deals with more complex problems in orthographic projection, axonometrics, and constructed perspectives. Includes measured drawings of buildings and introduction of site plan graphics, shadow casting, and presentation media. Completion of this course is required in order to take ARC 2113. [TCCN: ARCH 1308.]

1413 Architecture and Culture

(3-0) 3 hours credit.

Introduces architecture by exploring its sources in human culture and behavioral patterns and traces its evolution to the current state of architectural and interior design professions. Examines their relationship to allied professions.

1423 Architecture and Thought

(3-0) 3 hours credit.

Introduction to the relationship between the built environment and human thought. Examines the structure of thought and the ideas that give shape to built form. Readings are drawn from literature, philosophy, and architectural theories of different cultures and historical periods.

2113 Design Fundamentals II

(1-5) 3 hours credit. Prerequisites: ARC 1233 and 1323.

Introduction to spatial perception, human dimensions and proportions, tectonics, and the behavioral determinants of design. Reinforcement of design principles and development of process. Continued development of the craft of drawings and models. Includes a weekly one-hour lecture on design theory. Concurrent enrollment in ARC 2213 and ARC 2413 is recommended.

2123 Design Fundamentals III

(1-5) 3 hours credit. Prerequisite: ARC 2113.

Application of architectural principles and theories to spatial exploration and architectural forms. Investigates the roles of function, space, and order in architecture and interior design. Emphasis on processes that promote a holistic view from conceptualization to complete design using a variety of scales. Integrates site and structural issues and the consideration of program. Includes a weekly one-hour lecture on design theory. Completion of or concurrent enrollment in this course is required in order to take ARC 2223. Concurrent enrollment in ARC 2423 is recommended.

2213 Construction Materials and Concepts

(3-0) 3 hours credit. Prerequisites: ARC 1233 or enrollment as a major in management with a Building/Development Concentration; ARC 1323.

Analysis of materials, components, and assemblies. Concepts and principles of their selection and application to problems of structure, enclosure, and interior systems. Historical role of materials in architecture and interior design. Concurrent enrollment in ARC 2113 is recommended for majors. Completion of or concurrent enrollment in this course is required in order to take ARC 2223.

2223 Structures I

(3-0) 3 hours credit. Prerequisites: ARC 2213; completion of or concurrent enrollment in ARC 2123; and either PHY 1603 and PHY 1611 or PHY 1904 and PHY 1911.

Introduction to architectural structures, including statics and strengths of materials. Special emphasis on structural systems and their articulation in the creation of built form and space.

- 2413 History of Architecture I**
(3-0) 3 hours credit.
Survey of the architectural interpretation of environmental, social, aesthetic, technical, religious, and cultural forces that influenced design from prehistory to 1650. Concurrent enrollment in ARC 2113 is recommended for majors. [TCCN: ARCH 1301.]
- 2423 History of Architecture II**
(3-0) 3 hours credit.
Survey of architectural interpretation of social, aesthetic, technical, political, and cultural forces that influenced design from 1650 into the twentieth century. Concurrent enrollment in ARC 2123 is recommended for majors. [TCCN: ARCH 1302.]
- 3013 Color and Light**
(2-2) 3 hours credit. Prerequisite: ARC 2123.
Studies of psychological and physiological effects of color and light in the built environment. Light as a form determinant of interior space. Introduction to artificial illumination design. Completion of or concurrent enrollment in this course is required in order to take ARC 3246.
- 3113 Presentation Graphics**
(0-6) 3 hours credit. Prerequisite: ARC 1323.
Principles and techniques of composition for presentation graphics. Exercises in architectural rendering in various media.
- 3123 Advanced Visual Communication**
(0-6) 3 hours credit. Prerequisite: ARC 1323 and 4223.
Advanced problems in graphics, computer graphics, and electronic media.
- 3143 Interior Materials I**
(3-0) 3 hours credit. Prerequisite: ARC 2123.
Study of materials used in interior spaces and their specification, installation, maintenance, and performance.
- 3153 Interior Materials II**
(3-0) 3 hours credit. Prerequisite: ARC 3143.
A continued study of materials used in interior spaces with an emphasis on textiles. Interior code issues are explored in relation to finishes and physical conditions.
- 3203 Housing Design and Development**
(3-0) 3 hours credit. Prerequisite: ARC 2123 or a major in management with a Building/Development Concentration.
Evolution of housing design and development with emphasis on site and market analyses, zoning, codes, and infrastructure issues.

- 3213 History of Interiors and Furniture**
(3-0) 3 hours credit. Prerequisites: ARC 2413 and 2423.
Survey of the social, aesthetic, technical, cultural, and professional forces that historically have influenced the use of interior space and furniture design in different cultures.
- 3216 Architecture Studio I**
(1-10) 6 hours credit. Prerequisites: ARC 2123, 2223, 2413, 2423, and completion of or concurrent enrollment in ARC 3233. Written permission of Portfolio Review Committee required. (See Portfolio Review Requirements under major requirement, section C.)
Application of basic architectural principles emphasizing the design of particular building types using a variety of scales. Includes concern for urban design principles as shaped by individual buildings, site analysis, program development, schematic design, and design development. Integrates structural concepts and environmental concerns. Includes a weekly one-hour lecture on related topics.
- 3226 Architecture Studio II**
(1-10) 6 hours credit. Prerequisite: ARC 3216.
A continuation of ARC 3216 with emphasis on urban design context and its relationship to individual buildings. Includes a weekly one-hour lecture on related topics.
- 3233 Structures II**
(3-0) 3 hours credit. Prerequisites: ARC 2123, ARC 2223, and MAT 1093.
Introduction to the principles and systems of wood and steel as construction materials with special emphasis on their articulation in built form and space to reveal their spatial, structural, and aesthetic qualities. Completion of or concurrent enrollment in this course is required in order to take ARC 3216.
- 3236 Interior Design Studio I**
(1-10) 6 hours credit. Prerequisites: ARC 2123, 2213, 2413, and 2423. Written permission of Portfolio Review Committee required. (See Portfolio Review Requirements under major requirement, section C.)
The study of the process of researching, programming, and developing physical design solutions of various interior types, including the integration of finishes, fixtures, and furnishings within design. Includes a weekly one-hour lecture on related topics.
- 3243 Structures III**
(3-0) 3 hours credit. Prerequisite: ARC 3233.
Introduction to the principles and systems of concrete and masonry as construction materials with special emphasis on their articulation in built form and space to reveal their spatial, structural, and aesthetic qualities.
- 3246 Interior Design Studio II**
(1-10) 6 hours credit. Prerequisites: ARC 3236 and completion of or concurrent enrollment in ARC 3013.
A continuation of ARC 3236 with emphasis on building types and special populations. Includes a weekly one-hour lecture on related topics.

- 3343 Environmental Systems I**
(3-0) 3 hours credit. Prerequisites: ARC 2123 and 2213.
Environmentally responsive design of buildings and the natural and artificial systems that support them, including heating, ventilation and cooling, water and waste, and solid waste management. (Formerly ARC 3323. Credit cannot be earned for both ARC 3343 and ARC 3323.)
- 3353 Environmental Systems II**
(3-0) 3 hours credit. Prerequisite: ARC 3343.
Light and sound as building form determinants and the natural and artificial systems that support them, including illumination, electrical design, and acoustics. (Formerly ARC 3313. Credit cannot be earned for both ARC 3353 and ARC 3313.)
- 3613 History of Modern Architecture**
(3-0) 3 hours credit.
Study of the social, aesthetic, theoretical, technical, cultural, and professional forces that form, shape, and communicate modern architecture. Completion of ARC 2413 and ARC 2423 is recommended for majors.
- 4013 Building Construction Estimating**
(3-0) 3 hours credit. Prerequisites: ARC 2123 or enrollment as a major in management with a Building/Development Concentration; ARC 2213.
Introduction to estimating procedures related to quantity surveying, cost of materials and labor, and life-cycle costs.
- 4113 Project Development**
(1-4) 3 hours credit. Prerequisite: ARC 3203 for majors in management with a Building/Development Concentration or consent of instructor.
The application of building/development practices to architectural and planning projects.
- 4133 Interior Design Topics**
(3-0) 3 hours credit. Prerequisite: ARC 2123 or consent of instructor.
A study of current trends and issues in interior design. May be repeated once for credit when topics vary.
- 4143 Architecture Topics**
(3-0) 3 hours credit. Prerequisite: ARC 2123 or consent of instructor.
A study of current trends and issues in architecture. May be repeated once for credit when topics vary.
- 4153 Topics in International Architecture**
(3-0) 3 hours credit. Prerequisite: ARC 2123 or consent of instructor.
An examination of current international trends and issues in architecture and interior design. May be repeated once for credit when topics vary.

- 4203 Interior Design Details**
(1-4) 3 hours credit. Prerequisites: ARC 3213 and 3236. Must be taken concurrently with ARC 4266 and 4313.
A lecture studio course focusing on the connections and integration of various materials used in interior construction, millwork, and casework.
- 4223 Computer Applications in Design**
(2-2) 3 hours credit. Prerequisites: ARC 1223 and 1323.
Development of skills in computer-generated construction documents. Includes survey of topics in computer technology related to design, graphic manipulation, multimedia, and current trends in design.
- 4233 Computer Projects in Design**
(2-2) 3 hours credit. Prerequisite: Consent of instructor.
Special projects in computer applications for advanced students.
- 4246 Architecture Systems Studio**
(1-10) 6 hours credit. Prerequisites: ARC 3226, 3243, and 3353. Must be taken concurrently with ARC 4313.
Integration of building systems in architectural design development. Focuses on civil, mechanical, and structural considerations as design criteria, including a concern for energy efficiency, code and zoning regulations, and use of natural light. Includes a weekly one-hour lecture on related topics. Final construction documents will be produced in ARC 4313.
- 4256 Architecture Senior Studio**
(1-10) 6 hours credit. Prerequisites: ARC 4246 and 4313.
Exploration and application of advanced design theory relative to architecture and urban design. Covers design philosophy, programming, transformation processes, and design development. Includes a weekly one-hour lecture on related topics.
- 4266 Interior Design Systems Studio**
(1-10) 6 hours credit. Prerequisites: ARC 3153, 3246, and 3353. Must be taken concurrently with ARC 4313 and 4203.
Integration of building systems in the design development of spaces with emphasis on materials, technical factors, and codes. Final construction documents will be produced in ARC 4313. Includes a weekly one-hour lecture on related topics.
- 4276 Interior Design Senior Studio**
(1-10) 6 hours credit. Prerequisites: ARC 4266 and 4313.
Exploration and application of theoretical and cultural contexts in planning, design, and detail of interior space. Includes a weekly one-hour lecture on related topics. Concurrent enrollment in ARC 4203 recommended.
- 4313 Construction Graphics**
(0-6) 3 hours credit. Prerequisites: ARC 3226 or 3246; ARC 3243 (for architecture majors); ARC 3353. Must be taken concurrently with ARC 4246 or ARC 4266 and ARC 4203.

A study in the preparation of construction documents and their use in communication of design concepts among the designer, owner, contractor, and others. Students will be required to prepare detailed construction documents.

4333 Practicum

3 hours credit. Prerequisites: ARC 3226; ARC 3246 or enrollment as a major in management with a Building/Development Concentration. Must have consent of instructor.

Offers students majoring in architecture, interior design, and building/development participation in a variety of design, development, and construction concerns. Students work under supervision 15 to 20 hours a week in an approved internship to gain knowledge of their respective professional fields. (Formerly ARC 3333. Credit cannot be earned for both ARC 4333 and ARC 3333.)

4423 History and Theory of Urban Form

(3-0) 3 hours credit. Prerequisites: ARC 2123, 2413, and 2423.

Concentrates on the origins of the contemporary city, its current condition, and emerging theories of urban design.

4513 Professional Practice and Ethics

(3-0) 3 hours credit. Prerequisite: ARC 2123.

A study of the currently applied ethical, legal, and professional criteria for the practice of architecture and allied professions. Forms of practice, client relationships, interior design, team leadership, office organization, and project management including initiation, acquisition, agreements, and management.

4613 Construction Management

(3-0) 3 hours credit. Prerequisite: ARC 2123 or enrollment as a major in management with a Building/Development Concentration.

The study of the management of the construction process and its integration with allied professions.

4911,3 Independent Study

1 or 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.

Scholarly research under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, may apply to a bachelor's degree.

4953,6 Special Studies in Architecture

(3-0) 3, (6-0) 6 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours for ARC 4953 or 12 hours for ARC 4956, regardless of discipline, will apply to a bachelor's degree.

DIVISION OF ENGLISH, CLASSICS, PHILOSOPHY, AND COMMUNICATION

Honors in Communication

Students whose grade-point average in the communication major (including support work) before the beginning of their final year at UTSA is 3.2 or above, and whose overall grade-point average is 3.0, may earn Honors in Communication. In order to do so, a student must complete a substantial paper approved by the Division Honors Committee and maintain a 3.2 grade-point average in both the major and support work. The grade-point average requirements apply to all transfer work and courses at UTSA.

Bachelor of Arts Degree in Communication

The Bachelor of Arts degree in Communication offers four areas of concentration: speech communication, technical communication, electronic media, and public relations. The minimum number of semester credit hours required for this degree is 120, including Core Curriculum requirement hours. Thirty-nine of the 120 total semester credit hours required for the degree must be at the upper-division level.

Communication majors must complete the fourth semester of a college language course to fulfill the Core Curriculum requirement in language. The total number of semester credit hours that a student must take to fulfill this requirement will vary depending on previous preparation. It is expected that the typical student will enter with the equivalent of two years of high school language and will be able to enter the third semester of college language instruction immediately.

Speech Communication Concentration

All candidates for the Bachelor of Arts degree in Communication with a Speech Communication Concentration must complete the following:

A. 27 semester credit hours of required coursework:

1. Core courses:

COM	2213	Foundations of Communication
COM	3073	Conduct of Communication Inquiry
COM	3083	Language and Communication Theory
ENG	2413	Technical Writing

2. Other required courses:

COM	2113	Public Speaking
COM	2383	Relational Communication
COM	3243	Persuasion
COM	3253	Rhetorical Communication Analysis

COM 3553 Intercultural Communication
or
COM 3563 International Communication

- B. 9 additional semester credit hours in communication at the upper-division level
- C. 12 semester credit hours of approved support work in one of the following areas:
 - 1. Intercultural/international studies
 - 2. English language and composition
 - 3. Social and behavioral sciences
 - 4. Business, management, and marketing
 - 5. Other subjects as may be individually justified by the student and approved by the undergraduate advisor
- D. 18 semester credit hours of free electives

Technical Communication Concentration

IS 3003 or CS 2083 must be used to satisfy the Core Curriculum requirement in computer science/logic. ECO 2023 must be used to satisfy the Core Curriculum requirement in economics.

All candidates for the Bachelor of Arts Degree in Communication with a Technical Communication Concentration must complete the following:

- A. 27 semester credit hours of required coursework:

- 1. Core courses:

COM 2213 Foundations of Communication
COM 3073 Conduct of Communication Inquiry
COM 3083 Language and Communication Theory
ENG 2413 Technical Writing

- 2. Other required courses:

COM 2733 Introduction to Communication Technologies
COM 3623 Commercial Publications
ENG 2433 Editing
ENG 3413 Specialized Professional Writing

COM 3553 Intercultural Communication
or
COM 3563 International Communication

- B. 9 additional semester credit hours in communication at the upper-division level
- C. 15 semester credit hours of support work:

1. ACC 2003 Foundations of Accounting
 2. FIN 3003 Survey of Finance
 3. 9 semester credit hours of approved support work in one of the following areas:
 - a. Intercultural/international studies
 - b. English language and composition
 - c. Social and behavioral sciences
 - d. Business, management, and marketing
 - e. Other subjects as may be individually justified by the student and approved by the undergraduate advisor
- D. 15 semester credit hours of free electives

Electronic Media Concentration

IS 3003 or CS 2083 must be used to satisfy the Core Curriculum requirement in computer science/logic. ECO 2023 must be used to satisfy the Core Curriculum requirement in economics.

All candidates for the Bachelor of Arts degree in Communication with an Electronic Media Concentration must complete the following:

- A. 27 semester credit hours of required coursework:
1. Core courses:

COM	2213	Foundations of Communication
COM	3073	Conduct of Communication Inquiry
COM	3083	Language and Communication Theory
ENG	2413	Technical Writing
 2. Other required courses:

COM	2733	Introduction to Communication Technologies
COM	3633	Professional Presentation
COM	3733	Fundamentals of Communications Media
COM	4733	Communications Design and Innovation
COM	3553	Intercultural Communication
		or
COM	3563	International Communication
- B. 9 additional semester credit hours in communication, at least 6 of which must be at the upper-division level
- C. 15 semester credit hours of support work:

1. ACC 2003 Foundations of Accounting
 2. FIN 3003 Survey of Finance
 3. 9 semester credit hours of approved support work in one of the following areas:
 - a. Intercultural/international studies
 - b. Business, management, marketing, and information systems
 - c. Social and behavioral sciences
 - d. Other subjects as may be individually justified by the student and approved by the undergraduate advisor
- D. 15 semester credit hours of free electives

Public Relations Concentration

IS 3003 or CS 2083 must be used to satisfy the Core Curriculum requirement in computer science/logic. ECO 2023 must be used to satisfy the Core Curriculum requirement in economics.

All candidates for the Bachelor of Arts degree in Communication with a Public Relations Concentration must complete the following:

A. 30 semester credit hours of required coursework:

1. Core courses:

COM	2213	Foundations of Communication
COM	3073	Conduct of Communication Inquiry
COM	3083	Language and Communication Theory
ENG	2413	Technical Writing

2. Other required courses:

COM	2733	Introduction to Communication Technologies
COM	3523	Public Relations
COM	4523	Case Studies in Public Relations
COM	4533	Public Relations Planning and Campaigns
ENG	3413	Specialized Professional Writing
COM	3553	Intercultural Communication
		or
COM	3653	International Communication

- B. 9 additional semester credit hours in communication, at least 3 of which must be at the upper-division level
- C. 15 semester credit hours of support work:

1. ACC 2003 Foundations of Accounting
 2. FIN 3003 Survey of Finance
 3. 9 semester credit hours of approved support work in one of the following areas:
 - a. Intercultural/international studies
 - b. English language and composition
 - c. Business, management, and marketing
 - d. Social and behavioral sciences
 - e. Other subjects as may be individually justified by the student and approved by the undergraduate advisor
- D. 12 semester credit hours of free electives

Minor in Communication

All students pursuing the Minor in Communication must complete 21 semester credit hours.

- A. 9 semester credit hours of required courses:

COM	2213	Foundations of Communication
COM	3083	Language and Communication Theory
ENG	2413	Technical Writing

- B. One of the following options:

1. 12 additional semester credit hours of communication, at least 6 of which must be upper-division
2. 12 additional hours as follows, at least 6 of which must be upper-division:

6 semester credit hours of communication

6 semester credit hours of English courses selected from

ENG	2433	Editing
ENG	3313	Advanced Composition
ENG	3413	Specialized Professional Writing

COURSE DESCRIPTIONS COMMUNICATION (COM)

- 1043 Introduction to Communication**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or an equivalent.
Introduction to the fundamental processes of human communication, with emphasis on interpersonal, group, and mass communication. Practice in oral communication. [TCCN: SPCH 1311.]
- 2113 Public Speaking**
(3-0) 3 hours credit. Prerequisite: COM 1043 or an equivalent.
Theory and practice of speaking in formal settings. Emphasis on preparation, adaptation, and delivery of oral presentations. [TCCN: SPCH 1315.]
- 2123 Oral Interpretation**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or an equivalent.
Study of verbal and nonverbal communication, especially for aesthetic purposes, and of the dramaturgical skills that relate to the performing arts. Emphasis is given to those skills that promote oral proficiency. [TCCN: SPCH 2341.]
- 2213 Foundations of Communication**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Introduction for communication majors to fundamental concepts in speech communication, technical communication, electronic media, and public relations. Students will have an opportunity to learn and develop essential skills, including the basic strategies and technologies used for information access, retrieval, and processing. Required of and restricted to students majoring in communication.
- 2343 Introduction to Mass Communication**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or an equivalent.
Critical examination of how the mass media interact with individuals and social groups. Exploration of media industries, products, and processes from various disciplinary perspectives. Comparative analysis of media products from different cultural and national contexts. [TCCN: COMM 1307.]
- 2383 Relational Communication**
(3-0) 3 hours credit. Prerequisite: COM 1043 or 2213.
Analysis of research and theories concerning the role and effects of communication in the creation and maintenance of human relationships in friendship, marriage, family, and the professions. [TCCN: SPCH 1318.]
- 2733 Introduction to Communication Technologies**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in COM 2213.
Overview of media and networks used for entertainment and information distribution, storage, and retrieval. Emphasis on the interrelationships among technology, economics, policy, society, and culture.

- 2801 Forensic Activities**
(1-0) 1 hour credit. Prerequisite: Consent of instructor.
Opportunity to study the preparation and presentation of oral argument or speaking in competitive situations. May be repeated for credit. Does not count toward major requirements. [TCCN: SPCH 2144.]
- 3073 Conduct of Communication Inquiry**
(3-0) 3 hours credit. Prerequisite: COM 2213.
Introduction to basic research methods as they apply to communication inquiry. Issues include applications of quantitative and qualitative research designs, descriptive and inferential statistics, and interpretation and critical evaluation of findings.
- 3083 Language and Communication Theory**
(3-0) 3 hours credit. Prerequisite: COM 2213.
Overview of theories of language and communication. Focuses on understanding how language and communication affect individual and social action.
- 3113 Argumentation and Debate**
(3-0) 3 hours credit. Prerequisites: COM 1043 or COM 2213, and ENG 1023, or their equivalents.
Offers the opportunity to train in the preparation, construction, and critical analysis of argumentation. Exercises in oral communication in adversarial situations.
- 3143 Communication Practices in Professional Development**
(3-0) 3 hours credit. Prerequisite: COM 1043 or 2213.
Research and theory concerning the role and effects of communication in professional training and development. Focus on learning styles, information processing, motivational factors, gender differences, nonverbal communication, conflict, and communication apprehension.
- 3243 Persuasion**
(3-0) 3 hours credit. Prerequisite: COM 3083.
Theory and practice of influencing attitudes, beliefs, opinions, and actions. Emphasis on critical evaluation of persuasive messages and design of persuasive campaigns.
- 3253 Rhetorical Communication Analysis**
(3-0) 3 hours credit. Prerequisites: COM 2213.
Study of classical and contemporary rhetorical theory. Critical evaluation of communication messages and techniques of delivery.
- 3343 Theories of Mass Communication**
(3-0) 3 hours credit. Prerequisite: COM 2343 or an equivalent.
Overview of theories of mass communication. Includes exploration of the processes and effects of the media in public entertainment and information programming.

- 3523 Public Relations**
(3-0) 3 hours credit. Prerequisites: COM 2213 and ENG 2413.
Introduction to principles and practices of public relations, with emphasis on strategies and execution of campaigns. Some attention to public relations within multicultural communities.
- 3543 Multicultural Public Communication Practices**
(3-0) 3 hours credit. Prerequisite: COM 2213.
Strategic planning and execution of public information campaigns targeting ethnic markets; emphasis on techniques of audience analysis, construction of messages, and use of specific communication channels.
- 3553 Intercultural Communication**
(3-0) 3 hours credit. Prerequisite: COM 3083.
Examination of differences in communication that arise from cultural and/or ethnic diversity. Emphasis on the verbal and nonverbal communicative patterns, conflict managements, and decision-making processes of diverse cultures. Credit cannot be earned for both COM 3553 and COM 3573.
- 3563 International Communication**
(3-0) 3 hours credit. Prerequisite: COM 3083.
Examination of issues, conditions, and processes relating to world media systems. Consideration of theoretical and practical perspectives in key domains of interaction such as political economy, social development, and technology.
- 3623 Commercial Publications**
(3-0) 3 hours credit. Prerequisite: ENG 2413 or an equivalent.
Theory and practice of commercial writing and desktop publishing, including manuals, proposals, and ephemeral publications such as newsletters and brochures. Includes discussion of document design, principles of layout, and typography.
- 3633 Professional Presentation**
(3-0) 3 hours credit. Prerequisites: COM 2213 and ENG 2413.
Fundamentals of professional presentations including information exchange, problem solving, persuasive proposals, and interviewing. Emphasis on the integration of oral presentation with written, graphic, and other media materials.
- 3733 Fundamentals of Communications Media**
(3-0) 3 hours credit. Prerequisite: COM 2733.
Examination of basic technical concepts and their application to telecommunications technologies. Introduction to organizational processes of telecommunications development.
- 4413 Topics in Speech Communication**
(3-0) 3 hours credit. Prerequisite: COM 2213 or consent of instructor.
Intensive study of one or more specific issues in speech communication (including contexts, theoretical perspectives, and research methods). May be repeated once for credit when topics vary.

- 4423 Topics in Technical Communication**
(3-0) 3 hours credit. Prerequisite: COM 2213 or consent of instructor.
Intensive study of one or more specific issues in technical communication (including contexts, theoretical perspectives, research methods, and production processes). May be repeated once for credit when topics vary.
- 4433 Topics in Electronic Media**
(3-0) 3 hours credit. Prerequisite: COM 2213 or consent of instructor.
Intensive study of one or more specific issues in electronic media (including contexts, theoretical perspectives, and individual technologies). May be repeated once for credit when topics vary.
- 4443 Topics in Public Relations**
(3-0) 3 hours credit. Prerequisite: COM 2213 or consent of instructor.
Intensive study of one or more specific issues in public relations (including media relations, special events planning, and use of technologies). May be repeated once for credit when topics vary.
- 4523 Case Studies in Public Relations**
(3-0) 3 hours credit. Prerequisite: COM 3523.
Advanced study of public relations functions, principles, and practices using local, regional, and national organizations as examples.
- 4533 Public Relations Planning and Campaigns**
(3-0) 3 hours credit. Prerequisite: COM 4523.
Application of public relations principles to the planning and production of messages and campaigns. Students will be expected to produce and carry out a public relations campaign within the community.
- 4733 Communications Design and Innovation**
(3-0) 3 hours credit. Prerequisite: COM 3733.
Application and design of communications systems for professional organizations. Focus is on formal and informal communication involved in effective implementation and use of technology. Procedures for needs assessment, budgetary analysis, design, implementation, evaluation, and modification of communication technology.
- 4913 Independent Study in Communication**
3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933 Internship in Communication**
3 hours credit. Prerequisite: Consent of instructor.
Supervised field experience in communication. May be repeated once for credit, but only 3 semester credit hours may be counted toward major requirements.

4953 Special Studies in Communication

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4973 Seminar for Communication Majors

(3-0) 3 hours credit. Prerequisites: 12 upper-division semester credit hours in communication.

This undergraduate seminar, limited to communication majors in their final year, offers the opportunity to study practical application of principles and practices of communication. Students are required to engage in critical thinking, strategic planning, and problem-solving activities in implementing a creative program in a social or organizational setting. Content varies with each instructor. May be repeated once for credit when topics vary.

Honors in English

Students whose grade-point average in the English major (including support work) before the beginning of their final year at UTSA is 3.2 or above, and whose overall grade-point average is 3.0, may earn Honors in English. In order to do so, a student must complete a substantial paper approved by the Division Honors Committee and maintain a 3.2 grade-point average in both the major and support work. The grade-point average requirements apply to all transfer work and courses taken at UTSA.

Bachelor of Arts Degree in English

The minimum number of semester credit hours required for this degree is 120, including the hours of Core Curriculum requirements. Thirty-nine of the 120 total semester credit hours required for the degree must be at the upper-division level.*

ENG 2213 must be used to satisfy the Core Curriculum requirement in literature.

All candidates for the degree must complete the following:

- A. 30 semester credit hours in English (in addition to the 9 hours of composition and literature listed in the Core Curriculum requirement), 21 of which must be at the upper-division level:

ENG	2223	Major British Writers I
ENG	2233	Major British Writers II
ENG	2263	Major American Writers

*Students seeking teacher certification should consult the Undergraduate Certification Program in Education brochure for information. Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

ENG	3223	Shakespeare: The Early Plays or
ENG	3233	Shakespeare: The Later Plays
ENG	4973	Seminar for English Majors

15 additional upper-division semester credit hours in English, at least 6 hours of which must be in literature; of these 6 hours, at least 3 must include the study of American literature

- B. 12 additional semester credit hours of approved support work in one of the following categories (at least 6 hours of which must be at the upper-division level):
1. Classical studies (CLA), philosophy (PHI), humanities (HUM)
 2. Foreign languages, foreign literature (including foreign literatures in translation)
 3. Linguistics (including linguistics courses designated ENG, provided that they have not been counted toward the required 30 semester credit hours in English)
 4. Communication (COM)
 5. Creative writing or expository and technical writing (including courses designated ENG, provided that they have not been counted toward the required 30 semester credit hours in English)
 6. American studies (AMS), anthropology (ANT), history (HIS), psychology (PSY), or sociology (SOC)
 7. History and theory of either art or music
 8. Ethnic studies
 9. Women's studies
 10. Other subjects as may be individually justified by the student and approved by the Undergraduate Advisor of Record

Students who select a support category other than classics, philosophy, or humanities may apply 6 semester credit hours of upper-division literature courses in humanities or classics toward requirement A of the English major.

- C. 24 semester credit hours of electives

Minor in English Literature

All students pursuing the Minor in English Literature must complete 21 semester credit hours of English and American literature.

- A. 15 semester credit hours of required courses:

ENG	2213	Literary Criticism and Analysis
ENG	2223	Major British Writers I
ENG	2233	Major British Writers II
ENG	2263	Major American Writers

- ENG 3223 Shakespeare: The Early Plays
or
ENG 3233 Shakespeare: The Later Plays

- B. 6 additional upper-division semester credit hours of literature in English, 3 of which must include the study of American literature

COURSE DESCRIPTIONS ENGLISH (ENG)

- 0101 Writing Review**
(1-0) 1 hour credit.
Offers instruction and practice in composition and grammar, with emphasis on such considerations as the writer's purpose, audience, tone, logical cohesion, and paragraph and thesis development. Includes library research and documentation, and critical reading of academic writing. The course is offered on a credit/no-credit basis. Credit cannot be used to satisfy any degree requirements.
- 0103 Basic English**
(3-1) 3 hours credit.
Offers the opportunity for increasing writing skills before enrollment in ENG 1013. Intensive practice in the writing process, including prewriting, organization, sentence structure, and use of grammar, spelling, and punctuation. Includes library research and documentation, and critical reading of academic writing. The course is offered on a credit/no-credit basis. Credit cannot be used to satisfy any degree requirements.
- 1013 Freshman Composition**
(3-0) 3 hours credit.
Reviews principles of the writing process and of using sources for writing. Introduces the patterns of development, summary and paraphrase, analysis, evaluation, and synthesis of multiple sources drawn from a variety of cultural and intellectual contexts. Includes attention to forms of oral and visual communication and extensive library research and documentation. (This course or an equivalent is required of all undergraduates in fulfilling the Core Curriculum requirement and is normally taken during the first semester of the freshman year.) [TCCN: ENGL 1301.]
- 1023 Discourse across the Disciplines**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or an equivalent.
Extensive writing practice in the use of logical and organizational patterns and introduction to persuasion in written, oral, and visual form. Develops critical and analytical skills through multidisciplinary and multicultural readings. (This course or an equivalent is required of all undergraduates in fulfilling the Core Curriculum requirement and should be taken as the continuation of ENG 1013.) [TCCN: ENGL 1302.]

- 2013 Introduction to Literature**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Introductory study of great works of literature with an emphasis on novels, plays, and poetry by British and American authors. Designed for nonmajors.
- 2213 Literary Criticism and Analysis**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
A study of poetry, fiction, and drama, with close attention to literary terms, literary criticism, and the characteristics of each genre. Required of and restricted to students majoring in English.
- 2223 Major British Writers I**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or completion of the Core Curriculum requirement in literature.
Study of representative works of major British writers from Chaucer to Milton (excluding Shakespeare). Required of students majoring in English. [TCCN: ENGL 2322.]
- 2233 Major British Writers II**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or completion of the Core Curriculum requirement in literature.
Study of representative works of major British writers from the Age of Pope to the early twentieth century. Required of students majoring in English. [TCCN: ENGL 2323.]
- 2263 Major American Writers**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or completion of the Core Curriculum requirement in literature.
Study of representative work of major American writers. Required of students majoring in English.
- 2323 Creative Writing: Fiction**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Offers the opportunity for intensive practice and development of techniques in the writing of fiction.
- 2333 Creative Writing: Poetry**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Offers the opportunity for intensive practice and development of techniques in the writing of poetry.
- 2373 Literature for Children and Adolescents**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Literary analysis of the kinds of reading available for children and adolescents: poetry, drama, biography, science fiction, mystery, and fantasy. Both classics and current trends will be considered. Emphasis on the novel.

- 2383 Minority Voices in American Literature**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
A survey of the literature of various minority groups such as Native American, African American, and Hispanic. Designed for nonmajors.
- 2413 Technical Writing**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Techniques of expository writing, particularly adapted to students in technological and scientific subjects. [TCCN: ENGL 2311.]
- 2423 Literature of Texas and the Southwest**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Study of the literature of Texas and the Southwest, including an examination of the region's multicultural heritage. Designed for nonmajors.
- 2433 Editing**
(3-0) 3 hours credit. Prerequisite: ENG 2413 or an equivalent.
Principles and applications of production editing and technical editing, including evaluation and revision of style, tone, and organization of documents. Practice in the use of editing symbols and copy marking.
- 2613 Introduction to Literary Forms**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Offers the opportunity to discuss classic and contemporary selections from a single literary form: fiction, poetry, or drama. May be repeated for credit when topics vary. Designed for nonmajors.
- 3033 American Literature, 1945 to Present**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of major American writers of the past five decades.
- 3053 American Literature to 1870**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Study of major American writers before the late nineteenth century, including Hawthorne, Melville, and Dickinson.
- 3063 American Literature, 1870–1945**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Study of major American writers of the late nineteenth and early twentieth centuries, including Twain, Eliot, Hemingway, and Faulkner.
- 3113 Studies in Individual Authors**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Study of the works of an individual British or American author or of several authors examined in relation to one another. May be repeated for credit when authors vary.

- 3123 Modern Fiction**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical survey of American, British, and Continental fiction of the twentieth century, studied intensively in relation to the development of characteristically modern techniques.
- 3133 Women and Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of the presentation of women and feminist issues in various literary forms.
- 3143 Modern Drama**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Study of representative plays in the modern dramatic tradition, from the time of Ibsen and Strindberg through contemporary dramatists, with an emphasis on British and American playwrights.
- 3153 Topics in Drama**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or an equivalent.
Study of one or more periods (e.g., Tudor-Stuart, contemporary) or modes (e.g., comedy, tragedy) of drama. May be repeated for credit when topics vary.
- 3213 Chaucer**
(3-0) 3 hours credit. Prerequisite: ENG 2223 or an equivalent.
Critical study of the *Canterbury Tales* and other poems. Texts in Middle English.
- 3223 Shakespeare: The Early Plays**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of comedies, histories, and tragedies from the earlier period (1590–1601).
- 3233 Shakespeare: The Later Plays**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of comedies, tragedies, and romances from the later period (1602–1613).
- 3243 The English Novel**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical survey of English novels, selected chiefly from the eighteenth and nineteenth centuries.
- 3253 The American Novel**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Reading and discussion of representative American novels.

- 3273 Milton**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Reading and analysis of Milton's major poems and selected prose in the context of his times.
- 3303 Theory and Practice of Composition**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Extensive practice in the techniques of clear, effective writing. Designed for students who will write in their professions and will supervise the writing of others.
- 3313 Advanced Composition**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Study of the principles and procedures of informational and persuasive prose. Emphasis on coherence, liveliness, persuasiveness, and originality. Extensive writing practice, including the writing of arguments.
- 3323 History of the English Language**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Historical survey of the development of the English language.
- 3333 Introduction to the Structure of English**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Analysis of English syntax from various theoretical perspectives, including traditional, structural, and generative. Consideration of the concept of Standard English and of language variation, especially regional and social variation within modern English.
- 3343 Principles of English Linguistics**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
Introduction to the goals and procedures of modern linguistics, emphasizing phonetics, phonology, and morphology. Discussion of language acquisition and the neurolinguistic foundations of language ability. Some attention to topics such as semantics, pragmatics, and language change.
- 3393 Theory of Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of the nature and function of literature and the relationship of literature to philosophy, history, and the other arts; attention to such topics as stylistics, genres, and literary history. (Formerly HUM 2013. Credit cannot be earned for both ENG 3393 and HUM 2013.)

- 3413 Specialized Professional Writing**
(3-0) 3 hours credit. Prerequisite: ENG 2413 or an equivalent.
Writing for specialized purposes such as news releases, feature articles, reports, newsletters, speeches, scriptwriting, advertising, and professional correspondence.
- 3513 Mexican American Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 12 semester credit hours of English.
Critical study of literature by and about Mexican Americans, including prose, verse, drama, essays, and autobiography. Concentration on writings since 1959.
- 4013 Eighteenth-Century Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2233 or an equivalent.
Selected readings in the fiction, poetry, and prose of the British literature of the eighteenth century. Emphasis on such major writers as Defoe, Pope, Swift, Fielding, Johnson, and Burns.
- 4023 Romantic Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2233 or an equivalent.
Selected readings in the fiction, poetry, and prose of the British Romantic period. Emphasis on such major writers as Wordsworth, Coleridge, Byron, Keats, and Shelley.
- 4033 Literary Modes and Genres**
(3-0) 3 hours credit. Prerequisite: ENG 2223, 2233, or an equivalent.
Intensive study of a single mode or genre such as comedy, tragedy, allegory, satire, epic, or a type of nonfiction such as biography. May be repeated for credit when topics vary.
- 4053 Modern British and American Poetry**
(3-0) 3 hours credit. Prerequisite: ENG 2233, 2263, or an equivalent.
An intensive study of chief modern poets, with emphasis on Yeats, Eliot, Pound, Auden, Stevens, Williams, and Lowell.
- 4063 Medieval English Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2223 or an equivalent.
Study of the major English writings from the Anglo-Saxon and Middle English periods (excluding Chaucer), with special emphasis on *Beowulf* and Chaucer's contemporaries. Some works in translation, but original texts wherever possible.
- 4113 Renaissance Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2223 or an equivalent.
Selected readings from major writers of the sixteenth and seventeenth centuries (excluding Shakespeare), with emphasis on writers such as Spenser, Donne, Jonson, Milton, and Marvell.

- 4143 Victorian Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2233 or an equivalent.
Selected readings in the fiction, poetry, and nonfiction prose of major Victorian writers, with emphasis on Tennyson, Browning, Eliot, Dickens, Hardy, and Hopkins.
- 4393 Feminist Theory of Literature**
(3-0) 3 hours credit. Prerequisite: ENG 3133 or 3393.
Critical study of feminist theory and the relationship of gender to literature. Selected readings from major feminist theorists in connection with the study of literary texts.
- 4423 Studies in Advanced Linguistics**
(3-0) 3 hours credit. Prerequisite: ENG 3343, LNG 3913, or an equivalent.
Specialized study of one or more areas of linguistic research, including historical linguistics, sociolinguistics, dialectology, linguistics for literary analysis, or languages in contact. May be repeated for credit when topics vary.
- 4523 Writer's Workshop: Advanced Fiction Writing**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Designed for students who have demonstrated potential as fiction writers. May be repeated for credit, but not more than 12 semester credit hours of ENG 4523 and/or ENG 4533 will apply to a bachelor's degree, and not more than 6 hours will apply toward the English major.
- 4533 Writer's Workshop: Advanced Poetry Writing**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Designed for students who have demonstrated potential as poets. May be repeated for credit, but not more than 12 semester credit hours of ENG 4523 and/or ENG 4533 will apply to a bachelor's degree, and not more than 6 hours will apply toward the English major.
- 4613 Topics in Mexican American Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2263, ENG 3513, or an equivalent.
Critical study of a topic in Mexican American literature: author, genre, or theme. May be repeated for credit when topics vary.
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship

3 hours credit. Prerequisite: Consent of instructor.
Supervised experience relevant to English. May be repeated once for credit, but no more than 3 semester credit hours will apply toward the English major.

4953 Special Studies in English

(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4973 Seminar for English Majors

(3-0) 3 hours credit. Prerequisites: 12 upper-division semester credit hours in English or the equivalent.
This undergraduate seminar, limited to English majors in their senior year, offers the opportunity to study a genre, author, or period in English or American literature. Content varies with each instructor. May be repeated once for credit when topics vary.

Honors in Humanities

Students whose grade-point average in the humanities major before the beginning of their final year at UTSA is 3.2 or above, and whose overall grade-point average is 3.0, may earn Honors in Humanities. In order to do so, a student must complete a substantial paper approved by the Division Honors Committee and maintain a 3.2 grade-point average in the major. The grade-point average requirements apply to all transfer work and courses taken at UTSA.

Bachelor of Arts Degree in Humanities

The Bachelor of Arts degree in Humanities is an interdisciplinary degree program consisting of courses drawn from a number of academic disciplines.

The minimum number of semester credit hours required for this degree is 120, including the hours of the Core Curriculum requirements. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 42 semester credit hours:

1. 12 required semester credit hours:

CLA	2013	Introduction to Ancient Greece
CLA	2023	Introduction to Ancient Rome
HUM	3013	History of Ideas
HUM	4973	Seminar for Humanities Majors

2. 9 semester credit hours of historical-period courses selected from the following:

HUM	3023	The Medieval World
HUM	3033	The Renaissance Idea of Humanity
HUM	3043	Classicism and Enlightenment
HUM	3053	The Romantic Age
HUM	3063	The Modern World

3. 21 semester credit hours that should form an interdisciplinary course of study developed in conjunction with the undergraduate advisor and designed to aid the student's integration of his or her program in terms of central themes, focal problems, or fields of historical interest; at least 12 hours must be at the upper-division level

The student must take at least 3 semester credit hours in each of the following five areas:

classical studies (CLA), philosophy (PHI), humanities (HUM), art history and criticism (AHC), and literature in one of the following languages (including literature courses in translation and culture and civilization courses): English, French, German, Italian, Spanish, or Russian

The remaining 6 semester credit hours may be selected from these five areas or, with the approval of the Undergraduate Advisor of Record, from other relevant areas such as history, music history, or the social sciences.

B. 24 semester credit hours of electives

Minor in Humanities

All students pursuing the Minor in Humanities must complete 21 semester credit hours.

A. HUM 3013 History of Ideas

B. 9 semester credit hours of background courses, with 3 hours selected from each of the three following groups:

- CLA 2013 Introduction to Ancient Greece
CLA 2023 Introduction to Ancient Rome
CLA 2033 Introduction to Classical Literature
- PHI 2013 Basic Philosophical Problems
PHI 2023 Introduction to Ancient Philosophy
PHI 2033 Introduction to Modern Philosophy
- AHC 1113 Survey of Art and Architecture from Prehistoric Times to 1350
AHC 1123 Survey of Art and Architecture in Europe and the New World from 1350 to 1750

AHC 1133 Survey of Modern Art

C. 9 additional semester credit hours of upper-division coursework in humanities

COURSE DESCRIPTIONS HUMANITIES (HUM)

- 1011 Topics in the Humanities**
(1-0) 1 hour credit.
Introductory study of a topic or issue in the humanities. May be repeated for credit when topics vary.
- 3013 History of Ideas**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Survey of the development and influence of major philosophical, scientific, and aesthetic conceptions in Western civilization from ancient times to the present.
- 3023 The Medieval World**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Interdisciplinary investigation of medieval thought and culture as exemplified in major works of literature, philosophy, theology, and history.
- 3033 The Renaissance Idea of Humanity**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Interdisciplinary investigation of Renaissance thought and culture, as exemplified in major works of literature, philosophy, theology, and history; emphasis on the fundamental changes in the Western view of the world.
- 3043 Classicism and Enlightenment**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Interdisciplinary investigation of European thought and culture in the later seventeenth and the eighteenth centuries, as exemplified in major works of philosophy, literature, and the fine arts.
- 3053 The Romantic Age**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Interdisciplinary investigation of the development of ideas in literature, philosophy, art, politics, and society at the end of the eighteenth and beginning of the nineteenth century. Figures such as Rousseau, Kant, Wordsworth, Goethe, and Goya will be considered.
- 3063 The Modern World**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Interdisciplinary investigation of modern thought in the late nineteenth and twentieth centuries, as exemplified in major works of philosophy, literature, and the fine arts.

- 3093 World Religions**
 (3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
 Examination of the origins, teachings, development, and philosophical foundations of the world's chief religious movements, including Hinduism, Buddhism, Shintoism, Confucianism, Taoism, Sikhism, Janism, Islam, Zoroastrianism, Judaism, and Christianity. (Formerly PHI 3063. Credit cannot be earned for both HUM 3093 and PHI 3063.)
- 3103 American Film**
 (3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
 Survey of the art, history, development, and major critical approaches to American film with attention to such topics as classic and revisionist film styles, cinematic apparatus, the history and development of film genres, and film as a part of American culture.
- 3213 The Christian Classics**
 (3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
 The opportunity for an intensive survey of selected works of writers such as Augustine, Dante, Milton, Bunyan, Pascal, Hopkins, and Eliot, studied in the context of Christian thought.
- 3223 The Bible as Literature**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.
 Offers the opportunity to survey major themes, stories, and motifs in the Old and New Testament, with emphasis on those elements fundamental to Western culture. (Formerly ENG 2513. Credit cannot be earned for both HUM 3223 and ENG 2513.)
- 3263 Modern European Novel**
 (3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
 Critical study of selected Continental novelists of the last hundred years.
- 3623 Topics in National Cultures and Civilizations**
 (3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
 The cultural life of the respective geographic regions and social strata of individual nations of Europe and America, as reflected in and interpreted by their artistic production. Individual topics may focus on a single nation or several nations. May be repeated for credit when topics vary.
- 4913 Independent Study**
 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Humanities

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4973 Seminar for Humanities Majors

(3-0) 3 hours credit. Prerequisites: 12 upper-division semester credit hours in humanities, classics, philosophy, or the equivalent.

Undergraduate seminar limited to humanities majors in their senior year. Content varies with each instructor. May be repeated once for credit when topics vary.

Honors in Philosophy

Students whose grade-point average in the philosophy major before the beginning of their final year at UTSA is 3.2 or above, and whose overall grade-point average is 3.0, may earn Honors in Philosophy. In order to do so, a student must complete a substantial paper approved by the Division Honors Committee and maintain a 3.2 grade-point average in the major. The grade-point average requirements apply to all transfer work as well as courses taken at UTSA.

Bachelor of Arts Degree in Philosophy

The minimum number of semester credit hours required for this degree is 120, including the hours of the Core Curriculum requirements. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 30 semester credit hours:

PHI	2013	Basic Philosophical Problems
PHI	2023	Introduction to Ancient Philosophy
PHI	2033	Introduction to Modern Philosophy
PHI	2043	Introductory Logic
PHI	3213	Ethics
PHI	3223	Approaches to Knowledge and Reality

12 additional upper-division semester credit hours of philosophy electives

B. 12 semester credit hours of approved support work, at least 6 hours of which must be at the upper-division level, in one of the following categories:

1. Mathematics and natural sciences: computer science (CS), mathematics (MAT), statistics (STA), chemistry (CHE), geology (GEO), physics (PHY), astronomy (AST), and biology (BIO)

2. Social and behavioral sciences: American studies (AMS), anthropology (ANT), history (HIS), psychology (PSY), economics (ECO), political science (POL), sociology (SOC), and social science (SSC)
3. Language, literature, and humanities: English (ENG), humanities (HUM), classical studies (CLA), communication (COM), comparative studies in the humanities (CSH), linguistics (LNG), and foreign languages
4. History and theory of art and music: art history and criticism (AHC) and music (MUS)
5. Other subjects as may be individually justified by the student and approved by the undergraduate advisor

C. 24 semester credit hours of electives

Minor in Philosophy

All students pursuing the Minor in Philosophy must complete 21 semester credit hours.

A. 18 semester credit hours of required courses:

PHI	2013	Basic Philosophical Problems
PHI	2023	Introduction to Ancient Philosophy
PHI	2033	Introduction to Modern Philosophy
PHI	2043	Introductory Logic
PHI	3213	Ethics
PHI	3223	Approaches to Knowledge and Reality

B. 3 additional upper-division semester credit hours in philosophy

COURSE DESCRIPTIONS PHILOSOPHY (PHI)

- 2013 Basic Philosophical Problems**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Introduction to philosophy through general problems in metaphysics, epistemology, ethics, political philosophy, and philosophy of religion; emphasis on the writings of philosophers of various historical periods, especially as these doctrines apply to contemporary problems. [TCCN: PHIL 1301.]
- 2023 Introduction to Ancient Philosophy**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Introduction to ancient philosophy through the study of Plato, Aristotle, Epicurus, and others; emphasis on the Greek contribution to the moral and political ideas of the Western world. [TCCN: PHIL 2316.]

- 2033 Introduction to Modern Philosophy**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Introduction to modern philosophy from the Renaissance to the present through the study of Descartes, Locke, Hume, Leibniz, Kant, Kierkegaard, and others; emphasis on the relations of philosophy to the development of modern science, the social and political history of the Western world, and humankind's attempt to achieve a satisfactory worldview. [TCCN: PHIL 2317.]
- 2043 Introductory Logic**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Study of the principles of valid argument definition, deductive and inductive inference, and fallacies. [TCCN: PHIL 2303.]
- 2053 Business Ethics**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Critical examination of interrelated social and ethical issues that arise from the conduct of business in contemporary society. Designed primarily for business majors.
- 2123 Moral Issues in Contemporary America**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Examination of ethical issues facing American society, with emphasis on medical, social, and business ethics.
- 3013 Philosophy of Religion**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Examination of traditional religious beliefs and such concepts as faith and knowledge, mysticism and theology, the existence and nature of God, and the relation of religion to experience and social life.
- 3033 Philosophy of Science**
(3-0) 3 hours credit. Prerequisite: PHI 2013, 2043, or an equivalent.
Examination of major issues in the philosophical foundations of the natural and social sciences, including scientific explanation, laws and theories, probability and induction, and the relation of scientific inquiry to the Western philosophical tradition.
- 3053 Philosophy of Art**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Examination of major philosophical theories of art, beauty, and aesthetic judgment, with emphasis on such problems as form and structure, communication in art, and meaning in aesthetic judgment.
- 3073 Asian Philosophy**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Examination of the philosophical and religious traditions of the East, with emphasis on various schools such as Vedanta, Buddhism, Confucianism, and Taoism.

- 3213 Ethics**
(3-0) 3 hours credit. Prerequisite: PHI 2013 or an equivalent.
Examination of ethical theory and of the nature and scope of ethical discourse, with emphasis on the concepts of good, human happiness, self-realization, virtue, duty, responsibility, and the means-ends relationship; reading will include selected classical and contemporary texts.
- 3223 Approaches to Knowledge and Reality**
(3-0) 3 hours credit. Prerequisite: PHI 2013, 2043, or an equivalent.
Examination of the interrelations between the theory of knowledge and theory of reality, with emphasis on the nature and scope of human knowledge, sensation and understanding, truth and error, change and causality, possibility and actuality, and meaning and existence. Reading will include selected classical and contemporary texts.
- 3343 Issues and Movements in Twentieth-Century Philosophy**
(3-0) 3 hours credit. Prerequisite: PHI 2013 or an equivalent.
Sustained study of recent works focusing on one or more specific issues or movements, such as philosophy of language, philosophy of mind, epistemology, political philosophy, theoretical or applied ethics, phenomenology, existentialism, hermeneutics, or postmodernism. May be repeated when topics vary.
- 4013 Studies in Individual Philosophers**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Examination of the works of an individual philosopher or of several philosophers studied in relationship to one another. May be repeated for credit when topics vary.
- 4113 Contemporary Analytic Philosophy**
(3-0) 3 hours credit. Prerequisite: PHI 2013 or an equivalent.
An in-depth examination of the major trends in the development of the Anglo-American philosophical tradition during the twentieth century, including the early analysts, the development of logical positivism, and the emergence of nonformal linguistic analysis.
- 4123 Contemporary Continental Philosophy**
(3-0) 3 hours credit. Prerequisite: PHI 2013 or an equivalent.
A sustained treatment of the major trends in twentieth-century European philosophy, including movements such as phenomenology, existentialism, hermeneutics, and postmodernism; emphasis on historical development.
- 4333 Philosophy of Language**
(3-0) 3 hours credit. Prerequisite: PHI 2013 or an equivalent.
A critical examination of traditional problems dealing with the nature and function of language. Representative issues include analyticity, reference, proper names, metaphorical meaning, and speech-act theory.

4913 Independent Study

3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Philosophy

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

**COURSE DESCRIPTIONS
CLASSICAL STUDIES
(CLA)**

2013 Introduction to Ancient Greece

(3-0) 3 credit hours. Prerequisite: ENG 1023 or an equivalent.

Introduction to the civilization and cultural achievements of ancient Greece, including history, religion, philosophy, literature, and art.

2023 Introduction to Ancient Rome

(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.

Introduction to the civilization and cultural achievements of ancient Rome, including history, religion, philosophy, literature, and art.

2033 Introduction to Classical Literature

(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.

Introductory study of selected works of ancient Greek and Roman authors, with emphasis on epic, drama, satire, and lyric.

3023 Classical Myths and Literature

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in literature.

Critical examination of ancient Greek and Roman myths and their functions in literary texts and ancient societies; study of current theories and methodologies of mythic analysis.

**COURSE DESCRIPTIONS
LATIN
(LAT)**

- 1114** **Introductory Latin I**
(4-0) 4 hours credit.
Fundamentals of Latin grammar and readings in Latin.
- 1124** **Introductory Latin II**
(4-0) 4 hours credit. Prerequisite: LAT 1114.
Fundamentals of Latin grammar and readings in Latin.
- 2113** **Intermediate Latin I**
(3-0) 3 hours credit. Prerequisite: LAT 1124 or an equivalent.
Continued practice in reading Latin. Selections from Cicero, Sallust, Catullus, and/or Virgil. Review of Latin grammar and syntax.

**COURSE DESCRIPTIONS
THEATER
(THR)**

- 1013** **Acting I**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or equivalent.
Fundamental techniques of acting, emphasizing the actor's approach to characterization and relationship to all parts of the play's production. [TCCN: DRAM 1351.]
- 1023** **Acting II**
(3-0) 3 hours credit. Prerequisite: ENG 1013 or equivalent.
Sustained character portrayal. Intensive work in stage movement and vocal techniques, including dialects. [TCCN: DRAM 1352.]
- 2013** **Drama Production**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or equivalent.
Techniques and materials used in producing a play: directing, acting, lighting, stagecraft, makeup, costume, and management.
- 2023** **Stage Direction**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or equivalent.
The techniques of stage direction, with a study of factors leading to completed production.

DIVISION OF FOREIGN LANGUAGES

The Division of Foreign Languages offers majors in French, German, and Spanish designed to develop the student's specialized knowledge of culture, literature, and language. The division also offers minors in French, German, Russian, Spanish, Comparative Literature, Foreign Languages, and Linguistics. The minors give students the opportunity to refine language skills and acquire knowledge of a foreign culture and/or literature. Skills-development courses, which facilitate speaking, reading, writing, and understanding of a foreign language, are offered in these languages as well as in Chinese, Italian, and Japanese. Courses in comparative studies in the humanities relate literatures to the other arts and general currents of culture and humanistic thought, while coursework in linguistics focuses on general concepts of linguistic structure and meaning and relates language development to other areas of human understanding. Additional study abroad is also encouraged.*

DIVISION HONORS

A student whose grade-point average in courses taken at UTSA is at least 3.0, whose grade-point average in upper-division courses in one of the fields offered as a major in the division is at least 3.5, and who has completed 18 semester credit hours at the upper division in the major (24 hours for Spanish) may petition the undergraduate advisor to enroll in the appropriate honors course (SPN, FRN, or GER 4993 Honors Research). If the student maintains the minimum grade-point averages upon completion of the course, the Division Honors Committee will evaluate the project the student completed in the honors course and determine whether he or she will be awarded Division Honors.

Bachelor of Arts Degree in French

The minimum number of semester credit hours required for the Bachelor of Arts degree in French, including the hours in the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level. Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.**

All candidates for the degree must complete the following:

- A. 24 semester credit hours in the major, all of which must be at the upper-division level, as follows:

FRN	3023	Oral Communication and Composition
FRN	3413	French Literature and Culture until 1800
FRN	3423	French Literature and Culture since 1800

15 additional semester credit hours in French chosen in consultation with the student's advisor

*See study abroad options under Course Descriptions--Foreign Languages.

**Undergraduates seeking elementary teaching certification must complete the interdisciplinary studies degree.

B. 12 semester credit hours of support work, as follows:

1. 6 semester credit hours selected from among the following courses:

CSH	1103	Literary Masterpieces of Western Culture I
CSH	1113	Literary Masterpieces of Western Culture II
CSH	2313	Introduction to Literary Studies
LNG	3813	Introduction to Linguistics
LNG	3833	Sociology of Language

2. 6 additional semester credit hours outside the major in another foreign language at the upper-division level and/or a related area, including other literature, culture, or linguistics courses chosen in consultation with the student's advisor

C. 39 semester credit hours of electives

Minor in French

All students pursuing the Minor in French must complete 18 semester credit hours.

A. 9 semester credit hours of required language skill courses:

FRN	2013	Intermediate French I
FRN	2023	Intermediate French II
FRN	3023	Oral Communication and Composition

B. 9 additional semester credit hours of upper-division French courses chosen in consultation with the advisor for the Minor in French

COURSE DESCRIPTIONS FRENCH (FRN)

1014 Elementary French I
(3-2) 4 hours credit.

Fundamentals of French offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Introduction to French culture. [TCCN: FREN 1411.]

1024 Elementary French II

(3-2) 4 hours credit. Prerequisite: FRN 1014, an equivalent, or an appropriate placement test score.

Fundamentals of French offering the opportunity to develop listening, speaking, reading, and writing skills. Further study of French culture. [TCCN: FREN 1412.]

- 2013 Intermediate French I**
(3-2) 3 hours credit. Prerequisite: FRN 1024, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, reading, speaking, and writing skills. Grammar review and further study of French culture. [TCCN: FREN 2311.]
- 2023 Intermediate French II**
(3-2) 3 hours credit. Prerequisite: FRN 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, reading, speaking, and writing skills. Grammar review and further study of French culture. [TCCN: FREN 2312.]
- 3013 French Phonetics and Pronunciation**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Articulatory description of the sounds of standard French. Exercises in sound discrimination, pronunciation, intonation, and phonetic transcription. Attention to levels of usage and regional accents.
- 3023 Oral Communication and Composition**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Conversation correlated with readings, reports, and expository writing, aimed at increasing oral and written fluency and accuracy. Vocabulary expansion and selective grammar review. May be repeated once for credit.
- 3033 Advanced Grammar and Stylistics**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
An intensive study of selected complex features of morphology and syntax. Grammatical and stylistic analysis of literary and nonliterary, formal and informal, language.
- 3053 Business French**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Introduction to the basic context of the French economy and business world, with emphasis on development of practical language skills to deal with matters such as commercial correspondence, documents, reports, telecommunications, and conferences. Attention to vocabulary and style specific to French business. Practice in translation on business-related topics.
- 3333 French Literature in English Translation**
(3-0) 3 hours credit.
Major works of French literature across time, genres, and movements. May not be applied to a major in French.
- 3413 French Literature and Culture until 1800**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Selections from French literature studied as reflections and interpretations of central moments in French literary and cultural history until 1800. Introduction to concepts of literary style, genre, and period, with emphasis on poetry and drama.

- 3423 French Literature and Culture since 1800**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Selections from French literature studied as reflections and interpretations of central moments in French literary and cultural history since 1800. Introduction to concepts of literary style, genre, and period, with emphasis on poetry and the novel.
- 3433 French Civilization**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
A chronological survey of French history, society, ideas, and arts, with emphasis on reading and analysis of materials from primary sources such as historical documents, memoirs, chronicles, philosophical and scientific discourses, and literature.
- 3613 Contemporary French Culture and Society**
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Social, political, economic, and cultural aspects of contemporary France, with emphasis on reading and analysis of materials from primary sources such as official documents, informational publications, newspapers, magazines, radio, and television. Attention to current national and regional problems and conflicts.
- 4413 Genre Studies**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in an upper-division French course or consent of instructor.
Study of the history, characteristics, and major achievements in a particular French literary genre: novel, short narrative, lyric, drama, or film. May be repeated for credit when topics vary.
- 4613 Periods and Schools of French Literature**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in an upper-division French course or consent of instructor.
Study of the major figures and the principal literary and cultural achievements of a single period: Middle Ages, Renaissance and Baroque, Classicism, Enlightenment, Nineteenth Century, La Belle Epoque, or Twentieth Century. May be repeated for credit when topics vary.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated once for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. No more than 6 hours of FRN 4993 and/or FRN 4913 may be applied to the major in French.
- 4933 Internship in French**
3 hours credit. Prerequisite: Permission of French Internship Coordinator.
Supervised experience in a setting that provides the opportunity to integrate theory and practice in language usage. May be repeated once for credit.

4953 Special Studies in French

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisite: Consent of the Undergraduate Advisor of Record.

Supervised research and preparation of an honors thesis. May be repeated once for credit, with approval. No more than 6 semester credit hours of FRN 4993 and/or FRN 4913 may be applied to the major in French.

Bachelor of Arts Degree in German

The minimum number of semester credit hours required for the Bachelor of Arts degree in German, including the hours in the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level. Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.*

All candidates for the degree must complete the following:

A. 24 semester credit hours in the major, all of which must be at the upper-division level, as follows:

GER 3023 Oral Communication and Composition
GER 3413 German Literature and Culture I: Middle Ages to 1700
GER 3423 German Literature and Culture II: 1700 to the Present
15 additional semester credit hours in German chosen in consultation with the student's advisor

B. 12 semester credit hours of support work, as follows:

1. At least 6 semester hours selected from the following:

CSH 1103 Literary Masterpieces of Western Culture I
CSH 1113 Literary Masterpieces of Western Culture II
CSH 2313 Introduction to Literary Studies

LNG 3813 Introduction to Linguistics
or
LNG 3833 Sociology of Language

2. Hours remaining to make the total of 12 selected from section B.1 or courses in related areas in consultation with the student's advisor in the major

*Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

C. 39 semester credit hours of electives

Minor in German

All students pursuing the Minor in German must complete 18 semester credit hours.

A. 9 semester credit hours of required language skill courses:

1. GER 2013 Intermediate German I
GER 2023 Intermediate German II
2. GER 3023 Oral Communication and Composition
or
GER 3053 Advanced German Grammar and Stylistics

B. 9 additional semester credit hours of upper-division German courses chosen in consultation with the advisor for the Minor in German

COURSE DESCRIPTIONS GERMAN (GER)

- 1008 Elementary German—Accelerated**
(6-4) 8 hours credit.
A one-semester course offering the opportunity to develop listening, reading, speaking, and writing skills. Introduction to German culture. (Credit for GER 1008 is equivalent to credit for both GER 1014 and GER 1024.)
- 1014 Elementary German I**
(3-2) 4 hours credit.
Fundamentals of German offering the opportunity to develop listening, reading, speaking, and writing skills. Introduction to German culture. [TCCN: GERM 1411.]
- 1024 Elementary German II**
(3-2) 4 hours credit. Prerequisite: GER 1014, an equivalent, or an appropriate placement test score.
Fundamentals of German offering the opportunity to further develop abilities in listening, reading, speaking, and writing skills. Further exposure to German culture. [TCCN: GERM 1412.]
- 2013 Intermediate German I**
(3-2) 3 hours credit. Prerequisite: GER 1008, 1024, an equivalent, an appropriate placement test score, or consent of instructor.
Continued opportunity to develop listening, reading, speaking, and writing skills. Continued exposure to German culture. [TCCN: GERM 2311.]

- 2023 Intermediate German II**
(3-2) 3 hours credit. Prerequisite: GER 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, reading, speaking, and writing skills. Continued exposure to German culture. [TCCN: GERM 2312.]
- 3023 Oral Communication and Composition**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor.
Conversation correlated with contemporary readings in everyday situations. Practical vocabulary in reading, speaking, and writing is stressed. Oral reports and expository writing are aimed at increasing fluency through vocabulary expansion and selective grammar review. Attention is given to individual students' pronunciation, word choice, and syntax. May be repeated once for credit when topics vary.
- 3053 Advanced German Grammar and Stylistics**
(3-0) 3 hours credit. Prerequisite: GER 3023 or consent of instructor.
A study of selected syntactic characteristics of the language, with special attention given to advanced grammatical categories and stylistic differentiation of literary and nonliterary language. Application of language skills in relevant situations is stressed. Readings deal with contemporary social, economic, political, intellectual, and/or artistic interests and issues. May be repeated once for credit when topics vary.
- 3333 German Literature in English Translation**
(3-0) 3 hours credit.
Major works of German literature across time, genres, and movements. May not be applied to a major in German.
- 3353 Critical Perspectives on Contemporary German Culture**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor.
Systematic development of speaking and writing skills through understanding and analyzing forms of culture production in contemporary German-speaking societies (e.g., German TV, working with German online resources).
- 3413 German Literature and Culture I: Middle Ages to 1700**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor.
Selected works from the medieval period to 1700 are studied as examples of central movements in German culture and literary history. The course presents the shape of German civilization, emphasizing the major literary periods, styles, movements, and generations.
- 3423 German Literature and Culture II: 1700 to the Present**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor.
Selected works from 1700 to the present are studied as examples of central movements in German culture and literary history. The course presents the shape of German civilization, emphasizing the major literary periods, styles, movements, and generations.

- 3513 Business German**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor. Introduction to the basic context of the German economy and business world, with emphasis on development of practical language skills to deal with matters such as commercial correspondence, documents, reports, telecommunications, and conferences. Attention to vocabulary and style specific to German business. Practice in translation on business-related topics.
- 4003 Topics in Periods of German Literature**
(3-0) 3 hours credit. Prerequisite: GER 3413, 3423, or consent of instructor. Focus on a specific period of German literature, from the medieval period through the twentieth century. Selected texts are studied as examples of representative movements in German literary history. May be repeated for credit when topics vary.
- 4013 Genre Studies**
(3-0) 3 hours credit. Prerequisite: GER 3413, 3423, or consent of instructor. Study of a single genre or subgenre in German, such as lyric, drama, novel, and film. May be repeated for credit when topics vary.
- 4133 Major German Authors**
(3-0) 3 hours credit. Prerequisite: GER 3413, 3423, or consent of instructor. Study of one or several German literary or intellectual figures, such as Luther, Goethe, Nietzsche, or Brecht. May be repeated for credit when topics vary.
- 4213 German Studies: Culture**
(3-0) 3 hours credit. Prerequisite: GER 3413, 3423, or consent of instructor. Focuses on selected topics of cultural history, such as Vienna 1890–1914, Expressionism, or contemporary cultural/political developments. May be repeated when topics vary.
- 4333 Studies in German Linguistics**
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor. Focuses on a selected topic of linguistics. May be repeated for credit when topics vary.
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. No more than 6 hours of GER 4913 and/or GER 4993 may be applied to the major in German.

4933 Internship in German

3 hours credit. Prerequisite: Permission of Division Director.
Supervised experience in a setting that provides the opportunity to integrate theory and practice in language usage. May be repeated once for credit.

4953 Special Studies in German

(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisite: Consent of the Undergraduate Advisor of Record.
Supervised research and preparation of an honors thesis. May be repeated once for credit, with approval. No more than 6 semester credit hours of GER 4993 and/or GER 4913 may be applied to the major in German.

Bachelor of Arts Degree in Spanish

The minimum number of semester credit hours required for this degree, including the hours in the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

Prerequisites for most upper-division Spanish courses may include SPN 2103, the appropriate proficiency or placement test score, or consent of instructor.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.*

All candidates for the degree must complete the following:

- A. 36 semester credit hours in the major, all of which must be at the upper-division level, as follows:
 - 1. 9 semester credit hours of required language courses (recommended for early completion):
 - SPN 3033 Oral Communication Skills
 - or
 - SPN 4033 Advanced Oral Communication Skills
(with placement score of 2+ or above)
 - SPN 3043 Advanced Reading
 - SPN 3063 Grammar and Composition

*Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

2. 3 semester credit hours selected from the following:

SPN	3013	Spanish Phonetics and Pronunciation
SPN	3113	Linguistic Structures of Spanish

3. 9 semester credit hours selected from the following:

SPN	3413	The Literature of Spain from the Middle Ages to 1700
SPN	3423	The Literature of Spain from 1700 to the present
SPN	3463	Latin American Literature to Modernism
SPN	3473	Latin American Literature since Modernism

4. 6 semester credit hours as follows:

SPN	3613	Spanish Culture and Civilization
SPN	3623	Latin American Culture and Civilization

5. 9 semester hours of Spanish electives, 3 of which must be at the 4000 level

B. 9 additional semester credit hours of coursework not taught in Spanish, in a single area or a combination, selected from the following in consultation with the undergraduate advisor: literature, culture, linguistics, foreign language (translation, cross-cultural communication, dramatic performance, study abroad, etc.), or another foreign language

C. 30 semester credit hours of electives

Minor in Spanish

All students pursuing the Minor in Spanish must complete 18 semester credit hours.

A. 12 semester credit hours of required language skill courses:

SPN	2023	Intermediate Spanish II
		or
SPN	2006	Intermediate Spanish–Accelerated
SPN	2103	Intermediate Conversation and Composition
SPN	3033	Oral Communication Skills
		or
SPN	4033	Advanced Oral Communication Skills (with placement score of 2+ or above)
SPN	3063	Grammar and Composition

B. 6 semester credit hours in other upper-division Spanish chosen in consultation with the advisor

COURSE DESCRIPTIONS

SPANISH

(SPN)

- 1008 Elementary Spanish--Accelerated**
(6-4) 8 hours credit.
A one-semester course offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Introduction to Hispanic culture. (Credit for SPN 1008 is equivalent to credit for both SPN 1014 and SPN 1024.)
- 1014 Elementary Spanish I**
(3-2) 4 hours credit.
Fundamentals of Spanish, offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Introduction to Hispanic culture. [TCCN: SPAN 1411.]
- 1024 Elementary Spanish II**
(3-2) 4 hours credit. Prerequisite: SPN 1014, an equivalent, or an appropriate placement test score.
Fundamentals of Spanish offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Further study of Hispanic culture. [TCCN: SPAN 1412.]
- 2006 Intermediate Spanish--Accelerated**
(6-4) 6 hours credit. Prerequisite: SPN 1008, 1024, an equivalent, or an appropriate placement test score.
A one-semester course offering continued opportunity to develop listening, speaking, reading, and writing skills. Includes grammar and further study of Hispanic culture. (Credit for SPN 2006 is equivalent to credit for both SPN 2013 and SPN 2023.)
- 2013 Intermediate Spanish I**
(3-2) 3 hours credit. Prerequisite: SPN 1008, 1024, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, speaking, reading, and writing skills. Grammar and further study of Hispanic culture. [TCCN: SPAN 2311.]
- 2023 Intermediate Spanish II**
(3-2) 3 hours credit. Prerequisite: SPN 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, speaking, reading, and writing skills. Grammar review and further study of Hispanic culture. [TCCN: SPAN 2312.]

- 2103 Oral and Written Expression**
(3-2) 3 hours credit. Prerequisite: SPN 2023, an equivalent, or an appropriate placement test score.
Conversation, reading, and grammar review toward building literacy skills. Opportunities for composition and oral communication for a variety of situations and topics.
- 2513 Spanish for Special Purposes**
(3-2) 3 hours credit. Prerequisite: SPN 2013, an equivalent, or an appropriate placement test score.
Foreign language communication and cross-cultural skills relevant to one or more of the following areas: business, health care, law, education, science, or technology. May be repeated for credit when topics vary.
- 2523 Hispanic Culture and Communication**
(3-2) 3 hours credit. Prerequisite: SPN 2013, an equivalent, or an appropriate placement test score.
A brief review of history, geography, worldview, and customs common in Latin America and Spain, with particular emphasis on Mexico and U.S. Hispanic culture. Use of some target culture source materials. Continued opportunity to develop oral and written communication in Spanish and to understand mainstream U.S.–Hispanic cross-cultural communication.
- 3013 Spanish Phonetics and Pronunciation**
(3-1) 3 hours credit. Prerequisite: SPN 2103 or consent of instructor.
Offers the opportunity for study of the sound system of Latin American Spanish. Activities may include pronunciation exercises, exercises in sound discrimination and transcription, and articulatory description of various dialects of Spanish.
- 3033 Oral Communication Skills**
(3-0) 3 hours credit. Prerequisite: SPN 2103 or a 2 on the Oral Proficiency Interview Test.
Offers the opportunity for further development of speaking skills through oral activities directed at the Advanced and Superior Level on the ACTFL-ETS proficiency scale. May be repeated once for credit if exit proficiency score is less than 2+.
- 3043 Advanced Reading**
(3-0) 3 hours credit. Prerequisite: SPN 2103 or a 2 on the Oral Proficiency Interview Test.
Extensive reading practice, comprehension strategies, and vocabulary building with material from a variety of disciplines and different types of texts.
- 3063 Grammar and Composition**
(3-0) 3 hours credit. Prerequisite: SPN 2103 or consent of instructor.
Offers the opportunity for extensive grammar review. Further development of writing skills through activities directed at the Advanced and Superior Levels on the ACTFL-ETS proficiency scale. Consideration of usage and differences between written and spoken language.

- 3113 Linguistic Structures of Spanish**
(3-0) 3 hours credit. Prerequisite: SPN 3063 or consent of instructor.
Offers the opportunity for application to Spanish of the basic principles of analysis and description of language structure. Attention given to structural regularities at the levels of word formation, syntax, and semantics.
- 3153 Spanish for the Business/Management Fields**
(3-0) 3 hours credit. Prerequisite: SPN 2103 or consent of instructor.
Foreign language skills relevant to careers in business fields. Emphasis on reading skills and simple conversations on business topics. Exposure to terminology from contracts, financial statements, business law, marketing, and banking. Intended for students with some background in Spanish. May be repeated once for credit when topics vary.
- 3333 Hispanic Literature in English Translation**
(3-0) 3 hours credit.
Major works in Hispanic literatures: themes, genres, and movements. May not be applied to a major in Spanish.
- 3343 Hispanic Women's Literature**
(3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
Readings in Spanish from women writers. Provides the opportunity to explore women's literature from various national perspectives.
- 3413 The Literature of Spain from the Middle Ages to 1700**
(3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
Spanish literature from the Middle Ages to 1700. Readings of selections and complete works. Practice in critical analysis through papers and examinations. (Credit cannot be earned for both SPN 3413 and SPN 3313.)
- 3423 The Literature of Spain from 1700 to the Present**
(3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
Spanish literature from 1700 to the present. Readings of selections and complete works. Practice in critical analysis through papers and examinations. (Credit cannot be earned for both SPN 3423 and SPN 3313.)
- 3463 Latin American Literature to Modernism**
(3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
Latin American literature from pre-Columbian times to Modernism. Practice in critical analysis through papers and examinations. (Credit cannot be earned for both SPN 3463 and SPN 3323.)
- 3473 Latin American Literature since Modernism**
(3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
Latin American literature from Modernism to the present. Practice in critical analysis through papers and examinations. (Credit cannot be earned for both SPN 3473 and SPN 3323.)

- 3493 Mexican American Literature**
(3-0) 3 hours credit. Prerequisite: SPN 2103 or consent of instructor.
Readings and discussion of works by Mexican American writers. The expression through poetry, the novel, the short story, and the theater of the Mexican American cultural experience as well as universal themes and literary concerns. Selections from popular literature, including the oral tradition. May be repeated for credit when topics vary.
- 3613 Spanish Culture and Civilization**
(3-0) 3 hours credit. Prerequisite: SPN 3043.
Emergence of the Spanish peoples from pre-Roman times to the present: history, cultural expression, myths, values, and worldview.
- 3623 Latin American Culture and Civilization**
(3-0) 3 hours credit. Prerequisite: SPN 3043.
The cultural life of the respective geographic regions and social strata of Latin America from before the Conquest to the present, as reflected in and interpreted by its literature and arts.
- 3653 Contemporary Spain**
(3-0) 3 hours credit. Prerequisite: SPN 3043.
Problems and conflicts determining the cultural development of contemporary Spain. Social, political, economic, and cultural characteristics as seen through intellectual currents, and the role of intellectual leaders in forming Spain's cultural expression.
- 3663 Contemporary Latin America**
(3-0) 3 hours credit. Prerequisite: SPN 3043.
Problems and conflicts determining the cultural development of contemporary Latin America. Ethnic, social, political, economic, and cultural characteristics. Intellectual currents and the role of intellectual leaders in forming the cultural expression of Latin America.
- 3673 Hispanic Cultural Systems**
(3-0) 3 hours credit. Prerequisite: SPN 3043.
Aspects of everyday culture that affect interaction with native speakers of Spanish in the Hispanic world. Topics may include social norms, customs, language styles, or religion.
- 4033 Advanced Oral Communication Skills**
(3-0) 3 hours credit. Prerequisite: SPN 3033 or a 2+ on the Oral Proficiency Interview Test.
Theory and practice of oral communication in formal settings. Focus on preparation, adaptation, and delivery. Emphasis on persuasive, dramaturgical, aesthetic, and forensic contexts. Applications of information theory and interpretive and motivational effects of language.

- 4103 Composition Workshop**
(3-0) 3 hours credit. Prerequisite: SPN 3063 or consent of instructor. Principles and methods of clear, effective writing. Extensive practice in writing and rewriting, with particular attention to stylistics. Diagnostic grammar as needed, tailored to the individual or small group. May be repeated once for credit.
- 4113 Topics in Spanish Linguistics**
(3-0) 3 hours credit. Prerequisite: SPN 3113 or consent of instructor. Advanced study and applications of topics in Spanish linguistics. May include one or more of the following: phonology, morphology, syntax, semantics, dialectology, language variability, and history of Spanish.
- 4123 The Spanish of the Mexican American**
(3-0) 3 hours credit. Prerequisite: SPN 3013, 3113, or consent of instructor. The analysis of the Spanish language as used by Mexican Americans in the southwestern United States, from a linguistic and sociolinguistic perspective. Particular attention given to the Spanish spoken in Texas.
- 4213 Classic Spanish Literature**
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor. An intensive study of the literature of Spain, from either the Medieval or Golden Age period. May be repeated for credit when topics vary.
- 4223 Twentieth-Century Spanish Literature**
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor. Spanish literature from the Generation of 1898 to the present. May be repeated for credit when topics vary.
- 4233 Nineteenth-Century Latin American Literature**
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor. An intensive study of Latin American literature from its eighteenth-century ideological and vital roots through the Modernist movement. May be repeated for credit when topics vary.
- 4243 Twentieth-Century Latin American Literature**
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor. An intensive study of Latin American prose, poetry, and/or drama from Modernism to the present. May be repeated for credit when topics vary.
- 4323 Cervantes' *Don Quijote***
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor. A reading of *Don Quijote*; analysis of the novel's structure and themes with special consideration of its stylistic patterns, ideological framework, and symbolic meanings.

- 4483 National Literatures of Latin America**
 (3-0) 3 hours credit. Prerequisite: An upper-division course in literature taught in Spanish or consent of instructor.
 Representative works from the national literatures of Latin America. May be repeated for credit when topics vary.
- 4513 Hispanic Film**
 (3-0) 3 hours credit. Prerequisite: SPN 3043 or consent of instructor.
 Focus on representative Spanish, Latin American and/or U.S. Hispanic films and directors. Film as art and cultural expression. May be repeated for credit when topics vary.
- 4913 Independent Study**
 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. No more than 6 hours of SPN 4913 and/or SPN 4993 may be applied to the major in Spanish.
- 4933 Internship in Spanish**
 3 hours credit. Prerequisite: Permission of Division Director.
 Supervised experience in a setting that provides the opportunity to integrate theory and practice in language usage. May be repeated once for credit.
- 4953 Special Studies in Spanish**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Research**
 3 hours credit. Prerequisite: Consent of the Undergraduate Advisor of Record.
 Supervised research and preparation of an honors thesis. May be repeated once for credit with approval. No more than 6 semester credit hours of SPN 4993 and/or SPN 4913 may be applied to the major in Spanish.

Minor in Comparative Literature

The Minor in Comparative Literature offers an opportunity to study texts in a manner that transcends national and linguistic boundaries. Comparative literature enables students, through their majors, to develop a solid grounding in one particular tradition (e.g., English, Spanish, French) or one discipline (e.g., history, music) while also embracing a broader perspective. A student minoring in comparative literature may wish to pursue graduate work in comparative literature or in a specific national literary

tradition or to pursue a career in translation, teaching, publishing, or writing. A Minor in Comparative Literature discourages parochialism and fosters the sophistication that a liberal arts degree is designed to recognize.

All students pursuing the Minor in Comparative Literature must complete 18 semester credit hours.

- A. 12 semester credit hours of upper-division literature courses, selected from at least two of the following disciplines: classics, English, French, German, Italian, Russian, or Spanish
- B. 6 semester credit hours of upper-division courses in comparative studies in the humanities:

CSH 3013 Theory and Practice of Comparative Literature
3 semester credit hours of an additional upper-division CSH literature course

COURSE DESCRIPTIONS COMPARATIVE STUDIES IN THE HUMANITIES (CSH)

- 1103 Literary Masterpieces of Western Culture I**
(3-0) 3 hours credit.
Representative masterworks of Western literature in translation. An examination of major texts from antiquity to the Renaissance that have shaped and expressed Western cultural traditions. Situation of literary works in the context of the development of civilization.
- 1113 Literary Masterpieces of Western Culture II**
(3-0) 3 hours credit.
Representative masterworks of Western literature in translation. An examination of major texts from the Renaissance to the present that have shaped and expressed Western cultural traditions. Situation of literary works in the context of the development of civilization.
- 1203 Introduction to Hispanic Cultures**
(3-0) 3 hours credit.
An overview of the cultures of Spain, Spanish America, and Hispanic groups in the United States as revealed through their literatures and other forms of expression. Exploration of the unifying and diversifying elements in Hispanic civilization from its beginnings. All readings from English language or translated materials. May not be used as support work for the Spanish major. [TCCN: SPAN 2324.]
- 1213 Topics in World Cultures**
(3-0) 3 hours credit.
Introductory overview of a specific culture or cultural area as revealed through the diversity of its heritage. Includes topics such as Hispanic, Francophone, German, Slavic, Judaic, Latin, Oriental, or African culture.

All readings are from English language or translated materials. May be repeated for credit when topics vary, but not more than 6 semester credit hours will apply to a bachelor's degree.

- 2113 The Foreign Film**
(3-0) 3 hours credit.
An introduction to film as art and cultural expression. Emphasis on cinematic techniques, national traditions, genres, and the distinctive features of film as a humanistic medium. Films drawn from Latin America, Asia, Africa, and/or Europe. May be repeated for credit when topics vary.
- 2313 Introduction to Literary Studies**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Offers the opportunity to develop an awareness of literature and the skills with which to approach and understand it. Examination of individual national traditions and the interrelationship of all literary traditions. Emphasis on the nature of genre, period, and style. (Formerly CSH 3313. Credit cannot be earned for both CSH 2313 and CSH 3313).
- 3013 Theory and Practice of Comparative Literature**
(3-0) 3 hours credit.
Introduction to history and nature of the discipline. Issues of translation and transmission, periods and movements, genres and forms, motifs and types, and literature and the other arts.
- 3113 Literary Genre, Period, Movement, or Motif**
(3-0) 3 hours credit.
Study from an international perspective of one or more of the following: a particular genre, such as the novel, sonnet, or tragedy; a period, such as Renaissance, Enlightenment, or Modern; a movement, such as Romanticism, Surrealism, or Existentialism; or a motif, such as Don Juan, Faust, or the quest. May be repeated for credit when topics vary.
- 3213 Comparison of Authors**
(3-0) 3 hours credit.
Intensive study of two or more authors from different literary traditions, such as Shakespeare, Calderón, and Molière; Kafka, Borges, and Calvino; or Keats and Heine. May be repeated for credit when topics vary.
- 3313 Literature and the Other Arts**
(3-0) 3 hours credit.
Analogies and distinctions between literature and another art or arts, including music, painting, photography, sculpture, and film. Case studies in comparison and transposition. May be repeated for credit when topics vary.
- 3713 Topics in Twentieth-Century Comparative Studies**
(3-0) 3 hours credit.
Topics chosen from among authors, genres, themes, and movements of the twentieth century and studied from a perspective transcending national and linguistic boundaries.

Minor in Foreign Languages

The Minor in Foreign Languages offers an opportunity to increase proficiency in reading, writing, speaking, and listening skills in a foreign language. The minor will lead to the acquisition of metalinguistic skills and an enhanced understanding of the target culture and its orientation to world communication.

All students pursuing the Minor in Foreign Languages must complete 18 semester credit hours.

A. 6 semester credit hours of language skill courses:

FL	2023	Culture and Communication in a Foreign Language or
SPN	2523	Hispanic Culture and Communication

3 additional semester credit hours in the same language at the 2013 level or above

B. 12 additional semester credit hours of foreign languages courses selected from the following:

FL	3003	Introduction to Translation
FL	3013	Translation for the Language Specialist
FL	3053	Dramatic Performance
FL	4013	Cross-Cultural Communications and Foreign Languages
FL	4243	Foreign Language Instruction
LNG	3813	Introduction to Linguistics
LNG	3833	Sociology of Language

COURSE DESCRIPTIONS FOREIGN LANGUAGES (FL)

1034 **Beginning Language Study Abroad**

(3-2) 4 hours credit. Prerequisite: Consent of instructor.

Opportunity to begin developing oral and written communication skills in the target language, along with enhanced comprehension skills in listening and reading. Linguistic and cultural immersion. May be repeated up to 8 semester credit hours in each language. Offered in Spanish, German, French, Chinese, Hebrew, Italian, Japanese, and Russian.

1043 **Individualized Instruction in Basic Language**

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Opportunity to develop basic oral and written communication skills in the target language, along with enhanced comprehension skills in listening and reading. Generally restricted to special projects or languages not regularly offered as organized classes. May be repeated up to 6 semester credit hours in each language.

- 2023 Culture and Communication in a Foreign Language**
 (3-2) 3 hours credit. Prerequisite: 2013 (in a foreign language such as French or Spanish), or an equivalent in the target language, or an appropriate placement test score.
 A brief overview of history, geography, worldview, and customs common in the target culture. Use of some target culture materials. Continued opportunity to develop oral and written communication skills in the language and to understand U.S. target group cross-cultural communication. May be repeated for credit when language varies. May be offered in Chinese, Italian, or Japanese.
- 2033 Intermediate Language Study Abroad**
 (3-2) 3 hours credit. Prerequisites: Consent of instructor and 1008, 1024 (in a foreign language such as French or Spanish), or an equivalent in the selected foreign language.
 Opportunity to develop intermediate-level oral and written communication skills in the target language, along with increased comprehension skills in listening and reading. Linguistic and cultural immersion. May be repeated up to 6 semester credit hours in each language. Offered in Spanish, German, French, Chinese, Hebrew, Italian, Japanese, and Russian.
- 2043 Individualized Instruction in Intermediate-Level Language**
 (3-0) 3 hours credit. Prerequisites: Consent of instructor and 1008, 1024 (in a foreign language such as French or Spanish), or an equivalent in the selected foreign language.
 Opportunity to develop intermediate-level oral and written communication skills in the target language, along with increased comprehension skills in listening and reading. Generally restricted to special projects or languages not regularly offered as organized classes. May be repeated up to 6 semester credit hours in each language.
- 3003 Introduction to Translation**
 (3-0) 3 hours credit. Prerequisites: At least four courses of any single foreign language.
 Principles of translation with practice in translating brief documents of a general nature. May be repeated for credit when language varies. (Formerly FL 2013. Credit cannot be earned for both FL 3003 and FL 2013.)
- 3013 Translation for the Language Specialist**
 (3-0) 3 hours credit. Prerequisite: At least one course at the 3000 level in the selected foreign language.
 The language-related and cultural issues involved in translation and interpretation. Practice in translating documents from selected professional areas: business, health care, law, technology, or the arts. May be repeated for credit when topics/languages vary.
- 3033 Advanced Language Study Abroad**
 (3-0) 3 hours credit. Prerequisites: Consent of instructor and 2006, 2023 (in a foreign language such as French or Spanish), or an equivalent in the selected foreign language.

Opportunity to develop advanced-level oral and written communication skills in the target language, along with enhanced comprehension skills in listening and reading. Linguistic and cultural immersion. May be repeated up to 6 semester credit hours in each language. Offered in Spanish, German, French, Italian, Japanese, and Russian.

3043 Individualized Instruction in Advanced-Level Language

(3-0) 3 hours credit. Prerequisites: Consent of instructor and 2006, 2023 (in a foreign language such as French or Spanish), or an equivalent in the selected foreign language.

Opportunity to develop advanced-level oral and written communication skills in the target language, along with enhanced comprehension skills in listening and reading. Generally restricted to special projects or languages not regularly offered as organized classes. May be repeated up to 6 semester credit hours in each language.

3053 Dramatic Performance

(3-0) 3 hours credit. Prerequisite: At least one upper-division course of any single foreign language or consent of instructor.

Students will study, prepare, and perform up to three works in the target language. Offered in Spanish, French, German, and Russian. May be repeated once for credit.

4013 Cross-Cultural Communication and Foreign Languages

(3-0) 3 hours credit.

Study of cross-cultural communication research in specific language communities and its application to effective interaction with speakers of a variety of foreign languages. Selected applications and comparisons according to sociolinguistic norms, semantic variation, and nonverbal language, relevant to the most numerous language communities in the United States and abroad. Material from psychology, sociology, communication, and other related fields.

4243 Foreign Language Instruction

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in foreign language.

A study of second-language-acquisition theories. Emphasis on instruction as it relates to foreign languages and cultures.

Minor in Linguistics

The Minor in Linguistics offers an enhanced awareness of the components, functions, and interfaces of human language. It prepares students for careers and advanced study for which such an awareness is essential through coursework aligned with a student's own professional goals and intellectual interests.

All students pursuing the Minor in Linguistics must complete 18 semester credit hours, at least 9 of which must be drawn from outside the major.

A. 3 semester credit hours selected from the following:

ENG	3343	Principles of English Linguistics
LNG	3813	Introduction to Linguistics
ESL	3003	Applications of Linguistics

- B. 3 semester credit hours taken in the linguistics of a particular language
- C. 6 semester credit hours selected from psycholinguistics, anthropological linguistics, sociolinguistics, or historical linguistics
- D. 6 additional semester credit hours chosen in consultation with an advisor in one or more of the following approved areas: anthropology, bicultural-bilingual studies, English, French, German, linguistics, and Spanish

COURSE DESCRIPTIONS LINGUISTICS (LNG)

- 3813 Introduction to Linguistics**
(3-0) 3 hours credit.
Basic principles of analysis and description of the structure of language, including sound system, word order, and meaning. Also, overview of selected subfields of linguistics, such as historical linguistics, sociolinguistics, language acquisition, and bilingualism.
- 3833 Sociology of Language**
(3-0) 3 hours credit.
The examination of the interrelationships among language, culture, and society. Topics many include language use in social context, language variation and change, maintenance and shift, and multilingual societies.
- 3843 Gender Issues in Language**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in 3000-level linguistics course.
The examination and analysis of issues related to gender and language, such as the historical basis for grammatical gender, gender-based sociolinguistic differences, and recent research in gender-based expectations for language use.
- 3913 Topics in Linguistics**
(3-0) 3 hours credit.
An opportunity to explore linguistic topics in depth, including sociolinguistics, psycholinguistics, neurolinguistics, pragmatics, syntax, semantics, phonology, or phonetics. May be repeated for credit when topics vary.

Minor in Russian

All students pursuing the Minor in Russian must complete 18 semester credit hours.

A. 6 semester credit hours of required language skill courses:

RUS	2013	Intermediate Russian I
RUS	2023	Intermediate Russian II

B. 12 additional semester credit hours of upper-division Russian courses, chosen in consultation with the advisor for the Minor in Russian

COURSE DESCRIPTIONS RUSSIAN (RUS)

- 1014 Elementary Russian I**
(3-2) 4 hours credit.
Fundamentals of Russian offering the opportunity to develop speaking, listening, reading, and writing skills. Introduction to Russian culture. [TCCN: RUSS 1411.]
- 1024 Elementary Russian II**
(3-2) 4 hours credit. Prerequisite: RUS 1014, an equivalent, or an appropriate placement test score.
Fundamentals of Russian offering the opportunity to further develop speaking, listening, reading, and writing skills. Further exposure to Russian culture. [TCCN: RUSS 1412.]
- 2013 Intermediate Russian I**
(3-2) 3 hours credit. Prerequisite: RUS 1024, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, speaking, reading, and writing skills. Continued exposure to Russian culture. [TCCN: RUSS 2311.]
- 2023 Intermediate Russian II**
(3-2) 3 hours credit. Prerequisite: RUS 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, speaking, reading, and writing skills. Continued exposure to Russian culture. [TCCN: RUSS 2312.]
- 3033 Oral Communication Skills**
(3-0) 3 hours credit. Prerequisite: RUS 2013 or an equivalent.
Further development of speaking skills in a variety of contexts. May be repeated once for credit when topics vary.

- 3143 Structure of Russian Language**
(3-0) 3 hours credit. Prerequisite: RUS 2013 or an equivalent.
Extensive grammar review. Further development of speaking and writing skills through activities directed at the intermediate-high and advanced levels. Considerations of differences between written and spoken language. May be repeated once for credit when topics vary.
- 3333 Russian Literature in English Translation**
(3-0) 3 hours credit.
Major works of Russian literature across time, genres, and movements.
- 3633 Topics in Russian Culture**
(3-0) 3 hours credit. Prerequisite: RUS 2013 or an equivalent.
Further development of proficiency by content-based instruction. Topics may include geography, traditions, history, music, literature, art, or film. May be repeated once for credit when topics vary.

**COURSE DESCRIPTIONS
CHINESE
(CHN)**

- 1014 Elementary Chinese I**
(3-2) 4 hours credit.
Fundamentals of Chinese offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Introduction to Chinese culture. [TCCN: CHIN 1411.]
- 1024 Elementary Chinese II**
(3-2) 4 hours credit. Prerequisite: CHN 1014, an equivalent, or an appropriate placement test score.
Fundamentals of Chinese offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Further study of Chinese culture. [TCCN: CHIN 1412.]
- 2013 Intermediate Chinese I**
(3-2) 3 hours credit. Prerequisite: CHN 1024, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, reading, speaking, and writing skills. Continued exposure to the target culture. Grammar review. [TCCN: CHIN 2311.]
- 2023 Intermediate Chinese II**
(3-2) 3 hours credit. Prerequisite: CHN 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, reading, speaking, and writing skills. Continued exposure to the target culture. Grammar review. [TCCN: CHIN 2312.]

COURSE DESCRIPTIONS ITALIAN (ITL)

- 1014 Elementary Italian I**
(3-2) 4 hours credit.
Fundamentals of Italian offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Introduction to Italian culture. [TCCN: ITAL 1411.]
- 1024 Elementary Italian II**
(3-2) 4 hours credit. Prerequisite: ITL 1014, an equivalent, or an appropriate placement test score.
Fundamentals of Italian offering the opportunity to develop listening, speaking, reading, and writing skills. Emphasis on listening and speaking. Further study of Italian culture. [TCCN: ITAL 1412.]
- 2013 Intermediate Italian I**
(3-2) 3 hours credit. Prerequisite: ITL 1024, an equivalent, or an appropriate placement test score.
Continued practice in developing listening, speaking, reading, and writing skills. Grammar and further study of Italian culture. [TCCN: ITAL 2311.]
- 2023 Intermediate Italian II**
(3-2) 3 hours credit. Prerequisite: ITL 2013, an equivalent, or an appropriate placement test score.
Continued practice in developing listening, speaking, reading, and writing skills. Grammar review and further study of Italian culture. [TCCN: ITAL 2312.]
- 3333 Italian Literature in English Translation**
(3-0) 3 hours credit.
Major works of Italian literature across time, genres, and movements.

COURSE DESCRIPTIONS JAPANESE (JPN)

- 1014 Elementary Japanese I**
(3-2) 4 hours credit.
Fundamentals of Japanese offering the opportunity to develop speaking, listening, reading, and writing skills. Read and write hiragana. Emphasis on listening and speaking. Introduction to Japanese culture. [TCCN: JAPN 1411.]

- 1024 Elementary Japanese II**
(3-2) 4 hours credit. Prerequisite: JPN 1014, an equivalent, or an appropriate placement test score.
Fundamentals of Japanese offering the opportunity to develop speaking, listening, reading, and writing skills. Read and write katakana. Emphasis on listening and speaking. Further study of Japanese culture. [TCCN: JAPN 1412.]
- 2013 Intermediate Japanese I**
(3-2) 3 hours credit. Prerequisite: JPN 1024, an equivalent, or an appropriate placement test score.
Continued opportunity to develop listening, speaking, reading, and writing skills. Read and write beginning kanji. Grammar review. Further study of Japanese culture. [TCCN: JAPN 2311.]
- 2023 Intermediate Japanese II**
(3-2) 3 hours credit. Prerequisite: JPN 2013, an equivalent, or an appropriate placement test score.
Continued opportunity to develop skills in listening, reading, speaking, and writing. Read and write kanji. Study of Japanese culture. Grammar review. [TCCN: JAPN 2312.]

COURSE DESCRIPTIONS
LATIN
(LAT)

See LAT listings in the Division of English, Classics, Philosophy, and Communication.

DIVISION OF MUSIC

The Division of Music is authorized to award the Bachelor of Music degree. This degree is accredited by the National Association of Schools of Music. Students may select one of four emphases in the Bachelor of Music program: music performance, composition, music marketing, or music studies. Within the Music Studies Emphasis, students must select one of two concentrations: all-level instrumental or all-level choral. The division also offers a Minor in Music.

Students entering the Bachelor of Music program with a Music Studies Emphasis may be required to satisfy additional requirements as prescribed by the Texas Education Agency. Students are advised to consult the Undergraduate Certification Programs in Education brochure.

Diagnostic examinations in music theory and music history are given to music majors entering UTSA for the first time. These examinations are given at the beginning of each semester and used as an aid in counseling.

Auditions are required of all music majors for placement into ensembles and private instruction.

Bachelor of Music Degree

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 125 in the Music Performance Emphasis, 125 in the Composition Emphasis, 123 in the Music Marketing Emphasis, and 132 in the Music Studies Emphasis.*

Core Curriculum requirements: Students seeking the Bachelor of Music must fulfill Core Curriculum requirements by taking the following courses or their equivalents.

Rhetoric (6 semester credit hours)**

Domain I: Science, Technology, and Mathematics

Mathematics (3 semester credit hours)**

Science (6 semester credit hours)*

Computer Science/Logic (3 semester credit hours):

MUS 3313 Microcomputer Applications in Music

*Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

**Music students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

*Music studies students must complete ANT 2033.

Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)*
 Political Studies (6 semester credit hours)*
 Economics (3 semester credit hours)*
 Social and Behavioral Sciences (incorporated in Domain IV)

Domain III: Literature, the Arts, and Language

Language (semester credit hours vary)**
 Literature (incorporated in Domain IV)
 The Arts (incorporated in Domain IV)

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):
 MUS 3413 Foundations of Music

Diversity of Culture (6 semester credit hours):
 MUS 3213 Music in Civilization I
 MUS 3223 Music in Civilization II

Major requirements:

A. All candidates for the Bachelor of Music degree, regardless of emphasis, must complete the following 38 semester credit hours of required music courses:

MUS	1102	Aural Skills I
MUS	1112	Basic Skills of Music I
MUS	1122	Aural Skills II
MUS	1132	Basic Skills of Music II
MUS	1251	Basic Repertoire
MUS	2102	Aural Skills III
MUS	2112	Aural Skills IV
MUS	2152	Basic Skills of Music III
MUS	2162	Basic Skills of Music IV
MUS	2253	Introduction to Music Literature
MUS	2403	Conducting I
MUS	3113	Analysis of Tonal Music
MUS	3213	Music in Civilization I
MUS	3223	Music in Civilization II
MUS	3313	Microcomputer Applications in Music
MUS	3413	Foundations of Music

*Music students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

**Music majors must complete a language course at the third-semester college level or by achieving an equivalent score on an approved proficiency examination.

Special degree requirements. All students pursuing the Bachelor of Music degree are required

- a. to make one recital appearance during the last semester of required study on their principal instrument
- b. to perform in an assigned University ensemble each semester while enrolled in courses as a music major (each student must enroll in an ensemble a minimum of eight semesters, excepting a term of enrollment in student teaching; specific requirements for degree emphases are outlined in the Division of Music Student Handbook)
- c. to meet music performance proficiency standards established for principal instruments (students not meeting those standards must repeat music performance courses until the proficiency standards have been met)
- d. to fulfill the recital attendance requirement as defined in the Division of Music Student Handbook (performance majors are required to make a minimum of one recital appearance each semester on their principal instrument)

Listening examinations are required for students who specify classical guitar as their principal instrument and for students who specify composition as their degree emphasis. Details regarding listening examinations are available in the Division of Music Student Handbook.

In addition, candidates for the Bachelor of Music degree must complete the course requirements for the emphasis they declare.

Music Performance Emphasis

- A. 26 semester credit hours of music performance are required from the following courses, some of which may be repeated for credit. Students must satisfy either the Keyboard Principal Instrument requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument

1. Principal Instrument

MUS	1512	Music Performance—Private Instruction (one semester)
MUS	1542	Music Performance—Private Instruction I (one semester)
MUS	2542	Music Performance—Private Instruction II (two semesters)
MUS	3543	Music Performance—Private Instruction IV (two semesters)
MUS	4544	Music Performance—Private Instruction V (two semesters)

2. Secondary Instrument(s)

MUS	1552	Functional Piano for Keyboard Principals
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2 semester credit hours from the following:

MUS	1511	Music Performance—Secondary Instrument
MUS	1531	Class Voice
MUS	1542	Music Performance—Private Instruction I

Non-Keyboard Principal Instrument**1. Principal Instrument**

MUS	1512	Music Performance–Private Instruction (one semester)
MUS	1542	Music Performance–Private Instruction I (one semester)
MUS	2542	Music Performance–Private Instruction II (two semesters)
MUS	3543	Music Performance–Private Instruction IV (two semesters)
MUS	4544	Music Performance–Private Instruction V (two semesters)

2. Secondary Instrument(s)

MUS	1532	Functional Piano for Non-Keyboard Principals
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2 semester credit hours from the following:

MUS	1511	Music Performance–Secondary Instrument
MUS	1522	Class Piano
MUS	1531	Class Voice
MUS	1542	Music Performance–Private Instruction I

B. 6 semester credit hours of music theory selected from the following courses:

MUS	3133	Analysis of Twentieth-Century Music
MUS	3143	Orchestration
MUS	4113	Composition with Contrapuntal Techniques

Exception: a student whose principal instrument is an orchestral instrument is required to take MUS 3143 Orchestration.

C. 4 semester credit hours of music literature (MUS 3252)

Topics may include the following:

Advanced Studies in Music Literature and Analysis
 Vocal Literature (required of voice principals)
 Operatic Literature (required of voice principals)
 History and Literature of the Guitar (required of classical guitar principals)
 Literature of the Pianoforte (required of piano principals)
 Organ Literature (required of organ principals)
 Orchestral Literature or Wind Literature (required of instrumental principals)

D. Piano principals are required to complete 4 semester credit hours of accompanying. MUS 2501 Accompanying may be repeated for credit to fulfill this requirement.

E. All music performance majors are required to complete 2 semester credit hours of MUS 4532 Music Pedagogy.

F. Voice principals are required to complete 4 semester credit hours of diction. MUS 3511 Diction for Singers may be repeated for credit to fulfill this requirement.

G. Free electives are required depending upon principal instrument:

- 11 semester credit hours for piano principals
- 11 semester credit hours for voice principals
- 15 semester credit hours for other music performance principals

H. A qualifying recital approximately 30 minutes in length must be presented and approved by the appropriate qualifying recital committee before the student can be approved as a major in music performance at the upper-division level; a senior recital (MUS 4561) approximately one hour in length must be presented and approved by the appropriate recital committee.

Composition Emphasis

A. 16 semester credit hours of music performance courses are required from the following courses, some of which may be repeated for credit. Students must satisfy either the Keyboard Principal Instrument requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument

1. Principal Instrument

- MUS 1512 Music Performance—Private Instruction (one semester)
- MUS 1542 Music Performance—Private Instruction I (one semester)
- MUS 2542 Music Performance—Private Instruction II (two semesters)
- MUS 3532 Music Performance—Private Instruction III (two semesters)

2. Secondary Instrument(s)

- MUS 1552 Functional Piano for Keyboard Principals

2 semester credit hours from the following:

- MUS 1511 Music Performance—Secondary Instrument
- MUS 1531 Class Voice
- MUS 1542 Music Performance—Private Instruction I

Non-Keyboard Principal Instrument

1. Principal Instrument

- MUS 1512 Music Performance—Private Instruction (one semester)
- MUS 1542 Music Performance—Private Instruction I (one semester)
- MUS 2542 Music Performance—Private Instruction II (two semesters)
- MUS 3532 Music Performance—Private Instruction III (two semesters)

2. Secondary Instrument(s)

- MUS 1532 Functional Piano for Non-Keyboard Principals

2 semester credit hours from the following:

MUS	1511	Music Performance–Secondary Instrument
MUS	1522	Class Piano
MUS	1531	Class Voice
MUS	1542	Music Performance–Private Instruction I

B. 15 additional required semester credit hours of music theory and composition:

MUS	2142	Composition I
MUS	3133	Analysis of Twentieth-Century Music
MUS	3143	Orchestration
MUS	3162	Composition II
MUS	4113	Composition with Contrapuntal Techniques
MUS	4142	Composition III

C. 4 semester credit hours of MUS 3252 Advanced Studies in Music Literature and Analysis are required in the following topics:

Music since 1950
Advanced Analytical Techniques

D. 3 semester credit hours of MUS 3123 Introduction to Synthesizers and Music

E. 15 semester credit hours of electives

F. Students electing the Composition Emphasis must interview with the Composition Committee for approval to pursue the emphasis at the upper-division level; MUS 4561 Senior Recital is required of all students in the Composition Emphasis.

G. The student's senior recital (MUS 4561) shall include a selection of the student's compositions totaling a minimum of 30 minutes. The student will submit completed musical scores representing a majority of the proposed recital program to an examining committee the semester before that of the recital. The examining committee shall determine the acceptability of the recital program.

Music Marketing Emphasis

A. 16 semester credit hours of music performance courses are required from the following, some of which may be repeated for credit. Students must satisfy either the Keyboard Principal Instrument requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument

1. Principal Instrument

MUS	1512	Music Performance–Private Instruction (one semester)
MUS	1542	Music Performance–Private Instruction I (one semester)

- MUS 2542 Music Performance–Private Instruction II (two semesters)
- MUS 3532 Music Performance–Private Instruction III (two semesters)

2. Secondary Instrument(s)

- MUS 1552 Functional Piano for Keyboard Principals

2 semester credit hours from the following:

- MUS 1511 Music Performance–Secondary Instrument
- MUS 1531 Class Voice
- MUS 1542 Music Performance–Private Instruction I

Non-Keyboard Principal Instrument

1. Principal Instrument

- MUS 1512 Music Performance–Private Instruction (one semester)
- MUS 1542 Music Performance–Private Instruction I (one semester)
- MUS 2542 Music Performance–Private Instruction II (two semesters)
- MUS 3532 Music Performance–Private Instruction III (two semesters)

2. Secondary Instrument(s)

- MUS 1532 Functional Piano for Non-Keyboard Principals

2 semester credit hours from the following:

- MUS 1511 Music Performance–Secondary Instrument
- MUS 1522 Class Piano
- MUS 1531 Class Voice
- MUS 1542 Music Performance–Private Instruction I

B. 6 additional required semester credit hours:

- MUS 3613 Music in Contemporary Life
- MUS 4803 Seminar in Music Marketing

C. 24 semester credit hours of required support work:

- ACC 2003 Foundations of Accounting
- BLW 3013 Business Law
- ECO 2013 Introductory Macroeconomics
- MGT 3013 Introduction to Organization Theory, Behavior, and Management
- MKT 3013 Principles of Marketing
- MKT 3023 Marketing Analysis for Decision Making
- MKT 4893 Marketing Strategy
- MKT 4933 Internship in Marketing

- D. 6 additional semester credit hours of music or music marketing selected from the following:

MUS	3123	Introduction to Synthesizers and Music
MUS	3153	Introduction to Audio Technology
MUS	4953	Special Studies in Music (music marketing topic)
MKT	3043	Advertising
MKT	3113	Retailing

- E. Students electing the Music Marketing Emphasis must interview with the Music Marketing Committee for approval to pursue the emphasis at the upper-division level.

Music Studies Emphasis

- A. All candidates for the Bachelor of Music with a Music Studies Emphasis, regardless of concentration, must complete the following 12 semester credit hours of private instruction in a principal instrument:

MUS	1512	Music Performance–Private Instruction (one semester)
MUS	1542	Music Performance–Private Instruction I (one semester)
MUS	2542	Music Performance–Private Instruction II (two semesters)
MUS	3532	Music Performance–Private Instruction III (two semesters)

The principal instrument for those whose student teaching will be in band must be a woodwind, brass, or percussion instrument(s) (for instance, traditional percussion instruments as found in a band or orchestra—timpani, mallet instruments, multipercussion, but not drum set).

The principal instrument for those whose student teaching will be in string classes or orchestra must be violin, viola, cello, or double bass (not electric bass).

The principal instrument for those whose student teaching will be in choral-general music must be voice or piano.

- B. A qualifying 30-minute proficiency recital must be presented on the student's principal instrument and approved before the semester of student teaching (specific requirements are outlined in the Division of Music Student Handbook).
- C. Students electing the Music Studies Emphasis must interview with the Music Studies Committee for approval to continue as a music studies major at the upper-division level.
- D. Students enrolled in the Music Studies Emphasis must successfully complete competency tests related to certification as specified by the Texas Education Agency.

Details regarding the following track requirements are available in the Division of Music Student Handbook.

Track I: All-Level Instrumental Music (Grades K–12)**A. 18 semester credit hours in music:**

1. 14 semester credit hours of required music courses:

MUS	2413	Conducting II
MUS	3252 [†]	Advanced Studies in Music Literature and Analysis (wind literature topic)
MUS	3401	Brass Instruments
MUS	3431	Woodwind Instruments I
MUS	3441	Woodwind Instruments II
MUS	3471	String Instruments
MUS	3481	Percussion Instruments
MUS	4452 [†]	The Marching Band

2. 4 semester credit hours of additional music performance study:

MUS	1532	Functional Piano for Non-Keyboard Principals
MUS	4532 [†]	Music Pedagogy

B. 18 semester credit hours of professional education courses (including 6 hours of student teaching); for specific required courses, consult the Undergraduate Certification Program in Education brochure**C. 3 semester credit hours in a state-mandated reading course; for specific required courses, consult the coordinator of music studies****Track II: All-Level Choral Music (Grades K–12)****A. 18 semester credit hours in music:**

1. 14 semester credit hours of required music courses:

MUS	2413	Conducting II
MUS	3252 ^{**}	Advanced Studies in Music Literature and Analysis (choral literature topic)
MUS	3453	Music Studies I
MUS	3463	Music Studies II
MUS	3501	Diction Survey

2. 4 semester credit hours of additional music performance study:

MUS	1532	Functional Piano for Non-Keyboard Principals
		or
MUS	1552	Functional Piano for Keyboard Principals

[†]Must be repeated to include topics Wind Literature I and Wind Literature II.

[†]Students with a string instrument as their principal instrument should consult with the coordinator of music studies or the Undergraduate Advisor of Record to determine the approved substitutions for these courses.

^{**}Must be repeated to include topics Choral Literature I and Choral Literature II.

Voice Principals: MUS 4532 Music Pedagogy (vocal topic)

Keyboard Principles: two semesters of MUS 1511 Music Performance–Secondary Instrument (voice)

- B. 18 semester credit hours of professional education courses (including 6 hours of student teaching); for specific required courses, consult the Undergraduate Certification Program in Education brochure
- C. 3 semester credit hours in a state-mandated reading course; for specific required courses, consult the coordinator of music studies

Minor in Music

All students pursuing the Minor in Music must complete 21 semester credit hours.

- A. 8 semester credit hours of music theory courses:

MUS	1102	Aural Skills I
MUS	1112	Basic Skills of Music I
MUS	1122	Aural Skills II
MUS	1132	Basic Skills of Music II

- B. 3 semester credit hours of lower-division music studies selected from the following:

MUS	1522	Class Piano
MUS	1531	Class Voice
MUS	2253	Introduction to Music Literature
MUS	2403	Conducting I
MUS	2603	Class Guitar
MUS	2613	Intermediate Guitar
MUS	2663	History and Styles of Jazz
MUS	2673	History and Styles of Rock
MUS	2683	Masterpieces of Music

- C. 6 semester credit hours of upper-division music studies selected from the following:

MUS	3123	Introduction to Synthesizers and Music
MUS	3153	Introduction to Audio Technology
MUS	3313	Microcomputer Applications in Music
MUS	3453	Music Studies I
MUS	3463	Music Studies II
MUS	3613	Music in Contemporary Life

- D. Two semesters (a minimum of 2 semester credit hours) of Music Ensemble, as assigned
- E. 2 semester credit hours of MUS 2001 Concert Music

COURSE DESCRIPTIONS

MUSIC (MUS)

- 1102 Aural Skills I**
(2-1) 2 hours credit.
Offers the opportunity for training in sight singing, aural skills, and keyboard application. Should be taken concurrently with MUS 1112. [TCCN: MUSI 1216.]
- 1112 Basic Skills of Music I**
(2-0) 2 hours credit.
A survey of fundamentals and concepts of music. Emphasis on rudiments and melody, with an introduction to harmony. Materials from a variety of style periods are studied. Should be taken concurrently with MUS 1102. [TCCN: MUSI 1211.]
- 1122 Aural Skills II**
(2-1) 2 hours credit. Prerequisite: MUS 1102 or an equivalent.
Offers the opportunity to continue training in sight singing, aural skills, and keyboard, with emphasis on harmonic skills and twentieth-century materials. Should be taken concurrently with MUS 1132. [TCCN: MUSI 1217.]
- 1132 Basic Skills of Music II**
(2-0) 2 hours credit. Prerequisite: MUS 1112 or an equivalent.
Offers the opportunity for development of harmonic analytical and writing skills. Analytical techniques are applied to music from a variety of style periods. Should be taken concurrently with MUS 1122. [TCCN: MUSI 1212.]
- 1251 Basic Repertoire**
(1-0) 1 hour credit.
An introduction to listening and musical concepts, sampling the repertoires of the concert hall and opera theater. Audiovisual experience is the chief focus.
- 1511 Music Performance—Secondary Instrument**
1 hour credit.
Private instruction for students desiring to or required to study as a secondary instrument the following: bassoon, clarinet, contrabass, cornet, flute, classical guitar, euphonium, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit.
- 1512 Music Performance—Private Instruction**
2 hours credit. Prerequisites: Placement by examination and concurrent enrollment in an assigned University ensemble. Enrollment is limited to music majors.
Private instruction for all first-semester students, both freshmen and transfer students, desiring to or required to study the following instruments: bassoon, clarinet, contrabass, cornet, euphonium, flute, classical guitar, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba,

viola, violin, violoncello, or voice. Seminar attendance may be required. Students must earn a grade of either "A" or "B" to progress to a higher level of private instruction.

1522 Class Piano

(2-1) 2 hours credit.

For music students with little or no piano background. Basic musical and technical skills of hand position, tone production, memorization, sight-reading, and musical style are introduced through the study of technical exercises and solo literature. May be repeated for credit at a more advanced level.

1531 Class Voice

(1-0) 1 hour credit. Prerequisite: Placement examination.

For students with no previous vocal training. Offers the opportunity for development of fundamentals of voice technique through in-class performances of suitable songs. May be repeated for credit. [TCCN: MUSI 1183.]

1532 Functional Piano for Non-Keyboard Principals

(2-0) 2 hours credit. Prerequisite: Levels 1 and 2 of MUS 1522 Class Piano or consent of instructor.

For non-keyboard majors. Offers the opportunity to develop score reading, transposition, and multiple-part reading.

1542 Music Performance—Private Instruction I

2 hours credit. Prerequisites: Successful completion of MUS 1512 with a grade of "A" or "B" or placement by examination; concurrent enrollment in an assigned University ensemble. Limited to music majors.

Private instruction for students desiring to or required to study the following instruments: bassoon, clarinet, contrabass, cornet, euphonium, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit a maximum of three semesters.

1552 Functional Piano for Keyboard Principals

(2-0) 2 hours credit. Prerequisite: Music major with piano or organ as the principal instrument or consent of instructor.

Offers the opportunity for development of keyboard skills, harmonization, transposition, and improvisation of accompaniments to melodies, sight-reading, score reading, and multiple-part reading.

2001 Concert Music

(1-0) 1 hour credit. Prerequisite: Music major.

Required attendance at a selected number of approved music concerts and recitals as determined by the Division of Music. May be repeated for credit.

2102 Aural Skills III

(2-1) 2 hours credit. Prerequisite: MUS 1122 or an equivalent.

Sight singing, aural skills, and keyboard techniques applied to literature and theory drawn from MUS 2152 Basic Skills of Music III. Should be taken concurrently with MUS 2152. [TCCN: MUSI 2216.]

- 2112 Aural Skills IV**
(2-1) 2 hours credit. Prerequisites: MUS 2102 and 2152, or their equivalents. Application of skills to materials drawn from MUS 2162 Basic Skills of Music IV. Should be taken concurrently with MUS 2162. [TCCN: MUSI 2217.]
- 2132 Improvisation**
(2-0) 2 hours credit. Prerequisite: MUS 1132 or consent of instructor. Offers the opportunity for development of creative skills applied to melodic, rhythmic, and harmonic elaboration techniques adapted to the student's instrument. Stylistic elements vary according to the section offered: Jazz Improvisation or Improvisation in Traditional Styles. [TCCN: MUSI 1263.]
- 2142 Composition I**
2 hours credit. Prerequisites: MUS 1102, 1112, and consent of instructor. Private study of the fundamentals of composition through small forms. Seminar attendance is required. [TCCN: MUSI 1286.]
- 2152 Basic Skills of Music III**
(2-0) 2 hours credit. Prerequisite: MUS 1132 or an equivalent. A survey of the chromatic materials of music with emphasis on writing and analytical skills. Includes an introduction to Schenkerian concepts of structural analysis. Should be taken concurrently with MUS 2102 Aural Skills III. [TCCN: MUSI 2211.]
- 2162 Basic Skills of Music IV**
(2-0) 2 hours credit. Prerequisite: MUS 2152 or an equivalent. The continued study of chromatic materials of music and of Schenkerian concepts of analysis. Includes a survey of form as well as an introduction to analytical techniques for early twentieth-century music. Should be taken concurrently with MUS 2112 Aural Skills IV. [TCCN: MUSI 2212.]
- 2253 Introduction to Music Literature**
(3-0) 3 hours credit. Prerequisite: MUS 1132 or consent of instructor. A study of music literature and the concepts associated with the principal performance genres. Includes biography, style analysis, and social and aesthetic backgrounds.
- 2403 Conducting I**
(3-1) 3 hours credit. Prerequisite: MUS 1132 or an equivalent. Fundamentals of beat patterns, score mechanics and score reading, regular and irregular meters, gesture design, lefthand cuing, and rehearsal techniques.
- 2413 Conducting II**
(3-1) 3 hours credit. Prerequisite: MUS 2403 or an equivalent. Offers the opportunity for continued training in conducting, emphasizing score reading, rehearsal techniques, expressive conducting, score interpretation, and repertoire.

- 2501 Accompanying**
(0-2) 1 hour credit.
The study of the skills and aesthetic principles needed to accompany vocal and instrumental music. Practical experience may be accomplished through accompanying. May be repeated for credit.
- 2542 Music Performance—Private Instruction II**
2 hours credit. Prerequisites: MUS 1542 or placement by examination, and concurrent enrollment in an assigned University ensemble. Limited to music majors.
Private instruction for students desiring to or required to study the following instruments: bassoon, clarinet, contrabass, cornet, euphonium, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit a maximum of three semesters.
- 2603 Class Guitar**
(3-0) 3 hours credit.
An introductory course intended primarily for the nonmusic major. Emphasis will be on music in the first position (through the fourth fret) while students learn technical aspects as defined by the early nineteenth-century guitar masters.
- 2613 Intermediate Guitar**
(3-0) 3 hours credit. Prerequisite: MUS 2603 or an equivalent.
Designed primarily for the nonmusic major. Continued study of rudimentary classical guitar repertoire and basic elements of classic guitar technique.
- 2623 Basic Elements of Music for the Nonmusic Major**
(3-0) 3 hours credit.
A study of the basic elements of music through the notation of pitch, rhythm, and meter in traditional musics. Emphasis is placed on the historical development of music notation and music theoretical systems and their applications to both classical and popular musics. [TCCN: MUSI 1301.]
- 2643 Introduction to Opera and Oratorio**
(3-0) 3 hours credit.
A study of individual works representative of the dramatic musical traditions of the Western world. Background information on social setting and function, historical significance, aesthetics, and composers' biographies.
- 2663 History and Styles of Jazz**
(3-0) 3 hours credit.
A survey of the evolution of jazz styles, contributions of important performers, and musical techniques involved in the creation and performance of jazz music.

- 2673 History and Styles of Rock**
(3-0) 3 hours credit.
A survey of the evolution of rock styles, contributions of important performers, and musical techniques involved in the creation and performance of rock music.
- 2683 Masterpieces of Music**
(3-0) 3 hours credit.
A study of individual works selected from and representative of the musical traditions of the Western world. Background information on social setting and function, historical importance, aesthetics, and composers' biographies. (Formerly MUS 3643. Credit cannot be earned for both MUS 2683 and MUS 3643.) [TCCN: MUSI 1306.]
- 3113 Analysis of Tonal Music**
(3-0) 3 hours credit. Prerequisites: MUS 2112, 2162, and 2253, their equivalents, or consent of instructor.
Analysis of forms and structures from the common practice era of tonal music. Beginning with a study of such smaller structural units as periods, binaries, and ternaries, major emphasis is placed on such larger forms and genres as fugue and other contrapuntal types, sonata, and rondo.
- 3123 Introduction to Synthesizers and Music**
3 hours credit. Prerequisite: Consent of instructor.
Private study of the conceptual and practical techniques utilized in digital and analog synthesis, sequencing, audio recording, MIDI, sampling, and such sound-processing techniques as delay, reverb, and equalization. Includes a survey of the history and literature of electronic music.
- 3133 Analysis of Twentieth-Century Music**
(3-0) 3 hours credit. Prerequisite: MUS 3113.
Analysis of forms and structures drawn from the literature and repertoire of the twentieth century. Beginning with a review of late tonal practices, such styles and techniques as Impressionism, atonality, serialism, and pre- and postserial tonality are studied in depth.
- 3143 Orchestration**
(3-0) 3 hours credit. Prerequisites: MUS 2112, 2162, 2253, and 3313.
Applied instrumentation emphasizing idiomatic scoring for various orchestral and wind combinations with an approach to writing for full orchestra and symphonic band.
- 3153 Introduction to Audio Technology**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Fundamentals of recording, playback, and sound reinforcement equipment operation. Topics will include magnetic tape-recording principles, microphone selection and placement, and sound and recording engineering in live and studio applications.

- 3162 Composition II**
2 hours credit. Prerequisites: MUS 2112, 2142, 2162, 2253, and consent of instructor.
Private study in applied composition, with emphasis on expansion of musical materials to larger forms. Seminar attendance is required. May be repeated for credit.
- 3172 Composition in Electronic Media**
2 hours credit. Prerequisite: MUS 3123.
Private study in composition, with an emphasis on such electroacoustic music techniques as digital sound synthesis, tape recorder manipulations, mixing, and sampling. Seminar attendance is required. May be repeated for credit.
- 3213 Music in Civilization I**
(3-0) 3 hours credit. Prerequisites: MUS 2162 and 2253, their equivalents, or consent of instructor.
A study of the development of musical styles and literatures from antiquity to 1750, with emphasis on the parallels and influences of art, architecture, literature, and theater on musical art. In addition, the adaptation and influences of non-Western traditions and styles on Western art music will be considered.
- 3223 Music in Civilization II**
(3-0) 3 hours credit. Prerequisites: MUS 2162 and 2253, their equivalents, or consent of instructor.
A study of the development of musical styles and literatures from the Enlightenment to the present, with emphasis on the parallels and influences of art, architecture, literature, and theater on musical art. In addition, the adaptation and influences of non-Western traditions and styles on Western art music will be considered.
- 3252 Advanced Studies in Music Literature and Analysis**
(2-1) 2 hours credit. Prerequisites: Upper-division standing and consent of instructor.
A study of music literature and analysis at an advanced level in such areas as Chamber Music; Wind Literature I; Wind Literature II; Vocal Literature, Orchestral Literature; History and Literature of the Guitar; Choral Literature I; Choral Literature II; Literature of the Pianoforte; Organ Literature; The Operatic Tradition; Advanced Analytical Techniques; Music since 1950; and The Instrumental Concerto. May be repeated for credit.
- 3313 Microcomputer Applications in Music**
(3-1) 3 hours credit. Prerequisite: Consent of instructor.
Survey of concepts and development of skills related to current computer technology in music. Topics include MIDI, sequencers, tonal synthesis, note editors, productivity tools, and recent trends in the field.

- 3401 Brass Instruments**
(1-1) 1 hour credit. Prerequisite: MUS 1132 or an equivalent.
A study of playing techniques, selection of materials, and maintenance of brass instruments.
- 3413 Foundations of Music**
(3-1) 3 hours credit. Prerequisites: MUS 2162 and 2253 or their equivalents, and upper-division standing in music.
An approach to the foundations of music from different disciplinary perspectives. Focuses on music in contemporary society; current research from anthropology, biology, psychology, sociology, philosophy and aesthetics, economics, and ethics will be presented.
- 3431 Woodwind Instruments I**
(1-1) 1 hour credit. Prerequisite: MUS 1132 or an equivalent.
A study of the playing techniques, selection of materials, and maintenance of flutes and clarinets. (Formerly MUS 3451. Credit cannot be earned for both MUS 3451 and MUS 3431.)
- 3441 Woodwind Instruments II**
(1-1) 1 hour credit. Prerequisite: MUS 1132 or an equivalent.
A study of the playing techniques, selection of materials, and maintenance of saxophones, oboes, and bassoons. (Formerly MUS 3451. Credit cannot be earned for both MUS 3451 and MUS 3441.)
- 3453 Music Studies I**
(3-1) 3 hours credit. Prerequisite: Upper-division standing in music or consent of instructor.
A study of the essential elements of music as they relate to children. (Formerly MUS 4423. Credit cannot be earned for both MUS 3453 and MUS 4423.)
- 3463 Music Studies II**
(3-1) 3 hours credit. Prerequisite: Upper-division standing in music.
A study of the essential elements of music as they relate to teenagers.
- 3471 String Instruments**
(1-1) 1 hour credit. Prerequisite: MUS 1132 or an equivalent.
A study of playing techniques, selection of materials, and maintenance of string instruments.
- 3481 Percussion Instruments**
(1-1) 1 hour credit. Prerequisite: MUS 1132 or an equivalent.
A study of playing techniques, selection of materials, and maintenance of percussion instruments.
- 3501 Diction Survey**
(1-1) 1 hour credit.
A survey of English and foreign language pronunciation as applied to performance.

- 3511 Diction for Singers**
 (1-1) 1 hour credit.
 An intensive study of language pronunciation as applied to performance. Topics include English, French, Italian, and German. May be repeated for credit.
- 3532 Music Performance–Private Instruction III**
 2 hours credit. Prerequisites: MUS 2542 or placement by examination, and concurrent enrollment in an assigned University ensemble. Limited to music majors.
 Private instruction for students desiring to or required to study the following instruments: bassoon, clarinet, contrabass, cornet, flute, classical guitar, euphonium, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit a maximum of three semesters.
- 3543 Music Performance–Private Instruction IV**
 3 hours credit. Prerequisites: Consent of instructor and concurrent enrollment in an assigned University ensemble. Limited to students accepted to upper-division standing in the performance emphasis of the Bachelor of Music degree program.
 Private instruction at an advanced level in bassoon, clarinet, conducting, contrabass, cornet, euphonium, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit a maximum of three semesters.
- 3613 Music in Contemporary Life**
 (3-0) 3 hours credit.
 Designed to increase students' awareness of the varied functions of music in society. Topics include film and television music, environmental music, the recording industry, the publishing industry, music in the schools, ceremonial music, and concert life.
- 3701 Madrigal Singers**
 (0-3) 1 hour credit. Prerequisite: Consent of instructor by audition.
 An ensemble specializing in the performance of outstanding chamber choral music from the Middle Ages to the present. Previous musical experience and reading ability required. The ensemble performs on and off campus. May be repeated for credit.
- 3712 Concert Choir**
 (0-5) 2 hours credit. Prerequisite: Consent of instructor by audition.
 Select ensembles, both mixed and women's, open to all students by audition. These groups perform a variety of repertoire from all historical periods. May be repeated for credit.
- 3721 UTSA Chorus**
 (0-3) 1 hour credit.
 This choral ensemble is open to all students without audition. No previous choral experience is necessary. Many types of music are studied, and the repertoire is moderate in difficulty. May be repeated for credit.

- 3731 University Band**
(0-3) 1 hour credit.
Open to all students by audition. Ensemble rehearses and performs standard repertoire of concert band music. May be repeated for credit.
- 3741 Chamber Orchestra**
(0-3) 1 hour credit. Open to all string students by audition; concurrent registration in MUS 3761 Orchestra is required of all string principals. This ensemble will study, rehearse, and perform literature from the string orchestra repertoire. May be repeated for credit.
- 3742 UTSA Wind Ensemble**
(0-5) 2 hours credit. Prerequisite: Consent of instructor.
The wind ensemble studies, rehearses, and performs the repertoire for various combinations of wind instruments. May be repeated for credit.
- 3752 Symphonic Band**
(0-5) 2 hours credit.
Open to all students by audition. Ensemble performs standard repertoire for the full symphonic band. May be repeated for credit.
- 3761 UTSA Orchestra**
(0-3) 1 hour credit.
Open to all students by audition; concurrent registration in MUS 3741 Chamber Orchestra is required of all string principals. The UTSA Orchestra studies, rehearses, and performs literature from the standard orchestral repertoire. May be repeated for credit.
- 3771 Jazz Ensemble**
(0-3) 1 hour credit.
Open to all students by audition. Ensembles specializing in the performance of the various streams of jazz and other music appropriate to stage bands, jazz ensembles, and vocal jazz groups. May be repeated for credit.
- 3781 UTSA Roadrunner Band**
(0-3) 1 hour credit.
Open to all students by audition. An instrumental ensemble performing contemporary popular literature at UTSA athletic events and other University-related functions. May be repeated for credit.
- 3791 Opera Workshop**
(0-3) 1 hour credit.
Open to all students by audition. The study and performance of opera and other types of musical theater from the Baroque period to the present. May be repeated for credit.
- 4113 Composition with Contrapuntal Techniques**
3 hours credit. Prerequisites: MUS 2112, 2162, and 2253.
Private study in applied composition, with an emphasis on eighteenth- and twentieth-century contrapuntal techniques and procedures.

- 4142 Composition III**
2 hours credit. Prerequisites: MUS 3113 and 3162, or consent of instructor. Writing in the larger forms for small and large ensembles and electronic media. Seminar attendance is required. May be repeated for credit.
- 4452 The Marching Band**
(2-1) 2 hours credit. Prerequisites: MUS 2162 and 2253.
A study of the repertoire, materials, and maneuvers used by marching bands. (Formerly MUS 4453. Credit cannot be earned for both MUS 4453 and MUS 4452.)
- 4532 Music Pedagogy**
(2-1) 2 hours credit. Prerequisite: Upper-division standing in music or consent of instructor.
Survey of techniques, practices, and materials related to the development and teaching of orchestral and solo instruments and voice. Review of materials for beginning, intermediate, and advanced students. Topics include Strings, Brass, Woodwinds, Percussion, Guitar, Piano, Organ, Voice, and Instrumental Ensemble. May be repeated for credit. Voice topic requires successful completion of two semesters of MUS 1511 (Voice) or equivalent competency.
- 4544 Music Performance–Private Instruction V**
4 hours credit. Prerequisites: MUS 3543 or an equivalent, consent of instructor, and concurrent enrollment in an assigned University ensemble. Limited to students accepted to upper-division standing in the Performance Emphasis of the Bachelor of Music degree program.
Private instruction at an advanced level in bassoon, clarinet, contrabass, cornet, euphonium, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, or voice. Seminar attendance may be required. May be repeated for credit a maximum of three semesters.
- 4561 Senior Recital**
1 hour credit. Prerequisite: Consent of instructor. Concurrent enrollment in MUS 4544 is required of students in the Performance Emphasis; concurrent enrollment in MUS 4142 is required of students emphasizing in composition.
A public performance presented as a culmination of the student's private instruction.
- 4581 Chamber Music**
(0-3) 1 hour credit. Prerequisite: Upper-division standing in music.
Designed to offer students the opportunity to gain knowledge of chamber music literature and perform this repertoire. Instruction in brass ensemble, woodwind ensemble, percussion ensemble, string ensemble, mixed ensemble, vocal ensemble, and chamber opera. May be repeated for credit.

4803 Seminar in Music Marketing

(3-0) 3 hours credit. Prerequisite: MUS 3613 or consent of instructor.
An intensive study of music markets, channels of distribution, strategies, and musical product management.

4911-3 Independent Study

1 to 3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Division Director, and the Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Music

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

DIVISION OF VISUAL ARTS

Bachelor of Fine Arts Degree in Art

The Bachelor of Fine Arts (B.F.A.) degree program in Art is fully accredited by the National Association of Schools of Art and Design and conforms to its recommended guidelines. The degree is awarded in recognition of successful completion of prolonged and intensive studio coursework with supportive studies in art history and criticism. The final two years of study include a specialization in one of the following areas: ceramics, drawing, painting, photography, printmaking, or sculpture.

Transfer students with upper-division art courses on their transcripts should present a portfolio of work to the advisor of record for art programs before the registration period. This portfolio should consist of 10 original examples or 2" x 2" slides of work from upper-division studio courses taken at other institutions.

Applicants seeking a program of study with emphasis on art history and criticism and preparation for possible graduate work in art history should refer to the Bachelor of Arts degree in Humanities.

Most students will fulfill the requirements for this degree with 132 semester credit hours, including the hours of the Core Curriculum requirements. Nine of the Core Curriculum requirements also count as part of the 87 required semester credit hours in the art major. Due to the large number of major courses in the B.F.A. degree, full-time art students should enroll in two studio art courses, one art history and criticism course, and one or two Core Curriculum courses each semester. Art majors should request an appointment with the advisor of record for art programs before all enrollment periods. In order to complete all B.F.A. degree requirements in a timely fashion, both full-time and part-time art students should register every term for twice as many credits in their major course requirements as in Core Curriculum courses.*

All candidates for the degree must complete 69 semester credit hours of art (ART) and 18 semester credit hours of art history and criticism (AHC).

Core Curriculum requirements. Students seeking the Bachelor of Fine Arts degree in Art must fulfill University Core Curriculum requirements by taking the following courses or their equivalents:

Rhetoric (6 semester credit hours)*

Domain I: Science, Technology, and Mathematics

Mathematics (3 semester credit hours)**

Science (6 semester credit hours)**

Computer Science/Logic (3 semester credit hours)*

*Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information. Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

**Art students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)*

Political Studies (6 semester credit hours)*

Economics (3 semester credit hours)*

Social and Behavioral Sciences (incorporated in Domain IV)

Domain III: Literature, the Arts, and Language

Language (students must complete, by exam or course selection, three semesters in one foreign language)

Literature (3 semester credit hours)*

The Arts (incorporated in Domain IV)

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):

ART 3033 Contemporary Studio: Concepts and Practice

Diversity of Culture (6 semester credit hours):

Either

AHC 1113 Survey of Art and Architecture from Prehistoric Times to 1350

AHC 1123 Survey of Art and Architecture in Europe and the New World from 1350 to 1750

or

AHC 1123 Survey of Art and Architecture in Europe and the New World from 1350 to 1750

AHC 1133 Survey of Modern Art

Major requirements:

- A. 39 semester credit hours of specifically required lower-division studio art and art history foundation courses completed as part of the first 60 hours of the curriculum:

ART	1003	Design: Two Dimensional
ART	1013	Design: Three Dimensional
AHC	1113	Survey of Art and Architecture from Prehistoric Times to 1350
AHC	1123	Survey of Art and Architecture in Europe and the New World from 1350 to 1750
AHC	1133	Survey of Modern Art
ART	1213	Drawing I
ART	1223	Drawing II
ART	2113	Painting: Basic
ART	2213	Drawing: Figure
ART	2413	Printmaking: Basic
ART	2513	Photography: Basic
ART	2613	Sculpture: Basic
ART	2713	Ceramics: Basic

*Art students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

B. 21 semester credit hours of upper-division art courses:

ART 3033 Contemporary Studio

ART 4983 Senior Seminar and Exhibition

15 semester credit hours in one of the following areas: ceramics, drawing, painting, photography, printmaking, or sculpture

C. 9 additional semester credit hours of art history and criticism courses:

AHC 4113 Contemporary Art

6 elective hours of art history and criticism courses

Students may substitute a specific course in the philosophy of art or a humanities course with a strong art history component for an upper-division art history course with consent of the advisor of record for art programs.

D. 18 additional semester credit hours of art course electives are required, at least 9 of which must be upper-division

COURSE DESCRIPTIONS

ART (ART)

NOTE: Due to the instructional format of studio/laboratory classes, auditors will not be approved for art courses.

1003 Design: Two Dimensional

(0-6) 3 hours credit.

Exploration of the visual structure and organization of two-dimensional surfaces using a variety of media, with an emphasis on the development of creative and critical skills. [TCCN: ARTS 1311.]

1013 Design: Three Dimensional

(0-6) 3 hours credit.

Exploration of the visual structure and organization of multidimensional forms in a variety of materials, with an emphasis on the development of creative and critical skills. [TCCN: ARTS 1312.]

1153 Painting for Non-Art Majors

(0-6) 3 hours credit.

An introduction to the fundamentals of painting. May not be applied to a major in art.

1163 Drawing for Non-Art Majors

(0-6) 3 hours credit.

An introduction to the fundamentals of drawing. May not be applied to a major in art.

- 1173 Photography for Non-Art Majors**
(0-6) 3 hours credit.
Techniques and basic methods of creative photography. Students are expected to provide their own adjustable 35mm cameras. May not be applied to a major in art.
- 1213 Drawing I**
(0-6) 3 hours credit.
Emphasis on observation and development of perceptual skills as they relate to drawing; includes systems of perspective. [TCCN: ARTS 1316.]
- 1223 Drawing II**
(0-6) 3 hours credit. Prerequisite: ART 1213.
Emphasis on observation and opportunities for development of perceptual skills and conceptual principles in drawing, through various approaches and media. [TCCN: ARTS 1317.]
- 2113 Painting: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, and 1223.
Instruction in basic painting concepts, skills, and materials. [TCCN: ARTS 2316.]
- 2213 Drawing: Figure**
(0-6) 3 hours credit. Prerequisites: ART 1213 and 1223.
Study of the human figure and its anatomical and structural dynamics. May be repeated for credit. [TCCN: ARTS 2323.]
- 2413 Printmaking: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, and 1223.
Introduction to printmaking processes, concepts, and materials. [TCCN: ARTS 2333.]
- 2513 Photography: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, and 1223; or ARC 1213, ARC 1223, and ART 1213.
Introduction to photographic image making, technical principles, and laboratory procedures. Students are expected to provide their own adjustable 35mm cameras. [TCCN: ARTS 2356.]
- 2613 Sculpture: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, and 1223.
Instruction in basic sculptural concepts and materials. [TCCN: ARTS 2326.]
- 2713 Ceramics: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, and 1223.
Instruction in basic ceramic concepts and techniques. [TCCN: ARTS 2346.]
- 3033 Contemporary Studio: Concepts and Practice**
(0-6) 3 hours credit. Prerequisites: Satisfactory completion of any three of the six 2000-level art courses and any two art history and criticism courses.

Interdisciplinary studio projects generated from lectures, readings, and discussion, focusing on critical and cultural issues from the 1970s to the present. Projects are intended to encourage collaborative efforts and nontraditional solutions. Required of all B.F.A. candidates.

- 3113 Painting: Color, Form, and Composition**
(0-6) 3 hours credit. Prerequisite: ART 2113.
Continued study of the methods and materials of painting with an emphasis on color, form, and composition. May be repeated once for credit.
- 3123 Painting: Topics**
(0-6) 3 hours credit. Prerequisite: ART 2113.
Concentration on concepts in painting with an emphasis on the synthesis of idea and means. Occasionally this course may focus on special issues in painting such as the figure, abstraction, and landscape. May be repeated once for credit.
- 4133 Painting: Advanced**
(0-6) 3 hours credit. Prerequisites: ART 3113 and ART 3123.
Concentration on the development of a personal vision and an individual approach with consideration of historical and contemporary issues in painting. Occasionally this course may focus on a special topic such as the figure, abstraction, and landscape. May be repeated for credit.
- 4233 Drawing**
(0-6) 3 hours credit. Prerequisites: ART 2213 and upper-division standing.
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.
- 4433 Printmaking**
(0-6) 3 hours credit. Prerequisite: ART 2413 and upper-division standing.
An emphasis on the development of a personal vision and individual approach to the use of the medium, including experimentation in multiple processes. May be repeated for credit.
- 4533 Photography**
(0-6) 3 hours credit. Prerequisite: ART 2513 and upper-division standing.
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.
- 4673 Sculpture**
(0-6) 3 hours credit. Prerequisite: ART 2613 and upper-division standing.
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.
- 4753 Ceramics**
(0-6) 3 hours credit. Prerequisite: ART 2713 and upper-division standing.
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.

4833 Practicum in the Visual Arts

3 hours credit. Prerequisites: Completion of the lower-division studio art foundation courses and consent of instructor.

Students will participate in projects on an individual basis. The practical application of art methods and principles in such projects as providing special art programs or exhibition assistance to organizations and providing technical studio assistance for artists. May be repeated once for credit.

4913 Independent Study

3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the division director, and the dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Art

(0-6) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4983 Senior Seminar and Exhibition

(0-6) 3 hours credit. Prerequisites: ART 3033, AHC 4113, and 12 upper-division semester credit hours in area of specialization.

This course prepares the student in the professional concerns of aesthetics, art practices, and exhibition. The student will prepare work for a group exhibition in consultation with both the class instructor and a faculty advisor from his or her studio area of specialization. (Formerly ART 4903 and ART 4933. Students who completed both ART 4903 and ART 4933 cannot earn credit for ART 4983.)

Minor in Art History and Criticism

The discipline of the history of art addresses cultural, historical, and critical issues through the visual arts. A Minor in Art History and Criticism provides students with a general overview of the discipline.

All students pursuing the Minor in Art History and Criticism must complete 18 semester credit hours.

A. 6 semester credit hours selected from the following:

AHC	1113	Survey of Art and Architecture from Prehistoric Times to 1350
AHC	1123	Survey of Art and Architecture in Europe and the New World from 1350 to 1750
AHC	1133	Survey of Modern Art

B. 12 semester credit hours selected from the following:

AHC	3123	Northern European Art: Fifteenth and Sixteenth Centuries
AHC	3423	Pre-Columbian Art and Architecture of Mesoamerica
AHC	4113	Contemporary Art
AHC	4333	Topics in Art History and Criticism

COURSE DESCRIPTIONS ART HISTORY AND CRITICISM (AHC)

- 1033 Masterworks in Art**
(3-0) 3 hours credit.
A study of key works in art and architecture of Europe (1425–1825), ancient Mexico and Guatemala (before 1521), and modern Mexico (1920–1940). May not be applied to a major in art. [TCCN: ARTS 1301.]
- 1113 Survey of Art and Architecture from Prehistoric Times to 1350**
(3-0) 3 hours credit.
A study of art and architecture as it developed from Paleolithic times to 1350 in the various civilizations of Europe, the Near East, and the New World. Course will include selected readings from related fields. [TCCN: ARTS 1303.]
- 1123 Survey of Art and Architecture in Europe and the New World from 1350 to 1750**
(3-0) 3 hours credit.
A study of art and architecture as it developed from the period of the Aztecs and Incas in the New World and the Renaissance in Europe to 1750. Course will include selected readings from related fields.
- 1133 Survey of Modern Art**
(3-0) 3 hours credit.
A study of modern art from the French Revolution to the present, with special emphasis on contemporary developments. Course will include selected readings from related fields.
- 3123 Northern European Art: Fifteenth and Sixteenth Centuries**
(3-0) 3 hours credit. Prerequisite: 3 semester credit hours of lower-division art history and criticism or completion of the Core Curriculum requirement in literature.
A study of the fifteenth- and sixteenth-century art of Northern Europe. Emphasis is placed on the development of the arts in Flanders and Germany.
- 3423 Pre-Columbian Art and Architecture of Mesoamerica**
(3-0) 3 hours credit. Prerequisite: 3 semester credit hours of lower-division art history and criticism or completion of the Core Curriculum requirement in literature.
A study of art and architecture in ancient Guatemala, Mexico, Belize, and Honduras.

4113 Contemporary Art

(3-0) 3 hours credit. Prerequisite: 3 semester credit hours of lower-division art history and criticism or completion of the Core Curriculum requirement in literature.

Contemporary developments in the visual arts of the United States and Europe from 1960 to the present.

4333 Topics in Art History and Criticism

(3-0) 3 hours credit. Prerequisite: 3 semester credit hours of lower-division art history and criticism or completion of the Core Curriculum requirement in literature.

Focus on a specific period, medium, or theoretical and critical issue within the history and criticism of art. May be repeated for credit when topics vary.

4933 Art Gallery and Museum Internship

3 hours credit. Prerequisite: Consent of instructor.

Supervised experience related to preparation and installation of exhibitions in gallery and museum settings.

**COLLEGE OF SCIENCES
AND ENGINEERING**



COLLEGE OF SCIENCES AND ENGINEERING

COLLEGE HONORS

The College of Sciences and Engineering designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection for honors designation is based on the student's academic performance and recommendation by the faculty of the student's major discipline. To be eligible for the program, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.0 in their major at UTSA. These minimum averages must be maintained for students to receive the approval of the College Honors Committee and the discipline faculty. Students applying for College Honors are expected to enroll in the appropriate honors research course during their final two semesters. The completed research paper must be approved by the supervising faculty sponsor and another college faculty member. Students interested in this program should contact their faculty advisors for additional information.

DIVISION OF COMPUTER SCIENCE

The division offers a Bachelor of Science degree in Computer Science with a strong technical emphasis on modern computing and systems. The degree program offers students the opportunity to prepare for careers in high-technology companies, business, government, and teaching, and to prepare for advanced graduate study. The division also offers a Minor in Computer Science.

Bachelor of Science Degree in Computer Science

The Bachelor of Science degree in Computer Science requires a minimum of 126 semester credit hours, including the Core Curriculum requirements.

All majors in computer science are required to complete all required and elective computer science courses with a grade of "C" or better.

All candidates for the Bachelor of Science degree in Computer Science must complete the following:

- A. 65 semester credit hours of required courses (including the 12 hours of Core Curriculum requirements in science, computer science, and mathematics):

CS	1713, 1711	Introduction to Computer Science and Recitation
CS	1723, 1721	Data Structures and Recitation
CS	2413	Systems Programming
CS	2514	Computer Organization I
CS	2734	Computer Organization II

CS	3233	Discrete Mathematical Structures
CS	3323	Topics in Programming Languages
CS	3343	Analysis of Algorithms
CS	3733	Operating Systems
CS	3773	Software Engineering
CS	4753	Computer Architecture
MAT	1214	Calculus I*
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
STA	3513	Probability and Statistics
STA	3523	Statistical Methods
PHY	1904	Technical Physics I
PHY	1911	Technical Physics I Laboratory
PHY	1924	Technical Physics II

- B. 15 semester credit hours of upper-division computer science courses (not including CS 3133 or 4103)
- C. 4 semester credit hours of electives

Minor in Computer Science

All students pursuing the Minor in Computer Science must complete 21 semester credit hours.

- A. 15 semester credit hours of required courses:

CS	1713, 1711	Introduction to Computer Science and Recitation
CS	1723, 1721	Data Structures and Recitation
CS	2413	Systems Programming
CS	2514	Computer Organization I

- B. 6 semester credit hours of approved upper-division computer science electives

To declare a Minor in Computer Science, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Computer Science.

*The student who is not prepared to begin MAT 1214 must take MAT 1093 Precalculus.

COURSE DESCRIPTIONS COMPUTER SCIENCE (CS)

- 1033 Microcomputer Applications**
(3-0) 3 hours credit.
Study of the uses of the computer and the organization and visualization of data. Topics will be selected from library searching, networking, e-mail, spreadsheets, databases, authoring packages, multimedia and hypertext applications, presentation graphics, and legal/ethical issues. May not be applied toward a major in computer science. (Formerly CS 2083. Credit cannot be earned for both CS 2083 and CS 1033.)
- 1063 Introduction to Computer Programming**
(3-0) 3 hours credit. Prerequisite: MAT 1063 or the equivalent.
A course in computer programming for those who have never programmed a computer before, developing elementary programming skills using a modern computer language such as Java.
- 1073 Introductory Computer Programming for Scientific Applications**
(3-0) 3 hours credit. Prerequisite: MAT 1063.
Introductory programming. Sorting and ranking, plotting, numerical taxonomy, solution of nonlinear equations, linear regression, and solution of linear systems. May not be applied toward a major in computer science.
- 1711 Introduction to Computer Science Recitation**
(1-0) 1 hour credit. Prerequisite: MAT 1093. Concurrent enrollment in CS 1713 is required.
Recitation to accompany CS 1713.
- 1713 Introduction to Computer Science**
(3-0) 3 hours credit. Prerequisite: MAT 1093 and either CS 1063 or previous programming experience, or concurrent enrollment in CS 1063. Concurrent enrollment in CS 1711 is required.
Introduction to basic concepts of computer science. Functional components of computers, data representation, problem-solving methods, algorithm development, and programming using a high-level programming language. (Formerly CS 1714. Credit cannot be earned for both CS 1714 and CS 1713.)
- 1721 Data Structures Recitation**
(1-0) 1 hour credit. Prerequisites: CS 1713 and MAT 1214. Concurrent enrollment in CS 1723 is required.
Recitation to accompany CS 1723.
- 1723 Data Structures**
(3-0) 3 hours credit. Prerequisites: CS 1713 and MAT 1214. Concurrent enrollment in CS 1721 is required.
Abstract data structures (stacks, queues, lists, trees). Dynamic memory allocation, pointers, and recursion, sorting, and searching. (Formerly CS 1724. Credit cannot be earned for both CS 1724 and CS 1723.)

- 2073 Computer Programming with Engineering Applications**
(3-0) 3 hours credit. Prerequisites: MAT 1214 and completion of or concurrent enrollment in MAT 1223.
Algorithmic approaches to problem solving and computer program design for engineers. Engineering and mathematically oriented problem sets will be emphasized, including non-numeric applications. Searching, sorting, linked lists, and data typing will be introduced. May not be applied toward a major in computer science.
- 2413 Systems Programming**
(3-0) 3 hours credit. Prerequisite: CS 1723.
A study of systems-level programming in a specific system (at present, Unix).
- 2514 Computer Organization I**
(3-2) 4 hours credit. Prerequisite: CS 1723.
Introduction to theoretical concepts of digital logic design.
- 2734 Computer Organization II**
(3-2) 4 hours credit. Prerequisite: CS 2514.
Assembly language programming and computer organization. (Formerly CS 2733. Credit cannot be earned for both CS 2734 and CS 2733.)
- 3133 Computers and Society**
(3-0) 3 hours credit. Prerequisite: Consent of instructor or one of the following courses: CS 1033, 1063, 1073, 1713, or 2073.
Examination of some of the major issues faced by the use of computers in society, including computers and the law, computers in business, computers in education, computers in science and engineering, and electronic fund-transfer and communications.
- 3233 Discrete Mathematical Structures**
(3-0) 3 hours credit. Prerequisites: CS 1723 and MAT 1223.
Survey and development of theoretical tools suitable for describing algorithmic applications. Propositional and predicate calculus, induction, proofs, set theory, and finite state automata.
- 3323 Topics in Programming Languages**
(3-0) 3 hours credit. Prerequisite: CS 2413.
Study of two or three languages important to the computer science curriculum. (Formerly CS 3321. Credit cannot be earned for both CS 3323 and CS 3321.)
- 3343 Analysis of Algorithms**
(3-0) 3 hours credit. Prerequisites: CS 2413, 3233, and MAT 2213.
Analysis of the performance of algorithms; discussion of programming techniques and data structures used in the writing of effective algorithms. (Formerly CS 4323. Credit cannot be earned for both CS 3343 and CS 4323.)

- 3413 Data Communications**
(3-0) 3 hours credit. Prerequisite: CS 2734 or consent of instructor.
Concepts, principles, and terminology concerning the standards, equipment, interfaces, protocols, architectures, transmission alternatives, and regulatory issues involved in the design and use of data communications systems.
- 3723 Programming Languages**
(3-0) 3 hours credit. Prerequisites: CS 3233 and 3323.
An introduction to the organization of high-level programming languages, including data types, control structures, data flow, and run time environments. Use of formal syntax descriptions. The implications of interpretation versus compilation. Activation records and dynamic storage in block structured languages.
- 3733 Operating Systems**
(3-0) 3 hours credit. Prerequisites: CS 2734, 2413, and 3233.
An introduction to the functions and major techniques of a modern multiprogramming operating system. Includes exposure to the fundamentals of processor management, process synchronization, memory management, and peripheral management.
- 3743 Data Base Management**
(3-0) 3 hours credit. Prerequisites: CS 2413 and 3233.
Study of systems for management of large amounts of related data. Basic concepts, implementation approaches, user data models, and commercially available systems.
- 3773 Software Engineering**
(3-0) 3 hours credit. Prerequisites: CS 3323 and 3343.
Software development (analysis, specifications, design, implementation, and testing). Design methodologies and programming standards. Development project in small groups, including acceptance test.
- 3793 Introduction to Artificial Intelligence**
(3-0) 3 hours credit. Prerequisites: CS 3323 and 3343.
Discussion of theorem-proving by machine; includes computational linguistics, psychological modeling, and computer games.
- 4103 Ethical and Social Issues in Computer Science**
(3-0) 3 hours credit. Prerequisite: CS 3733 or consent of instructor.
An introduction to formal ethics and its application to issues arising from the modern computer revolution. Topics include ethical problems related to specialized areas of computer science, such as large databases, networks, artificial intelligence, and computer security. Legal issues are also covered.
- 4313 Automata, Computability, and Formal Languages**
(3-0) 3 hours credit. Prerequisite: CS 3343.
Discussion of abstract machines (finite state automata, pushdown automata, and Turing machines), formal grammars (regular, context-free, and type 0), and the relationship among them.

- 4383 Computer Graphics**
(3-0) 3 hours credit. Prerequisites: CS 3343 and MAT 2233.
An introduction to two- and three-dimensional generative computer graphics. Display devices, data structures, mathematical transformations, and algorithms used in picture generation, manipulation, and display.
- 4393 Topics in User Interfaces**
(3-0) 3 hours credit. Prerequisite: CS 3323.
Study of advanced user interface issues. Topics will be selected from user interface design, human factors, window systems and toolkits, GUI programming models, and input devices, psychological aspects of human-computer interaction, and the psychology of computer users.
- 4633 Simulation**
(3-0) 3 hours credit. Prerequisites: CS 3233, STA 3513, and STA 3523.
Design, execution and analysis of simulation models, discrete event simulation techniques, input and output analysis, random numbers, and simulation tools and languages.
- 4713 Compiler Writing**
(3-0) 3 hours credit. Prerequisites: CS 2734, 3323, and 3343.
An introduction to implementation of translators. Topics include formal grammars, scanners, parsing techniques, syntax-directed translation, symbol table management, code generation, and code optimization.
- 4753 Computer Architecture**
(3-0) 3 hours credit. Prerequisites: CS 2734 and CS 3733.
Instruction set architecture, datapath and control unit design, advanced computer arithmetic, pipelining, memory hierarchy and I/O subsystem, performance issues.
- 4763 Multimedia Systems**
(3-0) 3 hours credit. Prerequisite: CS 3733.
Multimedia hardware capabilities. Sound and video generation and editing. Multimedia applications development and toolkits. Analysis of operational characteristics of multimedia systems.
- 4773 Object-Oriented Systems**
(3-0) 3 hours credit. Prerequisite: CS 3773.
Study of object-oriented concepts and techniques, encapsulation, inheritance mechanisms, polymorphism, and programming in one or more object-oriented languages.
- 4793 Introduction to Artificial Neural Networks**
(3-0) 3 hours credit. Prerequisite: CS 3793.
Analysis of biological nervous systems, supervised and unsupervised training algorithms, Perceptrons and threshold logic-based systems, associative memories, nonlinear regression, and backpropagation learning methods.

- 4823 Introduction to Parallel Programming**
 (3-0) 3 hours credit. Prerequisites: CS 3343 and CS 3733.
 Parallel programming concepts (partitioning, synchronization and communication, programming models—shared memory based and message based), programming tools and languages, performance issues.
- 4873 Computer Networks**
 (3-0) 3 hours credit. Prerequisites: CS 3733 and STA 3513.
 Discussion of standard network layers, including issues of topology, error detection and recovery, congestion control, and hardware interfacing. (Formerly SD 4873. Credit cannot be earned for both CS 4873 and SD 4873.)
- 4901 Seminar in Computer Science**
 (1-0) 1 hour credit. Prerequisite: Upper-division classification in computer science program or consent of instructor.
 Scheduled and impromptu presentations on subjects of interest given by division faculty and visiting lecturers. May be repeated for credit, but no more than 3 semester credit hours will apply toward the major in computer science.
- 4913 Independent Study**
 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students desiring specialized work. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Computer Science**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Research**
 3 hours credit. Prerequisite: enrollment limited to candidates for College Honors during their last two semesters; approval by the College Honors Committee.
 Supervised research and preparation of an honors thesis. May be repeated one time with approval.

DIVISION OF EARTH AND PHYSICAL SCIENCES

The degree programs offered by the Division of Earth and Physical Sciences reflect its policy of offering the opportunity for a comprehensive education of the highest quality, individualized to the needs and interests of the student. Completion of a basic science curriculum allows students to apply for entry into one of several highly specialized areas in chemistry, geology, or physics. Students who have majored in any of these degree programs are eligible to apply for positions in industry and government as well as for entry into professional and graduate schools. The degree in multidisciplinary science gives students broad training in the sciences and is suitable as a preparation to teach science at the secondary school level. The division also offers Minors in Chemistry, Geology, and Physics.*

1. **Core Curriculum requirements for secondary science teaching certificates:** Students seeking a bachelor's degree and a secondary teaching certificate in chemistry, earth science, life/earth science, physical science, physics, or science composite must fulfill University Core Curriculum requirements by taking the following courses or their equivalents:

Rhetoric (6 semester credit hours)**

Domain I: Science, Technology, and Mathematics

Mathematics (3 semester credit hours)**

Science (6 semester credit hours)**

Computer Science/Logic (3 semester credit hours):

CS 1073 Introductory Computer Programming for Scientific Applications

or

CS 1033 Microcomputer Applications

Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)**

Political Studies (6 semester credit hours)**

Economics (3 semester credit hours)**

Social and Behavioral Sciences (incorporated in Domain IV)

Domain III: Literature, the Arts and Language

Language (3 semester credit hours)**

Literature (3 semester credit hours)**

*Students seeking teacher certification should contact the Office of Teacher Advising, Certification, and Placement early in their studies for information about certificate requirements and admission procedures. Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

**All secondary teacher certificate students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

The Arts (3 semester credit hours):

- COM 1043 Introduction to Communication
or
COM 2123 Oral Presentation

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):

- EDP 3203 Learning and Development in the Secondary School and Adolescent

Diversity of Culture (6 semester credit hours):

- EDU 3103 Education in American Society
C&I 4103 The Secondary School

Bachelor of Science Degree in Multidisciplinary Science

The Bachelor of Science degree in Multidisciplinary Science is primarily for students preparing to teach science at the secondary school level.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 138.

A. 45 or 47 semester credit hours of required science courses:

- | | | |
|-----|------------|--|
| AST | 1013, 1031 | Introduction to Astronomy and Laboratory |
| BIO | 1203, 1212 | Biology I and Laboratory Investigations in Biology |
| BIO | 2123 | Comparative Anatomy of Vertebrates |
| CHE | 1103, 1122 | General Chemistry and Laboratory Workshop |
| CHE | 1303 | Chemical Principles |
| CHE | 1312 | Inorganic Qualitative and Quantitative Analysis |
| GEO | 1103, 1111 | Introduction to Earth Systems and Laboratory |
| GEO | 1123, 1131 | Earth History and Laboratory |
| GEO | 4113, 4121 | Geomorphology and Laboratory |
| GRG | 3713 | Weather and Climate |

Either

- | | | |
|-----|------------|-------------------------------------|
| PHY | 1603, 1611 | General Physics I and Laboratory |
| PHY | 1623, 1631 | General Physics II and Laboratory |
| or | | |
| PHY | 1904, 1911 | Technical Physics I and Laboratory |
| PHY | 1924, 1931 | Technical Physics II and Laboratory |

B. 29 semester credit hours of approved electives in biology, chemistry, physics, geology, and/or mathematics; 15 of these hours must be at the upper-division level

C. 6 semester credit hours in computer science and mathematics:

- MAT 1093 Precalculus (or above)

- | | | |
|----|------|---|
| CS | 1073 | Introductory Computer Programming for Scientific Applications
or |
| CS | 1033 | Microcomputer Applications |

D. 19 to 24 semester credit hours of electives, as set forth below:

1. For students seeking the degree only (without teacher certification), at least 19 semester credit hours of electives are required, including a sufficient number of upper-division hours to meet UTSA's minimum of 39 upper-division hours
2. For students seeking the degree with teacher certification, these electives must include

IDS 3003 Science and Humanity
21 semester credit hours of professional education courses

Bachelor of Science Degree in Chemistry

The Bachelor of Science degree in Chemistry provides opportunities for preparation for careers in industry, government agencies, environmental studies, preprofessional programs, and medical technology, and for graduate study in chemistry or other related fields.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 133. All major and support work courses must be completed with a grade of "C" or better.

A. 53 semester credit hours of required courses in chemistry:

- | | | |
|-----|------|---|
| CHE | 1103 | General Chemistry |
| CHE | 1303 | Chemical Principles |
| CHE | 1312 | Inorganic Qualitative and Quantitative Analysis |
| CHE | 2203 | Organic Chemistry I |
| CHE | 2242 | Organic Chemistry I Laboratory |
| CHE | 2251 | Organic Chemistry I Recitation |
| CHE | 2303 | Organic Chemistry II |
| CHE | 2342 | Organic Chemistry II Laboratory |
| CHE | 2351 | Organic Chemistry II Recitation |
| CHE | 3103 | Analytical Chemistry |
| CHE | 3204 | Physical Chemistry I |
| CHE | 3212 | Physical Chemistry Laboratory |
| CHE | 3224 | Physical Chemistry II |
| CHE | 3243 | Instrumental Analysis |
| CHE | 3264 | Descriptive Inorganic Chemistry |
| CHE | 4243 | Organic Chemistry III |
| CHE | 4253 | Physical Chemistry III |
| CHE | 4263 | Inorganic Chemistry |

- CHE 4923 Special Project in Chemistry
or
CHE 4913 Independent Study
- CHE 4971 Proseminar

- B. 6 additional semester credit hours of approved upper-division chemistry electives, 3 hours of which must be an organized course in chemistry, at the senior level or above; no more than 3 semester credit hours may be from CHE 4913 Independent Study or CHE 4923 Special Project in Chemistry
- C. 23 semester credit hours of support work in science and mathematics:
1. 20 semester credit hours of required courses:

MAT 1214	Calculus I
MAT 1223	Calculus II
MAT 2213	Calculus III
	or
CS 1723, 1721	Data Structures and Recitation
PHY 1904, 1911	Technical Physics I and Laboratory
PHY 1924, 1931	Technical Physics II and Laboratory
 2. 3 additional semester credit hours of elective work from the College of Sciences and Engineering, as approved by the advisor
- D. 3 semester credit hours in computer science:
- | | |
|---------|----------------------------|
| CS 1063 | Microcomputer Applications |
|---------|----------------------------|
- E. 6 semester credit hours of electives

Bachelor of Arts Degree in Chemistry

The Bachelor of Arts degree in Chemistry is a less comprehensive degree than the Bachelor of Science degree in Chemistry. It provides opportunities for preparation for careers in industry, governmental agencies, environmental studies, and preprofessional programs. It is not recommended for students planning to pursue graduate studies in chemistry or related fields. It does not meet the criteria for an American Chemical Society–approved degree in chemistry.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 124. All major and support work courses must be completed with a grade of “C” or better.

All candidates for the degree must complete the following:

- A. 37 semester credit hours of required courses in chemistry:

CHE	1103	General Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CHE	2203	Organic Chemistry I
CHE	2242	Organic Chemistry I Laboratory
CHE	2251	Organic Chemistry I Recitation
CHE	2303	Organic Chemistry II
CHE	2342	Organic Chemistry II Laboratory
CHE	2351	Organic Chemistry II Recitation
CHE	3103	Analytical Chemistry
CHE	3212	Physical Chemistry Laboratory
CHE	3264	Descriptive Inorganic Chemistry
CHE	4103	Instrumental Analysis
CHE	4971	Proseminar

B. 12 additional semester credit hours of approved upper-division chemistry electives; no more than 6 semester credit hours may be from CHE 4913 Independent Study or CHE 4923 Special Project in Chemistry

C. 24 to 27 semester credit hours of support work in science and mathematics:

1. 15 to 18 semester credit hours of required courses:

MAT 1214 Calculus I

Either

PHY 1603, 1611 General Physics I and Laboratory

PHY 1623, 1631 General Physics II and Laboratory

or

PHY 1904, 1911 Technical Physics I and Laboratory

PHY 1924, 1931 Technical Physics II and Laboratory

CS 1063 Microcomputer Applications

2. 9 additional semester credit hours of approved electives from the College of Sciences and Engineering; up to 6 semester credit hours may be outside the college (9 hours for students seeking teacher certification) with approval of the advisor

D. 6 semester credit hours of electives

Minor in Chemistry

The purpose of this program is to permit students majoring in other areas to obtain a solid, broad-based knowledge of chemistry. The program is applicable to those students in other areas of science and in preprofessional programs. All coursework for the Minor in Chemistry must be completed with a grade of "C" or better.

22 semester credit hours are required for this minor:

CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CHE	2203	Organic Chemistry I
CHE	2242	Organic Chemistry I Laboratory
CHE	2303	Organic Chemistry II
CHE	2342	Organic Chemistry II Laboratory
CHE	3103	Analytical Chemistry
CHE	3264	Descriptive Inorganic Chemistry

To declare a Minor in Chemistry, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Earth and Physical Sciences.

COURSE DESCRIPTIONS CHEMISTRY (CHE)

- 1003 Chemistry for Allied Health Sciences**
(3-0) 3 hours credit.
Introduction to atomic structure, chemical bonding, stoichiometry, states of matter, inorganic chemical reactions, and acids and bases. For majors in occupational therapy, prenursing, and dental hygiene. May not be applied to a major in chemistry, biology, or clinical laboratory sciences. Concurrent enrollment in CHE 1011 is recommended. [TCCN: CHEM 1305.]
- 1011 Chemistry Laboratory for Allied Health Sciences**
(1-4) 1 hour credit. Prerequisite: Completion of or concurrent enrollment in CHE 1003.
Introduction to chemical laboratory techniques. For majors in occupational therapy, prenursing, and dental hygiene. May not be applied to a major in chemistry, biology, or clinical laboratory sciences. [TCCN: CHEM 1105.]
- 1053 Chemistry of Ordinary Things**
(3-0) 3 hours credit.
An introduction to the fundamental concepts of chemistry and the study of the chemistry of life and the everyday world. For nonscience majors. May not be applied to a major in the natural sciences, engineering, or allied health sciences.
- 1073 Basic Chemistry**
(3-0) 3 hours credit.
A one-semester preparatory course covering some basic concepts of inorganic chemistry, atomic-molecular structure, and related mathematics. May not be applied to a B.S. or B.A. in Chemistry.
- 1103 General Chemistry**
(3-0) 3 hours credit. Prerequisites: Passing grade on Freshman Chemistry Placement Exam or grade of "C" or better in CHE 1073, and completion of or concurrent enrollment in MAT 1063.

An introduction to descriptive inorganic chemistry and atomic-molecular structure, including such fundamental concepts as the periodic system of elements, valency, chemical bonding, reactions and reaction mechanisms, stoichiometry, equilibria, acids and bases, thermochemistry, molecular-kinetic theory, and states of matter. Concurrent enrollment in CHE 1122 is recommended. [TCCN: CHEM 1311.]

1122 General Chemistry Laboratory Workshop

(1-5) 2 hours credit. Prerequisite: Completion of or concurrent enrollment in CHE 1103.

An introduction to chemical problem solving and the basic operations of the chemical laboratory, and a survey of inorganic chemical reactions. This course consists of problem sessions, lecture-demonstrations, and/or laboratory experience.

1203 Elementary Organic and Biochemistry

(3-0) 3 hours credit. Prerequisites: CHE 1003 and 1011.

A survey of the structures and reactions of some important functional groups of organic chemistry, and the relationship of these functional groups to the chemistry of lipids, carbohydrates, nucleic acids, and proteins. May not be applied to a major in chemistry. Concurrent enrollment in CHE 1211 is recommended. (Formerly CHE 2103. Credit cannot be earned for both CHE 1203 and CHE 2103.) [TCCN: CHEM 1307.]

1211 Organic and Biochemistry Laboratory

(1-4) 1 hour credit. Prerequisite: Completion of or concurrent enrollment in CHE 1203.

Laboratory examination of the properties of some simple organic and biological chemicals; topics include solubility, crystallization, organic reactions, titration, enzyme action, sugars, and vitamins. May not be applied to a major in chemistry. [TCCN: CHEM 1107.]

1303 Chemical Principles

(3-0) 3 hours credit. Prerequisite: At least a "C" in CHE 1103 or an equivalent.

A continuation of CHE 1103. Elementary inorganic and physical chemistry; topics include solutions, electrolytes, oxidation-reduction reactions, reaction trends, coordination chemistry, basic thermodynamics, chemical kinetics, and electrochemistry. Primarily for science majors. [TCCN: CHEM 1312.]

1312 Inorganic Qualitative and Quantitative Analysis

(1-5) 2 hours credit. Prerequisite: Completion of or concurrent enrollment in CHE 1303.

Techniques of qualitative and quantitative chemical analysis, illustrated primarily via inorganic chemical systems and their reactions. Laboratory to accompany CHE 1303. [TCCN: CHEM 1112.]

2203 Organic Chemistry I

(3-0) 3 hours credit. Prerequisites: CHE 1303 and 1312.

An elementary study of structure, stereochemistry, reactions, and reaction mechanisms associated with organic compounds. Primarily for chemistry,

premed, and science majors. Concurrent enrollment in CHE 2242 and 2251 is recommended. [TCCN: CHEM 2323.]

2242 Organic Chemistry I Laboratory

(1-5) 2 hours credit. Prerequisite: Completion of or concurrent enrollment in CHE 2203.

The first of two semesters of organic chemistry laboratory. Qualitative analysis and determination of the physical constants of organic compounds. Separation, identification, and elementary synthesis of organic compounds. Laboratory techniques—crystallization, distillation, chromatographic and spectroscopic techniques (IR, NMR, MS)—are emphasized. [TCCN: CHEM 2223.]

2251 Organic Chemistry I Recitation

(0-2) 1 hour credit. Prerequisite: Concurrent enrollment in CHE 2203.

A recitation section for discussion of problems amplifying and clarifying textual content of CHE 2203.

2303 Organic Chemistry II

(3-0) 3 hours credit. Prerequisites: CHE 2203 and completion of or concurrent enrollment in CHE 2242.

Continuing study of fundamentals of structure, reactions, and reaction mechanisms of phosphorus and sulphur; polyfunctional organic compounds. A continuation of CHE 2203. (Formerly CHE 3003. Credit cannot be earned for both CHE 2303 and CHE 3003.) [TCCN: CHEM 2325.]

2342 Organic Chemistry II Laboratory

(1-5) 2 hours credit. Prerequisites: CHE 2242 and completion of or concurrent enrollment in CHE 2303.

Quantitative and continuing qualitative study of organic reactions and molecular structure through functional group interactions and spectroscopic techniques. Simple and multistep syntheses of organic compounds. A continuation of CHE 2242. (Formerly CHE 3022. Credit cannot be earned for both CHE 2342 and CHE 3022.) [TCCN: CHEM 2225.]

2351 Organic Chemistry II Recitation

(0-2) 1 hour credit. Prerequisite: Concurrent enrollment in CHE 2303.

A recitation section for discussion of problems amplifying and clarifying textual content of CHE 2303.

3103 Analytical Chemistry

(2-5) 3 hours credit. Prerequisites: CHE 1303, CHE 1312, and CS 1063.

A detailed study of wet chemical and basic instrumental analysis, including gravimetric, volumetric, and spectrophotometric determinations.

3124 Basic Physical Chemistry

(3-2) 4 hours credit. Prerequisites: CHE 1303, CHE 1312, MAT 1214, and either PHY 1623 and 1611 or 1924 and 1911.

A one-semester course covering some basic concepts of thermodynamics, chemical equilibria, kinetics, spectroscopy, and related topics. May not be applied to a B.S. in Chemistry.

3204 Physical Chemistry I

(4-0) 4 hours credit. Prerequisites: CHE 1303, CHE 1312, MAT 1223, and PHY 1924 and 1931; completion of two semesters of organic chemistry is strongly recommended.

States of matter, gas laws, equations of state, and intermolecular interactions; thermodynamics and physical equilibria; elements of molecular-kinetic theory and statistical mechanics; physicochemical properties of solutions, chemical equilibria, phase equilibria, and changes of state.

3212 Physical Chemistry Laboratory

(0-6) 2 hours credit. Prerequisite: CHE 3124 or 3224.

Experimental study of thermodynamics and electrochemistry, spectroscopy, and reaction kinetics.

3224 Physical Chemistry II

(4-0) 4 hours credit. Prerequisite: CHE 3204.

Chemical kinetics, electrolytes and electrochemistry, elements of quantum mechanics, chemical bonds, spectroscopy, and photochemistry. A continuation of CHE 3204.

3264 Descriptive Inorganic Chemistry

(3-3) 4 hours credit. Prerequisites: CHE 1303 and 1312.

The basic principles of inorganic chemistry applied to the properties, reactions, and periodicity of inorganic elements and compounds. Includes the synthesis and characterization of inorganic compounds and the use of specialized laboratory techniques.

4103 Instrumental Analysis

(1-6) 3 hours credit. Prerequisites: CHE 2342, CHE 3103, and completion of or concurrent enrollment in CHE 3124 or 3224.

Electrochemical methods; use of modern spectrometric and chromatographic instrumentation in separation, purification, and/or quantitative characterization of chemical systems. (Formerly CHE 3243. Credit cannot be earned for both CHE 4103 and CHE 3243.)

4203 Introduction to Polymer Chemistry

(3-0) 3 hours credit. Prerequisite: CHE 2303, 3224, or consent of instructor.

Fundamental concepts of polymer chemistry, including mechanisms for synthesis, kinetics, and copolymerization; molecular weight, stereoisomerism, morphology, solubility, and thermal transitions; visco- and rubber elasticity; and the molecular basis for physical properties.

4243 Organic Chemistry III

(3-0) 3 hours credit. Prerequisites: CHE 2303, 2342, and 2351; CHE 3204; or consent of instructor.

Advanced mechanistic and/or synthetic aspects of organic reactions; additional topics such as molecular rearrangements and organic molecular orbital theory and its application to pericyclic reactions.

- 4253 Physical Chemistry III**
(3-0) 3 hours credit. Prerequisites: CHE 2303 and 3224 or consent of instructor.
Relations between structure of molecules and physicochemical properties of gases, liquids, and solids; quantum-mechanical and statistico-thermodynamical approach.
- 4263 Inorganic Chemistry**
(3-0) 3 hours credit. Prerequisites: CHE 3204 and 3264.
A study of the structure, bonding, and properties of inorganic compounds; acid-base theory, crystalline state, coordination chemistry, and other advanced topics.
- 4363 NMR Spectroscopy**
(3-0) 3 hours credit. Prerequisite: PHY 1924, completion of or concurrent enrollment in CHE 3224, or consent of instructor.
A lecture course with demonstrations dealing with the basic theory and applications of one- and two-dimensional nuclear magnetic resonance spectroscopy, including the interpretation of spectra. The parameters and pulse sequences for various types of NMR experiments and explanations of how molecular structural information can be obtained will be presented.
- 4373 Organic Spectral Studies**
(3-0) 3 hours credit. Prerequisite: CHE 2342.
Identification of functional groups and the determination of the structure of compounds by spectral techniques including IR, NMR, mass spectroscopy, and UV-Vis absorption spectroscopy; basic theory of spectral measurements with emphasis on practical applications.
- 4383 Introduction to Mass Spectrometry**
(3-0) 3 hours credit. Prerequisite: CHE 3224, 4373, or consent of instructor.
The basic principles of interpreting mass spectra and how they are produced. The effect the method of ion production has on the observed mass spectra, and the theory and operation of various types of mass spectrometers will be covered. The basic theory of ion-molecule reactions and other advanced topics will be presented.
- 4403 Chemistry of Heterocyclic Compounds**
(3-0) 3 hours credit. Prerequisite: CHE 2303 or consent of instructor.
The chemistry of nitrogen, oxygen, and sulfur heterocycles. Five- and six-membered ring systems with one or more heteroatoms. Applications in the field of synthetic drugs.
- 4603 Synthesis and Biosynthesis of Natural Products**
(3-0) 3 hours credit. Prerequisites: CHE 4373 and 4243, or BIO 3513, are recommended.
Comparison of chemical and biochemical formations and transformations for several classes of naturally occurring compounds such as steroids, terpenoids, alkaloids, and other natural products of chemical or biological importance.

4911-3 Independent Study

1 to 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which this course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students desiring specialized work. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4923 Special Project in Chemistry

3 hours credit. Prerequisite: Consent of Division Director (form available in division office).

A special laboratory research or library readings project under the direction of a faculty member that results in a report. Limited to science majors in their final year of undergraduate study.

4953 Special Studies in Chemistry

(3-0) 3 hours credit. Prerequisites: Upper-division standing and consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4971 Proseminar

(0-3) 1 hour credit. Prerequisites: CHE 2303 and either 3204 or 3124.

Oral reports on current publications in chemistry and chemical technology using important chemical reference materials and periodicals. May be repeated for credit, but only 2 semester credit hours may be applied toward the degree.

4993 Honors Research

3 hours credit. Prerequisites: Enrollment limited to candidates for college honors during their last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis. May be repeated only once with approval.

Bachelor of Science Degree in Geology

The Bachelor of Science degree in Geology provides opportunities to prepare for careers in petroleum, mining, water resources, environmental management, governmental agencies, engineering geology, geochemistry, geophysics, and natural resources.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 133.

All candidates for the degree must complete the following:

A. 52 semester credit hours in geology completed with a grade of "C" or better:

1. 39 semester credit hours of required courses:

GEO	1103, 1111	Introduction to Earth Systems and Laboratory
GEO	1123, 1131	Earth History and Laboratory
GEO	2003, 2011	Mineralogy and Laboratory
GEO	2023, 2031	Optical Mineralogy and Laboratory
GEO	3043, 3052	Petrology and Laboratory
GEO	3063, 3071	Paleontology and Laboratory
GEO	3103, 3111	Structural Geology and Laboratory
GEO	3123, 3131	Sedimentary Geology and Laboratory
GEO	4946	Field Geology

2. 13 additional semester credit hours selected from the following (a maximum of 3 hours of GEO 4911-3 or 4951-3 may apply to this requirement):

GEO	3083, 3091	Stratigraphy and Laboratory
GEO	3113	Geologic Field Investigations
GEO	3143, 3151	Economic Geology and Laboratory
GEO	3163	Oceanography
GEO	3374	Geochemistry
GEO	3383	General Geophysics
GEO	4023	Engineering Geology
GEO	4063	Principles of Environmental Geology
GEO	4113, 4121	Geomorphology and Laboratory
GEO	4623	Ground-Water Hydrology
GEO	4803	X-Ray Crystallography
GEO	4911-3	Independent Study
GEO	4951-3	Special Studies in Geology
GEO	4993	Honors Research

B. 26 to 29 required semester credit hours in the College of Sciences and Engineering:

CHE	1103	General Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CS	1073	Introductory Computer Programming for Scientific Applications
		or
CS	1713,	1711 Introduction to Computer Science and Recitation
MAT	1214	Calculus I
MAT	1223	Calculus II
		Either
PHY	1904, 1911	Technical Physics I and Laboratory
PHY	1924, 1931	Technical Physics II and Laboratory
		or

PHY	1603, 1611	General Physics I and Laboratory
PHY	1623, 1631	General Physics II and Laboratory

C. 9 semester credit hours of electives

Bachelor of Arts Degree in Geology

The Bachelor of Arts degree in Geology provides opportunities to prepare for careers in fields such as law, insurance, financial services, and environmental management. It is not recommended for students planning to pursue graduate studies in geology or related fields.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 126.

All candidates for the degree must complete the following:

A. 40 semester credit hours of geology:

1. 32 semester credit hours of required courses:

GEO	1103, 1111	Introduction to Earth Systems and Laboratory
GEO	1123, 1131	Earth History and Laboratory
GEO	2003, 2011	Mineralogy and Laboratory
GEO	2023, 2031	Optical Mineralogy and Laboratory
GEO	3043, 3052	Petrology and Laboratory
GEO	3063, 3071	Paleontology and Laboratory
GEO	3113	Geologic Field Investigations
GEO	4113, 4121	Geomorphology and Laboratory

2. 8 additional semester credit hours selected from the following (a maximum of 3 hours from either GEO 4911-3 or 4953 may apply to this requirement):

GEO	3083, 3091	Stratigraphy and Laboratory
GEO	3103, 3111	Structural Geology and Laboratory
GEO	3123, 3131	Sedimentary Geology and Laboratory
GEO	3143, 3151	Economic Geology and Laboratory
GEO	3163	Oceanography
GEO	3374	Geochemistry
GEO	3383	General Geophysics
GEO	4023	Engineering Geology
GEO	4063	Principles of Environmental Geology
GEO	4623	Ground-Water Hydrology
GEO	4803	X-Ray Crystallography
GEO	4911-3	Independent Study
GEO	4951-3	Special Studies in Geology
GEO	4993	Honors Research

B. 23 to 24 semester credit hours in the College of Sciences and Engineering:

CHE	1103	General Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CS	1073	Introductory Computer Programming for Scientific Applications
		or
CS	1713, 1711	Introduction to Computer Science and Recitation
MAT	1214	Calculus I
PHY	1603, 1611	General Physics I and Laboratory
PHY	1623, 1631	General Physics II and Laboratory

C. 12 semester credit hours of electives

Minor in Geology

All students pursuing the Minor in Geology must complete 22 semester credit hours.

A. 16 semester credit hours of required courses:

GEO	1103, 1111	Introduction to Earth Systems and Laboratory
GEO	1123, 1131	Earth History and Laboratory
GEO	3203, 3211	Introduction to Rocks and Minerals
GEO	3303, 3311	Introduction to Paleontology and Laboratory

B. 6 semester credit hours of approved upper-division geology electives

To declare a Minor in Geology, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Earth and Physical Sciences.

COURSE DESCRIPTIONS GEOLOGY (GEO)

- 1013 The Third Planet**
(3-0) 3 hours credit.
Evolution of ideas concerning the earth's origin, structure, and age; social impact of recognizing the antiquity of the planet and humankind's brief presence; examination of how the distribution of planetary resources influenced the rise and clash of civilizations. May not be applied to a major in geology.
- 1103 Introduction to Earth Systems**
(3-0) 3 hours credit. Prerequisite: Successful completion of one of the following core curriculum requirements: MAT 1033 or 1063, or STA 1053, 1063, 1073, or 1993.

The earth as a dynamic planet; relation of the earth's present processes to its resources, structure, and internal composition. Nature of minerals and rocks, the hydrosphere, tectonics, earthquakes, volcanism, and surface features of the earth. Concurrent enrollment in GEO 1111 recommended. (Formerly GEO 1003. Credit cannot be earned for both GEO 1103 and GEO 1003.) [TCCN: GEOL 1303.]

1111 Introduction to Earth Systems Laboratory

(0-3) 1 hour credit. Prerequisite: Completion of or concurrent enrollment in GEO 1103.

Relation of the earth's present processes to its resources, structure, and internal composition. Field trips and laboratory study of minerals, rocks, maps, and aerial and satellite photos. (Formerly GEO 1011. Credit cannot be earned for both GEO 1111 and GEO 1011.) [TCCN: GEOL 1103.]

1123 Earth History

(3-0) 3 hours credit. Prerequisite: Successful completion of one of the following core curriculum requirements: MAT 1033 or 1063, or STA 1053, 1063, 1073, or 1993.

Formation and evolution of the earth, its life forms, and the major features of its surface. Concurrent enrollment in GEO 1131 recommended. (Formerly GEO 1023. Credit cannot be earned for both GEO 1123 and GEO 1023.) [TCCN: GEOL 1304.]

1131 Earth History Laboratory

(0-3) 1 hour credit. Prerequisite: Completion of or concurrent enrollment in GEO 1123.

Laboratory study of fossils and rock sequences; interpretation of earth history. (Formerly GEO 1031. Credit cannot be earned for both GEO 1131 and GEO 1031.) [TCCN: GEOL 1104.]

2003 Mineralogy

(3-0) 3 hours credit. Prerequisites: CHE 1103, GEO 1103, GEO 1111, MAT 1093, or consent of instructor; concurrent enrollment in GEO 2011.

Crystallography, chemistry, physical properties, and origins of minerals. Field trips required.

2011 Mineralogy Laboratory

(0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 2003.

Laboratory study of crystal models, crystals, and minerals. Field trips required.

2023 Optical Mineralogy

(3-0) 3 hours credit. Prerequisites: GEO 2003, 2011, and concurrent enrollment in GEO 2031.

Principles and methods of optical mineralogy. Optical properties of minerals and microscopic determination of opaque and nonopaque minerals.

- 2031 Optical Mineralogy Laboratory**
(0-3) 1 hour credit. Prerequisites: GEO 2003, 2011, and concurrent enrollment in GEO 2023.
Use of the petrographic microscope for the identification of minerals.
- 3043 Petrology**
(3-0) 3 hours credit. Prerequisites: GEO 2023, 2031, and concurrent enrollment in GEO 3052.
Description, classification, occurrence, and origin of igneous, metamorphic, and sedimentary rocks. Field trips required.
- 3052 Petrology Laboratory**
(0-4) 2 hours credit. Prerequisites: GEO 2023, 2031, and concurrent enrollment in GEO 3043.
Laboratory study of rocks in hand specimen and thin section. Field trips required.
- 3063 Paleontology**
(3-0) 3 hours credit. Prerequisites: GEO 1103, 1111, 1123, 1131, or consent of instructor; concurrent enrollment in GEO 3071.
Study of fossil animals and plants. Emphasis on invertebrate animals. Systematics, biostratigraphy, paleoecology, and evolution of fossil organisms. Field trips required. (Formerly GEO 2063. Credit cannot be earned for both GEO 3063 and GEO 2063.)
- 3071 Paleontology Laboratory**
(0-3) 1 hour credit. Prerequisites: GEO 1103, 1111, 1123, 1131, and concurrent enrollment in GEO 3063.
Study of fossil specimens, collections, and preparation techniques. Field trips required. (Formerly GEO 2071. Credit cannot be earned for both GEO 3071 and GEO 2071.)
- 3083 Stratigraphy**
(3-0) 3 hours credit. Prerequisites: GEO 3063, 3071, 3123, and 3131, or consent of instructor; concurrent enrollment in GEO 3091.
Application of stratigraphic principles to the interpretation of rocks formed at or near the surface of the earth. Field trips required.
- 3091 Stratigraphy Laboratory**
(0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3083.
Laboratory study of stratigraphic methods using maps, measured sections, geologic and stratigraphic cross-sections, air photos, seismic data, modeling techniques, systems analysis, and various aspects of sequence stratigraphic analysis. Field trips required.
- 3103 Structural Geology**
(3-0) 3 hours credit. Prerequisites: GEO 3043, 3052, and concurrent enrollment in GEO 3111.
Response of earth materials to natural stresses. Description and origin of geologic structures. Field trips required.

- 3111 Structural Geology Laboratory**
(0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3103.
Laboratory study of geologic structures using maps, cross-sections, photographs, and descriptive geometric and stereographic methods. Field trips required.
- 3113 Geologic Field Investigations**
(0-6) 3 hours credit. Prerequisite: Consent of instructor.
Field studies of areas of geologic interest; e.g., structural geologic mapping, sedimentary facies analysis, hydrologic studies, etc. May be repeated for credit when topics vary, but not more than 6 semester credit hours may be applied to a B.A. or B.S. in Geology. Concurrent enrollment in GEO 4946 is not permitted. Field trips required.
- 3123 Sedimentary Geology**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in GEO 3043 and 3052; concurrent enrollment in GEO 3131.
Processes of erosion, transportation, and deposition that form bodies of sedimentary rock. Depositional systems and modeling are a significant area of study. Field trips required.
- 3131 Sedimentary Geology Laboratory**
(0-3) 1 hour credit. Prerequisites: Completion of or concurrent enrollment in GEO 3043, 3052, and 3123.
Laboratory studies of sedimentary processes and their products. Hand specimens, thin sections, sedimentary structures, and interpretation of depositional environments. Field trips required.
- 3143 Economic Geology**
(3-0) 3 hours credit. Prerequisites: GEO 2003, GEO 2011, and concurrent enrollment in GEO 3151.
Origin of metallic ore deposits and industrial minerals, including the geology of major metallic deposits and the uses and economics of metals. Field trips required.
- 3151 Economic Geology Laboratory**
(0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3143.
Study of rock and mineral suites from important ore localities. Identification of ore minerals. Textures, structures, and alteration zones associated with ore deposits. Field trips required.
- 3163 Oceanography**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
General oceanography, with emphasis on marine geology and especially the continental margins. Field trips required.

- 3203 Introduction to Rocks and Minerals**
 (3-0) 3 hours credit. Prerequisite: GEO 1103, GEO 1111, CHE 1103, MAT 1063, or consent of instructor.
 Description, classification, and origin of common rocks and minerals as well as gemstones and ores. Field trips required. May not be applied toward a B.S. in Geology.
- 3211 Introduction to Rocks and Minerals Laboratory**
 (0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3203.
 Laboratory study in hand specimens of common rocks, minerals, gemstones, and ores. May not be applied toward a B.S. in Geology. Field trips required.
- 3303 Introduction to Paleontology**
 (3-0) 3 hours credit. Prerequisite: GEO 1103, GEO 1111, CHE 1103, MAT 1063, or consent of instructor.
 Description, taxonomy, paleoecology, and correlation techniques of special interests to geoscientists will be introduced. May not be applied toward a B.S. in Geology. Field trips required.
- 3311 Introduction to Paleontology Laboratory**
 (0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3303.
 Laboratory study in specimen characteristics, species analysis, collecting, and preservation techniques. May not be applied toward a B.S. in Geology. Field trips required.
- 3323 Global Tectonism and Geologic Processes**
 (3-0) 3 hours credit. Prerequisites: GEO 1103, GEO 1111, and MAT 1063 or above.
 Global tectonism provides a framework for understanding the planet. The distribution of lithologies, mountains, volcanoes, earthquake, and resources is controlled by tectonism. The transfer of heat from the interior of the planet toward the surface provides the driving force for tectonism. Students may explore the evolution of our current global tectonic paradigm from continental drift to pale tectonics. May not be applied toward a B.S. in Geology.
- 3331 Global Tectonism and Geologic Processes Laboratory**
 (0-3) 1 hour credit. Prerequisite: Concurrent enrollment in GEO 3323.
 Students will study the concepts that underlie global tectonism through the medium of hands-on activities specifically designed for adaptation and use in school classrooms. May not be applied toward a B.S. in Geology.
- 3374 Geochemistry**
 (2-4) 4 hours credit. Prerequisite: CHE 1303 or consent of instructor.
 A survey of geochemical processes and the distribution of elements in the earth. Application of chemical methods and data to the solution of geologic problems. (Formerly GEO 3373. Credit cannot be earned for both GEO 3374 and GEO 3373.)

- 3383 General Geophysics**
(3-0) 3 hours credit. Prerequisites: GEO 3043 and 3052.
Physics of the earth's interior, plate tectonics, geomagnetism, gravity, and heat flow.
- 4023 Engineering Geology**
(3-0) 3 hours credit. Prerequisite: PHY 1904, PHY 1603, MAT 1214, or consent of instructor.
Geologic factors in construction. Geotechnical properties of minerals, rocks, and soils. Case studies. Field trips required. (Formerly GEO 3023. Credit cannot be earned for both GEO 4023 and GEO 3023.)
- 4063 Principles of Environmental Geology**
(3-0) 3 hours credit. Prerequisites: GEO 1103 and 1111.
Geologic factors important to city and regional planning. Land capability studies; geologic hazards. Field trips required.
- 4113 Geomorphology**
(3-0) 3 hours credit. Prerequisites: GEO 1103, 1111, and concurrent enrollment in GEO 4121.
Analysis of Cenozoic landform evolution. Field trips required.
- 4121 Geomorphology Laboratory**
(0-3) 1 hour credit. Prerequisites: GEO 1103, 1111, and concurrent enrollment in GEO 4113.
Interpretation of maps and aerial photographs. Field trips required.
- 4623 Ground-Water Hydrology**
(3-0) 3 hours credit. Prerequisites: GEO 1103, GEO 1111, and PHY 1904; or PHY 1603 and MAT 1214.
Hydrologic cycle and the theory of underground water. Recharge and discharge of aquifers; water quality; exploration and development of groundwater supplies. Field trips required.
- 4803 X-Ray Crystallography**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
The principles and applications of x-ray diffraction to crystalline materials.
- 4911-3 Independent Study**
1 to 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students desiring specialized work. May be repeated for credit, but not more than 3 semester credit hours will apply to a bachelor's degree in geology.
- 4946 Field Geology**
(6-12) 6 hours credit. Prerequisites: GEO 3103, 3111, and consent of instructor.

Field mapping and measurements during a seven-week period in summer. (Formerly GEO 4947. Credit cannot be earned for both GEO 4946 and GEO 4947.)

4951-3 Special Studies in Geology

1 to 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisites: Enrollment limited to candidates for college honors during their last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis. May be repeated only once with approval.

Bachelor of Science Degree in Physics

The Bachelor of Science degree in Physics provides opportunities for preparation for careers in industry and government agencies, and for graduate study in physics or related fields.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 133.

All candidates for the degree must complete the following:

A. 49 semester credit hours:

1. 40 semester credit hours of required courses:

PHY	1904, 1911	Technical Physics I and Laboratory
PHY	1924, 1931	Technical Physics II and Laboratory
PHY	3103	Modern Physics
PHY	3143	Computer Visualization of Physics
PHY	3203	Classical Mechanics I
PHY	3293	Statistical Thermodynamics
PHY	3343	Advanced Physics Laboratory I
PHY	3353	Advanced Physics Laboratory II
PHY	3423	Electricity and Magnetism
PHY	3443	Optics
PHY	3823	Mathematical Physics
PHY	4263	Quantum Mechanics I

2. 9 additional approved semester credit hours selected from the following (a maximum of 3 hours from either PHY 4911-3 or 4953 may apply to this requirement):

PHY	3163	Theoretical Physics
PHY	3233	Environmental Physics
PHY	3313	Solid State Physics
PHY	3433	Introduction to the Theory of Solid State Electronics
PHY	3453	Lasers: Theory and Applications
PHY	4133	Numerical Methods for Physicists
PHY	4203	Classical Mechanics II
PHY	4423	Quantum Mechanics II
PHY	4553	Health Physics
PHY	4911-3	Independent Study
PHY	4953	Special Studies in Physics
PHY	4993	Honors Research

B. 30 semester credit hours required in the College of Sciences and Engineering:

1. 27 semester credit hours of required courses (excluding physics):

CHE	1103	General Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CS	1073	Introductory Computer Programming for Scientific Applications
MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
MAT	3613	Differential Equations I

2. 3 additional approved semester credit hours in the College of Sciences and Engineering

Bachelor of Arts Degree in Physics

The Bachelor of Arts degree in Physics provides opportunities for careers in several professional fields. It is not recommended for students planning to pursue graduate studies in physics or related fields.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 124.

All candidates must complete the following:

A. 28 semester credit hours:

1. 25 semester credit hours of required courses:

PHY	1904, 1911	Technical Physics I and Laboratory
PHY	1924, 1931	Technical Physics II and Laboratory
PHY	3103	Modern Physics
PHY	3203	Classical Mechanics

PHY	3343	Advanced Physics Laboratory I
PHY	3423	Electricity and Magnetism
PHY	4133	Numerical Methods for Physicists

2. 3 additional semester credit hours selected from the following:

PHY	3143	Computer Visualization of Physics
PHY	3163	Theoretical Physics
PHY	3293	Statistical Thermodynamics
PHY	3313	Solid State Physics
PHY	3353	Advanced Physics Laboratory II
PHY	3443	Optics
PHY	3823	Mathematical Physics
PHY	4133	Numerical Methods for Physicists
PHY	4263	Quantum Mechanics

B. 42 semester credit hours required in the College of Sciences and Engineering:

1. 27 semester credit hours of required courses (excluding physics):

CHE	1103	General Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CS	1073	Introductory Computer Programming for Scientific Applications
MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
MAT	3613	Differential Equations I

2. 15 additional approved semester credit hours from the College of Sciences and Engineering

Minor in Physics

All students pursuing the Minor in Physics must complete 22 semester credit hours.

A. 19 semester credit hours of required courses:

PHY	1904, 1911	Technical Physics I and Laboratory
PHY	1924, 1931	Technical Physics II and Laboratory
PHY	3103	Modern Physics
PHY	3203	Classical Mechanics
PHY	3423	Electricity and Magnetism

B. 3 semester credit hours selected from the following:

PHY	3133	Computers in Physics Laboratory
PHY	3163	Theoretical Physics

PHY	3293	Statistical Thermodynamics
PHY	3313	Solid State Physics
PHY	3443	Optics
PHY	3823	Mathematical Physics
PHY	4133	Numerical Methods for Physicists
PHY	4263	Quantum Mechanics

To declare a Minor in Physics, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Earth and Physical Sciences.

COURSE DESCRIPTIONS PHYSICS (PHY)

- 1003 Topics in Physics**
(3-0) 3 hours credit.
An organized course offering the opportunity for specialized study in physics. This course is not often available as part of the regular course offering and provides special opportunities for students to learn about practical methods and/or special topics in physics. Topics include practical problem solving, the nature of things, and energy and the environment. May be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree. May not be counted toward the B.S. in Physics without written approval of the department.
- 1014 Conceptual Physics and Civilization**
(3-1) 4 hours credit. Prerequisite: MAT 1063.
Major scientific discoveries since the Renaissance and their impact on the development of culture. May not be applied toward a B.S. or B.A. in Physics.
- 1603 General Physics I**
(3-0) 3 hours credit. Prerequisite: MAT 1063 completed with a grade of "C" or better.
Motion, forces, conservation of energy and momentum, fluids, wave motion, and heat. Concurrent enrollment in PHY 1611 recommended. [TCCN: PHYS 1301.]
- 1611 General Physics I Laboratory**
(1-3) 1 hour credit. Prerequisites: Completion of or concurrent enrollment in PHY 1603; proficiency in DOS, spreadsheets, and word processing.
Laboratory accompanies PHY 1603; uses modern data acquisition and analysis tools to study the classic physics experiments that underlie the concepts discussed in PHY 1603. [TCCN: PHYS 1101.]
- 1623 General Physics II**
(3-0) 3 hours credit. Prerequisites: PHY 1603 completed with a grade of "C" or better.
Electrostatics, electromagnetism, light, sound, and atomic and nuclear physics. Concurrent enrollment in PHY 1631 recommended. [TCCN: PHYS 1302.]

- 1631 General Physics II Laboratory**
(1-3) 1 hour credit. Prerequisites: PHY 1611 completed with a grade of “C” or better and completion of or concurrent enrollment in PHY 1623; proficiency in DOS, spreadsheets, and word processing. Laboratory accompanies PHY 1623; uses modern data acquisition and analysis tools to study the classic physics experiments that underlie the concepts discussed in PHY 1623. [TCCN: PHYS 1102.]
- 1904 Technical Physics I**
(4-0) 4 hours credit. Prerequisite: MAT 1214 and completion of or concurrent enrollment in MAT 1223 completed with a grade of “C” or better. The basic concepts and methods of physics. Mechanics, heat, and fluids. Concurrent enrollment in PHY 1911 and MAT 1223 recommended. [TCCN: PHYS 2425.]
- 1911 Technical Physics I Laboratory**
(1-3) 1 hour credit. Prerequisites: Completion of with a grade of “C” or better or concurrent enrollment in PHY 1904; proficiency in DOS, spreadsheets, and word processing. Laboratory to accompany PHY 1904: uses modern data acquisition and analysis tools to study the classic physics experiments that underlie the concepts discussed in PHY 1904. [TCCN: PHYS 2125.]
- 1924 Technical Physics II**
(4-0) 4 hours credit. Prerequisites: PHY 1904 and MAT 1223 completed with a grade of “C” or better. Electricity and magnetism, wave phenomena, and elements of modern physics. Concurrent enrollment in PHY 1931 is recommended. [TCCN: PHYS 2426.]
- 1931 Technical Physics II Laboratory**
(1-3) 1 hour credit. Prerequisites: PHY 1911 completed with a grade of “C” or better and completion of or concurrent enrollment in PHY 1924; proficiency in DOS, spreadsheets, and word processing. Laboratory to accompany PHY 1924. [TCCN: PHYS 2126.]
- 3103 Modern Physics**
(3-0) 3 hours credit. Prerequisite: PHY 1924. Special relativity, Planck’s Radiation Law, elements of quantum mechanics, atomic and molecular structures, spectra, the atomic nucleus, nuclear reactions, and an introduction to elementary particles.
- 3133 Computers in the Physics Laboratory**
(3-0) 3 hours credit. Prerequisites: PHY 1924, 1931, and 3103. Topics covered include i80x86 assembly language programming, the FORTH programming environment, construction of customized computer interfaces to equipment, writing DOS/Windows device drivers for scientific instrumentation, and computer-controlled data acquisition and analysis.

- 3143 Computer Visualization of Physics**
(3-0) 3 hours credit. Prerequisite: PHY 3103.
Simulations of physical processes from classical and quantum mechanics, electrodynamics, and solid state physics. May be applied toward a B.S. in Physics with approval of the physics advisor.
- 3163 Theoretical Physics**
(3-0) 3 hours credit. Prerequisites: PHY 1924 and MAT 2213.
Methods of theoretical physics applied to problems in electromagnetism and quantum and statistical physics, with an emphasis on physical formulation and interpretation.
- 3203 Classical Mechanics I**
(3-0) 3 hours credit. Prerequisites: PHY 1924 and completion of or concurrent enrollment in PHY 3103 and MAT 2213.
Kinematics and dynamics of systems of particles; rigid body motion. Applications are emphasized.
- 3233 Environmental Physics**
(3-0) 3 hours credit. Prerequisite: PHY 1623 or PHY 1924.
The essentials of environmental physics: global climate, energy for human use, pollutants, noise, environmental spectroscopy, and LIDAR.
- 3293 Statistical Thermodynamics**
(3-0) 3 hours credit. Prerequisites: PHY 1924, PHY 3103, and MAT 2213.
Fundamentals of thermodynamics: entropy, free energy, phase transitions, and thermodynamic potentials; equilibrium Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac distribution functions; derivation of macroscopic equilibrium thermodynamics from statistical mechanics.
- 3313 Solid State Physics**
(3-0) 3 hours credit. Prerequisite: PHY 3103.
Crystalline structures, phonons, energy bands, and semiconductor crystals.
- 3343 Advanced Physics Laboratory I**
(0-6) 3 hours credit. Prerequisites: PHY 1924 and 1931.
Laboratory experience in the areas of optics, modern physics, and solid state and surface physics. (Formerly PHY 3346. Credit cannot be earned for both PHY 3343 and PHY 3346.)
- 3353 Advanced Physics Laboratory II**
(0-6) 3 hours credit. Prerequisite: PHY 3343.
A continuation of PHY 3343. (Formerly PHY 3356. Credit cannot be earned for both PHY 3353 and PHY 3356.)
- 3423 Electricity and Magnetism**
(3-0) 3 hours credit. Prerequisites: PHY 1924 and completion of or concurrent enrollment in MAT 2213.
Vector calculus, electrostatics magnetostatics, Faraday's Law, and Ohm's Law.

- 3433 Introduction to the Theory of Solid State Electronics**
(3-0) 3 hours credit. Prerequisites: PHY 3103 and 3313, or consent of instructor.
Principles of intrinsic and extrinsic semiconductors. The theory of solid state devices.
- 3443 Optics**
(3-0) 3 hours credit. Prerequisite: PHY 3423.
The reflection, refraction, absorption, polarization, and diffraction of light. Filters, lasers, nonlinear properties, and Fourier optics.
- 3453 Lasers: Theory and Applications**
(3-0) 3 hours credit. Prerequisite: PHY 3103.
Basic principles and designs of lasers: Einstein A and B coefficients; semiclassical laser theory; the phase-coherent nature of the stimulated emission process; and laser efficiency. Various applications of lasers, such as laser-induced fluorescence, light wave communications, holography, surgery, and laser fusion.
- 3823 Mathematical Physics**
(3-0) 3 hours credit. Prerequisite: MAT 2233.
Tensor analysis, complex variable theory, partial differential equations of physics, special functions, and approximation techniques.
- 4003 Introduction to Astrophysics**
(3-0) 3 hours credit. Prerequisites: MAT 1223 and PHY 1924, or consent of instructor.
A survey of the fundamentals of modern astrophysics and gravitation including observed properties of stars (normal, multiple, variable, and peculiar). Stellar and nonstellar radiation laws, stellar and planetary atmospheres and interiors, high-energy astrophysics, collapsed objects (neutron stars and black holes), structure and inventory of normal (Milky Way) and active galaxies, quasars, and an introduction to cosmology.
- 4133 Numerical Methods for Physicists**
(3-0) 3 hours credit. Prerequisites: PHY 1924 and MAT 3613.
Topics covered include numerical integration of functions, solution of linear algebraic equations, matrices, Monte Carlo methods, root finding, minimization and maximization of functions, fast Fourier and discrete wavelet transform methods, and solution of differential equations.
- 4203 Classical Mechanics II**
(3-0) 3 hours credit. Prerequisite: PHY 3203.
Advanced methods in mechanics; Lagrangian and Hamiltonian formulations. Nonlinear dynamics, chaos, strange attractors, and fractals.
- 4263 Quantum Mechanics I**
(3-0) 3 hours credit. Prerequisites: PHY 3203 and 3423.
The Schrodinger equation, operators, and perturbation methods. Applications to the harmonic oscillator and the hydrogen atom.

4423 Quantum Mechanics II

(3-0) 3 hours credit. Prerequisite: PHY 4263.

The interaction of radiation with atomic systems, laser oscillations, band theory of electrons in crystals, and charge transport.

4453 Physics Demonstrations

(3-0) 3 hours Prerequisites: PHY 1603 and 1623, or PHY 1904 and 1924.

Introduction to teaching materials and laboratory demonstrations illustrating principles of classical and modern physics, with emphasis on inexpensive techniques and direct experience. May not be counted toward a B.S. or B.A. in Physics.

4463 Physics and the Entrepreneurial Process

(3-0) 3 hours credit. Prerequisites: PHY 1603 and 1623, PHY 1904 and 1924, or consent of instructor.

The entrepreneurial process usually is coupled to innovation, and in today's technological business world, innovation usually involves some form of applied physics. This course begins with the invention process itself and the physics behind some of the most famous inventions. It proceeds to look at the research and developmental physics that typically follows a new product concept. The course then examines the challenges that face the entrepreneur in the technical marketing of the new product, in which the physics must be conveyed to the consumer.

4553 Health Physics

(3-0) 3 hours credit. Prerequisite: PHY 1924 or the equivalent.

Applications of electromagnetic radiation to biological systems. Laser-tissue interaction: optical and thermal properties of biological tissues. Lasers in medicine: therapeutic, diagnostic, and surgical applications. Particular utilization of lasers in the field of ophthalmology. Introduction to nuclear medicine for diagnostic and therapeutic purposes.

4911-3 Independent Study

1 to 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students desiring specialized work. May be repeated for credit, but not more than 3 semester credit hours will apply to a bachelor's degree in physics.

4933,6 Internship in Physics

3 to 6 hours credit. Prerequisites: Senior standing and consent of internship coordinator.

This course offers supervised work experience relevant to physics within selected organizations and agencies. Internships should be relevant to previous coursework. May be repeated for credit. A maximum of 6 semester credit hours may be earned through Internship in Physics.

4953 Special Studies in Physics

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisite: Enrollment limited to candidates for college honors during their last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis. May be repeated once with approval.

COURSE DESCRIPTIONS ASTRONOMY (AST)

1003 Universes

(3-0) 3 hours credit. Prerequisites: PHY 1014 or AST 1013, and MAT 1063 or the equivalent.

This course emphasizes how the great ideas of physics have influenced and reshaped our general conception of the universe. Selected topics include the historical development of the scientific method, ancient cosmological ideas beginning with the geocentric model, and the classical cosmological models emphasizing Newtonian cosmology. Modern cosmological ideas including Einstein's and Hawking's universe will be compared. Topics presented will include the large-scale structure, origin, and fate of the universe. Modern evidence supporting these theories will be presented. May not be applied toward the B.S. in Physics without prior written approval of the department.

1013 Introduction to Astronomy

(3-0) 3 hours credit. Prerequisite: MAT 1063.

A descriptive course including the development of astronomy, its methods, and the motions, laws, and evolution of the solar system. Topics include general properties and types of stars, unusual stellar objects such as quasars and black holes, galaxies, evolution, and cosmology. Occasional evening viewing sessions are held. [TCCN: PHYS 1311.]

1031 Introduction to Astronomy Laboratory

(0-2) 1 hour credit. Prerequisite: AST 1013 or consent of instructor.

Exercises in the use of the telescope and certain other astronomical instruments, including simple observations, measurement, and photography. [TCCN: PHYS 1111.]

1033 Exploration of the Solar System

(3-0) 3 hours credit. Prerequisite: MAT 1063

A descriptive course of modern studies of the solar system, including a survey of the properties of the planets and smaller bodies (asteroids and comets) and current theories of the origin of planetary systems. Topics include results from the latest satellite, robotic, and human exploration of space, origin of life in the solar system, existence of other planetary systems, possibilities of space colonization, and the search for extraterrestrial life (techniques and possibilities of communication with other intelligences).

**COURSE DESCRIPTIONS
ENVIRONMENTAL SCIENCES
(ES)**

2013 Introduction to Environmental Systems

(3-0) 3 hours credit.

An introduction to the principles of man-machine-community interrelationships within the natural and built environments. General attention is given to the concepts of growth, processes, and changes occurring in ecosystems and social structures. Emphasis on understanding system dynamics and their relation to public policy formulation and natural resource use. (Formerly ENV 2013. Credit cannot be earned for both ES 2013 and ENV 2013.)

3023 Man and His Natural Resources

(3-0) 3 hours credit.

An in-depth analysis of humankind's dependency on the major natural resources of the earth such as water, air, soils, forests, grasslands, minerals, fuels, and wildlife, and the environmental problems that arise through societal mismanagement. (Formerly ENV 3023. Credit cannot be earned for both ES 3023 and ENV 3023.)

4043 Introduction to Geographic Information Systems (GIS)

(2-2) 3 hours credit. Prerequisites: Experience using a computer and consent of instructor.

Use of geographic information systems (GIS) to analyze and solve spatially related problems commonly encountered by professionals in many disciplines. The course uses ArcView as the base program and emphasizes the fundamental concepts and principles of GIS. Overviews for other commonly used GIS programs are included.

DIVISION OF ENGINEERING

The Division of Engineering offers Bachelor of Science degrees in Civil, Electrical, and Mechanical Engineering. Each program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET/EAC). Individuals enrolling in these degree programs are given an opportunity to develop a strong background in the engineering sciences and to learn the analysis, design, and synthesis tools necessary to function well as active participants in many traditional, new, and emerging areas of high technology.

The division has excellent laboratory facilities where students receive hands-on instruction by faculty. Computer-aided design (CAD) facilities, including state-of-the-art workstations, are routinely used in all programs. Some classes are taught by adjunct faculty from local industries, giving students the opportunity to interact with engineering professionals engaged in relevant engineering practice.

This quality engineering education is complemented by the Core Curriculum. Graduates from the Division of Engineering should have excellent opportunities for employment and pursuit of graduate degrees.

Cooperative Education in Engineering Program

The Cooperative Education in Engineering Program formally integrates students' University studies with institutionally supervised work experiences at cooperating organizations. Students participating in this program alternate periods of study at the University with periods of employment in industry. This combination of experiences enhances the student's knowledge, personal development, and preparation for a professional career. Participants register at the University each semester. During the work periods, students register for the 1-semester-credit-hour Engineering Co-op course. At the end of each work period, students submit reports covering the period. These reports are the basis of the students' grades in the course. The cooperative education work periods also provide students with a source of income to help pay for their college expenses.

Students may petition to apply 3 semester credit hours of Engineering Co-op as a technical elective toward their degree in engineering. They are encouraged to petition prior to co-op activities.

To qualify for the Cooperative Education in Engineering Program, a student must have declared a major in the Division of Engineering; have completed at least 36 semester credit hours of major and support work, including 10 hours of college-level calculus and 10 hours of college-level physics; and have a minimum cumulative grade-point average of 2.50 and a minimum grade-point average of 2.50 in their College of Sciences and Engineering courses. Students are advised that many co-op employers require cumulative grade-point averages higher than 2.50, and some require a minimum cumulative grade-point average of 3.0. Transfer students may participate in the program after completing at least one semester at the University.

For more information and to apply to the Cooperative Education in Engineering Program, students should contact Career Services.

Degree Requirements Common to All Programs

Entering students should enroll in a specific engineering program by selecting civil, electrical, or mechanical engineering as a major. Undecided engineering students should select a major closest to their area of interest (refer to the following program descriptions). Students may obtain additional information about each program from the division office or a faculty advisor in the appropriate discipline.

Prerequisites for civil engineering (CE), electrical engineering (EE), mechanical engineering (ME), and engineering (EGR) courses must be completed with a grade of "C" or better. Students must satisfy the University's Core Curriculum and ABET accreditation requirements. Recommended degree plans and current ABET requirements may be obtained from the Division of Engineering.

Requirements common to all engineering degree programs follow.

I. Core Curriculum requirements:

Students seeking the Bachelor of Science degree in any engineering field must fulfill University Core Curriculum requirements by taking the following courses or their equivalents:

Rhetoric (6 semester credit hours)*

Domain I: Science, Technology, and Mathematics

Mathematics (4 semester credit hours):

MAT 1214 Calculus I

Science (7 semester credit hours):

CHE 1103 General Chemistry

PHY 1904 Technical Physics I

Computer Science/Logic (3 semester credit hours):

CS 2073 Programming with Engineering Applications

Domain II: Society and Culture

United States History and Diversity (6 semester credit hours)*

Political Studies (6 semester credit hours)*

Economics (3 semester credit hours):

EGR 3713 Engineering Economic Analysis

Social and Behavioral Sciences (incorporated in Domain IV)

*Engineering students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in the chapter 6 (Bachelor's Degree Regulations) of this catalog.

Domain III: Literature, the Arts, and Language

Language (semester credit hours vary)*
 Literature (incorporated in Domain IV)
 The Arts (incorporated in Domain IV)

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours)

One of the following:

CE	4813	Civil Engineering Design
EE	4813	Electrical Engineering Design
ME	4813	Mechanical Engineering Design Project

Diversity of Culture (6 semester credit hours):

IDS	2203	World Civilization to the Fifteenth Century
COR	2213	Engineering and Civilization

II. General Engineering Requirements:

All degree-seeking candidates in engineering must complete the following 29 semester credit hours (CHE 1103, PHY 1904, MAT 1214, CS 2073, and EGR 3713 also satisfy 17 hours of the Core Curriculum):

CHE	1103	Introductory Chemistry
CS	2073	Programming with Engineering Applications
EGR	3713	Engineering Economic Analysis
MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
PHY	1904, 1911	Technical Physics I and Laboratory
PHY	1924, 1931	Technical Physics II and Laboratory

COURSE DESCRIPTIONS ENGINEERING (EGR)

- 1402 Engineering Graphical Communications**
 (1-3) 2 hours credit. Prerequisite: Completion of or concurrent enrollment in MAT 1214.
 Technical communication, engineering graphics, and an introduction to computer-aided graphics. Introduction to engineering analysis, design, synthesis, and production methods.

*Engineering students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

2213 Engineering Mechanics

(3-0) 3 hours credit. Prerequisites: MAT 1223 and PHY 1904.

Force systems, moments, equilibrium, kinematics, and kinetics of particles and plane rigid bodies. Not open to students majoring in civil or mechanical engineering. May not be substituted for CE 2203 or ME 2503.

3301 Engineering Co-op

1 hour credit. Prerequisite: Acceptance into the Cooperative Education in Engineering Program.

Designed for students participating in Cooperative Education in Engineering Program. Problems related to students' work assignments during their work for co-op employers. May be repeated for credit, but no more than 3 semester credit hours may apply to a bachelor's degree.

3713 Engineering Economic Analysis

(3-0) 3 hours credit. Prerequisite: Upper-division standing in the Division of Engineering. Fundamentals of economics and economic policies. Techniques of investment analysis for engineering decisions. Discussion of professional practice-ethics, project management, proposal preparation, and communication. (Formerly EGR 4713. Credit cannot be earned for both EGR 3713 and EGR 4713.)

4113 Engineering Fracture Mechanics

(3-0) 3 hours credit. Prerequisite: ME 3813 or equivalent, or consent of instructor.

Introduction to the theory of fracture mechanics through the Griffith energy balance, Irwin's stress intensity and strain energy release rate, and Rice's conservation integral. Fracture mechanics will be applied to several modern engineering problems.

4183 Propulsion

(3-0) 3 hours credit. Prerequisites: ME 3293 or ME 3283, and ME 3663 or EE 3413.

Introduction to analysis, design, control of air-breathing engines, including performance and cycle analysis, heat transfer, material considerations, and shocks; design and analysis of inlets, compressors, combustors, turbines, and nozzles. Applications to aeronautical and ground transportation.

4213 Introduction to the Theory of Finite Elements

(2-3) 3 hours credit. Prerequisites: ME 3813 and 3423 or consent of instructor.

Introduction to the theory of finite element analysis through the method of weighted residuals. The method will be applied to find the solution of boundary-valued and time-dependent problems of mechanics and heat transfer. Commercially available finite element codes will be utilized as a solution technique during scheduled laboratory.

4953 Special Studies in Engineering

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisites: Enrollment limited to candidates for college honors during their last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis. May be repeated once with approval.

Bachelor of Science Degree in Civil Engineering

The Bachelor of Science degree in Civil Engineering is a broad-based program designed to prepare students for careers in areas traditionally associated with civil engineering and several modern areas of high technology. Students are required to take courses in subjects related to environmental and water resource issues, structural analysis and design methodology, civil engineering materials such as reinforced concrete and steel, and geotechnical engineering. In addition, elective courses are available to provide emphasis on transportation systems, structures made with advanced composite materials, construction, and other areas. Upon graduation from the civil engineering program, successful students should be qualified to seek employment in local or national companies and government agencies associated with aerospace, automotive and transportation, environmental, structural, geotechnical, and other industries.

All candidates for the degree must complete the following:

A. 62 semester credit hours of required courses:

CE	1301	Introduction to Civil Engineering
CE	2103	Civil Engineering Measurements
CE	2203	Statics
CE	2503	Dynamics
CE	2633	Environmental Engineering
CE	3103	Mechanics of Solids
CE	3113	Structural Analysis
CE	3213	Reinforced Concrete Design
CE	3233	Steel Design
CE	3243	Properties and Behavior of Engineering Materials
CE	3413	Geotechnical Engineering
CE	3603	Hydraulic Engineering
CE	3713	Civil Engineering Systems Analysis
CE	4603	Water Resources Engineering

CE	4813	Civil Engineering Design*
EE	2214	Electric Circuits and Electronics
ENG	2413	Technical Writing
CHE	1303	Chemical Principles
GEO	4023	Engineering Geology
MAT	3253	Engineering Analysis
ME	3283	Fundamentals of Thermal Sciences

B. 9 semester credit hours of civil engineering electives, 6 of which must be selected from the following list:

CE	3633	Water and Wastewater Treatment
CE	3723	Hydrology
CE	4113	Transportation Systems
CE	4223	Earth Structures
CE	4333	Solid Waste Engineering
CE	4413	Foundation Engineering
CE	4523	Advanced Reinforced Concrete Design
CE	4543	Construction Planning
CE	4643	Air Quality Engineering
CE	4653	Design of Pollution Control Systems
CE	4723	Hydraulic Systems Design

COURSE DESCRIPTIONS CIVIL ENGINEERING (CE)

- 1301 Introduction to Civil Engineering**
(1-0) 1 hour credit.
Engineering as a career; engineering ethics; and approaches to engineering problem formulation and solution using principles of design and decision making. (Formerly EGR 1301. Credit cannot be earned for both CE 1301 and EGR 1301.)
- 2103 Civil Engineering Measurements**
(2-3) 3 hours credit. Prerequisite: MAT 1214.
Principles of measurement and error analysis. Application of equipment to acquire, analyze, and control data in civil engineering systems. Introduction to plane surveying. (Formerly CE 2113. Credit cannot be earned for both CE 2103 and CE 2113.)
- 2203 Statics**
(3-0) 3 hours credit. Prerequisites: CE 1301, EGR 1402, MAT 1223, and PHY 1904.
Vector algebra, force systems, and free body diagrams. Engineering applications of equilibrium, centroids, and moments of inertia. [TCCN: ENGR 2301.] (Formerly EGR 2203. Credit cannot be earned for both CE 2203 and EGR 2203.)

*May be used to satisfy the Core Curriculum requirements in Domain IV.

- 2503 Dynamics**
(3-0) 3 hours credit. Prerequisites: CE 2203 and completion of or concurrent enrollment in MAT 2213.
Kinematics and kinetics of particles and plane rigid bodies, work and energy, impulse and momentum, and engineering applications. [TCCN: 2302.] (Formerly EGR 2503. Credit cannot be earned for both CE 2503 and EGR 2503.)
- 2633 Environmental Engineering**
(3-0) 3 hours credit. Prerequisites: CHE 1303 and PHY 1924.
Principles, analysis, and design related to environmental monitoring, protection, and remediation systems. Topics include environmental quality and legislation, modeling, water treatment, wastewater treatment, solid and hazardous waste management, air and noise pollution, and radioactive waste management. (Formerly CE 2133. Credit cannot be earned for both CE 2633 and CE 2133.)
- 3103 Mechanics of Solids**
(3-0) 3 hours credit. Prerequisite: CE 2203.
Internal forces and deformations in solids; stress, strain, and their relations; stresses and deflections in beams column theory and analysis; and engineering applications. (Formerly EGR 3213. Credit cannot be earned for both CE 3103 and EGR 3213.)
- 3113 Structural Analysis**
(3-0) 3 hours credit. Prerequisite: CE 3103.
Forces and deflections in structural systems; considers stationary and moving loads and exact and approximate methods.
- 3213 Reinforced Concrete Design**
(2-3) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in CE 3113.
Ultimate strength theory and design for reinforced concrete members.
- 3233 Steel Design**
(2-3) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in CE 3113.
Analysis and design of tension members, beams, columns, and bolted or welded connections.
- 3243 Properties and Behavior of Engineering Materials**
(2-3) 3 hours credit. Prerequisites: CE 3103 and ENG 2413.
Structure, properties, and behavior of engineering materials; measurement and analysis of material properties and behavior. Laboratory exercises illustrate typical material behavior and selected principles of mechanics.

- 3413 Geotechnical Engineering**
(2-3) 3 hours credit. Prerequisite: CE 3103.
Fundamental properties of soil and rock. Flow through porous media. The effective stress principle and computation of in-situ stress distributions. Strength and compressibility of geotechnical materials. (Formerly CE 4213. Credit cannot be earned for both CE 3413 and CE 4213.)
- 3603 Hydraulic Engineering**
(2-3) 3 hours credit. Prerequisite: CE 2503.
Fluid properties, fluid statics concepts, and equations of fluid flow in pipes and open channels. Flow through porous media.
- 3633 Water and Wastewater Treatment**
(2-3) 3 hours credit. Prerequisites: CE 2633 and completion of or concurrent enrollment in CE 3603.
The application of chemical, biochemical, and physical processes to water treatment, wastewater treatment, and pollution control. (Formerly CE 4633. Credit cannot be earned for both CE 3633 and CE 4633.)
- 3713 Civil Engineering Systems Analysis**
(3-0) 3 hours credit. Prerequisites: CS 2073, MAT 3253, and EGR 3713.
Introduction to systems approach to problem solving. Application of operations research in civil engineering; mathematical modeling and analysis techniques, including marginal analysis, linear programming, and dynamic programming. (Formerly CE 4713. Credit cannot be earned for both CE 3713 and CE 4713.)
- 3723 Hydrology**
(3-0) 3 hours credit. Prerequisite: CE 3603.
Hydrologic cycle, precipitation, hydrologic abstractions, surface runoff; unit hydrographs; synthetic hydrographs; peak discharge relationships; flood frequency analysis; flood and reservoir routing; and groundwater hydrology.
- 4113 Transportation Systems**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in EGR 3713.
Planning, design, construction, operation, and maintenance of transportation systems; concepts of various modes of transportation.
- 4123 Highway Engineering**
(3-0) 3 hours credit. Prerequisite: Senior standing in civil engineering.
General characteristics of highway design. Horizontal and vertical alignment, cross-sections, earthwork, drainage, and pavement. Economic analysis.
- 4223 Earth Structures**
(3-0) 3 hours credit. Prerequisite: CE 3413.
Stability, strength, and deformation characteristics of engineering structures in and on geotechnical materials.

- 4313 Computer-Aided Design in Civil Engineering**
(2-3) 3 hours credit. Prerequisite: Senior standing in civil engineering. Organization and programming of civil engineering problems for computer solutions. Application of commercially available design software.
- 4333 Solid Waste Engineering**
(3-0) 3 hours credit. Prerequisite: CE 2633. Analysis and design of municipal solid waste systems. Topics covered include waste generation and sources, quality, legislation, collection and transport, treatment trends, disposal, reduction, recovery, and recycling. Introduction to hazardous waste engineering.
- 4413 Foundation Engineering**
(3-0) 3 hours credit. Prerequisite: CE 3413. Design of foundations and earth-retaining structures; study of earth-pressure theories.
- 4513 Advanced Structural Analysis**
(3-0) 3 hours credit. Prerequisite: CE 3113. Digital computer analysis of linear structural systems. Theoretical basis for modern computer programs. Application of several standard programs for a variety of structures.
- 4523 Advanced Reinforced Concrete Design**
(3-0) 3 hours credit. Prerequisite: CE 3213. Design of reinforced concrete buildings by ultimate strength methods; prestressed concrete design.
- 4543 Construction Planning**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in EGR 3713. Planning and managing, scheduling, and control of construction projects. Topics include management functions, network techniques, equipment selection, management and operation, construction financing, bidding strategy, risk assessment, cost control, and projection.
- 4603 Water Resources Engineering**
(3-0) 3 hours credit. Prerequisites: CE 2633 and 3603. Analysis and design of surface and subsurface water resource systems; dam and reservoir design for recharge, flood control, and water supply; and design of water supply, wastewater collection, and stormwater systems.
- 4643 Air Quality Engineering**
(3-0) 3 hours credit. Prerequisites: CHE 1303 and senior standing in civil engineering. Discussion of the sources, quantities, effects of sampling, and control of airborne pollutants in ambient air and in urban and industrial environments. (Formerly AS 4643. Credit cannot be earned for both CE 4643 and AS 4643.)

- 4653 Design of Pollution Control Systems**
(2-3) 3 hours credit. Prerequisite: CE 3633.
Analysis, synthesis, design, and system optimization of integrated processes and operations to handle and treat water, wastewater, and hazardous wastes.
- 4723 Hydraulic Systems Design**
(3-0) 3 hours credit. Prerequisites: CE 3603, MAT 3253, and senior standing in civil engineering.
Hydraulic structure design, culverts, transitions, and energy dissipators; stable channel design.
- 4813 Civil Engineering Design**
(2-3) 3 hours credit. Prerequisites: CE 3213, 3233, 3413, 3603, 3633, and 3713.
Opportunity to apply design skills to execution of an open-ended integrated civil engineering design project, including field and laboratory investigations, numerical and scale modeling, design, and formal oral and written presentation of results. Considers safety, reliability, environmental, economic, and other constraints, and ethical and social impacts.
- 4911-3 Independent Study**
1 to 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Civil Engineering**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

Bachelor of Science Degree in Electrical Engineering

The Bachelor of Science degree in Electrical Engineering offers students the opportunity to prepare for careers in areas associated with electronics, digital systems, computer architecture and design, communications, controls and robotics, computer-aided design (CAD), instrumentation, bioengineering, and other traditional and emerging areas of high technology. Through the proper selection of elective courses to augment required courses, successful students may develop a specialization pertinent to many of these areas that may lead to employment with electronic companies, high-technology industries, and government agencies.

All candidates for the degree must complete the following:

A. 64 semester credit hours of required courses:

1. 55 semester credit hours of electrical engineering:

EE	1303	Introduction to Electrical Engineering
EE	2323	Applied Engineering Analysis
EE	2423	Network Theory
EE	2513	Logic Design
EE	3113	Electrical Engineering Laboratory I
EE	3213	Electromagnetic Engineering
EE	3313	Electronic Circuits I
EE	3413	Analysis and Design of Control Systems
EE	3423	Signals and Systems I
EE	3463	Microcomputer Systems I
EE	3513	Electromechanical Systems
EE	3523	Signals and Systems II
EE	3563	Digital Systems Design I
EE	4113	Electrical Engineering Laboratory II
EE	4313	Electronic Circuits II
EE	4613	Communication Systems
EE	4643	Digital Signal Processing
EE	4811	Electrical Engineering Design I
EE	4813	Electrical Engineering Design II*

2. 9 semester credit hours of supporting courses:

EGR	2213	Engineering Mechanics
ME	3283	Fundamentals of Thermal Sciences
STA	3533	Probability and Random Processes or
EE	3533	Random Signals and Noise

B. 12 semester credit hours of electrical engineering electives selected from the following:

EE	4243	Digital Systems Design II
EE	4323	Advanced Electrical Engineering Laboratory
EE	4333	Instrumentation Systems
EE	4343	Active Filter Synthesis
EE	4353	Introduction to Modern Optics
EE	4443	Discrete-Time and Computer-Controlled Systems
EE	4453	Principles of Bioengineering and Bioinstrumentation
EE	4513	LSI and VLSI Design
EE	4523	Integrated Circuit Design
EE	4553	VLSI Testing
EE	4573	Engineering Workstations
EE	4583	Microcomputer Systems II
EE	4623	Digital Filtering

*May be used to satisfy the Core Curriculum requirements in Domain IV.

EE	4653	Information Theory and Coding
EE	4723	Intelligent Robotics

Students may petition the electrical engineering faculty for approval of other appropriate engineering or advanced science electives, such as EGR 418 and EE 4953.

COURSE DESCRIPTIONS ELECTRICAL ENGINEERING (EE)

- 1303 Introduction to Electrical Engineering**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in MAT 1214.
Techniques for problem solving and design in electrical engineering.
- 2214 Electric Circuits and Electronics**
(3-3) 4 hours credit. Prerequisites: PHY 1924 and 1931; corequisite: MAT 3253 or EE 2323.
Electric, magnetic, and electronic circuits; transient analysis, transforms, and phasors; transformers; solid state devices; analog and digital circuits. Laboratory component includes basic experiments with electrical networks and electronic circuits. Not open to electrical engineering majors. (Formerly EE 2213. Credit cannot be earned for both EE 2214 and EE 2213.)
- 2323 Applied Engineering Analysis**
(3-0) 3 hours credit. Prerequisite: MAT 1223.
Linear algebra and differential equations with applications in electrical engineering.
- 2423 Network Theory**
(3-0) 3 hours credit. Prerequisites: MAT 2213 and completion of or concurrent enrollment in PHY 1924 and MAT 3253, or EE 2323.
Basic network principles; steady state responses to DC and AC signals; transient responses; nodal and loop analysis; Laplace transforms; and 2-port analysis. Use of SPICE to solve network problems. (Formerly EE 2424. Credit cannot be earned for both EE 2423 and EE 2424.)
- 2513 Logic Design**
(3-0) 3 hours credit. Prerequisite: Major in computer science, or completion of or concurrent enrollment in CS 2073.
Number systems, Boolean algebra, combinational and sequential circuit design. Minimization and implementation. Introduction to computer-aided design (CAD) tools. (Formerly EE 2514. Credit cannot be earned for both EE 2513 and EE 2514.)

- 3113 Electrical Engineering Laboratory I**
(1-6) 3 hours credit. Prerequisites: EE 2423, 2513, and completion of or concurrent enrollment in EE 3313.
Introduction to basic measurement equipment and techniques. Use of analog and digital simulation tools; comparison to empirical performance of simple analog communication and digital circuits using discrete devices and circuits. Simple subsystem circuit design. Laboratory technical communication.
- 3213 Electromagnetic Engineering**
(3-0) 3 hours credit. Prerequisites: PHY 1924, MAT 2213.
Review of vector calculus, Maxwell's equations, electromagnetic waves, dielectrics, and boundary conditions. Selected other topics include wave guides, anisotropic crystal optics, transmission lines, fiber optics, reflection and refraction, and special relativity.
- 3313 Electronic Circuits I**
(3-0) 3 hours credit. Prerequisites: PHY 1924, EE 2423, and completion of or concurrent enrollment in EE 3423 or ME 3323.
Electrical properties of semiconductors; P-N junctions; diode circuits; BJTs and FETs; and application to digital and analog circuits. Use of SPICE to solve simple circuits.
- 3413 Analysis and Design of Control Systems**
(3-0) 3 hours credit. Prerequisites: EE 2323 or MAT 3253; EE 3423 for electrical engineering majors; ME 3323 for mechanical engineering majors. Modeling, analysis, and design of linear automatic control systems. Time and frequency domain techniques; stability analysis, state variable techniques, and other topics. Control systems analysis and design software will be used. (Formerly EE 4413. Credit cannot be earned for both EE 3413 and EE 4413.)
- 3423 Signals and Systems I**
(3-0) 3 hours credit. Prerequisite: EE 2323.
Frequency response and complex variables, Fourier series, Fourier transforms, Dirac Delta function, convolution, mathematical modeling of systems, and the Z-transform.
- 3463 Microcomputer Systems I**
(3-0) 3 hours credit. Prerequisites: EE 2513, CS 2073, and completion of or concurrent enrollment in EE 3563.
Introduction to assembly- and C-language programming. Architecture, peripherals, operating system interfacing principles, and development tools. Software documentation techniques. (Formerly EE 4563. Credit cannot be earned for both EE 3463 and EE 4563.)
- 3513 Electromechanical Systems**
(3-0) 3 hours credit. Prerequisites: EE 3213 and EGR 2213.
Principles of electromechanical energy conversion; polyphase circuits; dynamic analysis of energy-transfer devices; and power devices.

- 3523 Signals and Systems II**
(3-0) 3 hours credit. Prerequisites: EE 3423.
Time and frequency characteristics of signals and systems, sampling, and application of Laplace transforms and Z transforms to linear time invariant systems and linear feedback systems.
- 3533 Random Signals and Noise**
(3-0) 3 hours credit. Prerequisite: MAT 1223.
Probability, statistics, random variables, and random processes, with applications in electrical engineering.
- 3563 Digital Systems Design I**
(2-3) 3 hours credit. Prerequisite: EE 2513.
Introduction to switching theory. Design of complex combinational and sequential circuits. Analysis of hazards and fault detection, location, and tolerance. Design and verification of complex circuitry using Design Entry, functional modeling, physical dealing, and mixed-mode simulation.
- 4113 Electrical Engineering Laboratory II**
(1-6) 3 hours credit. Prerequisites: EE 3113, 3413, 3463, and 4313.
Complex electronic circuit subsystem design. Improving measurement system performance. Introduction to automatic test equipment, the design process, and simple system design. Technical communication.
- 4243 Digital Systems Design II**
(2-3) 3 hours credit. Prerequisites: EE 3463 and 3563.
Design of advanced state machines and computer systems. Processor design. Simulation and other computer-assisted design tools. (Formerly EE 3583. Credit cannot be earned for both EE 4243 and EE 3583.)
- 4313 Electronic Circuits II**
(3-0) 3 hours credit. Prerequisites: EE 3313, 3523, 3563, and completion of or concurrent enrollment in CE 3413. Multiple transistor circuits; feedback and frequency response analysis; operational amplifier analysis and design; power semiconductors; and other topics. Design of analog and digital circuits. Use of SPICE to analyze complex circuits.
- 4323 Advanced Electrical Engineering Laboratory**
(1-6) 3 hours credit. Prerequisites: Completion of or concurrent enrollment in EE 4113 and consent of instructor.
Laboratory experience in one of the following: controls, optics, digital systems, communications, or instrumentation.
- 4333 Instrumentation Systems**
(2-3) 3 hours credit. Prerequisites: EE 3463, 3413, and completion of or concurrent enrollment in EE 4113.
Principles of instrumentation system design, transducers, power supplies, and signal conditioning. Noise analysis and reduction techniques. Standard protocol instrumentation buses.

- 4343 Active Filter Synthesis**
(2-3) 3 hours credit. Prerequisite: EE 4313.
Analysis and design of active filter networks. Sensitivity analysis and filter design techniques. Passive synthesis, switched capacitor filters, and other topics.
- 4353 Introduction to Modern Optics**
(3-0) 3 hours credit. Prerequisite: EE 3213.
The basic principles of geometrical and physical optics. Topics include lens design, interference, diffraction, and polarization. Selected other topics may include Fourier optics, coherence theory, holography, lasers, Gaussian beams, acousto-optics, electro-optics, and fiber-optic communications.
- 4443 Discrete-Time and Computer-Controlled Systems**
(2-3) 3 hours credit. Prerequisites: EE 3413 and completion of or concurrent enrollment in EE 4643.
Sampled-data techniques applied to the analysis and design of digital control systems. Stability criteria, compensation, and other topics.
- 4453 Principles of Bioengineering and Bioinstrumentation**
(2-3) 3 hours credit. Prerequisites: EE 3213, 3413, and completion of or concurrent enrollment in EE 4113.
Theoretical basis for signal generation, transmission, and detection from biological systems. Modeling of biological systems. Electrodes and transducer systems; signal excitation and processing instrumentation.
- 4513 LSI and VLSI Design**
(2-3) 3 hours credit. Prerequisites: EE 3213, 4313, and completion of or concurrent enrollment in EE 4243 or 4583.
Design of integrated digital systems. Logic simulation, standard cell libraries, circuit simulation, and other computer-aided design tools. Integrated circuit processing and device modeling.
- 4523 Integrated Circuit Design**
(2-3) 3 hours credit. Prerequisites: EE 3213 and 4313.
Analysis and design of analog and digital integrated circuits. Integrated circuit technologies, computer-aided analysis, design, and other tools. Fabrication and testing.
- 4553 VLSI Testing**
(2-3) 3 hours credit. Prerequisite: EE 4513.
Faults modeling and simulation; stuck at faults, bridging faults, and functional testing; self-testing concepts; standard and test patterns; device and system testing; and design or testability.
- 4573 Engineering Workstations**
(2-3) 3 hours credit. Prerequisites: EE 3463 and 3563.
Design and application of engineering workstations. Integration of components and peripherals to address specific engineering design support requirements. Networking considerations.

- 4583 Microcomputer Systems II**
(2-3) 3 hours credit. Prerequisites: EE 3463, 3313, and completion of or concurrent enrollment in EE 4313.
Advanced microprocessor-based system design. High-speed bus interfacing, coprocessors, and other specialized input/output devices. Real-time and multiuser operating systems. High-level languages and software performance analysis.
- 4613 Communication Systems**
(3-0) 3 hours credit. Prerequisites: STA 3533 or EE 3533.
Fundamentals of communication systems engineering using analog and digital techniques. Signal analysis, signal-to-noise ratio, and circuit implementations.
- 4623 Digital Filtering**
(3-0) 3 hours credit. Prerequisites: EE 4643 and completion of or concurrent enrollment in EE 3463.
Design and implementation of FIR and IIR filters, hardware, and software. Topics from adaptive filtering, neural networks, and image processing.
- 4643 Digital Signal Processing**
(3-0) 3 hours credit. Prerequisites: Concurrent enrollment or completion of EE 3523, and STA 3533 or EE 3533.
Transform techniques for discrete signal analysis. Discrete representation and analysis of digital filters and other topics. A/D and D/A conversion and associated filtering techniques.
- 4653 Digital Communications**
(3-0) 3 hours credit. Prerequisites: STA 3533 or EE 3533.
Elements of information theory and modulation and coding for efficient signaling and error correction. Hardware and software implementation of encoders and decoders.
- 4723 Intelligent Robotics**
(3-0) 3 hours credit. Prerequisites: EE 2213 or 2423, and completion of or concurrent enrollment in ME 4523 or EE 3413.
Theory and industrial application of robots; sensing and artificial intelligence. (Formerly EGR 4723 and ME 4713. Credit cannot be earned for both EE 4723 and EGR 4723 or ME 4713.)
- 4811 Electrical Engineering Design I**
(1-0) 1 hour credit. Prerequisite: Concurrent enrollment or completion of EE 4113.
Selection of a design project and development of a detailed design proposal.
- 4813 Electrical Engineering Design II**
(1-6) 3 hours credit. Prerequisites: EE 4113, 4811, 4643, and EGR 3713.
Complex system design. Advanced ATE. Project management, proposals, status reporting, formal oral and written technical reports, and business plans. Open-ended design project considering safety, reliability, environmental, economic, and other constraints, and ethical and social impacts.

4911-3 Independent Study

1 to 3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

- Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Electrical Engineering

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

Bachelor of Science Degree in Mechanical Engineering

The Bachelor of Science degree in Mechanical Engineering offers students the opportunity to prepare for careers in traditional and emerging high-technology areas of mechanical engineering associated with machinery and mechanism design, thermal and fluid sciences, solid mechanics, robotics, bioengineering and materials, the finite element method (FEM), fatigue and fracture, vibration, and control. Through the proper selection of elective courses to augment required courses, successful students may develop a specialization pertinent to many of these areas that may lead to employment with companies or government agencies associated with aerospace, automotive, heating and air conditioning, manufacturing, and other industries.

All candidates for the degree must complete the following:

A. 8 semester credit hours of required courses:

CHE	1303	Chemical Principles
EGR	1402	Engineering Graphical Communications
MAT	3253	Engineering Analysis

B. 20 semester credit hours of required introductory mechanical and electrical engineering courses:

EE	2214	Electric Circuits and Electronics
ME	2103	Introduction to Mechanical Engineering Problem Solving
ME	2213	Statics of Deformable Bodies
ME	2241	Materials Engineering Laboratory
ME	2243	Materials Engineering
ME	3103	Dynamics of Rigid Bodies
ME	3293	Thermodynamics I

C. 39 semester credit hours of required mechanical engineering courses:

1. 29 semester credit hours of required mechanical engineering sciences courses:

ME	3313	Measurements and Instrumentation
ME	3323	Dynamics of Mechanical Systems
ME	3423	Applied Engineering Analysis
ME	3663	Fluid Mechanics
ME	3713	Numerical Methods in Mechanical Engineering
ME	3813	Solid Mechanics
ME	4293	Thermodynamics II
ME	4313	Heat Transfer and Rate Processes
ME	4523	Dynamic Systems and Control
ME	4802	Mechanical Engineering Laboratory

2. 10 semester credit hours of mechanical engineering design courses:

ME	3513	Mechanism Design
ME	4423	Machine Element Design
ME	4811	Mechanical Engineering Design Project Planning Laboratory
ME	4813	Mechanical Engineering Design Project*

D. 9 semester credit hours of mechanical engineering elective courses:

1. 3 semester credit hours of mechanical engineering design electives selected from the following:

ME	4323	Thermal Systems Design
ME	4343	Heating, Air Conditioning, and Refrigeration Design
ME	4413	Intermediate Mechanism Design
ME	4513	Mechanical Vibrations and Dynamics of Machinery
ME	4603	Finite Element Applications in Mechanical Design
ME	4613	Power Systems Design
ME	4663	Intermediate Fluid Mechanics
ME	4723	Reliability and Quality Control in Engineering Design

2. 6 semester credit hours of upper-division mechanical engineering (ME) electives or engineering (EGR) science electives. If upper-division mechanical engineering (ME) electives are selected they must be petitioned.

If upper-division engineering science (EGR) electives are selected they must be from the following:

EGR	4113	Engineering Fracture Mechanics
EGR	4183	Propulsion
EGR	4213	Introduction to the Theory of Finite Elements

*May be used to satisfy the Core Curriculum Requirements in Domain IV.

COURSE DESCRIPTIONS MECHANICAL ENGINEERING (ME)

- 2103 Introduction to Mechanical Engineering Problem Solving**
(2-3) 3 hours credit. Prerequisites: EGR 1402 and MAT 1214; corequisite: MAT 1223.
Approaches to mechanical engineering problem formulation and solution; conceptual design of mechanical components and systems; introduction to solid mechanics; thermodynamic properties, work, energy, modes of heat transfer, and fluid statics.
- 2213 Statics of Deformable Bodies**
(3-0) 3 hours credit. Prerequisites: MAT 1223 and PHY 1904.
Vector algebra, force systems, statically determinant and indeterminant systems, rods, beams, and an introduction to elasticity.
- 2241 Materials Engineering Laboratory**
(0-3) 1 hour credit. Corequisite: ME 2243.
Investigation of the properties of engineering materials, with emphasis on metals, sample preparation, metallography, and foundry processes. (Formerly ME 3241. Credit cannot be earned for both ME 2241 and ME 3241.)
- 2243 Materials Engineering**
(3-0) 3 hours credit. Prerequisite: CHE 1303.
Fundamental aspects of the structure, properties, and behavior of engineering materials. (Formerly ME 3243. Credit cannot be earned for both ME 2243 and ME 3243.)
- 3103 Dynamics of Rigid Bodies**
(3-0) 3 hours credit. Prerequisites: ME 2213 and MAT 2213.
Kinematics and kinetics of plane rigid bodies, equations of motion, work and energy, impulse and momentum, and engineering applications.
- 3263 Materials Processing**
(2-3) 3 hours credit. Prerequisites: ME 2243 and 3103.
Casting, joining, forming, and machining. Methods of processing modern engineering materials, forming and joining techniques, and effects of processing on materials.
- 3283 Fundamentals of Thermal Sciences**
(3-0) 3 hours credit. Prerequisite: PHY 1904; corequisite: MAT 3253 or EE 2323.
Introduction to classical thermodynamics, fluid mechanics, and heat transfer; thermodynamics systems, first and second laws, thermodynamic cycles; fluid statics and dynamics; applications of conduction, convections, and radiation heat transfer. Not open to students majoring in mechanical engineering. May not be substituted for ME 3293, 3663, or 4313.

- 3293 Thermodynamics I**
(3-0) 3 hours credit. Prerequisites: CS 2073, PHY 1904, and MAT 2213. Heat, work, kinetic theory of gases, equation of state, thermodynamics system, control volume, first and second law of thermodynamics, reversible and irreversible processes, and introduction to basic thermodynamic cycles.
- 3313 Measurements and Instrumentation**
(2-3) 3 hours credit. Prerequisites: ME 2213 and EE 2214; corequisite: MAT 3253. Fundamentals of measurement systems; standards and treatment of data; transducers and signal conditioning; strain, force, acceleration, pressure, temperature, pressure, and fluid flow.
- 3323 Dynamics of Mechanical Systems**
(3-0) 3 hours credit. Prerequisites: ME 3103 and 3713. Mechanical system dynamics, linear systems, modeling techniques, analytical dynamics, and vibrations.
- 3423 Applied Engineering Analysis**
(3-0) 3 hours credit. Prerequisites: CS 2073 and MAT 3253. Application of mathematical principles to the analysis of engineering problems using traditional and modern techniques; Fourier series, partial differential equations, and complex number analysis.
- 3503 Alternative Energy Sources**
(3-0) 3 hours credit. Prerequisite: ME 3293. Solar, nuclear, wind, geothermal, and tidal energy. Energy storage problems. Principles, current technology, and economic considerations.
- 3513 Mechanism Design**
(3-0) 3 hours credit. Prerequisites: CS 2073 and ME 3103. Introduction to kinematics and mechanisms; graphical and linear analytical methods for kinematic synthesis; displacement, velocity, and acceleration analyses of mechanisms; and cam design.
- 3523 Introduction to Mechanical Design**
(3-0) 3 hours credit. Prerequisite: ME 2213. Design process, design of machine elements for static and fatigue strength, and design of welded and bolted connections; simple mechanical design project and graphical communication of design.
- 3663 Fluid Mechanics**
(3-0) 3 hours credit. Prerequisites: CS 2073, MAT 3253, and ME 3103. Fluid properties; fluid statics and dynamics; concepts and equations of fluid flow; similitude; viscous effects; lift and drag; and compressible fluid flow.

- 3713 Numerical Methods in Mechanical Engineering**
(3-0) 3 hours credit. Prerequisites: MAT 3253, ME 2103, and CS 2073.
Introduction to numerical methods. Topics include finding roots of equations, interpolation, curve fitting, integration and differentiation, and methods to solve initial value problems. Applications will show how these methods can be applied to engineering problems. (Credit cannot be earned for both ME 3713 and ME 4703.)
- 3813 Solid Mechanics**
(3-0) 3 hours credit. Prerequisites: MAT 2213 and ME 2213.
Energy methods for rods, beams, plates, and finite elements. Classical and modern fatigue and failure criteria.
- 4243 Intermediate Materials Engineering**
(3-0) 3 hours credit. Prerequisites: ME 2241, 2243, and 3523.
Selected topics in ceramics and polymers; introduction to composites; fracture mechanics and corrosion; engineering design applications in material selection for control of fracture, deflection, wear, and corrosion.
- 4263 Nondestructive Evaluation**
(2-3) 3 hours credit. Prerequisites: ME 2243 and 3313.
Defect detection. Materials and defect characterization using nondestructive evaluation methods such as ultrasonic, eddy current, magnetic and electromagnetic methods, radiography, and thermography.
- 4293 Thermodynamics II**
(3-0) 3 hours credit. Prerequisite: ME 3293.
Nonreactive and reactive mixtures, vapor and gas power cycles, refrigeration, and thermodynamic relations.
- 4313 Heat Transfer and Rate Processes**
(3-0) 3 hours credit. Prerequisites: ME 3293, 3423, and 3713; corequisite: ME 3663.
Generalized potential distribution and gradients; transient and steady mass and heat transfer including conduction, forced and free convection, and radiation.
- 4323 Thermal Systems Design**
(2-3) 3 hours credit. Corequisite: ME 4313.
Application of basic thermodynamics, fluid mechanics, heat transfer, and computer methods to the design of heat exchangers, coils, fans, pumps, and thermal energy systems.
- 4343 Heating, Air Conditioning, and Refrigeration Design**
(2-3) 3 hours credit. Corequisites: ME 4293 and 4313.
Heating, ventilation, and air conditioning of buildings for human comfort or industrial processes; design selection, construction, and operation of air conditioning equipment and refrigeration systems.

- 4353 Gas Dynamics**
(3-0) 3 hours credit. Prerequisites: ME 3663 and 3713.
Application of mass, energy, and force balance to compressible fluids; treatment of one-dimensional steady and transient flows, isentropic flow, adiabatic flow, and flow with friction. Application to duct flows and to jet and rocket propulsion engines.
- 4363 Intermediate Heat Transfer**
(3-0) 3 hours credit. Prerequisite: ME 4313.
Multidimensional heat conduction, numerical solutions, selected topics in natural convection, boiling and condensation heat transfer, and thermal storage systems.
- 4413 Intermediate Mechanism Design**
(3-0) 3 hours credit. Prerequisite: ME 3513.
Linear and nonlinear analytical methods for kinematic synthesis; statics, kinetostatics, and dynamics of mechanisms; design of cam and cam-link mechanisms; case studies; and computer-aided design.
- 4423 Machine Element Design**
(3-0) 3 hours credit. Prerequisite: ME 3513 and 3813.
Design of spur, helical, bevel, and worm gears; design of couplings, clutches, and brakes; design of journal and rolling bearings, shafts, and springs; and computer-aided design.
- 4503 Intermediate Dynamics**
(3-0) 3 hours credit. Prerequisite: ME 3323.
Three-dimensional rigid-body kinetics; vector algebraic and Lagrange methods; integration of equations of motion; and computer-assisted methods.
- 4513 Mechanical Vibrations and Dynamics of Machinery**
(3-0) 3 hours credit. Prerequisites: ME 3323 and 3423.
Free and forced single and multiple degree of freedom systems, modeled as both discrete and continuous. Applications in mechanical engineering design problems in the transmission and control of vibration.
- 4523 Dynamic Systems and Control**
(2-3) 3 hours credit. Prerequisites: ME 3313 and 3323.
Introduction to modeling and control of dynamic physical systems; analysis and design of control systems for mechanical, electrical, fluid, and thermal systems. (Formerly ME 4522. Credit cannot be earned for both ME 4523 and ME 4522.)
- 4533 Mechanical Engineering Design Methodology**
(3-0) 3 hours credit. Prerequisites: ME 3323 and 4423.
Mechanical systems component design methodology; creative design, analysis, synthesis, selection, and design of components and systems; computer-aided design; and several short design projects.

- 4603 Finite Element Applications in Mechanical Design**
 (2-3) 3 hours credit. Prerequisite: ME 4423.
 Design case studies and finite element applications in mechanical design. Finite element method fundamentals; finite element modeling methodology; design case studies using finite element programs; commercial and/or government codes will be utilized during scheduled laboratory.
- 4613 Power Systems Design**
 (3-0) 3 hours credit. Prerequisites: ME 3663 and 4293.
 Application of basic fluid mechanics to the design of turbomachinery, turbines, pumps, compressors, fans, blowers, windmills, and combustion engines.
- 4663 Intermediate Fluid Mechanics**
 (3-0) 3 hours credit. Prerequisites: ME 3663 and 3713.
 Continuation of ME 3663. Potential flow theory, analysis of laminar and turbulent flows, introduction to boundary layer theory, and application of basic equations to engineering problems.
- 4723 Reliability and Quality Control in Engineering Design**
 (3-0) 3 hours credit. Prerequisite: Senior standing in the Division of Engineering. Introduction to statistical methods in reliability and probabilistic engineering design methodology; statistical quality control and inspection; life prediction and testing; and design optimization.
- 4802 Mechanical Engineering Laboratory**
 (0-6) 2 hours credit. Prerequisite: ME 3313; corequisites: ME 3323 and 4313.
 An experimental laboratory concerned with fluid statics, fluid flow, heat transfer, internal combustion engines, rotating machinery, and design of experiments.
- 4811 Mechanical Engineering Project Planning Laboratory**
 (0-3) 1 hour credit. Prerequisites: ME 3323, 4423, and 4293; corequisite: ME 4313.
 Development, presentation, and approval of design project proposals, computer-aided synthesis, analysis, and modeling of an open-ended problem. Industrial cooperation is encouraged.
- 4813 Mechanical Engineering Design Project**
 (2-3) 3 hours credit. Prerequisites: ME 4811 and EGR 3713.
 Completion of significant group design project. Development of design(s) using computer-aided synthesis, analysis, modeling, and optimization methods. Considerations of safety, reliability, environmental, and economic constraints, and ethical and social impacts. Formal presentations of progress and final reports.

4911-3 Independent Study

1 to 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Mechanical Engineering

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

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DIVISION OF LIFE SCIENCES

The Division of Life Sciences offers a Bachelor of Science degree in Biology with emphases in molecular cell biology and neurobiology. The degree is structured around a comprehensive core curriculum and related offerings in chemistry, physics, and mathematics that lead to more highly specialized areas in the life sciences, such as biochemistry, cellular biology, developmental biology, ecology, neurobiology, genetics, microbiology, molecular biology, and physiology.

DIVISION HONORS

The Division of Life Sciences designates certain of its outstanding students as Division Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for admission to the honors program is based on the student's academic performance and recommendation by the faculty. To be eligible for the program, students must have a minimum overall grade-point average of 3.0 and a minimum grade-point average of 3.5 in their major. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and faculty. Students admitted to the honors program are expected to enroll in Honors Thesis (BIO 4993) during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor and another divisional faculty member. Students interested in this program should contact their faculty advisors for additional information. Division Honors can be attained independent of or in addition to University Honors.

Bachelor of Science Degree in Biology

The minimum number of semester credit hours required for the Bachelor of Science degree in Biology, including the Core Curriculum requirements, is 126. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level. All major and support work courses must be completed with a grade of "C" or better.*

All candidates for the degree must complete the following:

- A. 48 semester credit hours in the major, 32 of which must be at the upper-division level:
 1. 23 semester credit hours in biology are required:

BIO	1203	Biology I
BIO	1212	Laboratory Investigations in Biology
BIO	1223	Biology II
BIO	2313, 2322	Genetics and Laboratory

*Students seeking teacher certification should consult the Certification Program through the Office of Teacher Advising, Certification, and Placement in the Division of Education for information. Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

- BIO 3413, 3422 General Physiology and Laboratory
- BIO 3513, 3522 Biochemistry and Laboratory

2. 10 semester credit hours of upper-division biology electives; two of the following must be completed:

- BIO 3283, 3292 Principles of Ecology and Laboratory
- BIO 3713, 3722 Microbiology and Laboratory
- BIO 3813, 3822 Cellular Biology and Laboratory
- BIO 4143, 4152 Developmental Biology and Laboratory
- BIO 4433, 4442 Neurobiology and Laboratory

3. 15 additional semester credit hours of biology electives, 12 of which must be at the upper-division level

B. 24 to 25 semester credit hours of support work:

1. 13 semester credit hours are required in chemistry:

- CHE 1103 Introductory Chemistry
- CHE 1303 Chemical Principles
- CHE 1312 Inorganic Qualitative and Quantitative Analysis
- CHE 2203, 2242 Organic Chemistry I and Laboratory

2. A minimum of 3 semester credit hours of mathematics selected from the following:

- MAT 1214 Calculus I
- STA 1993 Statistical Methods for the Life and Social Sciences

3. 8 semester credit hours of physics:

- PHY 1603, 1611 General Physics I and Laboratory
- PHY 1623, 1631 General Physics II and Laboratory

C. Up to 8 semester credit hours of free electives, dependent upon foreign language required

COURSE DESCRIPTIONS

BIOLOGY

(BIO)

1023 Human Sex and Reproduction

(3-0) 3 hours credit.

An in-depth look at human reproductive anatomy, physiology, and behavior. Topics to be considered include sexual selection, mating, endocrine function, fertilization, birth control, and sexually transmitted diseases. May apply toward the Level I Core Curriculum requirement in science. (Formerly BIO 2003. Credit cannot be earned for both BIO 1023 and BIO 2003.)

- 1033 Drugs and Society**
(3-0) 3 hours credit.
An examination of licit and illicit drugs and their biosocial effects. Topics include pharmacology of alcohol, stimulants, hallucinogens, addiction, and abuse. May apply toward the Level I Core Curriculum requirement in science. (Formerly BIO 3023. Credit cannot be earned for both BIO 1033 and BIO 3023.)
- 1203 Biology I**
(3-0) 3 hours credit.
An introduction to the science of biology, emphasizing a comparative study of the diversity of life forms. Topics include cell biology, energetics, metabolism, sexual reproduction, development, physiology, and animal behavior. May apply toward the Level I Core Curriculum requirement in science. (Credit cannot be earned for both BIO 1203 and BIO 1103.) [TCCN: BIOL 1306.]
- 1212 Laboratory Investigations in Biology**
(0-6) 2 hours credit.
Introduction to the tools, techniques, and topics of modern experimental biology. May apply toward the Level I Core Curriculum requirement in science. (Formerly BIO 1112. Credit cannot be earned for both BIO 1212 and BIO 1112.) [TCCN: BIOL 1106.]
- 1223 Biology II**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and MAT 1063 or an equivalent.
An introduction to the science of biology, emphasizing a comparative study of the diversity of life forms. Topics include the decomposers, the producers, the consumers, genetics, ecology, and evolution. May apply toward the Level II Core Curriculum requirement in science. [TCCN: BIOL 1307.]
- 2123 Comparative Anatomy of Vertebrates**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212.
A detailed study of anatomical differences and similarities of vertebrates with reference to evolutionary changes. Concurrent enrollment in BIO 2132 is recommended.
- 2132 Comparative Anatomy of Vertebrates Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 2123 is recommended.
- 2313 Genetics**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212, and CHE 1103 or an equivalent.
Principles governing transmission of hereditary factors in plants and animals, with emphasis on molecular biochemical and population genetics. Concurrent enrollment in BIO 2322 is recommended. [TCCN: BIOL 2316.]

- 2322 Genetics Laboratory**
(0-6) 2 hours credit. Optional for nonmajors.
Concurrent enrollment in BIO 2313 is recommended.
- 3003 Introduction to Oceanography**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
General oceanography with an emphasis on biological aspects and living marine resources.
- 3013 Introductory Pathology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212, or AHS 2103.
Concepts of disease and diagnosis of pathological conditions.
- 3033 Human Physiology and Performance**
(3-0) 3 hours credit. Prerequisites: BIO 3413 or AHS 2103.
A systematic application of physiological principles to human equipment and space to improve adaptation and performance in the work environment.
- 3063 Invertebrate Biology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
A comprehensive study of the invertebrate animals, with emphasis on their taxonomy, morphology, ecology, and evolution.
- 3083 Biosocial Genetics**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
A study of human heredity and social issues, with emphasis on inherited diseases, genetic problems, and evolutionary change in relation to culture, diversity, and mating systems.
- 3103 Biotechnology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
An introduction to recent advances in biology related to biotechnology. Discussion of how advances might be used to promote basic research in medicine, agriculture, and other industries.
- 3163 Histology and Cytology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
The cytological and histological aspects of cellular organization. Concurrent enrollment in BIO 3172 is recommended.
- 3172 Histological and Cytological Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 3163 is recommended.
- 3213 Animal Behavior**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
A detailed study of animal behaviors and their biological determinants.

- 3263 The Woody Plants**
(2-3) 3 hours credit. Prerequisite: Consent of instructor.
A study of the woody plants emphasizing the characteristics of family, genus, species. Includes identification of the common woody plants. Leaf, stem, and flower morphology, anatomy, and collecting techniques. Lecture, laboratory, and fieldwork will be included as part of the course.
- 3273 Biology of Flowering Plants**
(2-3) 3 hours credit.
A study of the wildflowers of Texas emphasizing identification of the more common wildflowers, as well as family characteristics, flower anatomy, and plant morphology. Plant-collecting techniques and wildflower photography will be included. Lecture, laboratory, and fieldwork are also part of the course.
- 3283 Principles of Ecology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, 1212, or consent of instructor; completion of the Core Curriculum requirement in mathematics.
A study of the interaction of organisms with their environment, with focus on ecological principles, adaptations of organisms, environmental pollution, and principles of conservation. Concurrent enrollment in BIO 3292 is recommended for biology majors. May apply toward the Level II Core Curriculum requirement in science.
- 3292 Principles of Ecology Laboratory**
(0-6) 2 hours credit.
A field-oriented course emphasizing modern ecological techniques, including examinations of plant and animal populations and measurement of selected chemical and physical parameters. Concurrent enrollment in BIO 3283 is recommended.
- 3323 Evolution**
(3-0) 3 hours credit. Prerequisite: BIO 2313.
A discussion of theories and possible mechanisms for evolutionary changes at various levels of organization.
- 3343 Plant Sciences**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212.
A study of the life histories and phylogenetic relationships of vascular and nonvascular plants. Concurrent enrollment in BIO 3351 is recommended.
- 3351 Plant Sciences Laboratory**
(0-3) 1 hour credit.
Concurrent enrollment in BIO 3343 is recommended.
- 3413 General Physiology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, 1212, and CHE 1303.
Fundamental properties and processes in living systems. Concurrent enrollment in BIO 3422 is recommended. (Credit cannot be earned for both AHS 2103 and BIO 3413.)

- 3422 General Physiology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 3413 is recommended. (Credit cannot be earned for both AHS 2111 and BIO 3422.)
- 3513 Biochemistry**
(3-0) 3 hours credit. Prerequisites: CHE 2203 and 2242; BIO 2313 is also recommended.
Introduction to biochemistry: amino acids, protein structure, enzymes, lipids, metabolism, nucleic acid structure, bioenergetics, and carbohydrates. Concurrent enrollment in BIO 3522 is recommended.
- 3522 Biochemistry Laboratory**
(0-6) 2 hours credit.
Basic biochemical laboratory techniques: titration, protein purification, enzyme kinetics, chromatography, electrophoresis, and centrifugation. Concurrent enrollment in BIO 3513 is recommended.
- 3613 The Biology of Aging**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1223.
The biological principles of human life and health; the changes that occur with aging and their implications for the lives of students and their families.
- 3633 Human Environmental Physiology**
(3-0) 3 hours credit. Prerequisite: BIO 3413 or AHS 2103.
Adaptive physiological responses to unusual environmental conditions.
- 3713 Microbiology**
(3-0) 3 hours credit. Prerequisites: BIO 2313 and CHE 2203.
A comprehensive study of microorganisms, including their composition, morphology, growth, metabolism, classification, ecology, and significance in disease. Concurrent enrollment in BIO 3722 is recommended. (Credit cannot be earned for both AHS 1053 and BIO 3713.)
- 3722 Microbiology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 3713 is recommended. (Credit cannot be earned for both AHS 1061 and BIO 3722.)
- 3733 Industrial Microbiology**
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722.
A study of genetic engineering of industrial microorganisms, industrial fermentation methodologies, quality control, and biotransformations used for the microbial manufacture of foods, beverages, antibiotics, enzymes, single-cell proteins, and industrial chemicals.
- 3813 Cellular Biology**
(3-0) 3 hours credit. Prerequisite: BIO 3413 or 3513.
A study of cellular function with relation to structure from the microscopic to the molecular level. Concurrent enrollment in BIO 3822 is recommended.

- 3822 Cellular Biology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 3813 is recommended.
- 3913 Molecular Biology**
(3-0) 3 hours credit. Prerequisite: BIO 3513.
A study of nucleotides, DNA, replication, recombination, RNA, transcription, genetic code, translation, and chromosomes.
- 4023 Environmental Toxicology**
(3-0) 3 hours credit. Prerequisite: BIO 3413 or 3513.
Environmental toxicants will be studied in terms of bioavailability, bioaccumulation, biodegradation, toxicity, and physiological processes.
- 4043 Desert Biology**
(2-3) 3 hours credit. Prerequisites: BIO 3283 and 3292.
A study of the deserts of the world with an emphasis on U.S. deserts. Adaptations of plants and animals and their responses to desert conditions, as well as examinations of desert climatic patterns, geology, and natural history. Lecture, laboratory, and fieldwork will be included.
- 4073 Law, Ethics, and the Life Sciences**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212, or consent of instructor.
Current developments in biology such as recombinant DNA, embryo transplants, life-preserving processes, reproductive and population control, and the impact of biotechnology on enactment of new legislation and ethics in general.
- 4133 The Biotechnology of Malting and Brewing**
(3-0) 3 hours credit. Prerequisites: BIO 3513, 3522, 3713, and 3722.
A study of the scientific principles underlying brewing and other fermentation technology.
- 4143 Developmental Biology**
(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, 3513, and 3813.
Sequential analysis of development in vertebrates and the factors which affect fertilization, organogenesis, and implantation. Concurrent enrollment in BIO 4152 is recommended. (Formerly BIO 3143. Credit cannot be earned for both BIO 3143 and 4143.)
- 4152 Developmental Biology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 4143 is recommended. (Formerly BIO 3152. Credit cannot be earned for both BIO 3152 and 4152.)
- 4203 Plant Ecology**
(3-0) 3 hours credit. Prerequisite: BIO 3283, 3292, or consent of instructor.
A study of the major biomes of North America and Texas, including the chemical, physical, and biological factors that influence the development of these biomes. Concurrent enrollment in BIO 4221 is recommended.

4221 Plant Ecology Laboratory

(0-3) 1 hour credit.

Provides the opportunity for field-oriented study to examine qualitative and quantitative methods and evaluate plant communities. Concurrent enrollment in BIO 4203 is recommended.

4233 Field Biology

(3-0) 3 hours credit. Prerequisites: BIO 1203, 1223, and 1212, or consent of instructor.

A study of the natural history of plants and animals in their native environment. Techniques for the identification of birds, mammals, reptiles, amphibians, insects, and the dominant flowering plants will be discussed. Concurrent enrollment in BIO 4241 is recommended.

4241 Field Biology Laboratory

(0-3) 1 hour credit.

A field-oriented course offering the opportunity for practical experience observing, collecting, and identifying Texas plants and animals. Concurrent enrollment in BIO 4233 is recommended.

4333 Population Genetics

(3-0) 3 hours credit. Prerequisites: BIO 2313 and 2322.

A quantitative approach to the study of genetics systems in populations, including mutations, selection, polymorphism, and mating systems.

4343 Molecular Genetics

(3-0) 3 hours credit. Prerequisites: BIO 2313 and 2322.

Application of recombinant DNA techniques to the study of animals and plants in industry, medicine, and research. Concurrent enrollment in BIO 4352 is recommended.

4352 Molecular Genetics Laboratory

(0-6) 2 hours credit. Prerequisites: BIO 2313 and 2322.

A laboratory course emphasizing techniques for cloning, sequencing, and analyzing recombinant DNA molecules. Concurrent enrollment in BIO 4343 is recommended.

4353 Comparative Animal Physiology

(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422.

A phylogenetic study of physiologic adaptation in animals.

4433 Neurobiology

(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422.

Anatomy and physiology of nervous systems; the mechanisms of neuronal functions. Concurrent enrollment in BIO 4442 is recommended.

4442 Neurobiology Laboratory

(0-6) 2 hours credit.

A laboratory course emphasizing principles presented in BIO 4433. Concurrent enrollment in BIO 4433 is recommended.

- 4453 Endocrinology**
(3-0) 3 hours credit. Prerequisites: BIO 3413, 3422, 3513, and 3522.
A consideration of the physiological effects of hormones on the organism in health and disease, with a study of the gross and microscopic morphology of the glands of internal secretion. Concurrent enrollment in BIO 4462 is recommended.
- 4462 Endocrinology Laboratory**
(0-6) 2 hours credit.
A laboratory course emphasizing principles presented in BIO 4453. Concurrent enrollment in BIO 4453 is recommended.
- 4523 Intermediary Metabolism**
(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522.
A detailed consideration of metabolic pathways and energy metabolism and their regulation.
- 4603 Plant Physiology**
(3-0) 3 hours credit. Prerequisites: BIO 3343 and 3351, and CHE 2203 and 2242.
Principles of organization of cellular activity and molecular structure of protoplasm; includes nutrition, translocation, mineral metabolism, respiration, and photosynthesis. Concurrent enrollment in BIO 4611 is recommended.
- 4611 Plant Physiology Laboratory**
(0-3) 1 hour credit.
Qualitative and quantitative experiments in the study of plant physiology. Concurrent enrollment in BIO 4603 is recommended.
- 4723 Virology**
(3-0) 3 hours credit. Prerequisite: BIO 3713.
A study of the diversity of viruses and biochemical mechanisms for their replication. Concurrent enrollment in BIO 4732 is recommended.
- 4732 Virology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 4723 is recommended. A laboratory course emphasizing the principles of virus replication, genetics, and structure. Introduction to modern laboratory techniques for virus propagation, detection, quantitation, and for genetic-phenotypic analysis. (Formerly BIO 4731. Credit cannot be earned for both BIO 4731 and 4732.)
- 4743 Immunology**
(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522, or 3713 and 3722.
A study of the properties of antigens and antibodies and current concepts of humoral and cell-mediated immunity and the cells involved. Concurrent enrollment in BIO 4752 is recommended.

- 4752 Immunology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 4743 is recommended.
- 4763 Parasitology**
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722.
A study of the animal parasites of humans and related hosts, with emphasis on their epidemiology, life cycles, pathology, and control. Concurrent enrollment in BIO 4772 is recommended.
- 4772 Parasitology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment in BIO 4763 is recommended.
- 4813 Brain and Behavior**
(3-0) 3 hours credit. Prerequisite: BIO 1203, 1223, and 1212, or consent of instructor.
Basic physiological functions of the brain and how they relate to behavior.
- 4911-3 Independent Study**
1 to 3 hours credit. (Hours arranged.) Prerequisite: Permission in writing (form available) from the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Biology**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4963 Seminar in Biology**
(3-0) 3 hours credit. Prerequisite: Minimum of 20 semester credit hours in biological sciences.
An undergraduate seminar surveying selected biological topics through presentation and discussion of relevant contemporary research and literature. May not be repeated for credit. Limited to biology majors in their junior or senior year.
- 4972 MBRS-MARC Symposium**
(2-0) 2 hours credit. Prerequisites: BIO 1203, 1223, and 1212; CHE 1103; or consent of instructor.
A course involving presentations at the frontiers of chemistry, biochemistry, biophysics, and biology, including genetics, microbiology, physiology, and other areas. Course may be repeated for credit, but not more than 6 semester credit hours may be applied to a bachelor's degree.

4993 Honors Research

3 hours credit. (Hours arranged.) Prerequisite: Enrollment limited to candidates for honors in biology during their last two semesters and approval by the Division Honors Committee and faculty.

Supervised research and preparation of an honors thesis. May be repeated once with approval.

JOINT ALLIED HEALTH SCIENCE PROGRAMS

Joint degree programs with The University of Texas Health Science Center at San Antonio (UTHSCSA) leading to the Bachelor of Science are available in Clinical Laboratory Sciences and Occupational Therapy. Degrees in these two allied health programs are awarded jointly. Completion of joint program prerequisites does not guarantee or imply preferential admittance to the professional phase of these programs.

The preclinical curriculum for clinical laboratory sciences (CLS) includes Core Curriculum requirements, basic science lecture and laboratory courses, and CLS courses. Clinical laboratory science concepts are introduced throughout the curriculum, ending in a senior-year clinical practicum at UTHSCSA. Upon completion of all requirements, the student is eligible to take one of the clinical laboratory sciences national certification examinations.

The preprofessional curriculum in occupational therapy offers students the opportunity to gain a strong background in the life sciences, behavioral sciences, humanities, and special skill areas. Specific application of occupational therapy skills in laboratory and clinical settings occurs in the last two years of a student's program and includes a minimum of six months of approved fieldwork experience. Students who have completed all degree requirements and fieldwork are eligible to take the national examination for registration with the American Occupational Therapy Association.

Preprofessional Curriculum

Also available are preprofessional courses offering students the opportunity to prepare for admission to nursing, medical, dental, and other professional schools.

UTSA offers courses that fulfill the nursing preprofessional curriculum requirements for The University of Texas Health Science Center at San Antonio. All coursework listed will transfer to UTHSCSA without any loss of credit. Specific premedical and predental programs are not offered at UTSA. Admission requirements for these professional schools are outlined in a separate section of this catalog. Additional information can be obtained from the Office of the Division of Life Sciences and through the chairman of the Health Related Professions Advisory Subcommittee of UTSA.

Professional Liability (Malpractice) Insurance Requirement

Allied health students are required by policies of the Board of Regents of The University of Texas System to show evidence of professional liability (malpractice) insurance coverage *prior to official registration for courses that involve a clinical situation*. Additional information on the requirement or obtaining such coverage is available from the Director of the Division of Life Sciences.

UTSA/UTHSCSA Joint Bachelor of Science Degree in Clinical Laboratory Sciences (CLS)

Certain specific physical skills and abilities are required to successfully participate in the clinical laboratory sciences program. Students may wish to inquire regarding these physical requirements before seeking admission to the program or registering for specific courses in the program.

In the joint degree program, clinical laboratory sciences courses are offered throughout the course of study, culminating in a concentrated clinical hospital experience at The University of Texas Health Science Center at San Antonio. Students complete clinical laboratory sciences courses during their sophomore and junior years and enroll in classes on both the UTSA and UTHSCSA campuses. To enroll in UTHSCSA courses, students must complete a course card obtainable from both the UTHSCSA Office of Admissions and the Department of Clinical Laboratory Sciences. All CLSC courses are taught at UTHSCSA and are listed separately.

For consideration for admission into the joint degree program, students must complete a separate application form. This form may be obtained from the Registrar's Office at The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284. This application should be submitted by May 1 for fall admission and November 1 for spring admission. Students must be admitted to UTHSCSA before they enroll in CLSC courses. Minimum requirements for admission to UTHSCSA include 24 semester credit hours of college work, an overall grade-point average of 2.0, and no grade lower than a "C" in any basic science course.

Admission to and successful continuation in the program will provide the student with a clinical practicum position at one of the UTHSCSA teaching affiliates. A list of these affiliates may be obtained from the Department of Clinical Laboratory Sciences at UTHSCSA.

The clinical laboratory sciences program is accredited by the Committee on Allied Health Education and Accreditation in cooperation with the National Accrediting Agency for Clinical Laboratory Sciences. Upon successful completion of this joint degree program, students are eligible to take one of the national certification examinations. All students are encouraged to be counseled each semester by either the CLS department chair or a member of the CLS faculty to ensure enrollment in appropriate coursework.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 155.

All candidates for the degree must complete the following:

A. 57 semester credit hours in preprofessional support work:

1. 27 semester credit hours in the biological sciences:

AHS	1883	Introduction to Clinical Laboratory Sciences
BIO	1203	Biology I
BIO	1212	Laboratory Investigations in Biology

BIO	2313	Genetics
AHS	2103	Human Biology: Physiology
		or
BIO	3413	General Physiology
		or
AHS	3463	Human Physiology
BIO	3513, 3522	Biochemistry and Laboratory
BIO	3713, 3722	Microbiology and Laboratory
BIO	4743	Immunology

2. 13 semester credit hours in chemistry:

CHE	1103	Introductory Chemistry
CHE	1303	Chemical Principles
CHE	1312	Inorganic Qualitative and Quantitative Analysis
CHE	2203, 2242	Organic Chemistry I and Laboratory

3. 8 semester credit hours in physics:

PHY	1603, 1611	General Physics I and Laboratory
PHY	1623, 1631	General Physics II and Laboratory

4. 6 semester credit hours in mathematics:

MAT	1093	Precalculus
STA	1053	Basic Statistics

5. 3 semester credit hours in computer science

B. 59 semester credit hours in clinical laboratory sciences, all of which must be completed at UTHSCSA:

1. These courses are taken prior to clinical training and are integrated with support work taken at UTSA:

CLSC	20351, 20252	Hematology and Laboratory
CLSC	20301, 20202	Parasitology and Urinalysis and Laboratory
CLSC	30361, 30262	Immunochemistry and Serology and Laboratory
CLSC	30381, 30282	Clinical Chemistry and Laboratory
CLSC	30333, 30234	Medical Microbiology and Laboratory

2. These courses are the senior lecture and clinical experience courses:

a. Senior Fall

CLSC	40333	Advanced Medical Microbiology
CLSC	40353	Advanced Hematology
CLSC	40587	Chemistry Practicum
CLSC	40567	Immunochemistry Practicum
CLSC	40192	Management I

b. Senior Spring

CLSC	40383	Advanced Clinical Chemistry
CLSC	40255	Advanced Immunohematology
CLSC	40557	Hematology Practicum
CLSC	40537	Microbiology Practicum
CLSC	40293	Management II

Postbaccalaureate Clinical Laboratory Sciences Certificate Option

The postbaccalaureate certificate option in Clinical Laboratory Sciences is designed for students who hold a bachelor's degree in science from an accredited institution. The curriculum includes 59 semester credit hours of professional coursework. Prerequisite science requirements not completed as a part of the bachelor's degree may be taken as a part of the certificate curriculum. The certificate option course of study is 18 months long.

In addition, the program offers a categorical certificate designed for individuals with a bachelor's degree in science who are interested in a particular subdiscipline of the clinical laboratory. These certificates are available in Microbiology, Clinical Chemistry, Immunohematology, and Hematology. Students can complete the categorized requirements in 12 to 18 months, based on part-time enrollment. Successful completion of the certificate curriculum qualifies students to take the national certification examinations as generalists or categorical scientists.

Interested persons should contact the Department of Clinical Laboratory Sciences at UTHSCSA for further details.

UTSA/UTHSCSA Joint Bachelor of Science Degree in Occupational Therapy

The Bachelor of Science in Occupational Therapy is a joint degree option fully accredited by the Committee on Allied Health Education and Accreditation of the American Medical Association in collaboration with the American Occupational Therapy Association (AOTA). Upon completion of this program, students are eligible to complete the certification examination offered by the AOTA, which is necessary for licensure in Texas and most other states.

Admission to the program is made through The University of Texas Health Science Center at San Antonio. Students should seek admission to the professional program only after completing all coursework necessary to meet Core Curriculum as well as preprofessional (support work) requirements for the program. These may be completed at UTSA or another accredited college or university. However, non-UTSA students must be accepted for admission to UTSA prior to application to the professional program. Admission to UTSA does not ensure admission to the occupational therapy program. However, all students are encouraged to be counseled by a member of the occupational therapy faculty at UTHSCSA or by the UTSA Division of Life Sciences undergraduate advisor to ensure enrollment in appropriate preprofessional coursework.

Professional coursework begins in early June of each year, and classes are conducted at the UTHSCSA campus. The professional program involves assignment to facilities in San Antonio and other cities for completion of supervised clinical rotations.

Application for admission to the professional phase of the program must be made by February 1 of the year for which admission is sought. Students may initiate the application process by contacting

Allied Health Admissions
The University of Texas Health Science Center
at San Antonio
7703 Floyd Curl Drive
San Antonio, Texas 78284
(210) 567-2660

It should be noted that admission to the program in occupational therapy is competitive, and admission to UTSA does not guarantee admission to the professional phase of the curriculum.

Students who select the joint degree option should make sure that they have completed *both* the Core Curriculum requirements and all preprofessional support work requirements before February 1 of the year of admission to the professional phase of the occupational therapy program. It is the responsibility of the applicant to arrange to have transcripts forwarded to the UTHSCSA Office of Admissions before February 1 of the year for which application is being made.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 181.

All candidates for the degree must complete the following:

A. **Preprofessional Phase.** 37 to 39 semester credit hours of preprofessional support work:

1. 9 to 10 semester credit hours in the biological sciences:

BIO 1203, 1212 Biology I and Laboratory

AHS 2083, 2091 Human Biology: Anatomy and Laboratory
or

BIO 2123, 2132 Comparative Anatomy of Vertebrates and Laboratory

2. 4 to 5 semester credit hours in chemistry:

CHE 1003, 1011 General Chemistry for Allied Health Sciences
or

CHE 1103, 1122 Introductory Chemistry and Laboratory and
Laboratory Workshop

3. 6 semester credit hours in mathematics and statistics:

MAT	1063	College Algebra
STA	1053	Basic Statistics

4. 3 semester credit hours in physics:

PHY	1603	General Physics I
PHY	1611	General Physics I Laboratory (optional)

5. 3 semester credit hours in computer science

6. 9 semester credit hours in psychology:

PSY	2013	Fundamentals of Psychology
PSY	2503	Developmental Psychology (Life Span)
PSY	2513	Abnormal Psychology

7. 3 semester credit hours in sociology or anthropology

B. Preprofessional Phase. 69 semester credit hours in the major at the upper-division level. These courses must be completed at The University of Texas Health Science Center at San Antonio:

JUNIOR SUMMER

CSBL	3016	Gross Anatomy	6 hours
OCCT	3005	Medical Terminology	1 hour
PHYL	3012	Human Physiology	3 hours

JUNIOR FALL

OCCT	3001	Health and Occupation	4 hours
OCCT	3004	Human Neurosciences in OT	4 hours
OCCT	3006	Foundations in OT	2 hours
OCCT	3020	Biomechanical Approach in OT	4 hours
OCCT	3104	Assistive Technology in OT	2 hours

JUNIOR SPRING

MEDI	3007	Clinical Medicine	3 hours
OCCT	3025	Design and Fabrication	3 hours
OCCT	3031	OT in Physical Dysfunction	3 hours
OCCT	3071	Practicum/Physical Dysfunction	1 hour
OCCT	3091	Skills Lab/Physical Dysfunction	3 hours
PATH	3011	Pathology	3 hours

SENIOR FALL

OCCT	4010	Social and Moral Values	1 hour
OCCT	4028	Communication Skills in OT	2 hours
OCCT	4033	OT in Development Dysfunction	3 hours
OCCT	4073	Practicum/Developmental Dysfunction	1 hour

OCCT	4082	Management and Consultation	3 hours
OCCT	4093	Skills Lab/Developmental Dysfunction	3 hours

SENIOR SPRING

MEDI	4112	Medical Management in Psychosocial	2 hours
OCCT	4010	Social and Moral Values	1 hour
OCCT	4027	Geriatric Issues in OT	1 hour
OCCT	4032	OT in Psychosocial Dysfunction	3 hours
OCCT	4051	Research in OT	3 hours
OCCT	4092	Skills Lab/Psychosocial Dysfunction	3 hours

- C. 36 semester credit hours of fieldwork completed at selected clinical sites affiliated with UTHSCSA

OCCT	4071	Fieldwork/Physical Dysfunction	12 hours
OCCT	4072	Fieldwork/Developmental Dysfunction	12 hours
OCCT	4073	Fieldwork/Required Elective Area	12 hours

UTHSCSA Bachelor of Science Degree in Nursing

The UTHSCSA nursing degree program is fully accredited by the National League for Nursing. The program is composed of two phases. In Phase I students complete a minimum of 60 semester credit hours (two years) of prenursing course requirements available at UTSA. Phase I coursework at UTSA is approved by the Division of Life Sciences Health Related Professions Advisory Subcommittee. Phase II requires students to complete 60 semester credit hours of courses in the nursing major through either the Generic Process or Flexible Process track at the UTHSCSA School of Nursing. The minimum number of semester credit hours required for this degree is 120.

Admission into Phase I must be made through UTSA. Admission into Phase II must be made through UTHSCSA. Students who have completed 40 to 45 semester credit hours of Phase I courses may request an application for admission from the Office of Nursing Admissions at UTHSCSA. Questions about Phase I prenursing course requirements and requests for admissions applications should be addressed to

Nursing Admissions
 Office of Student Services
 The University of Texas Health Science Center
 at San Antonio
 7703 Floyd Curl Drive
 San Antonio, Texas 78284-7702
 (210) 567-2670

Application for admission to Phase II must be made by April 1 for Fall Semester admission and October 1 for Spring Semester admission. Applicants must have an overall grade-point average of 2.0 and a grade-point average of 2.3 in prenursing course requirements in order to be considered for admission. *Students with higher grade-point averages will be more competitive.*

Applicants must have passed all sections of the Texas Academic Skills Program (TASP) test and must meet minimum standards before they may enroll in upper-division (Phase II) coursework. Students may not enroll in the upper-division nursing courses until they have completed the 60 semester credit hours of prerequisite courses and have been formally accepted by UTHSCSA.

Students admitted to the School of Nursing must be certified in cardiopulmonary resuscitation (CPR) before registration.

Phase I: 59 semester credit hours at UTSA. All courses are subject to approval by the School of Nursing when the student applies for Phase II.

A. 20 semester credit hours of natural and physical sciences:

AHS	2083, 2091	Human Biology: Anatomy and Laboratory*
AHS	2103, 2111	Human Biology: Physiology and Laboratory*
AHS	1053, 1061	Introductory Microbiology (Laboratory strongly recommended)*
CHE	1003, 1011	General Chemistry for Allied Health Sciences (Laboratory strongly recommended)
CHE	1203, 1211	Elementary Organic and Biochemistry (Laboratory strongly recommended)

B. 15 semester credit hours in the behavioral sciences:

1. PSY	2013	Fundamentals of Psychology	}
PSY	2503	Developmental Psychology	
SOC	1013	Introduction to the Study of Society	

2. 6 semester credit hours of electives

C. 24 semester credit hours in other basic requirements:

1. 6 required semester credit hours:

AHS	2043	Nutrition
STA	1053	Basic Statistics (or 1063 or 1073)

2. 18 semester credit hours of UTSA Core Curriculum requirements (for a listing of the courses that fulfill these requirements, see chapter 6, Bachelor's Degree Regulations, of this catalog):

Rhetoric
American history
Political studies

*BIO 1203 Biology I and BIO 1212 Laboratory Investigations in Biology are prerequisites to the above allied health services courses.

Phase II: One of the following plans, completed at UTHSCSA:**A. Generic Plan**

The following lists the courses in the Generic Process Program Plan. This plan may be taken on a full-time or part-time basis but must be completed within four years of initial enrollment in Phase II of the nursing program.

FIRST SEMESTER, JUNIOR YEAR

NURS	3209	Introduction to Professional Nursing	2 hours
NURS	3310	Nursing and Drug Therapy	3 hours
NURS	3811	Nursing of Individuals with Deviations in Health Status	8 hours

SECOND SEMESTER, JUNIOR YEAR

NURS	3522	Nursing the Client with Mental Illness	5 hours
NURS	3912	Nursing of Families: Childbirth, Parenting, Illness	9 hours

THIRD SEMESTER, SENIOR YEAR

NURS	4203	The Nurse as a Professional	2 hours
NURS	4513	Community Health Nursing	5 hours
NURS	4523	Nursing of Clients with Chronic Health Problems	5 hours

FOURTH SEMESTER, SENIOR YEAR

NURS	4504	The Nurse as Manager and Leader	5 hours
NURS	4704	Nursing the Client with Major Health Problems	7 hours
Upper-Division Electives		3 hours of electives must be in nursing	9 hours

B. Flexible Plan

Only students with previous nursing experience are eligible for this plan. Although this program can be completed on a part-time basis, all work toward the degree must be completed within four years of the date of initial enrollment in Phase II of the nursing program. Some courses are offered by examination only. Credit for much of the program can be completed by examination also. For a complete list of these courses, contact the UTHSCSA Center School of Nursing.

FIRST SEMESTER (courses offered by examination only)

NURS	3327	Nursing of Clients with Alteration in Mental Health	3 hours
NURS	3624	Nursing Practice: Clinical Skills	6 hours

NURS	3925	Nursing of Adults with Health Problems	9 hours
NURS	3926	Nursing of Children and Childbearing Women	9 hours

SECOND SEMESTER

NURS	4212	Professional Nursing: Health Assessment	2 hours
NURS	4504	The Nurse as a Manager and Leader	5 hours
NURS	4512	Professional Nursing: Health Promotion	5 hours

THIRD SEMESTER

NURS	4114	Professional Nursing: Research	1 hour
NURS	4213	Professional Nursing: Issues and Ethics	2 hours
NURS	4413	Professional Nursing: Family Focus	4 hours
NURS	4513	Community Health Nursing	5 hours
Upper-Division Electives		3 semester hours of electives must be in nursing	9 hours

COURSE DESCRIPTIONS ALLIED HEALTH SCIENCES (AHS)

- 1053** **Introductory Microbiology**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212, or consent of instructor.
A general study of microorganisms, their characteristics, isolation, growth, and importance in nature, industry, public health, and human disease. (Credit cannot be earned for both AHS 1053 and BIO 3713.) [TCCN: BIOL 2320.]
- 1061** **Introductory Microbiology Laboratory**
(0-3) 1 hour credit.
Credit cannot be earned for both AHS 1061 and BIO 3722. [TCCN: BIOL 2120.]
- 1883** **Introduction to Clinical Laboratory Sciences**
(3-0) 3 hours credit. Prerequisite: CHE 1103 is recommended.
Overview of the profession of clinical laboratory sciences, including the clinical laboratory and its functions, relationship of physiological and pathological specimens to body systems, and medical terminology and medical laboratory calculations.
- 2043** **Nutrition**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212, or AHS 2103.
An examination of human nutritional needs from infancy to adulthood. [TCCN: BIOL 1322.]

- 2083 Human Biology: Anatomy**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212.
Systemic anatomy of the human organism. Includes cell biology, histology, and gross anatomy of major organ systems. May not be applied to a B.S. in Biology. [TCCN: BIOL 2301.]
- 2091 Human Biology: Anatomy Laboratory**
(3-0) 1 hour credit.
May not be applied to a B.S. in Biology. [TCCN: BIOL 2101.]
- 2103 Human Biology: Physiology**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212.
Physiological processes in human systems. May not be applied to a B.S. in Biology. [TCCN: BIOL 2302.]
- 2111 Human Biology: Physiology Laboratory**
(3-0) 1 hour credit.
May not be applied to a B.S. in Biology. [TCCN: BIOL 2102.]
- 3463 Human Physiology**
(3-0) 3 hours credit. Prerequisites: BIO 1203 and 1212, CHE 1203 or 2203, or consent of instructor.
Physiological processes in human systems.

DIVISION OF MATHEMATICS AND STATISTICS

The Division of Mathematics and Statistics offers a Bachelor of Science degree in Mathematics. The degree is offered in three concentrations: mathematics, statistics, and general mathematical studies. The Mathematics and Statistics Concentrations offer students the opportunity to prepare to provide technical support and do research for high-technology industries, government, and private companies; to teach mathematics at the secondary level; and to pursue advanced graduate study. The General Mathematical Studies Concentration is designed primarily for those students wishing to teach mathematics at the secondary level. The division also offers Minors in Mathematics and Statistics.

Bachelor of Science Degree in Mathematics

The Bachelor of Science degree in Mathematics is offered with three concentrations: mathematics, statistics, and general mathematical studies.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 126. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

Students choosing the General Mathematical Studies Concentration should satisfy the Core Curriculum requirements consistent with the Texas Teacher Certification Program.

All required and elective mathematics and statistics courses must be completed with a grade of "C" or better.

All candidates for the Bachelor of Science degree in Mathematics, regardless of concentration, must complete the following 28 to 29 semester credit hours of required courses (this includes the 6 hours of Core Curriculum requirements in mathematics and computer science):

CS	1073	Introductory Computer Programming for Scientific Applications
		or
CS	1713, 1711	Introduction to Computer Science and Recitation
		or
CS	2073	Computer Programming with Engineering Applications
MAT	1214	Calculus I*
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
MAT	3213	Foundations of Analysis
MAT	4213	Real Analysis I
STA	3513	Probability and Statistics
STA	3523	Statistical Methods

*The student who is not prepared to begin MAT 1214 must take MAT 1093 Precalculus.

In addition, a candidate for the Bachelor of Science degree in Mathematics must complete the course requirements for the concentration declared by the candidate.

Mathematics Concentration

A. 15 semester credit hours of required courses:

MAT	3243	Calculus for Applications
MAT	3613	Differential Equations I
MAT	3633	Numerical Analysis
MAT	4223	Real Analysis II
MAT	4233	Modern Abstract Algebra I

B. 6 additional semester credit hours of upper-division courses in mathematics, computer science, or statistics approved by the student's advisor

C. 28 to 29 semester credit hours of electives

Statistics Concentration

A. 18 semester credit hours of required courses:

MAT	3633	Numerical Analysis
STA	3013	Multivariate Analysis for the Life and Social Sciences
STA	3433	Applied Nonparametric Statistics
STA	4643	Introduction to Stochastic Processes
STA	4713	Applied Regression Analysis
STA	4723	Design and Analysis of Experiments

B. 9 additional semester credit hours of approved courses in the division, of which at least 6 hours must be upper-division

C. 22 to 23 semester credit hours of electives

General Mathematical Studies Concentration

A. 15 semester credit hours of mathematics and/or statistics:

1. 9 semester credit hours of mathematics:

MAT	3233	Modern Algebra
MAT	4113	Computer Mathematical Topics
MAT	4263	Geometry

2. 6 approved upper-division semester credit hours in mathematics or statistics

B. 6 semester credit hours of required academic foundations:

COM	1043	Introduction to Communication
3 semester credit hours of English literature		

C. 28 to 29 semester credit hours of electives

Students seeking teacher certification should use 21 of these hours for the required certification courses. Other students should take an additional 6 semester credit hours of upper-division mathematics or statistics courses approved by the Undergraduate Advisor of Record.

Certification requirements for students pursuing the General Mathematical Studies Concentration are different from degree requirements. In addition to specific course requirements, teacher certification in Texas also requires passing scores on the Texas Academic Skills Program (TASP) test and acceptable scores on the state-mandated exit competency test. Complete information may be obtained at the Office of Teacher Certification and Placement at UTSA.

Minor in Mathematics

All students pursuing the Minor in Mathematics must complete 22 semester credit hours.

A. 16 semester credit hours of required courses:

MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
MAT	3613	Differential Equations

B. 6 semester credit hours of approved upper-division mathematics electives

To declare a Minor in Mathematics, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Mathematics and Statistics.

Minor in Statistics

All students pursuing the Minor in Statistics must complete 22 semester credit hours.

A. 19 semester credit hours of required courses:

MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	2233	Linear Algebra
STA	3513	Probability and Statistics
		or
STA	3533	Probability and Random Processes
STA	3523	Statistical Methods

B. 3 semester credit hours of approved upper-division statistics electives

To declare a Minor in Statistics, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Adviser of Record in the Division of Mathematics and Statistics.

COURSE DESCRIPTIONS MATHEMATICS (MAT)

- 0103 TASP Review**
(3-0) 3 hours credit.
A course intended for students with minimal mathematical skills who need a comprehensive review before they can successfully complete an algebra course. Topics include the Fundamental Mathematics and Geometry objectives of the Texas Academic Skills Program (TASP), with an introduction to algebra. Intensive review and maintenance of computational skills with integers, fractions, decimals, percents, ratio, and proportions; reading and interpreting information presented in graphs, tables, and charts; solving word problems, elementary algebraic equations, and problems with two- and three-dimensional geometric figures; and inductive and deductive reasoning skills. Course does not count toward any degree at UTSA.
- 0113 Elemental Algebra**
(3-0) 3 hours credit.
Introductory algebra course that includes the Texas Academic Skills Program (TASP) Algebra and Problem Solving objectives. Operations with algebraic expressions; solving one- and two-variable equations; solving word problems involving one and two variables; graphing numbers and number relationships; solving problems involving quadratic equations. Course does not count toward any degree at UTSA.
- 1033 Algebra with Calculus for Business**
(3-0) 3 hours credit. Prerequisite: Placement.
An introduction to business calculus with an emphasis on the algebra of functions. Concentration is on the algebraic manipulations of functions and includes volume and profit functions, both linear and quadratic; root finding and graphical analysis; matrices; and differentiation and integration. [TCCN: MATH 1325.]
- 1063 College Algebra**
(3-0) 3 hours credit. Prerequisite: Placement.
Algebraic expressions, equations, inequalities over the real numbers, relations, functions, polynomial and rational functions, systems of linear equations and inequalities, matrices and determinants, complex numbers, and polynomials. Other topics may include sequences, series, binomial expansion, mathematical induction, permutations, and combinations. [TCCN: MATH 1314.]

- 1093 Precalculus**
(3-0) 3 hours credit. Prerequisite: MAT 1063 or an equivalent course or placement.
Exponential functions, logarithmic functions, trigonometric functions, complex numbers, DeMoivre's theorem, and polar coordinates. [TCCN: MATH 2312.]
- 1143 Essential Elements in Mathematics**
(3-0) 3 hours credit. Prerequisite: MAT 1063.
Numeration systems; properties of the systems of whole numbers, integers, rational numbers, and real numbers; problem solving, geometry, and measurement; probability and statistics; logic. May not be applied toward a major in mathematics. [TCCN: MATH 1335.]
- 1214 Calculus I**
(4-0) 4 hours credit. Prerequisite: MAT 1093 or an equivalent course or placement.
An introduction to the concepts of limit, continuity and derivative, mean value theorem, and applications of derivatives such as velocity, acceleration, maximization, and curve sketching; introduction to the Riemann integral and the fundamental theorem of calculus. [TCCN: MATH 2413.]
- 1223 Calculus II**
(3-0) 3 hours credit. Prerequisite: MAT 1214.
Methods of integration, inverse trigonometric functions, and applications of the integral. [TCCN: MATH 2314.]
- 2213 Calculus III**
(3-0) 3 hours credit. Prerequisite: MAT 1223.
Special areas of differential and integral calculus; includes Taylor series, power series, convergence tests, vectors, functions of several variables, partial derivatives, and multiple integrals. [TCCN: MATH 2315.]
- 2233 Linear Algebra**
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Vector spaces and matrix algebra, matrices and determinants, characteristic values of matrices, and reduction to canonical forms. Emphasis on applications. [TCCN: MATH 2318.]
- 2243 Foundations of Mathematics**
(3-0) 3 hours credit. Prerequisite: MAT 1214.
Development of theoretical tools for rigorous mathematics. Topics may include mathematical logic, propositional and predicate calculus, set theory, functions and relations, cardinal and ordinal numbers, Boolean algebras, and construction of the natural numbers, integers, and rational numbers. Emphasis on theorem proving.

- 3123 Fundamentals of Geometry**
(3-0) 3 hours credit. Prerequisite: MAT 1214.
A survey of geometric concepts, including axiomatic developments of advanced Euclidean geometry, coordinate geometry, non-Euclidean geometry, three-dimensional geometry, and topology. May not be applied toward a major in mathematics other than the General Mathematical Studies Concentration of the B.S. in Mathematics.
- 3213 Foundations of Analysis**
(3-0) 3 hours credit. Prerequisite: MAT 1214 (MAT 2243 is recommended).
Axiomatic definition of real numbers, including order properties and completeness; infinite sequences and their convergence; basic notions related to series and their convergence; functions and function limits. Introduction to topology of the real line. Emphasis on theorem proving.
- 3223 Complex Variables**
(3-0) 3 hours credit. Prerequisites: MAT 2213 and either 3213 or consent of instructor.
An introduction to complex variables, including elementary functions, line integrals, power series, residues and poles, and conformal mappings.
- 3233 Modern Algebra**
(3-0) 3 hours credit. Prerequisite: MAT 1214 (MAT 2243 is recommended).
Topics will include the development of groups, integral domains, fields, and number systems, including the complex numbers. Divisibility, congruences, primes, perfect numbers, and some other problems of number theory will be considered.
- 3243 Calculus for Applications**
(3-0) 3 hours credit. Prerequisite: MAT 2233.
Line vector differential and integral calculus, line integrals, Green's theorem, Stokes' theorem, and Divergence theorem.
- 3253 Engineering Analysis**
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Ordinary differential equations, Laplace transforms, linear algebra, and matrix arithmetic. May not be applied to a major in mathematics.
- 3273 Applied Mathematics for Sciences and Engineering**
(3-0) 3 hours credit. Prerequisite: MAT 3253 or 3613.
Complex analysis, Fourier series, Fourier transforms, harmonic analysis, and partial differential equations. (Formerly MAT 3263. Credit cannot be earned for both MAT 3273 and MAT 3263.)
- 3613 Differential Equations I**
(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in MAT 2233.
Basic notions of differential equations, solution of first-order equations and linear equations with constant coefficients, n^{th} -order initial value problems, and power series solutions of differential equations.

- 3623 Differential Equations II**
(3-0) 3 hours credit. Prerequisite: MAT 3613.
Continuation of MAT 3613. Stability, partial differential equations, and boundary value problems.
- 3633 Numerical Analysis**
(3-0) 3 hours credit. Prerequisites: MAT 2233, MAT 3213, and either CS 1073 or CS 1713.
Solution of linear and nonlinear equations, curve-fitting, and eigenvalue problems.
- 4113 Computer Mathematical Topics**
(3-0) 3 hours credit. Prerequisites: MAT 3233 and either 3123 or 4263.
Mathematical topics from consumer mathematics, algebra, geometry, number theory, and probability and statistics will be investigated using the computer. Course will also include some instruction in BASIC programming language. May not be applied toward a major in mathematics other than the General Mathematical Studies Concentration of the B.S. in Mathematics.
- 4123 History of Mathematics**
(3-0) 3 hours credit. Prerequisites: MAT 3233 and either 3123 or 4263.
Selected subjects in mathematics developed through historical perspectives and biographies. May not be applied toward a major in mathematics other than the General Mathematical Studies Concentration of the B.S. in Mathematics.
- 4213 Real Analysis I**
(3-0) 3 hours credit. Prerequisite: MAT 3213.
Continuous functions, uniform continuity; theory of differentiation; applications of the derivatives to properties of functions; antiderivatives; Riemann integral; connection between differentiation and integration.
- 4223 Real Analysis II**
(3-0) 3 hours credit. Prerequisite: MAT 4213.
Lebesgue integral on the real line; n -dimensional spaces; vectors; calculus of functions of several variables; multidimensional integration.
- 4233 Modern Abstract Algebra I**
(3-0) 3 hours credit. Prerequisite: MAT 3213.
An in-depth study of groups and rings.
- 4253 Number Theory**
(3-0) 3 hours credit. Prerequisite: MAT 3213.
The theory of primes, congruences, and related subjects.
- 4263 Geometry**
(3-0) 3 hours credit. Prerequisite: MAT 3213.
Projective, affine, and non-Euclidean geometry.

- 4273 Topology**
(3-0) 3 hours credit. Prerequisite: MAT 3213.
Set theory, including cardinal and ordinal numbers. Topological properties of the real-line and metric spaces.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Mathematics**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. May be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Research**
3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during their last two semesters; approval by the College Honors Committee.
Supervised research and preparation of an honors thesis.

COURSE DESCRIPTIONS STATISTICS (STA)

- 1053 Basic Statistics**
(3-0) 3 hours credit. Prerequisite: Placement.
Descriptive statistics; histograms; measures of location and dispersion; elementary probability theory; random variables; binomial and normal distributions; interval estimation and hypothesis testing; simple linear regression and correlation; and applications of the chi-square distribution. [TCCN: MATH 1342.]
- 1063 Basic Statistics for Business and Economics**
(3-0) 3 hours credit. Prerequisite: MAT 1033.
Fundamental concepts and procedures of statistics and probability with business applications. Includes descriptive statistics, estimation, hypothesis testing, and simple linear regression and correlation. (Formerly STA 1064. Credit cannot be earned for both STA 1063 and 1064.)

1073 Statistics for Psychology

(3-0) 3 hours credit. Prerequisites: MAT 1033 or MAT 1063 and one psychology course.

The use of statistics in psychological research. Includes elementary probability theory; descriptive statistics, including histograms, graphing, and measures of central tendency and dispersion; correlational techniques; binomial and normal distributions; and inferential statistics, including hypothesis testing, interval estimation, and analysis of variance.

1993 Statistical Methods for the Life and Social Sciences

(3-0) 3 hours credit. Prerequisite: STA 1053, 1063, or 1073.

Point estimator properties, inference about the means and variances of two or more populations, categorical data analysis, linear regression, analysis of variance, and nonparametric tests. Open to students of all disciplines.

3013 Multivariate Analysis for the Life and Social Sciences

(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.

Linear algebra preliminaries, the multivariate normal distribution, tests on means, discriminant analysis, cluster analysis, principal components, and factor analysis. Use of computer library programs. Open to students of all disciplines.

3313 Introduction to Sample Survey Theory and Methods

(3-0) 3 hours credit. Prerequisite: STA 1993 or 3513.

Simple random sampling, stratified random sampling, ratio and regression estimates, systematic sampling, cluster sampling, unequal probability sampling, two-stage and multistage sampling, and nonsampling errors.

3433 Applied Nonparametric Statistics

(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.

Tests of location, goodness-of-fit tests, rank tests, tests based on nominal and ordinal data for both related and independent samples, and measures of association.

3513 Probability and Statistics

(3-0) 3 hours credit. Prerequisite: Completion of or concurrent enrollment in MAT 2213.

Axioms of probability, random variables, probability functions, density functions, functions of random variables, sampling distributions, important discrete and continuous random variables, and Central Limit Theorem.

3523 Statistical Methods

(3-0) 3 hours credit. Prerequisite: STA 3513 or 3533.

Estimation and hypothesis testing, chi-square tests, linear regression, analysis of variance, and other topics which may include nonparametric methods, quality control, and reliability.

3533 Probability and Random Processes

(3-0) 3 hours credit. Prerequisites: EE 3423 and MAT 3253.

Probability, random variables, distribution and density functions, limit theorems, random processes, correlation functions, power spectra, and response of linear systems to random inputs.

- 3813 Discrete Data Analysis and Bioassay**
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.
Methods especially useful for problems arising in the life sciences: analysis of count data, contingency tables, and Probit and Logit analysis.
- 4613 Operations Research I**
(3-0) 3 hours credit. Prerequisite: MAT 2233.
Introduction to analytical methods and models of operations research, with emphasis on optimization. Linear, integer, and nonlinear programming, network analysis including PERT and CPM, and introduction to dynamic programming.
- 4623 Operations Research II**
(3-0) 3 hours credit. Prerequisite: STA 3513 or an equivalent.
Introduction to probabilistic analysis and models in operations research. Decision analysis, Markov chains, and queuing models.
- 4643 Introduction to Stochastic Processes**
(3-0) 3 hours credit. Prerequisite: STA 3513.
Finite Markov chains, including transition probabilities, classification of states, limit theorems, queuing theory, and birth and death processes.
- 4713 Applied Regression Analysis**
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3513.
An introduction to regression analysis, with emphasis on practical aspects, fitting a straight line, examination of residuals, matrix treatment of regression analysis, fitting and evaluation of general linear models, and nonlinear regression.
- 4723 Design and Analysis of Experiments**
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.
General concepts in the design and analysis of experiments. Emphasis will be placed on both the experimental designs and analysis and tests of the validity of assumptions. Topics covered include completely randomized designs, randomized block designs, complete factorials, fractional factorials, and covariance analysis. The use of computer software packages will be stressed.
- 4803 Statistical Quality Control**
(3-0) 3 hours credit. Prerequisite: STA 3513.
Statistics and simple probability are introduced in terms of problems that arise in manufacturing and their application to control of manufacturing processes. Includes acceptance sampling in terms of standard sampling plans: MIL-STD 105, MIL-STD 414, Dodge-Romig plans, continuous plans, and others.
- 4903 Survival Analysis**
(3-0) 3 hours credit. Prerequisite: STA 3523 or an equivalent.
Measures of survival, hazard function, means residual life function, common failure distributions and a procedure for selecting an appropriate model, reliability of complex series and parallel systems, and the probabilistic approach to biomedical applications.

4913 Independent Study

3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Statistics

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

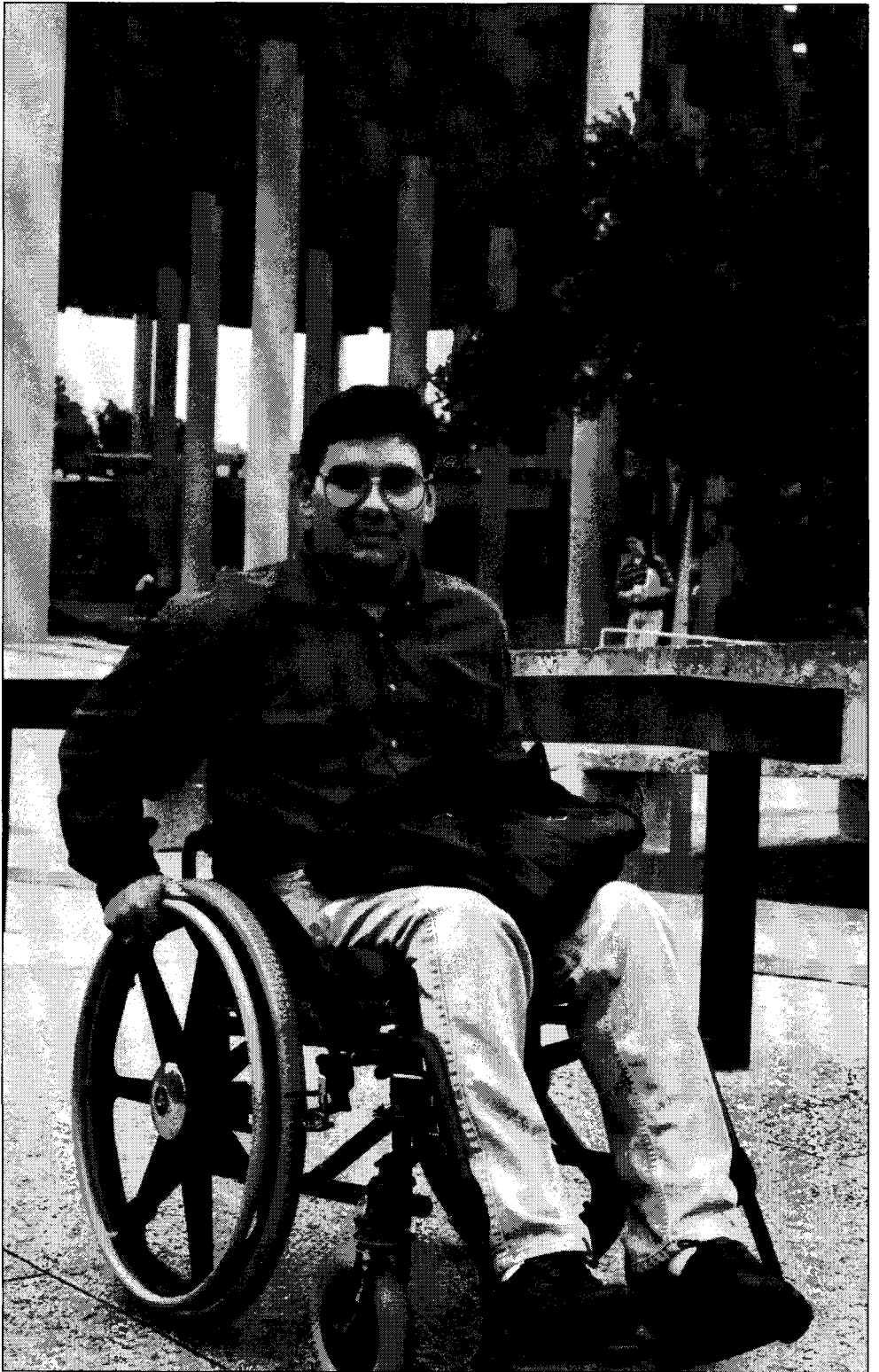
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Research

3 hours credit. Prerequisites: Enrollment limited to candidates for College Honors during their last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis.

**COLLEGE OF SOCIAL
AND BEHAVIORAL SCIENCES**



COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

DIVISION OF BEHAVIORAL AND CULTURAL SCIENCES

The Division of Behavioral and Cultural Sciences offers Bachelor of Arts degrees in American Studies (offered jointly with the Division of English, Classics, Philosophy, and Communication), Anthropology, History, and Psychology. American studies is an interdisciplinary examination of the relationships among the diverse elements of American culture. Anthropology is the study of human cultural behavior. History is the study of the past of human society. Psychology is the study of animal and human behavior and of cognitive processes and thought. Each major combines a specialization in one of these sciences with support work in a related area. The support work area involves a specific number of semester credit hours outside the major discipline which forms a cohesive whole and is approved by the student's advisor. The division also offers Minors in American Indian Studies, American Studies, Anthropology, History, Psychology, and Women and Gender Studies.

INTERNSHIP STUDY

Internship entails supervised experience within selected organizations in the San Antonio area. Placement is arranged with the internship coordinator of the Division of Behavioral and Cultural Sciences. Supervision and grading of the internship experience is normally done by division faculty members. The various degree plans within the division place different restrictions on whether an internship must be taken on a credit/no-credit basis and on whether an internship may be counted toward major requirements. Up to 6 semester credit hours may be counted toward a bachelor's degree. Students from majors other than the social sciences are welcome to participate but should consult with their faculty advisors regarding the role of the internship within their own degree programs. Further information can be obtained from the internship coordinator.

DIVISION HONORS

The Division of Behavioral and Cultural Sciences awards Division Honors to certain of its outstanding students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for honors designation is based on the student's academic performance and recommendation by the faculty in the student's major discipline. To be eligible for the program, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students applying for Division Honors are expected to enroll in the appropriate honors thesis course during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor and another divisional faculty member. Students interested in this program should contact their faculty advisors for additional information.

Bachelor of Arts Degree in American Studies

American studies is an interdisciplinary program that examines society and culture in the United States. This approach provides a broad view of the nation's life by examining not only politics and economics but also customs, art, literature, and thought and by using materials and methodologies from several disciplines. The major in this field allows students a latitude of study to develop, in close consultation with the American studies advisor, a course of study adapted to their own interests and postgraduate needs; it is especially appropriate for students choosing careers in law, urban studies, the military, public relations, historic conservation, museum and archival management, and community organizations.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 36 semester credit hours in courses approved by the American studies advisor, 21 of which must be at the upper-division level:

1. 21 semester credit hours of required courses:

- a. AMS 2013 Basic Issues in American Culture
- AMS 3013 Early American Culture
- AMS 3023 Modern American Culture

b. 6 semester credit hours selected from the following:

- AMS 3033 Topics in Regional American Cultures
- AMS 3043 Topics in Ethnic American Cultures
- AMS 3053 Topics in Women and American Culture

c. 6 semester credit hours of AMS 4823 Topics in American Culture

2. 15 semester credit hours of support work with American content from at least two disciplines. American content may be interpreted as North, South, and Central America and the Caribbean. Areas of interest may include Mexican American studies, women and gender studies, the American legal system, problems in modern American society, race and ethnicity in America, American arts, and urban studies. Other areas of interest may be chosen with the consent of the American studies advisor. Support work must be approved by the American studies advisor.

3 semester credit hours of AMS 4933 Internship in American Studies may be taken in partial fulfillment of this requirement.

B. 30 semester credit hours of electives

Minor in American Studies

All students pursuing a Minor in American Studies must complete 18 semester credit hours.

A. 12 semester credit hours of required courses:

AMS	2013	Basic Issues in American Culture
AMS	3013	Early American Culture
AMS	3023	Modern American Culture
AMS	4823	Topics in American Culture

B. 6 additional semester credit hours selected from the following:

AMS	3033	Topics in Regional American Cultures
AMS	3043	Topics in Ethnic American Cultures
AMS	3053	Topics in Women and American Culture

To declare a Minor in American Studies, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

COURSE DESCRIPTIONS AMERICAN STUDIES (AMS)

- 2013 Basic Issues in American Culture**
(3-0) 3 hours credit. Prerequisite: HIS 1043 or 1053.
Introduces the student to the study of culture in the United States using the interdisciplinary American studies approach. Issues may include ethnicity, class, gender, nationalism, regionalism, individualism, religion, consumerism, violence, and mobility, considered both historically and in contemporary American culture.
- 3013 Early American Culture**
(3-0) 3 hours credit.
Examines the influences that shaped American culture to the twentieth century. Topics may include the impact of colonialism, the Enlightenment, the frontier, industrialism, ethnicity, race, religious reform, and other factors in the development of a distinctive society.
- 3023 Modern American Culture**
(3-0) 3 hours credit.
Examines major trends in American culture during and after the industrial revolution, with special attention to the consequences of urbanization, suburbanization, industrialization, race relations, popular culture, technology, and secularization.

- 3033 Topics in Regional American Cultures**
(3-0) 3 hours credit.
A study of the culture(s) of a distinct region or regions within the United States. Emphasis is on works that analyze the region's culture, literature by authors from that particular area, history, and folk traditions. Topics may include southern, western, suburban, or other identifiable regional cultures. May be repeated for credit when topics vary.
- 3043 Topics in Ethnic American Cultures**
(3-0) 3 hours credit.
A study of the cultural expressions of a particular racial or ethnic group or groups in the United States. Topics may include Native American, African American, Latino, Asian, Jewish, or other cultural groups. May be repeated for credit when topics vary.
- 3053 Topics in Women and American Culture**
(3-0) 3 hours credit.
A study of the cultural expressions of women in America. Topics may include literature, art, music, and philosophy by and about women; women's roles in history; folklore relating to women; and similarities and differences in men's and women's culture. May be repeated for credit when topics vary.
- 4823 Topics in American Culture**
(3-0) 3 hours credit.
An in-depth study of a selected topic, such as American reform movements and political change, music in American culture, sports in American culture, childhood in America, modernism and postmodernism, literary expressions of American culture, and cultural currents in various periods of American history. May be repeated for credit when topics vary. Two or more topics courses may be taken concurrently.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in American Studies**
3 or 6 hours credit. Prerequisite: Consent of program director.
Supervised experience relevant to American studies within selected community organizations. A maximum of 6 semester credit hours may be earned through Internship in American Studies. Must be taken on a credit/no-credit basis. Only 3 hours can be applied to the major in American studies.

Bachelor of Arts Degree in Anthropology

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

- A. 33 semester credit hours in the major, 21 of which must be at the upper-division level:
1. 12 semester credit hours of required courses:

ANT	2033	Introduction to Physical Anthropology
ANT	2043	Introduction to Archaeology
ANT	2053	Introduction to Cultural Anthropology
ANT	2063	Language, Thought, and Culture
 2. 9 upper-division semester credit hours chosen in consultation with the student's advisor:

3 semester credit hours in archaeology
3 semester credit hours in cultural anthropology
3 semester credit hours in physical anthropology
 3. 12 additional upper-division semester credit hours of anthropology electives excluding ANT 4913 Independent Study, chosen in consultation with the student's advisor. The following courses may be used to satisfy all or part of this requirement:

ENG	3343	Principles of English Linguistics
GRG	3213	Cultural Geography
HIS	3113	The American Indian
LNG	3813	Introduction to Linguistics
PHI	3033	Philosophy of Science
PSY	3053	Cross-Cultural Psychology
SSC	3103	Major Theories of the Social Sciences
- B. 6 semester credit hours of social science courses, including ANT 1313 The Uses of Anthropology or courses outside the major, chosen with the consent of the advisor
- C. 9 upper-division semester credit hours of work from another discipline that supports the study of anthropology. The support area must form a cohesive program of study and must be chosen in consultation with the student's advisor after completion of 12 semester credit hours of anthropology. The student should file a statement of intent and the list of courses to be taken in the support area with the Undergraduate Advisor of Record.
- D. 18 semester credit hours of electives

Minor in Anthropology

All students pursuing a Minor in Anthropology must complete 18 semester credit hours.

A. 9 semester credit hours of courses selected from the following:

- ANT 2033 Introduction to Physical Anthropology
- ANT 2043 Introduction to Archaeology
- ANT 2053 Introduction to Cultural Anthropology
- ANT 2063 Language, Thought, and Culture

B. 9 additional upper-division semester credit hours:

- 3 semester credit hours in archaeology
- 3 semester credit hours in cultural anthropology
- 3 semester credit hours in physical anthropology

To declare a Minor in Anthropology, obtain advice, obtain lists of relevant courses, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

COURSE DESCRIPTIONS ANTHROPOLOGY (ANT)

1013 Introduction to Anthropology

(3-0) 3 hours credit.

The study of human culture, past and present; its origin, development, and contemporary change; and the exploration of human physical and cultural differences using the paradigm of adaptation. [TCCN: ANTH 2346.]

1313 The Uses of Anthropology

(3-0) 3 hours credit.

Applying anthropological ideas to real-world problems; nonacademic and academic career options. Topics include the history of applied anthropology; becoming a professional; and anthropology as it relates to business, education, health care, cultural resource management, museums, criminal justice, and academic settings.

2033 Introduction to Physical Anthropology

(3-0) 3 hours credit.

Examines basic issues, concepts, and orientations of physical anthropology, regarding human development and variation both past and present, as well as the relationship between human biology and culture. [TCCN: ANTH 2301.]

2043 Introduction to Archaeology

(3-0) 3 hours credit.

A problem-solving approach to classic and contemporary questions in archaeology. The nature of anthropological inquiry as reflected in the field is stressed. [TCCN: ANTH 2302.]

- 2053 Introduction to Cultural Anthropology**
(3-0) 3 hours credit.
This course discusses culture and other basic anthropological concepts and their use in understanding variation in economy, social structure, and ideology. Ethnographic descriptions provide examples of cross-cultural variation. Attention is also given to processes governing culture continuity and change. (Credit cannot be earned for both ANT 2023 and ANT 2053.) [TCCN: ANTH 2351.]
- 2063 Language, Thought, and Culture**
(3-0) 3 hours credit.
This course surveys anthropological approaches to the study of language, emphasizing the relation between language and worldview and the social uses of speech. Instruction is given in the fundamentals of descriptive linguistics. The biological basis of language and patterns of historical development are also examined. (Credit cannot be earned for both ANT 2023 and ANT 2063.)
- 3103 Social Organization**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
Comparative analysis of family and social organization, primarily among nonliterate peoples.
- 3133 Ritual and Symbol**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
An examination of rituals—highly stereotyped, stylized, and repetitive acts usually taking place in carefully selected locations and marked by use of material items. Students will be offered an introduction to symbolic anthropology through the study of ritual and its material culture.
- 3153 Indians of the Great Plains**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
An examination of the fundamental cultural transformation and florescence of Native American societies of the Great Plains following the introduction of the horse. Attention is given also to the subsequent retrenchment under the imposition of Anglo-American dominance, and the recent emergence of new forms of cultural expression within tribal and urban areas.
- 3173 Ethnomedicine: Theory and Applications**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
Integration of sociocultural and medical approaches to health maintenance based on cross-cultural and contemporary urban research. Evidence for the efficacy of non-Western medical practices, the interaction of medical systems in biethnic social situations, cross-cultural studies of mental health, and the analysis of cross-ethnic programs of medical care receive attention.
- 3223 Cultural Ecology**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
Human adaptation to the environment and interaction with it, comparing simple and complex societies in various environmental contexts.

- 3263 Archaeology of North America**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2043 recommended.
Survey of prehistoric cultures in North America from earliest times to historic contact. May include discussion of Ice Age mammoth hunters, Eastern mound-building cultures, Southwestern pueblo cultures, and Plains bison hunters. Chronology, sites, settlement and subsistence patterns, and recent research issues may be considered.
- 3273 Ancient Civilizations of Mesoamerica**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2043 recommended.
Examination of the development of the ancient civilizations of Guatemala, Mexico, and Central America: Olmec, Teotihuacan, Maya, Toltec, Aztec, and Zapotec, among others.
- 3293 Research Methods in Anthropology**
(3-0) 3 hours credit. Prerequisites: ANT 1013, and completion of Core Curriculum requirement in mathematics; ANT 2023 or 2053 recommended.
Quantitative analysis and computer applications as used in anthropological research.
- 3333 Physical Anthropology of Human Populations**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2033 recommended.
Examines the biological variability of living populations; includes genetics, anatomy, demography, and change within a physical anthropology framework.
- 3353 Anthropology of American Culture**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
Presents anthropological approaches to the modern and postmodern United States. Case studies in social structure, language, and ideology are examined. Attention is given to the extent and limits of cultural variation and to cultures both in and outside the mainstream.
- 3363 Indians of Mesoamerica**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
A survey of the development, content, and variety of Mesoamerican Indian cultures from before the Spanish conquest to the present. Emphasis is placed on the cultural responses of the Indian peoples to the pressures of the Spanish and National regimes.
- 3383 Folklore and Folklife**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.
Examines vernacular arts, crafts, and customs and their function in the maintenance of group identity. National, regional, ethnic, and occupational traditions are investigated. Attention is given to texts such as legends, myths, and ballads, as well as folk performance, clothing, architecture, and foodways.

- 3403 Field Course in Archaeology**
3 hours credit. Prerequisites: Upper-division standing, consent of instructor, and at least one previous anthropology or archaeology course. Offers the opportunity to gain intensive training in archaeological field methods: excavation, site survey, mapping, sampling, and interpretation. Additional fees are required. May be repeated for credit with advisor's permission, but not more than 6 semester credit hours may be applied to a major in anthropology. (Formerly ANT 3406. Credit cannot be earned for both ANT 3403 and ANT 3406.)
- 3413 The Fieldwork Experience**
(3-0) 3 hours credit. Prerequisite: ANT 2023, ANT 2053, or consent of instructor. Drawing upon the field experiences of major figures in anthropology, the course explores the scientific and humanistic aspects of research in cultural anthropology. Ethnographic methods and techniques are discussed, with emphasis on participant observation and ethical considerations.
- 3503 Human Origins**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2033 recommended. The fossil record of human emergence and comparative studies of human evolution. Evolution of social organization, technology, and language development to the end of the Ice Age.
- 3513 The Human Skeleton**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2033 recommended. Students are given the opportunity to develop skills in the study and analysis of human osteological remains. Applications of skeletal analysis in a variety of fields are considered, including physical anthropology and archaeological demography.
- 3523 Medical Anthropology**
(3-0) hours credit. Prerequisite: ANT 1013, 2033, or 2053 recommended. This course approaches the study of health and disease patterns in human populations through the combined perspectives of culture, biology, and ecology.
- 3603 Sex, Gender, and Culture**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2033 recommended. Examination of the biological and cultural sources of differences between men and women.
- 3633 Mexico: Transforming Cultures**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended. Contemporary issues facing Mexico's diverse peoples. Emphasis is placed on ethnicity, gender, and class in a globalizing economy. Case studies examine Mexico's "Indian problem," the peasantry, urban squatter settlements, women in maquiladoras, and the contested United States–Mexico border.

3663 Hunters and Gatherers

(3-0) 3 hours credit. Prerequisite: ANT 1013, 2043, or 2053 recommended. The study of lifeways of hunting and gathering peoples around the world. Emphasis is placed on archaeological approaches to past hunting and gathering societies. Cross-cultural analyses utilizing ethnographic and archaeological data within an ecological context are emphasized.

3673 Ancient Civilizations of the Near East, Egypt, and Europe

(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2043 recommended. Development of agriculture and village life; beginnings of civilization in the Near East and Mediterranean as compared with Mesoamerica, India, and China; rise of civilization in the Nile Valley.

3683 Archaeology of the Biblical Lands

(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2043 recommended. Survey of the prehistoric and early historic periods of the geographic area mentioned in biblical and related texts. Time periods covered are approximately 7,000 B.C. to A.D. 100, or from the Aceramic Neolithic to the Late Iron Age, with emphasis on the later periods. Cultural evolution and culture history, as well as the historicity of textual materials, will be treated.

3713 Material Culture Systems

(3-0) 3 hours credit. Prerequisite: ANT 2043 required and ANT 2053 recommended.

This course surveys the role of material culture in human social systems of the past and present. Archaeological, historical, and ethnographic case studies are used to illustrate how the material world is variously woven into the fabric of culture.

3723 Ancient Complex Society

(3-0) 3 hours credit. Prerequisites: ANT 2043 required and ANT 3273 or ANT 3673 recommended.

Cross-cultural exploration of social, economic, and political institutions found in ancient complex societies. Archaeological evidence is used to examine sources of variation in the development and organization of complexity. Comparisons are drawn from the ancient civilizations of South America, Mesoamerica, Africa, and Asia.

3733 Political and Legal Anthropology

(3-0) hours credit. Prerequisite: ANT 1013 or 2053 recommended.

Comparative political and legal systems; forms of authority, legitimacy, and power. Major trends in anthropological thought are explored with emphasis on the political uses of myth, symbol, and ritual. Law and judicial processes are examined in Western and non-Western societies.

3813 Anthropology of Business

(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended.

This course examines how anthropological concepts and methods are used to understand and improve work conditions, corporate culture, and marketing; and how businesses can be better integrated into global markets by understanding the cultures of international business partners.

- 4113 Archaeology of Texas**
(3-0) 3 hours credit. Prerequisite: ANT 2043, 3263, or 3663 recommended. Detailed review of prehistoric and historic aboriginal cultures of Texas and adjacent areas; current trends in Texas archaeology; examination of artifacts; and field trips to local prehistoric sites.
- 4123 Archaeology of the American Southwest**
(3-0) 3 hours credit. Prerequisite: ANT 2043 or 3263 recommended. Consideration of the prehistoric cultures in the American Southwest and northern Mexico from the earliest occupations to European contact. Paleo-Indian, Archaic, Mogollon, Anasazi, and Hohokam occupations are reviewed with a consideration of recent research directions and theory.
- 4133 Indians of Texas**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended. Ethnological survey of the Indian populations of Texas from the early historic period to the present.
- 4243 Ethnographic Film**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended. Critique of major ethnographic films, concentrating on field methodology, production values, and the issue of representation.
- 4263 Social and Cultural Change**
(3-0) 3 hours credit. Prerequisite: ANT 1013 or 2053 recommended. Anthropological perspectives on the nature, causes, and consequences of social and cultural change, with an emphasis on how local cultures are shaped by and resist the process of globalization.
- 4403 Laboratory Analysis in Anthropology**
(2-4) 3 hours credit. Prerequisites: ANT 3403 or 3406, and completion of the Core Curriculum requirement in science. Supervised analysis of field data; methods of analysis; research techniques; and preparation of reports. May be repeated for an additional 3 semester credit hours with consent of instructor.
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in Anthropology**
3 or 6 hours credit. Prerequisite: Consent of internship coordinator. Supervised experience relevant to anthropology within selected community organizations. A maximum of 6 semester credit hours may be earned through Internship in Anthropology. Must be taken on a credit/no credit basis.

4953 Special Studies in Anthropology

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisites: Enrollment limited to candidates for Honors in Anthropology during their last two semesters; completion of honors examination and approval by the honors program coordinator.

Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

Bachelor of Arts Degree in History

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level. Courses taken to satisfy Core Curriculum requirements in U.S. History/Diversity cannot be used to satisfy history major or support work requirements.

All candidates for the degree must complete the following:

A. 30 semester credit hours in the major, 18 of which must be at the upper-division level:

1. HIS 2003 Historical Methods
2. 9 semester credit hours selected from the world civilization sequence (IDS 2203 and 2213) or from courses numbered HIS 2103 to 2693
3. 15 upper-division semester credit hours of history courses, including at least one U.S., one European, and one other area. Up to 6 semester credit hours from the following may be used to fulfill this requirement:

AMS	3013	Early American Culture
AMS	3023	Modern American Culture
ANT	3273	Ancient Civilizations of Mesoamerica
ANT	3673	Ancient Civilizations of the Near East, Egypt, and Europe
ECO	3163	Evolution of Economic Thought
ECO	3183	Economic History of the United States
POL	3133	Political Philosophy: Ancient and Medieval
POL	3143	Political Philosophy: Modern
POL	3323	Constitutional Law
PSY	4003	History of Psychology
SSC	3533	Inter-American Relations

4. 3 semester credit hours from HIS 4973 Seminar in History or HIS 4303 Quantitative Methods in History

- B. 6 semester credit hours in approved support work from one of the following areas outside history: social and behavioral sciences, research methodology, or cultural studies

The student must consult with his or her advisor to define a cohesive support area, and the advisor's approval is required.

- C. 30 semester credit hours of electives

Minor in History

All students pursuing a Minor in History must complete 18 semester credit hours.

- A. 9 semester credit hours of required courses:

HIS	2003	Historical Methods
IDS	2203	World Civilization to the Fifteenth Century
IDS	2213	World Civilization since the Fifteenth Century

- B. 9 additional semester credit hours of upper-division history electives

To declare a Minor in History, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

COURSE DESCRIPTIONS HISTORY (HIS)

1043 United States History: Pre-Columbus to Civil War Era

(3-0) 3 hours credit.

From a variety of perspectives, this course will analyze topics covering the geography of North America; pre-Columbian societies; European colonial societies and their transition into the national period; the development of modern economic structures and political traditions; westward expansion; class, race, ethnicity, and gender; cultural diversity and national unity; the relations of the United States to other nations and cultures; and the impact of these trends and issues on the development of the nation. [TCCN: HIST 1301.]

1053 United States History: Civil War Era to Present

(3-0) 3 hours credit.

From a variety of perspectives, this course will analyze topics covering the development of the United States as an urban industrial nation; the rising importance of the business cycle, corporations, and immigration; political traditions; class, race, ethnicity, and gender; cultural diversity and national unity; the relationship between the United States and other nations and cultures; and the impact of these trends on the development of the nation. [TCCN: HIST 1302.]

2003 Historical Methods

(3-0) 3 hours credit. Prerequisite: ENG 1013.

An introduction to the study of history in which students will consider examples and approaches to the problems of research and writing in the field. This course is designed for students completing requirements for a major or minor in history.

2053 Texas History

(3-0) 3 hours credit.

An overview of the development of Texas from the era of Spanish exploration and colonization to the modern period, with emphasis on major events in the nineteenth and twentieth centuries. Topics may vary, but generally will include cultural geography, contributions of ethnic minorities and women, the Republic of Texas, statehood, secession, Reconstruction, conservatism, reform, oil exploration, urbanization, and political, economic, and social change in the post-World War II era.

2203 Historical Background to Contemporary Problems

(3-0) hours credit.

The purpose of this course is to acquaint students with the historical background for some major issues of the day. Topics will highlight current concerns and give insights into how the historian looks at the past, seeking to understand the forces that lead to current "hot spots." Topics may include modern ideologies and political systems; relationship of the West and non-West; nationalism and internationalism; and environment and world resources.

2533 Introduction to Latin American Civilization

(3-0) 3 hours credit.

An introduction to Latin America examining the broader topics that shaped its history. These topics may include Native American societies; the encounter between Native Americans, Europeans, and Africans; the post-Independence era; the different paths toward nation-building; the nature of authoritarian regimes; the impact of revolutions; and the cultural development of Latin America and its historiography. [TCCN: HIST 2331.]

2543 Introduction to Islamic Civilization

(3-0) 3 hours credit.

An introduction to the role of Islam in world history, from the Prophet and the founding of the Umayyad Caliphate to the breakup of the Ottoman Empire. Primary focus will be on the Ottoman Empire, its institutions and culture, and its interaction with Western civilization.

2553 Introduction to East Asian Civilization

(3-0) 3 hours credit.

An introduction to the East Asian history and culture from the dawn of civilization to the twentieth century. Focusing on China and Japan, this course will examine the genesis of East Asian culture, society, and the state in the ancient world, their evolution through the medieval period, and their modern transformation particularly since the coming of the West. [TCCN: HIST 2323.]

- 2563 Introduction to European Civilization**
(3-0) 3 hours credit.
An introduction to the major historical and historiographical problems in the experience of Europe from the earliest times to the present. The course will expose students to a variety of intellectual approaches and to the diversity of European history.
- 2573 Introduction to African Civilization**
(3-0) 3 hours credit.
An introduction to the major historical and historiographical problems in the experience of Africa from the earliest times to the present. The course will expose students to a variety of intellectual approaches and to the diversity of African history.
- 3003 Colonial America and the Formation of American Society**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An examination of the development and transformation of colonial societies in the seventeenth and eighteenth centuries, with special emphasis on family and community studies as measures of social change.
- 3023 American Independence and National Unity, 1760–1820**
(3-0) 3 hours credit. Prerequisite: HIS 1043, an equivalent, or consent of instructor; HIS 2003 recommended.
Topics may include origins of the American Revolution, the Revolutionary War, the struggle for unity, and the early years of nationhood.
- 3033 American Reform**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An analysis and comparison of the origins and development of American reform from 1730 to the New Deal. Topics may include the Great Awakening, antislavery, temperance, abolitionism, populism, progressivism, and the New Deal.
- 3063 The Spanish Borderlands, 1521–1821**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An overview and analysis of Spanish exploration and colonization in the northern frontier of colonial Mexico, including the introduction of Hispanic institutions, customs, and traditions in the development of a frontier society in the region adjacent to the international boundary.
- 3073 The Mexican Borderlands/The American Southwest**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
American westward movement into the Southwest, the settlement and development of the area, and its political history are considered in relation to national trends. Attention is given to the area as a meeting place of various European, American, and Asian ethnic groups and to their cultural institutions and expressions as reflections of the development of the area within United States history.

- 3083 History of the American West**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An examination of the American westward movement in the nineteenth and twentieth centuries. Topics may include the conquest and settlement of the territory, the relationship of the new territory to the nation, patterns of economic development, community building, population diversity, and the symbolism of the frontier.
- 3093 United States Constitutional History**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Constitutional developments from the formation of the state and federal constitutions to Watergate. Particular attention is paid to the context of judicial decision making at the Supreme Court level and the impact of those decisions on American life. Complements POL 3323 Constitutional Law.
- 3113 The American Indian**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A history of the American Indian from European contact to the present. Attention is given to the internal cultural, economic, and political developments of the different Indian groups as well as to the European and American developments and policies affecting the Indian.
- 3123 Colonial Texas under Spanish and Mexican Rule to 1836**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An overview of Texas history beginning with sixteenth- and seventeenth-century Spanish exploration, with emphasis on eighteenth-century colonization, and culminating in nineteenth-century Anglo-American immigration and the sociopolitical changes that resulted in Texas independence.
- 3153 American Urban History**
(3-0) 3 hours credit.
A study of urban growth since 1625. The course examines the social, economic, and political life of three phases in U.S. urbanization: the colonial city, the industrial city, and the modern metropolis. The effects of urban changes on the lives of city dwellers and on the ways in which cities have influenced national development are considered.
- 3163 The Stranger in America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An examination of immigrants and their reception in American society from the eighteenth century to the present, including the immigrants' motives for moving to the United States, the problems they encountered in adjusting to their new surroundings, and the contributions they made to the nation's development.
- 3173 Modern America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Modern America since the onset of the Great Depression is examined in relation to the socioeconomic forces and the political trends of the twentieth century. Topics may include social change, popular culture, evolving political functions and structures, and the new American role in world order.

- 3183 Law and American Development**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
The impact of law from colonial times to the present. Particular attention will be paid to the impact of law on social change, economic growth, and political development.
- 3193 The South in American History**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Topics may include development of southern identity, slavery, Civil War and Reconstruction, Jim Crowism, the black experience, and the civil rights movement, with emphasis on the period since 1815.
- 3213 France since 1750**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Introduction to the culture, politics, and life of France. Intensive examination of a central event in European history: the French Revolution and its role in the formation of modern France.
- 3233 Germany since 1806**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
The history of Germany since the Battle of Jena, emphasizing the crisis of the Prussian state, the effects of industrialization, the rise of German culture, Germany's unification and attainment of world power, and Germany's history since World War I.
- 3243 Europe in the Nineteenth Century**
(3-0) hours credit. Prerequisite: HIS 2003 recommended.
The course offers a survey of European history from the Congress of Vienna until World War I. Topics may include an examination of the changing scope of international relations, industrial growth and acceleration, the conditions among social groups, and various social and political initiatives among European nations.
- 3263 Seventeenth- and Eighteenth-Century Europe**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A survey of European history under the Ancien Regime to 1789. Examination of the development of and the limits to absolutism, the "crisis" of the seventeenth century and the Baroque, the rise of science, and the culture of the Enlightenment.
- 3273 Medieval Europe**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of European society from the fall of the Roman empire to the eve of the Renaissance. Attention to the growth of Christianity in Europe; changing forms of political, economic, and social organization; and intellectual and cultural developments.

3283 Twentieth-Century Europe

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

Economic, social, political, and cultural change in Europe since World War I. Topics may include the formation of new political movements (such as social democracy, communism, fascism) between the wars, World War II and its effects, the postwar transformation of Europe, and the Cold War in Europe.

3293 Imperial Spain

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

Iberian history from the evolution of the northern kingdoms to the early nineteenth century. Topics may include the growth and development of Castile and Aragon, Hapsburg imperialism, the Bourbon reformers, and the collapse of the monarchy and the rise of the Carlist movement. (Formerly HIS 3243. Credit cannot be earned for both HIS 3293 and 3243.)

3303 History of Mexico

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

An overview of Mexican history from the pre-Columbian indigenous civilizations to the present. The course will cover the peopling of Mexico, the conquest, the formation of colonial society, independence, the Mexican-American War, the liberal reforms, the Porfiriato, and the Mexican Revolution.

3313 History of U.S. Relations with Latin America

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

A survey of United States relations with Latin America from the Monroe Doctrine to the present. General themes may include the Monroe Doctrine, Manifest Destiny, gunboat diplomacy, the Good Neighbor Policy, the Cold War, and the Alliance for Progress. Specific themes include U.S. reactions to revolutions, authoritarian regimes, and reformist governments.

3343 Modern Central America and the Caribbean

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

The course will emphasize the nineteenth and twentieth centuries and may include the breakdown of colonialism; the problems of independence; the rise and decline of slavery; the impact of foreign capital and imperialism; and the importance of nationalism, socialism, fascism, communism, and revolution in the contemporary era.

3353 Latin America since Independence

(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.

The course will emphasize the nineteenth and twentieth centuries and may include the following topics: the breakdown of colonialism; the problems of independence; neocolonial development; the impact of the Depression; industrialization and urbanization; and the importance of nationalism, socialism, fascism, communism, and revolution in the contemporary era.

- 3373 Revolution in Latin America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An analysis of the role colonial legacies played in nineteenth- and twentieth-century social and political violence. Case studies may include Mexico, Bolivia, Cuba, Chile, and Nicaragua.
- 3403 Pre-Hispanic and Colonial Latin America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An analysis of the pre-Columbian Indian civilizations, the Spanish conquest, and the Spanish and Portuguese colonial societies of the New World.
- 3423 The Republic Transformed, 1820–1877**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of the political, economic, social, and cultural developments in the United States from the age of Andrew Jackson through Reconstruction.
- 3433 The Emergence of Modern America, 1877–1929**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An examination of social and political responses to the industrial revolution in the United States.
- 3443 Latinos in the United States**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of Mexican Americans, Puerto Ricans, Cubans, and other Latinos in the United States. Special attention will be given to ethnic institutions and traditions, as well as to interethnic relations and theories of assimilation and acculturation.
- 3463 History of Religion in the United States**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Religious behavior, ideas, and institutions in American society from colonial times to the present, with special emphasis on periods of religious change, including the First and Second Great Awakening, the Social Gospel, and the New Religious Consciousness.
- 3473 History of Women in the United States**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Analysis of women's lives in American history, including how women have been affected by the economic, social, cultural, and political structures in different periods; how this experience has been altered by class, ethnicity, region, and age; and how women have coped with and promoted change throughout American history.
- 3493 History of San Antonio**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Topics may include the cultural origins of colonial San Antonio; political, economic, and social development; and the effects of urbanization on local ethnic communities.

- 3503 The Expansion of Europe, 1415–1800**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A survey of European exploration, cultural and economic expansion, colonization, and imperialism.
- 3513 The Economic and Social History of Europe, A.D. 200–1500**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A survey of European economic and social history from the end of the Roman Empire to early modern times. Among the topics to be considered are the third-century crisis, the effects of the Germanic and Muslim invasions, feudalism, the recovery of Europe in the High Middle Ages, and the impact of the Black Death.
- 3523 European Cultural History**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Introduction to various aspects of the European cultural heritage focusing on the interaction between society and culture. Topics may include popular culture, the arts, philosophy, science, social theory, ideology, and mass media.
- 3533 The Urban History of Western Civilization**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
This course examines the role of cities in the development of Western civilization and focuses on the ways cities contributed to the rise of states, the emergence of organized economic life, and the creation of a distinctive culture.
- 3543 History of Modern Warfare**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Survey of the major developments in the history of war since the Napoleonic era. Analyses of the social, economic, and political context in which wars have occurred. Topics may include emergence of new forms of weaponry, strategy, logistics, and tactics.
- 3633 Early Modern England, 1485–1760**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
English history in the Tudor, Stuart, and early Hanoverian eras emphasizing the growth of the national state, the overseas expansion of England, and preindustrial social and economic change.
- 3643 Modern Spain**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of nineteenth- and twentieth-century Spain beginning with the origins of the Carlist movement, continuing with the rise and fall of the two Spanish Republics, the Civil War, and the advent of the Franco regime, and concluding with the restoration of the monarchy.
- 3723 The European Renaissance**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
The cultural achievements of Italy and northern Europe, from the fourteenth to the sixteenth centuries, in their economic, social, and political contexts.

- 3733 Europe in the Age of the Reformation**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
Culture, religion, and society in Europe in the sixteenth century.
- 3743 Russia, 1682–1917**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
The development of Russia from the accession of Peter the Great to the outbreak of the Russian Revolution.
- 3753 The Soviet Union and After**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
The evolution of Russia from the revolution of 1917 to the present. A critical analysis of the construction and decline of a socialist society in the Soviet Union and the relationship of twentieth-century Russia to the outside world.
- 3763 Russia before Peter the Great**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An introduction to the period of Russian history beginning with the founding of the Kievan State in the ninth century A.D. and ending with Peter the Great. Topics may include the Mongol conquest, the use of Muscovite patrimonial autocracy, Ivan the Terrible's Oprichnina, the Time of Troubles, and the reattachment of Russia to Europe in the seventeenth century.
- 3813 American Political History**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of American political history from the eighteenth century to the present. Deals with presidents and major national developments and may consider such topics as federalism, state politics, voting behavior, party systems, and political realignment.
- 3823 History of American Foreign Policy**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An examination of the emergence of America as a world power and its subsequent activities in the affairs of nations. Particular emphasis is placed on the domestic roots of American diplomacy.
- 3903 Modern Japan**
(3-0) 3 hours credit. Prerequisite: HIS 2553; HIS 2003 recommended.
An overview of Japanese history since the end of the sixteenth century. Topics may include the Tokugawa period of early modern history, the Meiji transformation of state and society, the rise of Japanese militarism leading up to the Pacific War, the American occupation, and the subsequent rebirth of Japan into a global economic giant.
- 3913 Late Imperial China**
(3-0) 3 hours credit. Prerequisite: HIS 2553; HIS 2003 recommended.
Chinese history from the late Ming (ca. 1550) to the end of the Qing dynasty in the 1911 Revolution. The course will address the nature of imperial institutions, state-society interaction, economic developments, social and cultural changes, and China's relationship with the outside world.

- 3923 China in Revolution**
(3-0) 3 hours credit. Prerequisite: HIS 2553; HIS 2003 recommended.
A study of twentieth-century China. The course will analyze and characterize the different phases of revolutionary changes in China and examine the sources of its revolutionary impulse.
- 4003 History of Organized Crime**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of the emergence and development of various types of syndicated crime and their impact on American society since the nineteenth century.
- 4113 American Intellectual History**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in history and diversity.
Examines ideas of intellectuals and scholars as well as ordinary people. Topics may include definitions of America, individualism, community, consequences of the frontier, education and art in a democracy, industrialization, the culture of consumption, racial and ethnic conflicts, and women's roles in society.
- 4123 History of Science and Technology in America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
History of American science and technology from the eighteenth century to the present, with particular attention to the effects of social change on scientific enterprise and the influence of science on American culture.
- 4223 Environmental History of the United States**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
An introductory survey of the interaction of human beings and the environment in the United States from early Indian occupancy to the present. Topics may include problems of ecological change, climate, energy, population, conservation, and human ideas and uses of nature.
- 4303 Quantitative Methods in History**
(3-0) 3 hours credit. Prerequisites: HIS 2003 and CS 2083.
An introduction to the use of statistics and computers in historical research. Topics will include social science methodology, statistics, and the use of database and statistical software. Students will prepare and analyze a statistical database as part of organizing and writing a major research paper.
- 4403 Southern South America**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of the nations of Argentina, Chile, Paraguay, and Uruguay, focusing on their legacies of exploration, conquest, colonization, and independence, with major emphases on the national period. Relationships between these nations and the United States will be examined.

- 4503 Life in Early Modern Europe**
(3-0) 3 hours credit. Prerequisite: HIS 2003 recommended.
A study of some of the major historical and historiographical themes in the field of daily life in early modern Europe. Among the topics to be explored: sexuality, orthodox and nonorthodox; marriage and the family; the condition of women; attitudes toward children; deviants and outgroups.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4923 Topics in History**
(3-0) 3 hours credit. Prerequisite: Upper-class standing or consent of instructor.
Coverage of topics of current interest in the field of history. May be repeated for credit when topics vary, but not more than 6 semester credit hours may be applied to a bachelor's degree.
- 4933 Internship in History**
3 hours credit. Prerequisite: Consent of internship coordinator.
Supervised experience relevant to history within selected community organizations. A maximum of 6 semester credit hours may be earned through Internship in History. Must be taken on a credit/no-credit basis.
- 4953 Special Studies in History**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4973 Seminar in History**
(3-0) 3 hours credit. Prerequisites: HIS 2003 and consent of instructor.
The opportunity for an intensive study of a selected topic. Primary emphasis on supervised research on various aspects of the topic. Enrollment limited to juniors and seniors majoring in history.
- 4993 Honors Thesis**
3 hours credit. Prerequisites: Enrollment limited to candidates for Honors in History during their last two semesters; completion of honors examination and approval of the honors program coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

Bachelor of Arts Degree in Psychology

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 33 semester credit hours in the major, 18 of which must be at the upper-division level:

1. 15 semester credit hours of lower-division courses:

- a. PSY 1013 Introduction to Psychology, or
- PSY 1203 Principles of Psychology, or
- PSY 2013 Fundamentals of Psychology

b. 6 semester credit hours selected from the following:

- PSY 2503 Developmental Psychology
- PSY 2513 Abnormal Psychology
- PSY 2523 Personality
- PSY 2533 Social Psychology

c. 6 semester credit hours selected from the following:

- PSY 2543 Theories of Learning
- PSY 2553 Perception
- PSY 2573 Psychology of Thought
- PSY 2583 Psychology of Language

2. 18 semester credit hours of upper-division courses:

- a. PSY 3403 Experimental Psychology
- PSY 3413 Experimental Psychology Laboratory

b. 3 semester credit hours selected from the following:

- PSY 3103 Cognition
- PSY 4113 Cognitive Development
- PSY 4143 Memory
- PSY 4163 Sensory Processes
- PSY 4213 Social Cognition
- PSY 4273 Styles of Thought
- PSY 4293 Visual Information Processing

c. 9 semester credit hours of upper-division courses in psychology. No more than 3 hours of Independent Study, Internship in Psychology, or Honors Thesis may be counted toward this requirement.

B. 12 semester credit hours of support work outside of psychology. The courses taken to meet this requirement must have a common focus and must be approved by the student's advisor. A list of the sets of courses that meet this requirement is

available from the student's advisor. This requirement may be satisfied by completing a minor outside psychology.

- C. One of the following (one or more prerequisites must be satisfied to enroll in these courses):

STA	1053	Basic Statistics
STA	1063	Basic Statistics for Business and Economics
STA	1073	Statistics for Psychology or approved substitute

NOTE: Requirement C must be satisfied before enrolling in PSY 3403 and 3413 and should be completed during the freshman or sophomore year.

- D. 18 semester credit hours of electives

Minor in Psychology

All students pursuing a Minor in Psychology must complete 18 semester credit hours.

- A. 6 semester credit hours of required courses:

PSY	1013	Introduction to Psychology, or
PSY	1203	Principles of Psychology, or
PSY	2013	Fundamentals of Psychology
PSY	3403	Experimental Psychology

(concurrent enrollment in PSY 3413 waived; prerequisite of STA 1073 or equivalent required)

- B. 3 additional semester credit hours selected from the following:

PSY	2503	Developmental Psychology
PSY	2513	Abnormal Psychology
PSY	2523	Personality
PSY	2533	Social Psychology

- C. 3 additional semester credit hours selected from the following:

PSY	2543	Theories of Learning
PSY	2553	Perception
PSY	2573	Psychology of Thought
PSY	2583	Psychology of Language

- D. 6 additional upper-division semester credit hours of psychology courses, no more than 3 of which may be in Independent Study or Internship

To declare a Minor in Psychology, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

COURSE DESCRIPTIONS PSYCHOLOGY (PSY)

- 1013 Introduction to Psychology**
(3-0) 3 hours credit.
Introduction to the study of the mind and behavior, with attention to awareness, discrimination, sensation, perception, emotion, motivation, learning, memory, problem-solving, personality, mental and behavioral development, abnormal behavior, and behavior in group settings. Psychological, social, cultural, and biological determinants of behavior are considered, together with applications of basic principles. Scientific and nonscientific approaches to the explanation of psychological phenomena are examined critically. Participation in illustrative research required. (Formerly PSY 2013. Credit may be earned for only one of the following: PSY 1013, PSY 2013, or PSY 1203.) [TCCN: PSYC 2301.]
- 1203 Principles of Psychology**
(3-0) hours credit. Prerequisite: Minimum TASP Math score of 270 or MAT 1063.
An introduction to the ways the scientific method has been used to understand behavior and mental processes. Topics will include learning, sensation, perception, memory, cognition, cognitive and social development, social cognition, social influences, motivation, personality, abnormal behavior, and psychotherapy. The relationship between psychology and the other sciences (especially biology) will be emphasized. Participation in illustrative research required. (Credit may be earned for only one of the following: PSY 1203, PSY 1013, or PSY 2013.) [TCCN: PSYC 2301.]
- 1513 Knowledge and Learning**
(2-2) 3 hours credit. Does not substitute for PSY 1013 or 1203 for psychology majors and minors.
Models of cognitive skill acquisition derived from research on human information processing are presented and evaluated. Lectures will focus on theoretical bases for individual differences in cognitive performance. Laboratory exercises will focus on the empirical evaluation of effectiveness of different cognitive strategies for carrying out academic tasks.
- 2503 Developmental Psychology**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013.
Problems, methods, major theories, and results in the study of the psychological development of the individual from the prenatal period to old age. [TCCN: PSYC 2314.]
- 2513 Abnormal Psychology**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013.
Dynamics of abnormal behavior with attention to description, causes, and treatment of major psychological disorders, including neuroses, psychoses, personality disorders, and psychosomatic disorders.

- 2523 Personality**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013.
Problems, methods, major theories, and results in the study of development and maintenance of typical modes of behavior and dynamics of adjustment. [TCCN: PSYC 2316.]
- 2533 Social Psychology**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013.
Problems, methods, major theories, and results in the study of social interaction and interpersonal influence; self-identity, values and attitudes, role behavior, social perception, and behavior within groups. [TCCN: PSYC 2319.]
- 2543 Theories of Learning**
(3-0) 3 hours credit. Prerequisites: PSY 1013, 1203, or 2013; and MAT 1063 or an equivalent.
An examination of major theories about the nature of the learning process. Discussion will focus on the construction and evaluation of learning models. The practical implications of theoretical findings for the acquisition, maintenance, and elimination of behavior will be considered.
- 2553 Perception**
(3-0) 3 hours credit. Prerequisites: PSY 1013, 1203, or 2013; and MAT 1063 or an equivalent.
Survey of the processes by which the information available in the physical world is encoded and transformed to produce our perception of the world. Emphasis on the interaction between data-driven and conceptually driven processes. Examination of elementary sensory physiology, illusions, pattern recognition, perceptual development, and memory structures, and an introduction to information processing.
- 2573 Psychology of Thought**
(3-0) 3 hours credit. Prerequisites: PSY 1013, 1203, or 2013; and MAT 1063 or an equivalent.
The processes of reasoning, concept formation, language, problem solving, and creativity. Topics may include the role of logic in thinking, information processing models of problem solving, and techniques influencing creativity.
- 2583 Psychology of Language**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013; and MAT 1063 or an equivalent.
An introduction to the psychology of language. Contemporary research on the psychological aspects of language structure, comprehension, production, and development will be surveyed in order to illustrate the ways in which humans use verbal symbols to understand and describe events. Topics may include reading, brain-language relationships, and social determinants of thought and language.

- 3013 Psychological Measurement**
(3-0) 3 hours credit. Prerequisites: PSY 1013, 1203, or 2013; and STA 1053, 1063, or 1073 or consent of instructor.
The application of quantitative and qualitative measures to psychological data.
- 3023 Social Psychology of Small Groups**
(3-0) 3 hours credit. Prerequisites: PSY 2533 and 3403 or consent of instructor.
Theory and modern research in the social psychology of small groups. Particular attention will be given to group formation, the nature of small group processes, and the influence of groups on behavior.
- 3053 Cross-Cultural Psychology**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013; or ANT 1013.
Perception, learning, cognition and thinking, personality, and social behavior from a cross-cultural perspective.
- 3063 Psychological Testing**
(3-0) 3 hours credit. Prerequisite: PSY 3403 or an equivalent.
An introduction to the development, interpretation, and administration of psychological tests.
- 3103 Cognition**
(3-0) 3 hours credit. Prerequisites: PSY 3403 and one of the following: PSY 2543, 2553, 2573, or 2583.
Examination of current information-processing models of human cognition theories about how knowledge is represented in the mind. Emphasis will be placed on the processes by which stimuli are identified, by which past information is retrieved and used, and by which one's knowledge is modified.
- 3113 Motivation and Emotion**
(3-0) 3 hours credit. Prerequisites: PSY 2533, PSY 2543, or consent of instructor.
Topics may include examination of biological, physiological, learning, psychodynamic, cognitive, and purposive factors in the motivation of human behavior. Includes examination of nature and roles of emotion in explaining motivational processes.
- 3123 Attitudes**
(3-0) 3 hours credit. Prerequisites: PSY 2533 and 3403, or consent of instructor.
Examination of current theory and research on the nature of attitudes, their acquisition, and processes of attitude change. Topics may include psychological foundations of attitudes, structure and function of attitudes, attitude measurement, attitude-behavior consistency, theories of attitude change, and the role of attitudes in social behavior.
- 3133 Contemporary Personality Research**
(3-0) 3 hours credit. Prerequisites: PSY 2523 and 3403.
Examination of current theory and research on the processes underlying personality and individual differences. Topics may include temperament and biological mechanisms, self-concepts and their relationship to behavior, and cognitive processes underlying behavior consistency and emotional experience.

- 3143 Social Psychology of the Self**
 (3-0) 3 hours credit. Prerequisites: PSY 2523 or 2533, and PSY 3403 or consent of instructor.
 A social psychological examination of current research on the self in social interaction. Topics may include the structure of the self-concept and strategies for the preservation of self-esteem; the evaluation of the self through social comparison; the search for meaning and processes involved in understanding the self; and individual differences in self-knowledge and self-presentational styles.
- 3203 Industrial and Organizational Psychology**
 (3-0) 3 hours credit. Prerequisites: STA 1073 or an equivalent, and upper-class standing or consent of instructor.
 The role of psychology in industry. Applications of psychological knowledge to industrial problems such as personnel selection, employee motivation and satisfaction, and the influence of organizations on behavior.
- 3303 Psychological Perspectives on Gender**
 (3-0) 3 hours credit. Prerequisite: PSY 2503, 2513, 2523, or 2533.
 Consideration of physiological and social-learning origins of sex differences and psychological theories of sex-stereotyped and sexual behavior. Topics may include androgyny versus sex-typed behavior, gender dysfunction, origins of sex stereotypes, sexual preferences, and sex differences in reasoning ability, aggression, sexual behavior, personality, and psychopathology.
- 3403 Experimental Psychology**
 (3-0) 3 hours credit. Prerequisites: One course from PSY 2503, 2513, 2523, or 2533; one course from PSY 2543, 2553, 2573, or 2583; a minimum grade of "C" in STA 1073 or consent of instructor; and concurrent enrollment in PSY 3413.
 This course is designed to offer students the opportunity to familiarize themselves with representative experimental designs employed in psychological research, to provide instruction in the choice of appropriate designs, to provide the opportunity to develop skills in the analysis of published research, and to offer an introduction to techniques for collecting and analyzing data.
- 3413 Experimental Psychology Laboratory**
 (2-2) 3 hours credit. Prerequisite: Concurrent enrollment in PSY 3403.
 Application of observational and experimental procedures to selected problems in the collection of psychological data and the evaluation of psychological theories.
- 3513 Psychopathology and Childhood**
 (3-0) 3 hours credit. Prerequisite: PSY 2513.
 Clinical findings and experimental research regarding childhood behavior problems, including hyperactivity, autism, schizophrenia, and anxiety disorders. Additional topics include family influences on development of abnormal behavior and various psychotherapeutic techniques.

- 3523 Psychology of Adulthood and Aging**
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor.
Descriptive and theoretical accounts of psychological developments from early adulthood to old age. Relevant data are reviewed in the areas of memory, intellect, mental and physical health, social development, personality, grief, and dying.
- 3543 Introduction to Clinical Psychology**
(3-0) 3 hours credit. Prerequisites: PSY 2513 and 3403, or consent of instructor.
An introduction to the concepts, methods, and profession of clinical psychology. Topics will include historical background, theoretical and research perspectives on psychopathology and psychotherapy, clinical assessment, and professional issues concerning clinical training, regulation, and ethics.
- 3633 Aggression**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013; or consent of instructor.
Survey of social and psychological data; findings and theory of aggression for both human and nonhuman subjects.
- 3903 Advanced Psychological Research**
(2-2) 3 hours credit. Prerequisite: PSY 3403 or an equivalent.
Provides the opportunity for the student to conduct current research in a subarea of psychology under the instructor's supervision. Lectures will include a review of previous research in the subarea and discussion of research design, data collection, data analysis, and the reporting of research.
- 4003 History of Psychology**
(3-0) 3 hours credit. Prerequisite: PSY 1013, 1203 or 2013.
The development of major theoretical positions and research strategies in psychology from the ancient Greeks to the present, with emphasis on the development of scientific psychology since the late nineteenth century.
- 4103 Prejudice**
(3-0) 3 hours credit. Prerequisite: PSY 2533 and 3403 or consent of instructor.
Consideration of social, psychological, and personality factors in prejudice and stereotyping, and their interaction with cultural factors in producing racism and other prejudices.
- 4113 Cognitive Development**
(3-0) 3 hours credit. Prerequisite: PSY 2503, 2573, and 3403; or consent of instructor.
The development of perception, memory, and thinking in children, with attention to the roles of experience and maturation in development of thought, and the validity of the concept of cognitive stages, particularly Piagetian models.

- 4133 Social and Personality Development**
 (3-0) 3 hours credit. Prerequisite: PSY 2503, 2523, or 2533.
 Social and personality development across the life span. Topics may include sex-role development, child rearing, achievement, and the influence of peers. Socialization into different social roles may also be considered. (Credit cannot be earned for both PSY 4133 and either PSY 3283 or PSY 4123.)
- 4143 Memory**
 (3-0) 3 hours credit. Prerequisites: PSY 3403 or an equivalent and one of the following: PSY 2543, 2553, 2573, 2583, or consent of instructor.
 Models for the coding, storage, and retrieval of information in memory. Organization and structure of short-term, long-term, and semantic memory, and the role of verbalization and images in memory.
- 4163 Sensory Processes**
 (3-0) 3 hours credit. Prerequisites: PSY 2553 and 3403, or consent of instructor.
 Study of sensory physiology and the four psychophysical questions: detection, discrimination, magnitude estimation, and recognition.
- 4183 Physiological Psychology**
 (3-0) 3 hours credit. Prerequisite: PSY 1013, 1203, or 2013; or consent of instructor.
 The biological and particularly neurophysiological bases of human behavior and cognition, the structure and organization of the nervous system, and the effect of the latter on perception, memory, learning, motivation, and emotion. (Formerly PSY 2563. Credit cannot be earned for both PSY 4183 and 2563.)
- 4193 Relationships**
 (3-0) 3 hours credit. Prerequisites: PSY 2533 and 3403.
 A consideration of the psychological processes that underlie the development and maintenance of social relationships. Emphasis on motivational and cognitive factors that mediate social interaction and communication. Special attention may be given to friendships, romantic relationships, successful marriages, and distressed relationships. (Credit cannot be earned for both PSY 4193 and 4203.)
- 4213 Social Cognition**
 (3-0) 3 hours credit. Prerequisites: PSY 3403 or an equivalent; PSY 2533 or 2573; or consent of instructor.
 The study of how people perceive and construe social events, social situations, and the behavior of other people. Some emphasis is also placed on how social and cultural forces affect personal perception processes.
- 4223 Environmental Psychology**
 (3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor.
 Analysis of the ways natural, architectural, and social environments structure the behavior of individuals and groups. Topics may include environmental perception, spatial behavior, manipulation of the environment, and the nature of the person-environment interaction.

4253 Psychology and Health

(3-0) 3 hours credit. Prerequisite: Upper-class standing.

Exploration of the role of psychological factors in physical health. Topics may include the relationship between mind and body, psychological factors in pain, the effects of stress on health, psychological aspects of chronic illness, psychological processes involved in perceiving and responding to physical symptoms, interpersonal relationships in health care, personality factors in illness, and issues concerning death and dying.

4273 Styles of Thought

(3-0) 3 hours credit. Prerequisites: PSY 3403 or an equivalent; PSY 2573 or 3103.

Study of the various ways individuals perceive and analyze information. Topics may include the basis for skilled cognitive performances, the nature of cognitive pathologies, the impact of belief systems on cognitive performances, the consistency of individual differences in styles of thought across different cognitive tasks, and the modification of thought styles.

4283 Freudian Psychology

(3-0) 3 hours credit. Prerequisites: PSY 2523 and upper-class standing.

Development of Freud's thought through a reading of his major works and a consideration of his life. The influence of Freud's theories on neo-Freudian theorists and psychological theory and research.

4293 Visual Information Processing

(3-0) 3 hours credit. Prerequisites: PSY 3403 and PSY 2553 or 2573; or consent of instructor.

Focus on the acquisition, storage, and use of visual information. Topics will include visual pattern recognition, models of visual attention, analog representations in memory, and spatial cognition.

4303 Psychology and the Law

(3-0) hours credit. Prerequisite: 12 semester credit hours of undergraduate psychology credit.

Emphasis on the contributions of psychology to the understanding of the legal system and criminal behavior. Topics may include cognitive and social psychological factors in eyewitness testimony, jury selection and decision making, competence and the insanity defense, prediction of criminal behavior and dangerousness, lie detection and hypnosis, and sentencing.

4313 Psychology and Leadership

(3-0) hours credit. Prerequisite: MGT 3013 and STA 1063; or PSY 3403; or consent of instructor.

Examination of individual differences and environmental influences on leadership. Primary emphasis will be on leadership in a work setting. Topics may include traditional and contemporary theoretical perspectives on leadership and cross-cultural issues.

- 4911,3 Independent Study**
1 or 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree. No more than 3 semester credit hours of independent study will apply toward psychology major or minor requirements.
- 4923 Current Topics in Psychology**
(3-0) 3 hours credit. Prerequisites: PSY 1013, 1203, or 2013; and PSY 3403.
Coverage of topics of current interest in the field of psychology. May be repeated once for credit when topics vary, but no more than 3 semester credit hours will apply toward the major in psychology.
- 4933,6 Internship in Psychology**
3 or 6 hours credit. Prerequisite: Consent of internship coordinator before registration.
Supervised experience relevant to psychology within selected community organizations. A maximum of 6 semester credit hours may be earned through Internship in Psychology. No more than 3 semester credit hours will apply toward psychology major or minor requirements. Must be taken on a credit/no-credit basis.
- 4953 Special Studies in Psychology**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Thesis**
3 hours credit. Prerequisite: Enrollment limited to candidates for Honors in Psychology. Requirements for candidacy include the sponsorship of a faculty member and psychology faculty approval of the student's project proposal.
Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval. No more than 3 semester credit hours will apply toward psychology major requirements.

Minor in American Indian Studies

Eighteen semester credit hours are required for the Minor in American Indian Studies, at least 9 semester credit hours of which must be drawn from outside a student's major. Hours are selected from the following:

AHC	3423	Pre-Columbian Art and Architecture of Mesoamerica
ANT	3153	Indians of the Great Plains
ANT	3263	Archaeology of North America
ANT	3273	Ancient Civilizations of Mesoamerica
ANT	3363	Indians of Mesoamerica
ANT	4113	Archaeology of Texas
ANT	4123	Archaeology of the American Southwest
ANT	4133	Indians of Texas
HIS	3063	The Spanish Borderlands, 1521–1821
HIS	3073	The Mexican Borderlands/The American Southwest
HIS	3083	History of the American West
HIS	3113	The American Indian
HIS	3403	Pre-Hispanic and Colonial Latin America
SOC	3133	Sociology of Pluralism in the Southwest

To declare a Minor in American Indian Studies, obtain advice, obtain lists of relevant courses, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

Minor in Women and Gender Studies

The Minor in Women and Gender Studies provides students with the opportunity to examine the experience of women and men from an interdisciplinary perspective. Emphasis is placed on pursuing an understanding of women and issues of gender in diverse cultures and across time.

All students pursuing a Minor in Women and Gender Studies are required to complete 18 semester credit hours.

A. 6 semester credit hours of required courses:

WGS	2013	Introduction to Women and Gender Studies
WGS	4013	Research on Contemporary Policy Issues

B. 12 additional semester credit hours, in at least two disciplines other than the student's major, selected from the following:

AMS	3053	Topics in Women and American Culture
ANT	3103	Social Organization
ANT	3603	Sex, Gender, and Culture
BIO	1023	Human Sex and Reproduction
BLW	2003	Gender Law
ENG	3133	Women and Literature
HIS	3473	History of Women in the United States
LNG	3843	Gender Issues in Language
PSY	3303	Psychological Perspectives on Gender
PSY	4193	Relationships
SOC	2053	Marriage and the Family
SOC	3283	Poverty

SOC	3293	Sex Roles
WGS	4913	Independent Study
WGS	4933	Internship in Women and Gender Studies

To declare a Minor in Women and Gender Studies, obtain advice, obtain lists of relevant courses, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Behavioral and Cultural Sciences.

COURSE DESCRIPTIONS WOMEN AND GENDER STUDIES (WGS)

2013 Introduction to Women and Gender Studies

(3-0) 3 hours credit.

This course is an introduction to the study of women and gender using interdisciplinary and cross-cultural approaches. Designed to introduce students to the intellectual frameworks that shape thoughts about women and men. Topics may include sexuality, violence against women, feminism, and diversity in terms of race, ethnicity, age, and sexual orientation.

4013 Research on Contemporary Policy Issues

(3-0) 3 hours credit.

This course will allow the student to participate in directed research on a selected contemporary policy issue of relevance to women and/or gender. Students will research the issue and work together to formulate a policy recommendation. Women and gender studies minors are encouraged to recommend issues for examination to the women and gender studies advisor.

4913 Independent Study in Women and Gender Studies

3 hours credit. Prerequisites: Permission in writing (form available) from the instructor, the student's advisor, and the Division Director and Dean of the college with which the instructor is affiliated.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. A maximum of 3 semester credit hours of independent study in women and gender studies may be applied to the Minor in Women and Gender Studies.

4933 Internship in Women and Gender Studies

3 hours credit. Prerequisite: Approval of internship coordinator.

Supervised experience relevant to women and gender issues may be earned within selected community organizations. A maximum of 3 semester credit hours may be applied to the Minor in Women and Gender Studies. Must be taken on a credit/no credit basis.

DIVISION OF BICULTURAL-BILINGUAL STUDIES

The Division of Bicultural-Bilingual Studies offers a Bachelor of Arts degree in Mexican American Studies (offered jointly with the Divisions of Behavioral and Cultural Sciences, Social and Policy Sciences, and Foreign Languages), as well as Minors in Bicultural Studies and English as a Second Language. The division also offers courses that may be used to fulfill the Core Curriculum requirements or that may be taken as support courses for programs within the University or as electives. Courses in bicultural-bilingual studies offer students the opportunity to prepare for bilingual and/or second-language teaching, and give insights into bilingual and multicultural functions in society. Courses in teaching English as a second language offer students the opportunity to learn appropriate methods and strategies for teaching at the elementary, secondary, and adult levels. Courses are designed for students who plan to teach second languages, but they are also designed for those who intend to teach in other areas or to enter fields that rely heavily on an understanding of language learning and bilingualism.* In addition, the division offers advanced courses in English for international students that are appropriate for both graduate and undergraduate students.

Bachelor of Arts Degree in Mexican American Studies

The Bachelor of Arts in Mexican American Studies is an interdisciplinary program integrating Mexican American studies with a specific liberal arts discipline. Majors are required to complete 39 semester credit hours from a prescribed program of study that must include 18 semester credit hours from one of four options: history, political science, sociology, or Spanish.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120.

All candidates for the degree must complete the following:

A. 21 semester credit hours of Mexican American studies:

1. 18 required semester credit hours:

BBL	2003	Language, Culture, and Society
		or
BBL	3133	Communicative Competence in a Multilingual Society
BBL	2013	Social Science Paradigms in Chicano Studies
BBL	2023	Latino Cultural Expressions
BBL	3033	The Mexican American in the Southwest
		or
HIS	3443	Latinos in the United States

*Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information. Undergraduates seeking elementary teacher certification must complete the interdisciplinary studies degree.

BBL	4083	Research Seminar in Mexican American Studies
SPN	3493	Mexican American Literature

2. 3 semester credit hours selected from the following:

BBL	3043	Psychological Considerations in a Bicultural Environment
POL	3093	Mexican American Politics (required for political science option)
SOC	3403	Mexican American Stratification (required for sociology option)

B. 18 semester credit hours of required courses completed in one of the following options:

Option in History

a. 6 required semester credit hours:

HIS	2003	Historical Methods
HIS	4303	Quantitative Methods in History or
HIS	4973	Seminar in History

b. 6 semester credit hours selected from the following:

HIS	3083	History of the American West
HIS	3153	American Urban History
HIS	3163	The Stranger in America
HIS	3463	History of Religion in the United States
HIS	3473	History of Women in the United States

c. 6 semester credit hours selected from the following:

HIS	3063	The Spanish Borderlands, 1521–1821
HIS	3073	Mexican Borderlands/The American Southwest
HIS	3293	Imperial Spain
HIS	3303	History of Mexico

Option in Political Science

a. 6 required semester credit hours:

POL	2703	Scope and Methods in Political Science
POL	3083	Ethnic Politics in the United States

b. 3 semester credit hours selected from the following:

POL	2503	Introduction to Political Theory
POL	2513	Public Administration and Public Policy
POL	2533	Introduction to Political Science
POL	2603	International Politics

POL	2623	Law and Society
POL	2633	Comparative Politics

c. 9 semester credit hours of upper-division political science courses, as follows:

- 3 semester credit hours of political theory
- 3 semester credit hours of comparative politics or international relations
- 3 semester credit hours of public administration or public law

Option in Sociology

a. 12 required semester credit hours:

SOC	1013	Introduction to the Study of Society
SOC	3043	Race and Ethnic Relations
SOC	3313	Conceptualization and Measurement in Sociology
SOC	3343	Classical Sociological Theory
		or
SOC	3353	Contemporary Sociological Theory

b. 6 semester credit hours selected from the following:

SOC	3013	Social Stratification
SOC	3033	Population Dynamics
SOC	3073	Migration and Adjustment
SOC	3283	Poverty
SOC	3293	Sex Roles
SOC	3413	Mexican American Family
SOC	4203	Field Research

Option in Spanish

a. 18 required semester credit hours:

SPN	3013	Spanish Phonetics and Pronunciation
		or
SPN	3113	Linguistic Structures of Spanish
SPN	3043	Advanced Reading
SPN	3063	Grammar and Composition
		or
SPN	4103	Composition Workshop
SPN	3323	Hispanic Literature II: Spanish America
SPN	3623	Spanish American Culture and Civilization
		or
SPN	3663	Contemporary Spanish America
		or

SPN 3673 Hispanic Cultural Systems

SPN 4123 The Spanish of the Mexican American

C. 27 semester credit hours of electives

Minor in Bicultural Studies

All students pursuing a Minor in Bicultural Studies must complete 18 semester credit hours.

A. 6 semester credit hours of courses on bicultural studies selected from the following:

BBL 2003 Language, Culture, and Society
 BBL 2013 Social Science Paradigms in Chicano Studies
 BBL 2023 Latino Cultural Expressions

B. 6 semester credit hours of courses on language selected from the following:

BBL 3013 Language Analysis and Bilingualism
 BBL 3043 Psychological Considerations in a Bicultural Environment
 BBL 3133 Communicative Competence in a Multilingual Society
 ESL 3043 Psycholinguistic Concepts in Second-Language Acquisition

C. 6 semester credit hours of courses on culture and society selected from the following:

BBL 3003 Multiculturalism in the Southwest
 BBL 3023 Mexican American Biculturalism
 BBL 3033 The Mexican American in the Southwest
 BBL 4953 Special Studies in Bilingual and Bicultural Studies*

To declare a Minor in Bicultural Studies, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Bicultural-Bilingual Studies.

COURSE DESCRIPTIONS BICULTURAL-BILINGUAL STUDIES (BBL)

2003 Language, Culture, and Society
 (3-0) 3 hours credit.
 The interdisciplinary study of language in its cultural and social contexts, with emphasis on linguistically heterogeneous communities. Topics include language and ethnicity, language and gender, language and social class, language acquisition, and oral and written language.

*For BBL 4953 to count toward this minor, the student must obtain permission from the Undergraduate Advisor of Record in the Division of Bicultural-Bilingual Studies.

- 2013 Social Science Paradigms in Chicano Studies**
(3-0) 3 hours credit.
A historical analysis of the social, cultural, and economic status of Chicanos and Mexicans in the Southwest. The field of Chicano studies is explored through basic social science concepts, theoretical and methodological approaches, and research findings, providing differing interpretations of the Chicano experience in the academic and ethnic communities.
- 2023 Latino Cultural Expressions**
(3-0) 3 hours credit.
An introductory overview of Hispanic visual, performing, and folk arts from their origins in the Iberian peninsula, through the later blending of cultures and their parallelism during revolutionary periods, to contemporary Latino expressions in the United States.
- 3003 Multiculturalism in the Southwest**
(3-0) 3 hours credit.
A panoramic study of the concept of culture and the social dynamics of exchange among those ethnic groups that determine the multicultural milieu of the Southwest. Examination of cultural differences and similarities among all peoples of the region and the role of multiculturalism in politics, education, economics, religion, and everyday life.
- 3013 Language Analysis and Bilingualism**
(3-0) 3 hours credit.
Survey of concepts in descriptive and contrastive linguistics; analysis of language contact phenomena, including cross-linguistic transfer, language alternation, and bilingualism. Offered in Spanish and English.
- 3023 Mexican American Biculturalism**
(3-0) 3 hours credit.
A survey of the major cultural patterns and cultural diversity among Mexican Americans, including family and kinship, language, health, folklore, art, music, religion, sex roles, and cultural revitalization.
- 3033 The Mexican American in the Southwest**
(3-0) 3 hours credit.
Historical foundations of U.S.-Mexico biculturalism in the Southwest. An examination of the historical forces that created and shaped the Mexican American people as a bicultural community. Attention is given to Mexican American contributions in arts, economics, literature, and politics.
- 3043 Psychological Considerations in a Bicultural Environment**
(3-0) 3 hours credit.
A cross-cultural and social psychological study of human development, interethnic communication, stereotyping, learning styles, and other topics relevant to delivery of social and educational services in a bicultural setting.

- 3133 Communicative Competence in a Multilingual Society**
 (3-0) 3 hours credit.
 A study of language in its social and cultural contexts, with emphasis on factors affecting language choice and attitudes in multilingual settings. Examination of strategies to promote first- and second-language acquisition in schools and communities.
- 4023 Foundations of Bilingual Studies**
 (3-0) 3 hours credit.
 Investigation of the philosophies and theories of schooling in bilingual societies, with focus on language policy and the sociological, psychological, and legal aspects involved.
- 4033 Assessing Language and Learning in Bicultural-Bilingual Contexts**
 (3-0) 3 hours credit.
 A survey of evaluation and testing procedures in bicultural-bilingual settings, including formal and informal assessment of language proficiency for instructional purposes and the appropriate use of standardized tests with multicultural populations.
- 4063 Bilingual Approaches to Content-Based Learning**
 (3-0) 3 hours credit.
 An investigation of appropriate first language usage in bilingual classrooms, focusing on the different content areas, appropriate terminology for native language instruction, and the study of language distribution strategies. Offered in Spanish and English.
- 4073 Language Arts in a Bicultural-Bilingual Program**
 (3-0) 3 hours credit.
 A study of books and multicultural materials from diverse sources, with emphasis on their integrated use in the teaching of content and related skills in the elementary bilingual classroom. Offered in Spanish and English.
- 4083 Research Seminar in Mexican American Studies**
 (3-0) 3 hours credit.
 Provides students the opportunity to compare, contrast, and integrate social science theory and methods, and guides students in the conduct of sociocultural research in the Mexican American community. Emphasis will be given to qualitative and ethnographic methods and theory.
- 4913 Independent Study**
 3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Bilingual and Bicultural Studies

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when the topics vary, but not more than 6 semester credit hours within any one discipline will apply to a bachelor's degree. To apply credit earned in BBL 4953 toward a minor, consent of the Undergraduate Advisor of Record is required.

Minor in English as a Second Language

All students pursuing a Minor in English as a Second Language must complete 18 semester credit hours.

A. 12 semester credit hours of courses in English as a second language:

ESL	3003	Applications of Linguistics
ESL	3033	Foundations in English as a Second Language
ESL	3043	Psycholinguistic Concepts in Second-Language Acquisition
ESL	3053	Literacy in a Second Language

B. 3 semester credit hours of courses on culture and society selected from the following:

BBL	3003	Multiculturalism in the Southwest
BBL	3023	Mexican American Biculturalism
BBL	3033	The Mexican American in the Southwest

C. 3 semester credit hours of courses on language minority education selected from the following:

BBL	4023	Foundations of Bilingual Studies
BBL	4033	Assessing Language and Learning in Bicultural-Bilingual Contexts
BBL	4953	Special Studies in Bilingual and Bicultural Studies*

To declare a Minor in English as a Second Language, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Bicultural-Bilingual Studies.

*For BBL 4953 to count toward this minor, the student must obtain permission from the Undergraduate Advisor of Record in the Division of Bicultural-Bilingual Studies.

**COURSE DESCRIPTIONS
ENGLISH AS A SECOND LANGUAGE
(ESL)**

- 3003 Applications of Linguistics**
(3-0) 3 hours credit.
A study of the applications of linguistics to the teaching of a second language in English as a second language and bilingual education programs. Particular attention is given to psycholinguistic and sociolinguistic issues in second-language acquisition, and to oral language development, reading, and writing.
- 3033 Foundations in English as a Second Language**
(3-0) 3 hours credit.
Introduction to the field of English as a second language, with attention to basic concepts of second-language processing in various language learning contexts.
- 3043 Psycholinguistic Concepts in Second-Language Acquisition**
(3-0) 3 hours credit.
A study of second-language acquisition theory with emphasis on classroom-centered implications.
- 3053 Literacy in a Second Language**
(3-0) 3 hours credit.
A course on the relationship of reading and writing acquisition to second-language development; the design and evaluation of appropriate materials for the teaching of literacy.

**COURSE DESCRIPTIONS
ENGLISH FOR INTERNATIONAL STUDENTS
(EIS)**

- 1063 ESL for International Students: Listening**
(3-0) 3 hours credit.
Development of listening comprehension and related note-taking skills needed in academic settings. (Formerly ESL 1063. Credit cannot be earned for both EIS 1063 and ESL 1063.)
- 1073 ESL for International Students: Communicating Effectively**
(3-0) 3 hours credit.
Development of oral discourse, including oral presentation, small group discussion, and pronunciation needed in academic settings. (Formerly ESL 1073. Credit cannot be earned for both EIS 1073 and ESL 1073.)

- 1083 ESL for International Students: Reading**
(3-0) 3 hours credit.
Development of reading proficiency needed in various disciplines for academic purposes. (Formerly ESL 1083. Credit cannot be earned for both EIS 1083 and ESL 1083.)
- 1093 ESL for International Students: Writing**
(3-0) 3 hours credit.
Development of writing proficiency needed in various disciplines for academic purposes. (Formerly ESL 1093. Credit cannot be earned for both EIS 1093 and ESL 1093.)

DIVISION OF EDUCATION

The Division of Education offers three degree programs: the Bachelor of Arts in Interdisciplinary Studies, the Bachelor of Science in Health, and the Bachelor of Science in Kinesiology. Students seeking degrees in these areas may follow similar but individualized programs to prepare for professional service in institutions and agencies concerned with the welfare of children and youth. The Division of Education also provides professional education courses for all students seeking elementary, secondary, or all-level teacher certification.

DIVISION HONORS

The Division of Education awards Division Honors to certain of its outstanding students and provides the opportunity for advanced study under close faculty supervision.

Selection for honors designation is based on the student's academic performance and recommendation by the faculty of the student's major discipline. To be eligible for the program, students must have a minimum overall grade-point average of 3.0 at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students applying for Division Honors are expected to enroll in the appropriate honors thesis course during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor and another divisional faculty member. Students interested in this program should contact their professors for additional information.

CERTIFICATE PROGRAMS

The University of Texas at San Antonio is approved by the State Board for Educator Certification to recommend students for teaching certificates in various areas. Information regarding requirements for all certificate programs offered through UTSA is available in the Office of Teacher Advising, Certification, and Placement in the Division of Education. Students who are seeking provisional teacher certification or who wish to add teaching fields or endorsements to their current teacher certification, should contact the Office of Teacher Advising, Certification, and Placement for advisement and certification admission procedures at their earliest opportunity. There are some academic requirements for a teaching certificate in addition to those outlined for baccalaureate degrees.

Admission to Teacher Certificate Programs

All students seeking teacher certification must make formal application for admission to a certificate program through the Office of Teacher Advising, Certification, and Placement by

1. completing an application and obtaining recommendations
2. completing at least three courses at UTSA and attaining junior standing (60 semester credit hours of work completed)
3. having a cumulative grade-point average of 2.5 or better on a 4.0 scale on all work completed

4. having passing scores on all three sections of the Texas Academic Skills Program (TASP)
5. being in good standing with UTSA

The Student Teaching Semester

Admission to the professional semester of student teaching must be obtained by formal application during the semester before the student plans to student teach. Acceptance into the student teaching program is contingent upon completion of the following requirements:

1. admission to the UTSA Teacher Certification Program, including submission of passing scores on all three sections of the Texas Academic Skills Program (TASP)
2. a 2.5 cumulative grade-point average on all college work attempted
3. at least 90 semester credit hours completed before seeking admission (students should consult the director of student teaching for specific credit requirements)
4. completion of the Professional Education coursework:
for interdisciplinary studies and elementary education students: EDU 3103, EDP 3103, ECE 4303, and ECE 4403; for secondary certification students: EDU 3103, EDP 3203, EDP 4203 (if applicable), and C&I 4103; for all-level physical education students: EDU 3103, EDP 3203, and ECE 4403; for all-level music students: EDU 3103, EDP 3103, ECE 4403, and C&I 4203
5. for students seeking an endorsement in early childhood, bilingual education, or English as a second language: completion of at least 6 semester credit hours in the endorsement area
6. the recommendations of the UTSA professors designated on the student teaching application
7. presentation of a negative tuberculosis report, as specified by the school district, from a licensed physician, valid at the time of registration for student teaching
8. approval of the director of student teaching

Testing Requirements

The TASP

The Texas Academic Skills Program (TASP) is a competency exam administered by National Evaluation Systems that measures basic skills in reading, writing, and mathematics. *The TASP is a state-mandated requirement for all individuals who wish to become certified teachers in Texas.* Passing scores on the three sections of the TASP are required before a student is eligible to enroll for professional education and student teaching coursework. For certification purposes, the only exemptions that are accepted are top scores no more than five years old on the SAT, ACT, or TAAS. Questions about TASP policies and exemptions should be addressed to an academic advisor in the Office of Teacher Advising, Certification, and Placement. Registration bulletins are available in the Office of Teacher Advising, Certification, and Placement and the Testing Center. The Testing Center also administers the computerized version of the TASP at selected times throughout the academic year.

The ExCET

The Examination for the Certification of Educators in Texas (ExCET) is a state-mandated examination whose purpose is to ensure that educators possess the necessary professional and content knowledge to teach in the Texas public schools. Individuals seeking certification in Texas are required to pass the specific test or tests in their certification area before they can be recommended for a certificate and/or an endorsement. Information on the specific tests required for the desired teacher certificate is available in the Office of Teacher Advising, Certification, and Placement.

The ExCET must be taken *during* or *after* the student teaching semester.

Effective September 1998, the ExCET scores of universities will be used as part of the criteria for accrediting the university's certification program as a whole and individual certification programs. Students should, therefore, be thoroughly prepared before they attempt the ExCET. If students have questions about their eligibility for taking the exam, they should consult with an advisor in the Office of Teacher Advising, Certification, and Placement.

ExCET administration schedules, registration bulletins, and preparation manuals are available at no cost to certification students in the Office of Teacher Advising, Certification, and Placement. The office also has information about ExCET review sessions available to students.

The TOPT

The Texas Oral Proficiency Test (TOPT) was mandated by the State Board of Education as an extension of and addition to the ExCET program for certification to teach either Spanish or French, or to teach in a Spanish bilingual setting. Therefore, persons seeking certification in elementary or secondary Spanish or French and persons seeking certification or an endorsement in bilingual education are required to take this exam. The minimum level of oral proficiency required for an entry-level educator to perform successfully in Texas schools has been set at an "advanced" level.

TOPT administration schedules and registration bulletins are available in the Office of Teacher Advising, Certification, and Placement.

Applying for the Initial Teacher Certificate

Upon successful completion of the bachelor's degree, the certification program, required examinations, and student teaching, students must complete a formal application to receive the teacher certificate. To be eligible for recommendation, students must have a 2.5 cumulative grade-point average, be in good standing with UTSA, and receive the recommendation of the Division of Education. Applications for certificate recommendation are available in the Office of Teacher Advising, Certification, and Placement. The application should be completed by the student and submitted to this office accompanied by a check or money order for the necessary fee. The director of the Office of Teacher Advising, Certification, and Placement will recommend the student to the State Board for Educator Certification. The teacher certificate will be issued directly to the student by the State Board for Educator Certification.

Teaching Certificates and Persons with a Criminal Background

In accordance with Article 6252-13c, Texas Civil Statutes, the Commissioner of Education may suspend or revoke a teacher certificate, or refuse to issue a teacher certificate for a person who has been convicted of a felony or misdemeanor for a crime that directly relates to the duties and responsibilities of the teaching profession.

ELEMENTARY CERTIFICATION

Students who would like to teach in an elementary or middle school setting (grades 1 to 8) must obtain a Bachelor of Arts degree in Interdisciplinary Studies (IDS) and must choose an area of specialization from the areas listed as part of the interdisciplinary studies degree plan. The major and the area of specialization should be declared in the Office of Admissions and Registrar.

Bachelor of Arts Degree in Interdisciplinary Studies

The primary goal of the Bachelor of Arts degree in Interdisciplinary Studies is to prepare prospective early childhood, elementary, and middle school teachers. The program is designed to give successful students the opportunity to prepare for teaching careers and to become teachers who understand their own thinking and learning processes and can successfully foster children's conceptual, intellectual, and affective growth.

The interdisciplinary studies degree may also be used as preparation for careers in social work, counseling, or government service, or as an opportunity to prepare for graduate or professional study in business, law, or medicine.

The minimum number of semester credit hours required for this degree and teacher certification, including the Core Curriculum requirements, is 124, at least 39 of which must be at the upper-division level.

Core Curriculum requirements: Students seeking the interdisciplinary studies degree must fulfill Core Curriculum requirements by taking the following courses or their equivalents (58 semester credit hours required of students seeking teacher certification, and 55 semester credit hours required of other interdisciplinary studies majors):

Rhetoric (6 semester credit hours)

ENG 1013 Freshman Composition
ENG 1023 Discourse across the Disciplines

Domain I: Science, Technology, and Logic

Science (7 semester credit hours minimum):

BIO 1203, 1212 Biology I and Laboratory
or
GEO 1103, 1111 Introduction to Earth Systems and Laboratory
(must be taken by students seeking an area of specialization in biology)

An additional course in a science discipline

If BIO 1203 and 1212 are taken to fulfill the science requirement, the additional science course must be Level 2*; if GEO 1103 and 1111 are taken, the additional science course may be Level 1 or 2.*

Mathematics (6 semester credit hours):

MAT 1063 College Algebra (or any mathematics course higher than 1063)

MAT 1143 Essential Elements in Mathematics

(Students specializing in mathematics or physical science must substitute MAT 1093 and 1214 or MAT 1214 and 1223)

Computer Science (3 semester credit hours):

IDS 2083 Technology for Liberal Arts and Social Sciences
(must be taken by students seeking teacher certification)

Domain II: Society and Culture

U.S. History/Diversity (6 semester credit hours)**

Political Studies (6 semester credit hours)**

Cultural and Social Science (6 semester credit hours):

IDS 2103 The Individual, Family, and Community

IDS 2113 Society and Social Issues

(IDS 2113 may be applied toward the interdisciplinary studies major requirement in section A.1)

Economics (3 semester credit hours)**

Domain III: Literature, Language, and the Arts

Foreign Language (6 semester credit hours):

6 semester credit hours in the same language are required. This requirement must be met by completing a UTSA language course at the fourth-semester college level or by achieving an equivalent score on an approved proficiency examination.

Because of the high and growing percentage of Spanish-speaking students in the public schools of the Southwest, students seeking teacher certification are advised to fulfill their language requirements in Spanish.

Students specializing in bicultural-bilingual studies must take 9 semester credit hours in Spanish at the 2023 level and above to meet the foreign language requirements of the degree.

The Arts (3 semester credit hours)**

*Those not seeking teacher certification meet this section of the Core Curriculum in the same way as other UTSA students.

**Interdisciplinary studies students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

Literature (6 semester credit hours):

- | | | |
|-----|------|---|
| IDS | 2303 | World Literature I, The Narrative Mode |
| | | or |
| IDS | 2313 | World Literature II, Dramatic and Lyric Modes |

An additional course from the following:

- | | | |
|-----|------|---|
| IDS | 2303 | World Literature I, The Narrative Mode |
| IDS | 2313 | World Literature II, Dramatic and Lyric Modes |
| ENG | 2013 | Introduction to Literature |
| ENG | 2373 | Literature for Children and Adolescents |
| ENG | 2383 | Minority Voices in American Literature |
| ENG | 2423 | Literature of Texas and the Southwest |

Domain IV: Interdisciplinary Studies

Diversity of Thought (3 semester credit hours):

- | | | |
|-----|------|---|
| IDS | 2003 | Modes of Inquiry across the Fields of Study |
|-----|------|---|
- (IDS 2003 may be applied toward the interdisciplinary studies major requirement in section A.1)

Diversity of Culture (3 semester credit hours):

- | | | |
|-----|------|---|
| IDS | 3103 | Language and Culture in a Pluralistic Society |
|-----|------|---|
- (IDS 3103 may be applied toward the interdisciplinary studies major requirement in section A.1; students specializing in bilingual education will use IDS 2203 to fulfill this requirement)

Major requirements:

A. Interdisciplinary studies requirements:

1. Interdisciplinary studies component (15 to 33 semester credit hours)

a. Required (15 semester credit hours):

- | | | |
|-----|------|--|
| IDS | 2003 | Modes of Inquiry across the Fields of Study |
| IDS | 2113 | Society and Social Issues |
| IDS | 2203 | World Civilization to the Fifteenth Century |
| IDS | 2213 | World Civilization since the Fifteenth Century |
| IDS | 3003 | Science and Humanity |

b. Required of students seeking teacher certification (18 semester credit hours), but may be taken by those not seeking teacher certification:

- | | | |
|-----|------|---|
| COM | 2123 | Oral Interpretation |
| IDS | 3103 | Language and Culture in a Pluralistic Society* |
| IDS | 3303 | Studies in Exceptionality** |
| IDS | 3653 | Music and Related Arts |
| RDG | 3703 | Introduction to Developmental Reading |
| RDG | 3713 | Introduction to Content Area Reading—Elementary |

*Not required of IDS students specializing in bilingual education.

**Not required of IDS students specializing in early childhood or generic special education.

2. Specialization component. One of the following areas of specialization must be selected by the student. Assistance in selection is available from the Office of Teacher Advising, Certification, and Placement. Students are encouraged to select their area of specialization as early in their program as possible.

Listed courses are required unless a choice has been given or unless specifically indicated. Electives should be approved by a certification advisor before enrollment.

Art. (30 semester credit hours): ART 1003, 1013, 1213, 1223, 2113, 2413, 2713, 3113, 4433, and 4753

Bilingual education. 9 semester credit hours of coursework in Spanish at the 2023 level and above are required as determined by results of the Prochievement exam. 18 semester credit hours of the following BBL/ESL classes are required for the degree, and 24 semester credit hours are required for the teacher certificate: BBL 3003, 3023, or 3033; BBL 3013 or 3133; BBL 4023, 4033, 4063, and 4073; ESL 3003 or 3053; and ESL 3033

Biology. 19 semester credit hours: AHS 1053; BIO 1033, 1203, 1212, 3283, and 3292; and 3 hours of upper-division electives in biology

Early childhood. 18 semester credit hours are required for the degree, and 24 semester credit hours are required for the teacher certificate: ECE 3103, 3113, 3123, 3133, 3203, 4103, 4113, and 4123

English. 18 semester credit hours: ENG 2263, 3303, and 3333; 9 semester credit hours of electives in English, 6 of which must be at the upper-division level (ENG 4933 cannot be used to meet this requirement)

French. 18 semester credit hours: FRN 2006; FRN 3013, 3023, or 3033; and 9 semester credit hours of upper-division electives in French (FRN 4933 cannot be used to meet this requirement)

Generic special education. Coursework for this specialization has been sequenced, and all courses must be taken concurrently during the indicated semester. The sequence begins in the Fall Semester. 18 semester credit hours are required for the degree, and 24 semester credit hours are required for the teacher certificate):

Fall	EDP 3603, 3643, and 3653
Spring	EDP 3623, 3633, and 3663
Summer	EDP 4603 and 4653

Geography. 18 semester credit hours: GRG 1013, 2613, 2623, 3113, 3153, and 3 semester credit hours of upper-division electives in geography

German. 18 semester credit hours: GER 2013 and 2023 (or GER 2006); GER 3023 or 3053; GER 3413 or 3423; and 6 semester credit hours of upper-division electives in German (GER 4933 cannot be used to meet this requirement)

Health. 18 semester credit hours: HTH 2513, 2523, 3533, 4513, 4523, and 4533

History. 18 semester credit hours: HIS 2053; HIS 2533, 2553, or 2573; AMS 3043, HIS 3113, HIS 3163, HIS 3443, HIS 3463, or HIS 3473; 6 semester credit hours of upper-division electives in U.S. history; and 3 semester credit hours of upper-division electives in non-U.S. history

Kinesiology. 18 semester credit hours: KIN 2303, 2433, 3413, 3443, 4343, and 4403

Life-earth science. 25 to 27 semester credit hours: BIO 1033, 1203, 1212, 3283, and 3292; GEO 1103, 1111, 1123, and 1131; BIO 3003 or GEO 3163; and 1 to 3 semester credit hours of upper-division electives in biology

Mathematics. Core Curriculum mathematics requirements for this area of specialization are MAT 1093 and MAT 1214. 18 semester credit hours are required: MAT 2243, 3123, 3233, 4113, and 4123; STA 1053

Music. A background in music and an audition with music faculty are required before this specialization can be declared. 18 semester credit hours: MUS 1531, 2623, 2683, and 3453; 8 semester credit hours from the following, of which 3 hours must be upper-division: MUS 1522, 2603, 2663, 2673, 3463 (strongly recommended), 3712 (4 hours maximum), and 3721 (2 hours maximum)

Physical science. Core curriculum mathematics requirements for this area of specialization are MAT 1093 and MAT 1214. 26 semester credit hours are required: CHE 1103, 1122, 1303, 1312, 2203, 2242, and 2251; PHY 1904, 1911, 1924, and 1931

Reading. RDG 3703 and 3713 are prerequisites for the reading specialization courses. 18 semester credit hours: RDG 3723, 3733, 4103, and 4113; 6 semester credit hours from the following: RDG 3743, 3753, 3763, 4123, and 4133

Spanish. The Prochievement exam should be taken before registering for any Spanish specialization coursework. 18 semester credit hours: SPN 2013 and 2023 (or SPN 2006), or SPN 2103 and 2513; SPN 3613, 3623, 3653, or 3663; SPN 3033, 3043, 3063, 4113; SPN 3313 or 3323; and 3 semester credit hours of upper-division electives in Spanish

B. Electives

Option 1. For students seeking teacher certification:

Professional Education (12 semester credit hours):

The State Board for Educator Certification has mandated that the three sections of the TASP must be passed before enrollment in Professional Education and Student Teaching coursework.

EDU	3103	Education in American Society
EDP	3103	Learning and Development in the Elementary School Child
ECE	4303	Approaches to Teaching, Pre-K–Grade 2 (Restricted class/advisor code issued only if all prerequisites have been completed)
ECE	4403	Approaches to Teaching, Grades 3–8 (Restricted class/advisor code issued only if all prerequisites have been completed)

Student Teaching Component (6 semester credit hours):

EDU	4106	Student Teaching: Elementary or
EDU	4206	Student Teaching–Dual Placement: Elementary with Early Childhood, Elementary with Generic Special Education, or Bilingual Education with Early Childhood Endorsement

Option 2. For students not seeking teacher certification:

23 to 32 semester credit hours of electives as determined by appropriate divisions. (Advisors in the Office of Teacher Advising, Certification, and Placement will assist interdisciplinary studies students not seeking certification to use their electives to develop a coherent program of study, using existing UTSA course offerings. Possible options include outside fields in business, prelaw, pre dental, and premedical studies.)

SECONDARY CERTIFICATION

Students seeking certification to teach at the secondary level (grades 6 to 12) must obtain a bachelor's degree in the academic area in which they plan to teach. They should plan to consult with their advisor in the division in which their degree is contained. They should also consult with an advisor in the Office of Teacher Advising, Certification, and Placement for information regarding secondary certification requirements and admission information to the teacher certification program. Requirements for degrees and certificates have been carefully coordinated; however, there are specific degree requirements that may not be required in the certification program, and specific certification requirements that may not be required in the degree program. Certificate program requirements are approved by the state of Texas.

Core Curriculum Requirements: The Core Curriculum requirements listed in this section have been approved by the state of Texas for all secondary certificates. University Core Curriculum requirements for specific degrees may vary; students should refer to the appropriate section of this catalog for a listing of Core Curriculum requirements in the degree they are seeking.

Rhetoric (6 semester credit hours)*

*Secondary certification students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

Domain I: Science, Technology, and Logic

Science (4 to 5 semester credit hours):

A science lecture course accompanied by the corresponding laboratory

Mathematics (3 semester credit hours):

MAT 1063 College Algebra

Computer Science (3 semester credit hours):

CS 2083 Microcomputer Applications

Domain II: Society and Culture

U.S. History and Diversity (6 semester credit hours)*

Political Studies (6 semester credit hours)*

Domain III: Literature, the Arts, and Language

Literature (6 semester credit hours) at the sophomore level or above

The Arts (3 semester credit hours)*

Electives

9 semester credit hours from two of the following areas: social sciences, economics, foreign languages, fine arts

Reading Requirement (3 semester credit hours)

RDG 3773 Introduction to Content Area Reading–Secondary

Professional Education (12 semester credit hours)

The State Board for Educator Certification has required that students must pass all three sections of the TASP before they enroll in Professional Education and Student Teaching coursework.

EDU	3103	Education in American Society
EDP	3203	Learning and Development in the Secondary School Adolescent
EDP	4203	Assessment and Evaluation for Secondary Teachers (if applicable)
C&I	4103	The Secondary School (Restricted class/advisor code issued only if all prerequisites have been completed)

Student Teaching Component (9 semester credit hours)

C&I 4203 Models of Teaching in the Content Area of the Secondary School

*Secondary certification students meet this section of the Core Curriculum in the same way as other UTSA students, as indicated in the description of the Core Curriculum in chapter 6 (Bachelor's Degree Regulations) of this catalog.

with concurrent enrollment in
 EDU 4116 Student Teaching: Secondary
 or
 EDU 4126 Student Teaching: Secondary–ESL

Secondary teaching fields

Option 1. One of the following teaching fields should be selected by students who desire to teach in grades 6 to 12 in the selected teaching field only. (If certification in additional teaching fields is desired, two or more Option 2 teaching fields must be chosen.) All of the specific courses listed are required to meet Texas standards for teacher certification. Most students will obtain a bachelor's degree in the area of their teaching field. Degree advisors should be consulted so that students will be able to meet degree and certification requirements with a minimum number of hours. All electives listed as part of the teaching field must be approved by a certification advisor.

Biology. 38 semester credit hours: BIO 1203, 1212, 2123, 2132, 2313, 2322, 3283, 3292, 3413, 3422, 3513, and 3522; one of the following lecture-laboratory sequences: BIO 3143 and 3152, 3713 and 3722, 3813 and 3822, or 4433 and 4442; 3 semester credit hours of upper-division electives in biology

Chemistry. 36 semester credit hours: CHE 1103, 1122, 1303, 1312, 2203, 2242, 3103, 3204, 3212, and 3264; 8 semester credit hours of upper-division electives in chemistry

Computer information systems. 37 semester credit hours: CS 1713, 1711, 1723, 1721, 2514, 2734, 3323, 3723, 3733, 3743, and 4753; 6 semester credit hours of upper-division electives in computer science

Earth science. 45 semester credit hours: AST 1013 and 1031; GEO 1103, 1111, 1123, 1131, 2003, 2011, 3043, 3052, 3063, 3071, 3083, 3103, 3111, 3123, 3131, 3163, and 4947; and GRG 3713

Economics. 36 semester credit hours: ECO 2013, 2023, 3013, 3053, and 3183; FIN 2003; and 18 semester credit hours of electives in economics, 15 of which must be at the upper-division level

English. 36 semester credit hours: ENG 2223, 2233, 2263, 3303, 3333, and 4973; ENG 3223 or 3233; ENG 3323 or 3343; and 12 semester credit hours of electives in English, 9 of which must be at the upper-division level

French. 38 semester credit hours: FRN 1014, 1024, 2006 (or 2013 and 2023), 3023, 3413, and 3423; and 15 semester credit hours of upper-division electives in French

Geography. 39 semester credit hours: GRG 1023, 2613, 2623, 3113, and 3153; HIS 2053; and 21 semester credit hours of electives in geography, 15 of which must be at the upper-division level

German. 38 semester credit hours: GER 1014 and 1024 (or GER 1008); GER 2013 and 2023 (or GER 2006); GER 3023, 3413, and 3423; and 15 semester credit hours of upper-division electives in German, 6 of which must be at the 4000 level (GER 4933 cannot be applied to this requirement)

Government. 36 semester credit hours: POL 2023, 2603, 2633, 2703, and 3113; POL 3283, 3323, or 3373; POL 3233, 3243, or 3363; POL 4153, 4953, or 4973; SSC 3103, 3203, 3303, 3533, 4223, 4353, or 4373; and 9 semester credit hours of electives in political science, 6 of which must be at the upper-division level

Health. 39 semester credit hours: HTH 2513, 2523, 3503, 3513, 3523, 3533, 3543, 3553, 4503, 4513, 4523, and 4533; and KIN 3443

History. 39 semester credit hours: GRG 3153, HIS 2053, HIS 4973, IDS 2203, and IDS 2213; HIS 2533, 2553, or 2573; AMS 3013, AMS 3023, AMS 3033, AMS 3043, AMS 4823, HIS 3113, HIS 3163, HIS 3443, HIS 3463, or HIS 3473; 9 semester credit hours of upper-division electives in U.S. history; and 9 semester credit hours of upper-division electives in non-U.S. history

Life-earth science. 38 semester credit hours: AHS 1053; BIO 1033, 1203, 1212, 3283, and 3292; BIO 3003 or GEO 3163; GEO 1103, 1111, 1123, 1131, 2003, 2011, 3063, and 3071; and 3 semester credit hours of upper-division electives in biology and geology

Mathematics. 41 semester credit hours: MAT 1214, 1223, 2213, 2233, 3213, 3233, 4113, 4213, and 4263; STA 3513 and 3523; CS 1713 and 1711; and 3 semester credit hours of upper-division electives in mathematics

Physical science. 37 semester credit hours: CHE 1103, 1122, 1303, 1312, 2203, and 2242; PHY 1904, 1911, 1924, and 1931; and 12 semester credit hours of upper-division electives in chemistry and/or physics

Physics. 37 semester credit hours: PHY 1904, 1911, 1924, 1931, 3103, 3203, 3313, and 3423; and 15 semester credit hours of upper-division electives in physics

Sociology. 36 semester credit hours: SOC 1013; SOC 3123 or SSC 3023; SOC 3153 or 3183; SOC 4973 or 4993; SSC 3013; and 21 semester credit hours of electives in sociology, 12 of which must be at the upper-division level

Spanish. 39 semester credit hours: SPN 2013 and 2023 (or SPN 2006); SPN 2103, 3033, 3043, 3063, 3313, 3323, 3613, and 3623; SPN 3113 or 4113; and 6 semester credit hours of upper-division electives in Spanish

Option 2. A minimum of two of the following teaching fields should be selected by students who desire to teach in grades 6 to 12 in each of the selected teaching fields. (If certification in *one* teaching field is desired, a teaching field from Option 1 must be chosen.) All of the specific courses listed are required to meet standards for teacher certification. Most students will obtain a bachelor's degree in *one* of their teaching field areas. Degree advisors should be consulted so that students will be able to meet degree and certification requirements with a minimum number of hours. All electives listed as part of the teaching field must be approved by a certification advisor.

Earth science. 35 semester credit hours: AST 1013 and 1031; GEO 1103, 1111, 1123, 1131, 2003, 2011, 3063, 3071, and 3163; GRG 3713; and 9 semester credit hours of upper-division electives in geology (may be combined with biology only)

Generic special education. Because there is not a bachelor's degree in special education, students choosing this teaching field must also choose another field that will double as their academic major. Coursework for this teaching field has been sequenced, and courses must be taken concurrently during the indicated semesters. The sequence begins in the Fall Semester. 24 semester credit hours:

Fall	EDP 3603, 3643, and 3653
Spring	EDP 3623, 3633, and 3663
Summer	EDP 4603 and 4653

German. 24 semester credit hours: GER 2013 and 2023 (or GER 2006); GER 3413 or 3423; GER 3023 or 3053; and 12 hours of upper-division electives in German (GER 3333 cannot be applied to this requirement)

Health education. 24 semester credit hours: HTH 2513, 2523, 3533, 3543, 3553, 4513, 4523, and 4533

Kinesiology. Students who are pursuing a bachelor's degree in kinesiology must pursue all-level certification. Secondary kinesiology is intended only for students who are pursuing an academic major in another teaching field. 27 semester credit hours: KIN 2303, 2433, 3303, 3413, 3443, 4113, 4403, 4413, and 4423

Mathematics. 28 semester credit hours: MAT 1214, 1223, 2213, 2233, 3213, 3233, 4113, and 4263; and STA 3513

Sociology. 24 semester credit hours: SOC 1013; SOC 3153 or 3183; SSC 3013; SOC 4973 or 4993; and 12 semester credit hours of electives in sociology; 3 of which must be at the upper-division level

Option 4. This option is available to students pursuing a degree in multidisciplinary science and certification for grades 6 to 12 in composite science (biology, chemistry, geology, and physics). Students should select one of the four science areas as their primary science and should select the corresponding certification program.

Composite science–biology. 62 to 64 semester credit hours

Biology component: BIO 1033, 1203, 1212, 2123, 2132, 2313, 3283, 3292, 3413, and 3422

Additional sciences: AST 1013 and 1031; CHE 1103, 1122, 1303, 1312; GEO 1103, 1111, 1123, 1131, and 2003; GRG 3713; PHY 1603 and 1611 (or PHY 1904 and 1911); PHY 1623 and 1631 (or PHY 1924 and 1931)

Composite science–chemistry. 62 to 64 semester credit hours

Chemistry component: CHE 1103, 1122, 1303, 1312, 2203, 2242, 3103, 3204, 3212, and 3264

Additional sciences: AST 1013 and 1031; BIO 1203, 1212, and 2123; GEO 1103, 1111, 1123, 1131, and 2003; GRG 3713; PHY 1603 and 1611 (or PHY 1904 and 1911); PHY 1623 and 1631 (or PHY 1924 and 1931)

Composite science–geology. 55 to 57 semester credit hours

Geology component: GEO 1103, 1111, 1123, 1131, 2003, 2011, 3063, 3071, and 3163; and 3 semester credit hours of upper-division electives in geology

Additional sciences: AST 1013 and 1031; BIO 1203, 1212, and 2123; CHE 1103; 1122, 1303, and 1312; GRG 3713; PHY 1603 and 1611 (or PHY 1904 and 1911); PHY 1623 and 1631 (or PHY 1924 and 1931)

Composite science–physics. 59 to 61 semester credit hours

Physics component: PHY 1603 and 1611 (or PHY 1904 and 1911); PHY 1623 and 1631 (or PHY 1924 and 1931); PHY 3103, 3203, 3313, and 3423; and 3 semester credit hours of upper-division electives in physics

Additional sciences: AST 1013 and 1031; BIO 1203, 1212, and 2123; CHE 1103, 1122, 1303, and 1312; GEO 1103, 1111, 1123, 1131, and 2003; and GRG 3713

ALL-LEVEL CERTIFICATION

All-level certification programs for teaching in grades pre-K to 12 are available in physical education (kinesiology) and in instrumental and choral music. Students interested in the physical education program should consult the section of this catalog that describes the Bachelor of Science degree in Kinesiology with Teacher Certification in All-Level Physical Education. Degree and certification advising for these students is available in the Office of Teacher Advising, Certification, and Placement. Students interested in the music program should refer to the Bachelor of Music with an Emphasis in Music Studies. Degree advising for music majors is available in the Division of Music; certification advising is available in the Office of Teacher Advising, Certification, and Placement.

Bachelor of Science Degree in Health

This program provides students with the opportunity to pursue a Bachelor of Science degree in Health with an emphasis in one of the following: community health; health and fitness in business and industry; or school health (teacher certification).

The minimum number of semester credit hours for this degree, including the Core Curriculum requirements, is 125, at least 51 of which must be at the upper-division level.

All candidates for the degree must complete the following:

A. 24 semester credit hours of health—Common Body of Knowledge:

HTH	2513	Personal Health Management
HTH	2523	First Aid and Safety
HTH	3503	Foundations of Health Theory
HTH	3513	Issues in Community Health
HTH	3523	Worksite Health Promotion
HTH	3543	Growth and Development
HTH	4503	Survey of Human Disease
HTH	4533	Nutrition and Health

B. 12 semester credit hours from one of the following areas of emphasis:

Community Health or School Health:

HTH	3533	Drugs and Health
HTH	3553	Emotional Wellness
HTH	4513	Consumer Health
HTH	4523	Understanding Human Sexuality

Health and Fitness in Business and Industry:

HTH	4133	Exercise Physiology
KIN	3313	Anatomic Kinesiology
KIN	3323	Biomechanics
KIN	4113	Evaluation

C. 20 to 23 semester credit hours of required support work:

Community Health or School Health:

AHS	2083	Human Biology: Anatomy
AHS	2091	Human Biology: Anatomy Laboratory
AHS	2103	Human Biology: Physiology
AHS	2111	Human Biology: Physiology Laboratory
COM	2123	Oral Interpretation
KIN	3443	Exercise Prescription
MGT	3013	Introduction to Organization Theory, Behavior, and Management
SOC	3313	Conceptualization and Measurement in Sociology
SOC	3323	Social Research Design and Application in Sociology

Health and Fitness in Business and Industry:

AHS	2083	Human Biology: Anatomy
AHS	2091	Human Biology: Anatomy Laboratory
AHS	2103	Human Biology: Physiology
AHS	2111	Human Biology: Physiology Laboratory
KIN	3413	Tactics
KIN	3443	Exercise Prescription
KIN	4103	Motor Development
KIN	4123	Psychosocial Aspects of Exercise and Sport

D. 6 to 8 semester credit hours of Internship:

Community Health:

HTH	4936	Internship in Health for Community Health
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Health and Fitness in Business and Industry:

HTH	4932	Internship in Health
HTH	4936	Internship in Health

- E. 6 to 24 semester credit hours of electives chosen in consultation with the program advisor:

Community Health:

6 semester credit hours (of which 3 must be upper-division)

School Health (24 semester credit hours):

Professional Education and Reading Coursework (15 semester credit hours):

The State Board for Educator Certification has required that the three sections of the TASP must be passed before enrolling in Professional Education and Student Teaching coursework.

EDU	3103	Education in American Society
EDP	3203	Learning and Development in the Secondary School Adolescent
EDP	4203	Assessment and Evaluation for Secondary Teachers (if applicable)
RDG	3773	Introduction to Content Area Reading—Secondary
C&I	4103	The Secondary School (Restricted class/advisor code issued only if all prerequisites have been completed)

Student Teaching Component (9 semester credit hours):

C&I	4203	Models of Teaching in the Content Area of the Secondary School
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with concurrent enrollment in

EDU	4116	Student Teaching: Secondary
		or
EDU	4126	Student Teaching: Secondary—ESL

Health and Fitness in Business and Industry:

6 semester credit hours (upper-division)

Minor in Health

All students pursuing the Minor in Health must complete 18 semester credit hours.

HTH	2513	Personal Health Management
HTH	3513	Issues in Community Health
HTH	3533	Drugs and Health
HTH	4513	Consumer Health
HTH	4523	Understanding Human Sexuality
HTH	4533	Nutrition and Health

To declare a Minor in Health or to obtain advice, students should consult an advisor in the Office of Teacher Advising, Certification, and Placement.

Bachelor of Science Degree in Kinesiology

The minimum number of semester credit hours for the Bachelor of Science degree in Kinesiology, including the Core Curriculum requirements, is 126, at least 45 of which must be at the upper-division level.

All candidates for the degree must complete the following:

A. 49 semester credit hours of foundation courses:

HTH	2523	First Aid and Safety
HTH	4133	Exercise Physiology
KIN	2001	Skill Analysis in Physical Activity: Individual Activities
KIN	2101	Skill Analysis in Physical Activity: Team Sports
KIN	2303	Cultural and Scientific Foundations
KIN	2331	Physical and Motor Assessment
KIN	2411	Rhythmical Activities and Dance
KIN	2423	Introduction to Sport Management
KIN	2433	Outdoor Activities and Lifetime Sports
KIN	3303	Athletic Injuries and Training Procedures
KIN	3313	Anatomic Kinesiology
KIN	3443	Exercise Prescription
KIN	4103	Motor Development
KIN	4113	Evaluation
KIN	4123	Psychosocial Aspects of Exercise and Sport
KIN	4343	Movement Awareness
KIN	4423	Developmental/Adaptive Physical Activity
KIN	4936	Internship in Kinesiology

B. 11 semester credit hours of support courses:

1. 4 to 5 semester credit hours from the following:

AHS	2083, 2091	Human Biology: Anatomy and Laboratory or
BIO	2123, 2132	Comparative Anatomy of Vertebrates and Laboratory

2. 4 to 5 semester credit hours from the following:

AHS	2103, 2111	Human Physiology and Laboratory or
BIO	3413, 3422	General Physiology and Laboratory

3. COM 2123 Oral Interpretation

C. 12 semester credit hours of application courses predetermined and approved by the program advisor

Bachelor of Science Degree in Kinesiology with Teacher Certification in All-Level Physical Education

The minimum number of semester credit hours for this degree, including the Core Curriculum requirements, is 133, of which at least 51 must be at the upper-division level.

All candidates for the degree must complete the following:

A. 41 semester credit hours of required courses:

HTH	2523	First Aid and Safety
KIN	2001	Skill Analysis in Physical Activity: Individual Activities
KIN	2101	Skill Analysis in Physical Activity: Team Sports
KIN	2303	Cultural and Scientific Foundations
KIN	2331	Physical and Motor Assessment
KIN	2401	Gymnastics
KIN	2411	Rhythmical Activities and Dance
KIN	2433	Outdoor Activities and Lifetime Sports
KIN	3303	Athletic Injuries and Training Procedures
KIN	3313	Anatomic Kinesiology
KIN	3413	Tactics
KIN	3443	Exercise Prescription
KIN	4113	Evaluation
KIN	4343	Movement Awareness
KIN	4403	Motor Learning
KIN	4413	Coaching Athletics
KIN	4423	Developmental/Adaptive Physical Activity

B. 9 semester credit hours selected from the following:

HTH	4133	Exercise Physiology
KIN	2423	Introduction to Sport Management
KIN	3323	Biomechanics
KIN	4103	Motor Development
KIN	4123	Psychosocial Aspects of Exercise and Sport
KIN	4143	Advanced Athletic Training

C. 8 semester credit hours of support work:

BIO	1212	Laboratory Investigations in Biology
COM	2123	Oral Interpretation

An English elective at the 2000 level or above

D. 12 semester credit hours of Professional Education and Reading coursework:

The State Board for Educator Certification has required that the three sections of the TASP must be passed before enrolling in Professional Education and Student Teaching coursework.

EDU	3103	Education in American Society
EDP	3203	Learning and Development in the Secondary School Adolescent
RDG	3713	Introduction to Content Area Reading—Elementary
ECE	4403	Approaches to Teaching, Grades 3–8 (Restricted class/advisor code issued only if all prerequisites have been completed)

E. Student Teaching Component:

C&I	4203	Models of Teaching in the Content Areas of the Secondary School with concurrent enrollment in
EDU	4136	Student Teaching: All Level

COURSE DESCRIPTIONS CURRICULUM AND INSTRUCTION (C&I)

4103 The Secondary School

(3-0) 3 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program, including but not limited to passing scores on all three sections of the TASP, and completion of EDU 3103 and EDP 3203.

Study of curricular, instructional, and management approaches to secondary education. Emphasis on developing effective instructional strategies and planning and management skills for all types of secondary students, including special populations. Use of instructional media and technology and development of effective evaluation strategies. Twenty hours of observation in a school setting are required. Not offered in the summer.

4203 Models of Teaching in the Content Areas of the Secondary School

(3-0) 3 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester including but not limited to a 2.5 grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3203, and C&I 4103.

Curricular, instructional, and management applications to subject areas taught in the secondary schools. Emphasis on developing instructional and curricular strategies effective in teaching content skills. Application of instructional media, classroom management, and evaluation for the content areas. Twenty-five hours of observation in a school setting are required. This course may be offered in multiple sections according to subject-matter emphasis. Not offered in the summer.

4913 Independent Study

3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Curriculum and Instruction

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours within any one discipline will apply to a bachelor's degree.

COURSE DESCRIPTIONS EARLY CHILDHOOD (ECE)

3103 Young Children's Literature

(3-0) 3 hours credit.

Study of the written and oral literature for children from birth to second grade, from the combined perspectives of literacy and child development. The history and development of children's books are stressed, as well as genres, elements, and devices found in the literature. Social and cognitive development of children, technological advances, and diversity in children are considered as they impact children's literature. Field-based experiences required.

3113 Developmental Play in Early Childhood

(3-0) 3 hours credit.

Study of the role of development in play and creative expression during early childhood. Emphasis on physical, cognitive, social, and affective development and creative expression, as experienced in structured and nonstructured indoor and outdoor environments, including adapted environments for children with disabilities. Field-based experiences required.

3123 Early Childhood Development

(3-0) 3 hours credit.

Study of growth and development during early childhood. Review and integration of physical, psychological, social, and cognitive development affecting growth in children, including culturally diverse populations and children with atypical patterns of development. Field-based experiences required.

3133 Programs in Early Childhood

(3-0) 3 hours credit.

Survey of historical, philosophical, psychological, and sociocultural foundations of early childhood program development. Emphasis on connecting past and current trends and approaches to developmental programs designed to meet the growth and learning needs of young children.

Study of culturally responsive programming for diverse groups of children representing a wide range of abilities. Field-based experiences required.

3203 Tests and Measurement in Early Childhood

(3-0) 3 hours credit.

Principles of designing and using assessment and evaluation techniques that are culturally fair, intellectually sound, reliable, dependable, and content-valid for children in the early childhood years. Emphasis on differentiation among criterion-referenced, norm-referenced, individual, informal, authentic, and group tests and measurements. Field-based experiences required.

4103 Guidance of Young Children in Groups

(2-2) 3 hours credit.

Study of appropriate adult roles in guiding the growth, learning, and development of children in group situations. Emphasis on classroom management and discipline; cultural dynamics; guiding children in task involvement, human interaction, cooperation, and uses of materials; and including children with disabilities. Field-based experiences required.

4113 Language Development in Early Childhood

(3-0) 3 hours credit.

Introduction to theories of language and cognitive development in young children, with implications for language instruction and beginning reading. Review of the development of symbolic logic and language learning needs of children from diverse cultural and linguistic backgrounds. Field-based experiences required.

4123 Family and Community Resources in Early Childhood

(3-0) 3 hours credit.

Study of approaches to family, community, societal, cultural, and ideological support systems in children's growth, learning, and development. Emphasis on how these factors are related in the permissive-restrictive dimensions of childrearing and socialization in broad perspectives across environmental contexts. Included are children "at risk" and with disabilities. Field-based experiences required.

4303 Approaches to Teaching, Pre-K–Grade 2

(2-2) 3 hours credit. Prerequisites: Completion of all requirements for admission to teacher certification program, including but not limited to passing scores on all three sections of the TASP, and completion of EDP 3103, EDU 3103, and IDS 2003.

Study of developmental approaches to teaching diverse groups of children representing a wide range of abilities in preschool and primary grades. Emphasis on development of child-centered curriculum for culturally responsive classroom instruction, evaluation, management, and use of instructional technology. Twenty hours of directed field-based experience in preschool and elementary school classrooms are required.

- 4403 Approaches to Teaching, Grades 3–8**
(2-2) 3 hours credit. Prerequisites: Completion of all requirements for admission to teacher certification program, including but not limited to passing scores on all three sections of the TASP, and completion of EDP 3103, EDU 3103, IDS 2003, and ECE 4303.
Examination of different pedagogical approaches to the teaching and learning process and how they can be applied in the upper elementary and middle school curriculum, with emphasis on designing interdisciplinary learning experiences, developing children's cognitive skills, and evaluating teaching and learning. Twenty-five hours of directed field experience in elementary and middle school classrooms are required.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4953 Special Studies in Early Childhood and Elementary Education**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

COURSE DESCRIPTIONS EDUCATIONAL PSYCHOLOGY (EDP)

- 1702 College Success Seminar**
(1-1) 2 hours credit.
Training in the application of self-assessment, time management, budgeting, social skills, and learning and study strategies, with emphasis on the student's need to succeed in higher education. Laboratory required.
- 3103 Learning and Development in the Elementary School Child**
(3-0) 3 hours credit. Prerequisites: Sophomore standing and passing scores on all three sections of the TASP. IDS 2103 recommended.
An introduction to major theories of learning and development, with an emphasis on applications at the elementary school level. Topics also include individual and group differences, tests and measurements, motivation, and elementary-level classroom management.
- 3203 Learning and Development in the Secondary School Adolescent**
(3-0) 3 hours credit. Prerequisites: Sophomore standing and passing scores on all three sections of the TASP.

An introduction to major theories of learning and development, with an emphasis on applications at the secondary level. Topics include individual and group differences, tests and measurements, motivation, and secondary-level classroom management.

3603 Introduction to Exceptionality

(3-0) 3 hours credit. Prerequisite: Must be taken concurrently with EDP 3643 and EDP 3653 during the Fall Semester.

A study of individuals, groups, and populations designated or characterized as disabled, handicapped, deviant, or exceptional by various agencies and organizations historically and currently in society. Etiology, characteristics, services, and efficacy of treatment and intervention will be studied. Offered in the Fall Semester. (Credit cannot be earned for both EDP 3603 and IDS 3303.)

3613 Issues in Deaf Culture and Education: Practicum

(3-0) 3 hours credit. Prerequisites: ASL 1013, 1023, 2013, and 2023, or consent of instructor.

Requires the demonstration and use of ASL skills for communicating with people who are deaf or hard of hearing in a variety of community and academic settings, including but not limited to elementary through postsecondary general and special education classrooms, public and private service agencies, community service organizations, shopping centers, work stations, and restaurants.

3623 Assessment of Exceptional Children

(3-0) 3 hours credit. Prerequisite: EDP 3603 or consent of instructor; must be taken concurrently with EDP 3633 and 3663 during the Spring Semester.

An introduction to assessment of individuals with disabilities. Informal and formal assessment instruments, procedures, and systems for assessment of aptitude, achievement, adaptive behavior, and language abilities will be studied. Offered in the Spring Semester.

3633 Behavior Management of Exceptional Children

(3-0) 3 hours credit. Prerequisite: EDP 3603 or consent of instructor; must be taken concurrently with EDP 3623 and 3663 during the Spring Semester.

A study of learning theory with emphasis on operant and respondent conditioning. Research related to alternative explanations for behavior and behavior change will be included. Planning, application, and evaluation of a behavior change project is required. Offered in the Spring Semester.

3643 Language and Cognitive Development and Dysfunction

(3-0) 3 hours credit. Prerequisite: Must be taken concurrently with EDP 3603 and 3653 during the Fall Semester.

A study of theories, research, and practices related to language development and dysfunctions. The relationship of language, cognition, and disabilities will be investigated. Offered in the Fall Semester.

- 3653 Practicum in Special Education (Introduction)**
3 hours credit. Prerequisites: Must be taken concurrently with EDP 3603 and 3643 during the Fall Semester.
Treatment, educational and habilitative theories, research, and practices will be studied. Observation and evaluation of services provided to individuals with disabilities will be required. Students enrolled in this course will be required to spend 10 hours a week (mornings) in field-based placements. Offered in the Fall Semester.
- 3663 Practicum in Special Education (Intermediate)**
3 hours credit. Prerequisites: EDP 3603, 3643, and 3653; must be taken concurrently with EDP 3623 and 3633 during the Spring Semester.
The study of curriculum content, practices of habilitation, education, instruction, and treatment provided to individuals with disabilities. Theories, research, and contemporary practices will be emphasized in conjunction with evaluation of efficacy. Students enrolled in this course will be required to spend 10 hours a week (mornings) in field-based placements. Offered in the Spring Semester.
- 4203 Assessment and Evaluation for Secondary Teachers**
(3-0) 3 hours credit. Prerequisite: EDP 3203 or consent of instructor.
Requires working with teachers in field settings. This course will discuss the principles and techniques necessary to develop sound assessment strategies. The primary focus of the course will be on the creation of test items, administration of classroom evaluation procedures, and the roles of testing, measurement, and evaluation in daily classroom practice. The use and interpretation of standardized tests, alternative assessments, norm- and criterion-referenced assessments will also be discussed as well as theoretical and ethical issues related to testing and evaluation. This course is required of all postbaccalaureate students seeking certification.
- 4603 Working with Parents of Exceptional Children**
(3-0) 3 hours credit. Prerequisites: 9 semester credit hours of special education coursework or consent of instructor; must be taken concurrently with EDP 4653 during the Summer Session.
A study of theories, research, and practices of parent and family involvement in the habilitative education and treatment of individuals with disabilities. History, research, and contemporary issues in advocacy, legislation, training, and consultation will be studied. Offered in the Summer Session.
- 4653 Practicum in Special Education (Advanced)**
3 hours credit. Prerequisites: EDP 3603, 3623, 3633, 3643, 3653, and 3663; must be taken concurrently with EDP 4603 during the Summer Session.
The study of the planning, application, and evaluation of Individual Educational Plans (IEPs) in the specialized educational and related services provided under the law to individuals with disabilities. Students will be required to demonstrate competency in providing services and will be required to spend mornings (7:30–11:30) in field placements. Offered in the Summer Session.

- 4953 Special Studies in Educational Psychology**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

COURSE DESCRIPTIONS EDUCATION (EDU)

- 3103 Education in American Society**
(3-0) 3 hours credit. Prerequisites: Sophomore standing and passing scores on all three sections of the TASP.
Study of education as a social, economic, and moral force in our nation's development. Contemporary issues are related to their historical antecedents in order to demonstrate education's role in a democratic society. Topics discussed include religion and education, the development and structure of American schooling, and legal and ethical aspects of education. (Formerly EDU 3003. Credit cannot be earned for both EDU 3103 and EDU 3003.)
- 4003 Student Teaching: Endorsement**
3 hours credit. Prerequisites: Completion of student teaching requirements for a basic teaching certificate and consent of the director of student teaching. Individuals must apply to the director of student teaching one semester in advance.
Six consecutive weeks of full-day student teaching in an endorsement area. Individuals pursuing an early childhood endorsement will student teach in a kindergarten classroom; individuals pursuing an English as a second language endorsement (ESL) will be placed in an approved ESL program. NOTE: EDU 4003 may not be taken concurrently with EDU 4106, 4116, 4126, 4136, 4206, 4403, 4413, 4926, 4933, or 4943.
- 4106 Student Teaching: Elementary**
6 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a 2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3103, ECE 4303, and ECE 4403. Individuals must apply to the director of student teaching one semester in advance.
Twelve consecutive weeks of full-day student teaching in a regular elementary classroom under the supervision of University faculty. Weekly seminars explore issues in teaching practice.
- 4116 Student Teaching: Secondary**
6 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a

2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3203, EDP 4203 (if applicable), and C&I 4103. Individuals must apply to the director of student teaching one semester in advance.

Twelve consecutive weeks of full-day student teaching in grades 6–12. Individuals pursuing a Basic Secondary Certificate, Option I, will student teach in the single teaching field for which certification is sought. Individuals pursuing a Basic Secondary Certificate, Options II or IV, will student teach in two of the teaching fields for which certification is sought. Meets student teaching requirements for a Secondary Certificate, Options I, II, and IV.

4126 Student Teaching: Secondary–ESL

6 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a 2.5 cumulative grade-point average; passing scores on all three sections of the TASP; completion of a minimum of 6 semester credit hours of the ESL endorsement; and completion of EDU 3103, EDP 3203, EDP 4203 (if applicable), and C&I 4103. Individuals must apply to the director of student teaching one semester in advance.

Twelve consecutive weeks of full-day student teaching in grades 6–12, including six weeks of full days in one teaching field and six weeks of full days in an approved English as a second language (ESL) program. Individuals pursuing a specialization in generic special education will student teach for six weeks of full days in one teaching field with students having special needs and six weeks of full days in an approved English as a second language program. Meets student teaching requirements for a Secondary Certificate, Options I, II, or IV, with an ESL endorsement.

4136 Student Teaching: All Level

6 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a 2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3203, and ECE 4403. Individuals must apply to the director of student teaching one semester in advance.

Twelve consecutive weeks of full-day student teaching, including six weeks of full days in an elementary school (grades 1–8) and six weeks of full days in a secondary school (grades 6–12) in the certificate area sought. Meets student teaching requirements for the all-level certificate.

NOTE: Individuals may not concurrently pursue an all-level certificate and an endorsement in early childhood and/or English as a second language (ESL).

4206 Student Teaching–Dual Placement: Elementary with Early Childhood, Elementary with Generic Special Education, or Bilingual Education with Early Childhood Endorsement

6 hours credit. Prerequisites: Completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a

2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3103, ECE 4303, and ECE 4403. Individuals must apply to the director of student teaching one semester in advance.

For elementary with early childhood and elementary with generic special education endorsements, six consecutive weeks of full-day student teaching in a regular elementary classroom and six consecutive weeks in an early childhood or special education classroom under the supervision of University faculty. For bilingual education with early childhood endorsement, both the elementary and early childhood placements must be in bilingual classrooms. Weekly seminars explore issues in teaching practice.

4403 Student Teaching: All-Level Music—Elementary

3 hours credit. Prerequisites: Concurrent enrollment in EDU 4413; completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a 2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3103, ECE 4403, and C&I 4203. Individuals must apply to the director of student teaching one semester in advance.

Six consecutive weeks of full-day student teaching in an elementary school (grades 1–8) under the supervision of University faculty. Meets student teaching requirements for the elementary component of the all-level certificate.

4413 Student Teaching: All-Level Music—Secondary

3 hours credit. Prerequisites: Concurrent enrollment in EDU 4403; completion of all requirements for admission to the teacher certification program; completion of all requirements for admission to the student teaching semester, including but not limited to a 2.5 cumulative grade-point average; passing scores on all three sections of the TASP; and completion of EDU 3103, EDP 3103, ECE 4403, and C&I 4203. Individuals must apply to the director of student teaching one semester in advance.

Six consecutive weeks of full-day student teaching in a secondary school (grades 6–12) under the supervision of University faculty. Meets student teaching requirements for the secondary component of the all-level certificate.

4926 Internship in Education

6 hours credit. Prerequisites: A bachelor's degree; completion of all requirements for admission to the teacher certification program; completion of all coursework requirements for the certification program; consent of the Office of Teacher Advising, Certification, and Placement; and consent of the director of student teaching. Students seeking secondary certification will enroll concurrently in C&I 4203.

Internship to be jointly supervised by an employing school district and UTSA. Experiences will relate to the intern as the teacher-of-record in the classroom. Weekly seminars explore issues in teaching practice.

4933 Internship in Education—IDS

3 hours credit. Prerequisites: A bachelor's degree; completion of all requirements for admission to the teacher certification program; completion of all coursework requirements for the certification program; consent of the Office of Teacher Advising, Certification, and Placement; and consent of the director of student teaching.

Internship to be jointly supervised by an employing school district and UTSA. Experiences will relate to the intern as the teacher-of-record in the classroom. Students may register for this course more than once, but no more than 6 semester credit hours will apply to the postbaccalaureate program.

4943 Internship in Education—Secondary

3 hours credit. Prerequisites: A bachelor's degree; completion of all requirements for admission to the teacher certification program; completion of all coursework requirements for the certification program; consent of the Office of Teacher Advising, Certification, and Placement; consent of the director of student teaching; and concurrent enrollment in C&I 4203. Internship to be jointly supervised by an employing school district and UTSA. Experiences will relate to the intern as the teacher-of-record in the classroom. Students may register for this course more than once, but no more than 6 semester credit hours will apply to the postbaccalaureate program.

4953 Special Studies in Education

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of the discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisites: Enrollment limited to candidates for honors in the Division of Education during the last two semesters; approval by the honors program coordinator.

Supervised research and preparation for an honors thesis. May be repeated once with advisor's approval.

**COURSE DESCRIPTIONS
HEALTH
(HTH)**

2513 Personal Health Management

(3-0) 3 hours credit.

Emphasizes the concept of mind, body, and spirit as necessary components of total well-being; principles of preventive health; and self-responsibility for personal health behaviors. (Formerly KAH 2513 and HPE 2513. Credit cannot be earned for both HTH 2513 and either KAH 2513 or HPE 2513.)

- 2523 First Aid and Safety**
(3-0) 3 hours credit.
Study and practices of current first aid and safety skills. Emphasis on application of skills in emergency situations. Opportunity to earn Texas Department of Health Emergency Care Attendant Certificate. (Formerly KAH 4543 and HPE 4543. Credit cannot be earned for both HTH 2523 and either KAH 4543 or HPE 4543.) [TCCN: PHED 1306.]
- 3503 Foundations of Health Theory**
(3-0) 3 hours credit.
Designed for the health education major to provide an overview of current trends, research, literature, and health behavior models. (Formerly KAH 2503 and HPE 2503. Credit cannot be earned for both HTH 3503 and either KAH 2503 or HPE 2503.)
- 3513 Issues in Community Health**
(3-0) 3 hours credit. Prerequisite: HTH 3503 or consent of instructor.
Study of community health problems and the function and organization of public, private, and voluntary health agencies. (Formerly KAH 3513 and HPE 3513. Credit cannot be earned for both HTH 3513 and either KAH 3513 or HPE 3513.)
- 3523 Worksite Health Promotion**
(3-0) 3 hours credit. Prerequisite: HTH 3513, KIN 2303, or consent of instructor.
Organization, administration, and supervision of health programs in the community, school, business, or industry setting. (Formerly KAH 3523 and HPE 3523. Credit cannot be earned for both HTH 3523 and either KAH 3523 or HPE 3523.)
- 3533 Drugs and Health**
(3-0) 3 hours credit.
Study of the use and abuse of drugs and other substances. Examines addiction, dependence, tolerance, motivation for use, and effects of substance abuse on health and society. (Formerly KAH 3533 and HPE 3533. Credit cannot be earned for both HTH 3533 and either KAH 3533 or HPE 3533.)
- 3543 Growth and Development**
(3-0) 3 hours credit.
Physical, social, and psychological development throughout the life cycle. Emphasis on changes in early adolescence and their implications for health professionals. (Formerly KAH 3543 and HPE 3543. Credit cannot be earned for both HTH 3543 and either KAH 3543 or HPE 3543.)
- 3553 Emotional Wellness**
(3-0) 3 hours credit.
Practical application of techniques for shaping healthier emotional behavior; emphasis on personality, stress management, and fulfilling relationships. (Credit cannot be earned for both HTH 3553 and the section of KAH 4953 that was offered in Spring 1993.)

- 4133 Exercise Physiology**
(2-2) 3 hours credit. Prerequisite: KIN 3443.
A study of the adaptation and effects of the body to physiological stress. Emphasis will be placed on the physiology of training, metabolism and work capacity, and electrocardiography.
- 4503 Survey of Human Disease**
(3-0) 3 hours credit.
An in-depth look at the etiology, prevention, and treatment of chronic and contagious diseases afflicting humans.
- 4513 Consumer Health**
(3-0) 3 hours credit.
Study of the consumer's selection of health products and services, and the acquisition of basic knowledge for making responsible decisions when selecting professional health care services and products. (Formerly KAH 4513 and HPE 4513. Credit cannot be earned for both HTH 4513 and either KAH 4513 or HPE 4513.)
- 4523 Understanding Human Sexuality**
(3-0) 3 hours credit.
Study of the psychosocial and physical aspects of human sexuality and their impact on our lives. (Formerly KAH 4523 and HPE 4523. Credit cannot be earned for both HTH 4523 and either KAH 4523 or HPE 4523.)
- 4533 Nutrition and Health**
(3-0) 3 hours credit.
A practical approach to understanding the principles of nutrition and their effect on health and fitness. (Formerly KAH 4533 and HPE 4533. Credit cannot be earned for both HTH 4533 and either KAH 4533 or HPE 4533.)
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) from the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4932 Internship in Health**
2 hours credit. Prerequisites: 12 semester credit hours of health coursework and permission of the advisor.
The opportunity for work experience on campus or in a private or public health-related agency. Opportunities developed in consultation with faculty advisor and on-site coordinator. No more than 8 semester credit hours of internship will apply to a bachelor's degree.

4936 Internship in Health

6 hours credit. Prerequisites: 18 semester credit hours of health coursework and permission of the advisor.

The opportunity for work experience in a private or public health-related agency. Opportunities are developed in consultation with faculty advisor and on-site coordinator. No more than 8 semester credit hours of internship will apply to a bachelor's degree. (Formerly KAH 4956. Credit cannot be earned for both HTH 4936 and KAH 4956.)

4953 Special Studies in Health

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study in an area of health not available as part of the regular course offerings. Special studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

**COURSE DESCRIPTIONS
INTERDISCIPLINARY STUDIES
(IDS)**

2003 Modes of Inquiry across the Fields of Study

(3-0) 3 hours credit. Prerequisites: ENG 1013 and 1023.

Study of thinking in the sciences, social studies, mathematics, language arts, and fine arts through interdisciplinary investigations. Course experiences include modeling, practice, and analysis of ways of inquiring in the several subject areas, and seeking their implications for interdisciplinary inquiries. (Formerly IDS 4113. Credit cannot be earned for both IDS 2003 and IDS 4113.)

2083 Technology for Liberal Arts and Social Sciences

(3-1) 3 hours credit.

Exploration of technologies relevant to interdisciplinary studies in the liberal arts and social sciences, with particular attention to applications to teaching. Training in the use of software for database management, spreadsheets, digitized multimedia and telecommunications systems on Macintosh and IBM platforms. One-hour lab included.

2103 The Individual, Family, and Community

(3-0) 3 hours credit.

Study of theories of the individual, the family, and the community. The course integrates approaches from a variety of social sciences.

2113 Society and Social Issues

(3-0) 3 hours credit.

Study of social and institutional phenomena, including ethnicity, gender, and social conflict. These phenomena will be approached through case studies.

- 2203 World Civilization to the Fifteenth Century**
(3-0) 3 hours credit.
Study of the cultural histories of particular civilizations important for understanding the modern world: Meso-American, classical Greco-Roman, Chinese (Han and Tang dynasties), Latin American, medieval European, and Islamic in the Middle East and Africa through the fifteenth century. Within a general framework of political, social, and economic history, the course emphasizes the literature, philosophy, art, and music of each of these civilizations. (Credit cannot be earned for both IDS 2203 and HIS 2103.) [TCCN: HIST 2321.]
- 2213 World Civilization since the Fifteenth Century**
(3-0) 3 hours credit.
Study of the contact of civilizations and cultural change since the fifteenth century, emphasizing cultural history, literature, philosophy, art, and music of the following periods and movements: the Renaissance, the Scientific Revolution and the Enlightenment, the Age of Revolution and Romanticism, Victorian culture and imperialism, and the culture of the twentieth century. (Credit cannot be earned for both IDS 2213 and HIS 2113.) [TCCN: HIST 2322.]
- 2303 World Literature I, The Narrative Mode**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Explorations of the narrative mode in literature across the world and across time. Readings include such works as *Genesis*, the *Odyssey*, *Black Elk Speaks*, *Things Fall Apart*, and a variety of short fiction.
- 2313 World Literature II, Dramatic and Lyric Modes**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or an equivalent.
Exploration of the dramatic and lyric modes in literature across the world and across time. Works such as *Medea*, *Blood Wedding*, the screenplay for *Citizen Kane*, and an anthology of lyric poetry will be studied. Films will be viewed in class in conjunction with the reading of screenplays; the question of translation will be addressed in conjunction with lyric poetry.
- 3003 Science and Humanity**
(3-0) 3 hours credit.
Study of paradigms of the life, earth, and physical sciences, noting their effects on humanity. The course uses an integrative, thematic approach to studying the nature of scientific inquiry, knowledge, and theory development, relationships between science and technology, and effects of science and scientific thinking on humanity today and in the future.
- 3103 Language and Culture in a Pluralistic Society**
(3-0) 3 hours credit.
Investigation of research findings related to cultural processes in institutional and societal contexts. The course examines theoretical principles related to different facets of language in society, including bilingualism, and explores culturally inclusive responses to human needs in pluralistic settings.

3303 Studies in Exceptionality

(3-0) 3 hours credit.

Study of the nature, needs, characteristics, causes, and incidence of exceptional children, including historical and legal foundations for identifying and serving exceptional children under state and federal regulations. Community options for exceptional children at various levels of ability will also be addressed. (Credit cannot be earned for both IDS 3303 and EDP 3603.)

3653 Music and Related Arts

(3-1) 3 hours credit.

Study of the essential concepts of music and visual arts. An understanding of the cognitive content of each art will be reinforced by a variety of activities that relate directly to each artistic discipline. Similarities and differences in the various arts will be investigated in terms of basic elements, means of creating, and experience.

4913 Independent Study

3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Interdisciplinary Studies

(3-0) 3 hours credit.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

**COURSE DESCRIPTIONS
KINESIOLOGY
(KIN)**

1001 Individual Physical Activities

(0-3) 1 hour credit.

Practice in the techniques of individual physical activities. Sections focus on particular sports or fitness activities as indicated in the Schedule of Classes. May be repeated for credit, but not more than 6 semester credit hours of KIN 1001, KAH 1001, or HPE 1001, alone or in combination with KIN 1101, KAH 1101, or HPE 1101, will apply to a bachelor's degree.

- 1101 Team Sports**
(0-3) 1 hour credit.
Practice in the techniques of team sports. Sections focus on particular sports as indicated in the Schedule of Classes. May be repeated for credit, but not more than 6 semester credit hours of KIN 1101, KAH 1101, or HPE 1101, alone or in combination with KIN 1001, KAH 1001, or HPE 1001, will apply to a bachelor's degree.
- 2001 Skill Analysis in Physical Activity: Individual Activities**
(0-3) 1 hour credit.
Specialized activity instruction involving skills, drills, rules, regulations, and skill performance in a variety of selected individual activities. (Formerly HPE 2001 and KAH 2001. Credit cannot be earned for both KIN 2001 and either HPE 2001 or KAH 2001.)
- 2101 Skill Analysis in Physical Activity: Team Sports**
(0-3) 1 hour credit.
Specialized activity instruction involving skills, drills, rules, regulations, and skill performance in a variety of selected team sports. (Formerly HPE 2101 and KAH 2101. Credit cannot be earned for both KIN 2101 and either HPE 2101 or KAH 2101.)
- 2303 Cultural and Scientific Foundations**
(3-0) 3 hours credit.
Study of philosophy, ethics, sociology, scientific areas, and current concepts relevant to the discipline of kinesiology. (Formerly HPE 2303 and KAH 2303. Credit cannot be earned for both KIN 2303 and either HPE 2303 or KAH 2303.) [TCCN: KINS 1301.]
- 2331 Physical and Motor Assessment**
(0-3) 1 hour credit.
The opportunity to develop individual physical fitness and motor ability profiles for students in kinesiology. Analysis of strengths and weaknesses in physical capacity. (Formerly HPE 2331 and KAH 2331. Credit cannot be earned for both KIN 2331 and either HPE 2331 or KAH 2331.)
- 2401 Gymnastics**
(0-3) 1 hour credit.
Practice in gymnastic activities for the kinesiology major. (Formerly HPE 2401 and KAH 2401. Credit cannot be earned for both KIN 2401 and either HPE 2401 or KAH 2401.)
- 2411 Rhythmical Activities and Dance**
(0-3) 1 hour credit.
Practice in rhythmical techniques and various types of dance. (Formerly HPE 2411 and KAH 2411. Credit cannot be earned for both KIN 2411 and either HPE 2411 or KAH 2411.)

- 2423 Introduction to Sport Management**
(3-0) 3 hours credit.
Introduction to concepts and skills that will prepare the student to become an effective leader of physical fitness, sport and health, and physical education programs. [TCCN: PHED 1336.]
- 2433 Outdoor Activities and Lifetime Sports**
(2-2) 3 hours credit. Prerequisites: HTH 2523 or consent of instructor.
Programming theory of and participation in outdoor activities and life sports. Weekend class field trips required. Lab fees will be assessed. (Formerly HPE 2433 and KAH 2433. Credit cannot be earned for both KIN 2433 and either HPE 2433 or KAH 2433.)
- 3303 Athletic Injuries and Training Procedures**
(3-0) 3 hours credit.
Prevention and care of athletic injuries. A study of training and conditioning for the team and individual. Techniques and procedures for emergencies: diagnostic, preventive, and remedial measures. Organization of the training room facility. (Formerly HPE 3303 and KAH 3303. Credit cannot be earned for both KIN 3303 and either HPE 3303 or KAH 3303.)
- 3313 Anatomic Kinesiology**
(3-0) 3 hours credit.
Study of the systems of the human body that cause movement and motion. The science of kinesiology involves basic musculoskeletal concepts, applied myology, and the application of kinesiology theory. (Formerly AHS 3113. Credit cannot be earned for both KIN 3313 and AHS 3113.)
- 3323 Biomechanics**
(2-2) 3 hours credit. Prerequisite: KIN 3313.
The study of the human body in sports motion and sport objects in motion. The application of mechanical principles, kinematics, and kinetics.
- 3413 Tactics**
(3-0) 3 hours credit.
Administration of games, sports, and physical fitness activities for the adolescent through adulthood. Some fieldwork experience may be required. (Formerly HPE 3413 and KAH 3413. Credit cannot be earned for both KIN 3413 and either HPE 3413 or KAH 3413.)
- 3443 Exercise Prescription**
(3-0) 3 hours credit.
Analysis of the nature of physical fitness, basic principles and concepts of exercise and fitness, and the development and implementation of individually prescribed exercise training programs. An individual fitness requirement is mandatory for passing the course. (Formerly HPE 3443 and KAH 3443. Credit cannot be earned for both KIN 3443 and either HPE 3443 or KAH 3443.)

- 4103 Motor Development**
(3-0) 3 hours credit.
A study of motor, physical, and neuromuscular development across the human life span. Effects of social, cognitive, growth and maturation, and aging factors on motor development will be addressed. Some fieldwork experience may be required.
- 4113 Evaluation**
(3-0) 3 hours credit.
Application of test, measurement, and evaluation theory. Emphasis is on proper selection and administration of tests and appropriate evaluation of test results using basic statistical procedures. (Formerly HPE 4113 and KAH 4113. Credit cannot be earned for both KIN 4113 and either HPE 4113 or KAH 4113.)
- 4123 Psychosocial Aspects of Exercise and Sport**
(3-0) 3 hours credit. Prerequisite: KIN 2303.
A study of human behavior in exercise and sport. Motivation in sport, performance enhancement, sport personalogy, exercise adherence, and cognitive and affective effects of exercise.
- 4143 Advanced Athletic Training**
(2-2) 3 hours credit. Prerequisite: KIN 3303.
This course deals in depth with issues related to athletic training, including rehabilitation, the use of modalities, and various taping and wrapping techniques, along with hands-on evaluations. A two-hour lab will accompany this class. Lab fee will be assessed.
- 4343 Movement Awareness**
(3-0) 3 hours credit.
Study of concepts of movement awareness and the elements of movement that are the basis of all movement capacities. Application of these concepts to the learning of motor skills will be included. (Formerly HPE 4343 and KAH 4343. Credit cannot be earned for both KIN 4343 and either HPE 4343 or KAH 4343.)
- 4403 Motor Learning**
(3-0) 3 hours credit. Prerequisite: KIN 4113.
Functional applications of motor control and learning theory in skill instruction and sports performance. Motor learning laboratory required. Lab fee will be assessed. (Formerly HPE 4403 and KAH 4403. Credit cannot be earned for both KIN 4403 and either HPE 4403 or KAH 4403.)
- 4413 Coaching Athletics**
(3-0) 3 hours credit.
Theory of coaching relevant to athletics. Emphasis on organization and content involved in coaching a variety of sports. (Formerly HPE 4413 or KAH 4413. Credit cannot be earned for both KIN 4413 and either HPE 4413 or KAH 4413.)

- 4423 Developmental/Adaptive Physical Activity**
(3-0) 3 hours credit.
A developmental approach to the study of disabilities in physical activity. Legislation, pathologies, and adaptation principles. Class field trips required. (Formerly HPE 4423 or KAH 4423. Credit cannot be earned for both KIN 4423 and either HPE 4423 or KAH 4423.)
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) from the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4936 Internship in Kinesiology**
6 hours credit. Prerequisite: Consent of instructor.
Supervised internship with appropriate agency in the field of kinesiology and sport management.
- 4941 Practicum in Kinesiology**
1 hour credit. Prerequisite: Consent of instructor.
Supervised practicum with appropriate agency in the field of kinesiology. May be repeated for credit to a maximum of 6 semester credit hours.
- 4953 Special Studies**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

COURSE DESCRIPTIONS READING (RDG)

- 0011 Reading Review**
(1-0) 1 hour credit.
Individualized instruction to help students succeed at reading university-level materials. Students receive focused guidance on developing specific strategies that improve performance, including determining word meaning, understanding main ideas, identifying the writer's purpose, and using critical reasoning and study skills. Course does not count toward any degree at UTSA.

0013 Reading Improvement

(3-0) 3 hours credit.

Practical instruction in strategies for improving reading of university-level materials. Strategies developed include determining word meanings; understanding main ideas and supporting details; identifying the writer's purpose, point of view, and intended meaning; analyzing relationships among ideas; using critical reasoning when reading; and study skills. Course does not count toward any degree at UTSA.

3703 Introduction to Developmental Reading

(3-0) 3 hours credit.

An overview of the development of reading across the grades. Special emphasis is placed on how reading is learned and taught from kindergarten through eighth grade. The course focuses on teaching techniques for developing oral and written language facility, word identification, and comprehension in readers of various sociocultural backgrounds and abilities, and addresses the issue of classroom assessment of reading.

3713 Introduction to Content Area Reading—Elementary

(3-0) 3 hours credit. Prerequisite: RDG 3703.

Study of the learning and teaching of reading in the various content areas of the elementary school. The course considers the range of reading abilities of elementary students, texts used in elementary schools, and strategies for teaching and evaluating vocabulary, comprehension, and thinking skills in the elementary content areas.

3723 Children's and Adolescent Literature

(3-0) 3 hours credit.

Study of written and oral literature for children and adolescents from the combined perspectives of literary and child-adolescent development. The history and development of children's and adolescent books are stressed, as well as genres, elements, and devices found in the literature. Such factors are discussed in light of the learner's social and cognitive development.

3733 Reading Problems

(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.

Study of intellectual, psycholinguistic, neuropsychological, affective, and social factors related to difficulty in decoding and comprehending written text. Attention is also given to a variety of means for assessing literacy achievement and skill and to how reading problems can be addressed. Thirty hours of directed field experience in elementary and middle school classrooms are required.

3743 Language, Literacy, and Culture

(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.

Considers language development, first- and second-language reading and writing processes, the role of culture and ethnicity, social and regional language variation, socioeconomic factors, and linguistic and cultural diversity as they relate to literacy in various communities and school settings.

- 3753 Oral Language and Reading**
(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.
Study of the relations between oral language and reading. Topics include sound-symbol relations and the reading process, dialect and reading, second-language learning and reading, and relations between oral and written discourse.
- 3763 Reading and Studying as a Cognitive Process**
(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.
Examines reading as a cognitive process and its role in study practices in school. Considers attitude and motivational factors, text types and study, use of outlines, note-taking, summary writing, synthesis, and critical thinking and analysis. Cognitive processes, memory, metacognitive strategies, and test-taking skills are addressed.
- 3773 Introduction to Content Area Reading—Secondary**
(3-0) 3 hours credit.
Study of the reading process and of materials and techniques for teaching reading in the secondary school. Considers the range of reading ability of secondary students, texts used, and strategies for teaching vocabulary, word recognition, comprehension, and learning in a variety of content areas. Attention is given to diagnosis and treatment of reading difficulties at the secondary school level.
- 4103 Reading Comprehension**
(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.
Study of the reading comprehension process, including how various textual, reader-based, and contextual factors affect the understanding of written text and how reading comprehension can be maximized. Twenty hours of directed field experience in elementary and middle school classrooms are required.
- 4113 Relationships between Reading and Writing**
(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.
Examines how knowledge of written language and the writing process can help individuals become more effective readers and writers. Focuses on the role of author-reader relationships, audience, text structure, purpose, and meaning across reading-writing situations.
- 4123 The Social Psychology of Literacy**
(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.
Social and sociolinguistic factors that influence speaking, reading, and writing in various social situations are considered. Attention is given to adult-child interaction, peer groups, discourse community, school organization, and student and teacher expectations, beliefs, and values about learning and teaching.

4133 Critical Issues in Reading Research

(3-0) 3 hours credit. Prerequisites: RDG 3703 and 3713.

Examines issues critical to the field of reading and reading education using a special topics format. Critical research issues, including such themes as text processing, text response and interpretation, beginning reading, and assessment of literacy learning will be addressed, as well as new research measures and implications of research findings for educational theory and practice.

4913 Independent Study

3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4953 Special Studies in Reading

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

Minor in Youth and Human Services

The Minor in Youth and Human Services provides the opportunity to prepare for leadership positions in youth and human service nonprofit agencies. In addition to the formal courses, students minoring in youth and human services are expected to actively participate in the Youth and Human Services Student Organization, an integral part of their training.

All students pursuing a Minor in Youth and Human Services must complete 22 semester credit hours.

ACC	2003	Foundations of Accounting
		or
ACC	2013	Accounting Principles I
MGT	3803	Strategic Management of Nonprofit Organizations
MKT	3013	Principles of Marketing
YHS	1003	Introduction to Youth and Human Service Agencies
YHS	3003	Fundraising in Not-for-Profit Agencies
YHS	4901	American Humanics Management Institute
YHS	4933	Internship in Youth and Human Services
		or
YHS	4936	Internship in Youth and Human Services

To declare a Minor in Youth and Human Services, obtain advice, obtain lists of relevant courses, or seek approval of substitutions for course requirements, students should consult the coordinator of the Youth and Human Services Program located in the Division of Education.

COURSE DESCRIPTIONS YOUTH AND HUMAN SERVICES (YHS)

- 1003 Introduction to Youth and Human Service Agencies**
(3-0) 3 hours credit.
An overview of the historical background, development, role, auspices, organization, and purposes of youth and human service not-for-profit agencies. Special emphasis is placed on structure, program, financing, policies, and problems that confront these organizations.
- 3003 Fundraising in Nonprofit Agencies**
(3-0) 3 hours credit.
Examines methods, techniques, and directed experience in fundraising for youth and human service not-for-profit agencies. Explores relationships with umbrella organizations, government funding, grantsmanship, budget control, and accountability.
- 4901 American Humanics Management Institute**
1 hour credit.
A one-hour course requiring students to pay their own expenses to attend one American Humanics Management Institute. May be repeated once for credit.
- 4933 Internship in Youth and Human Services**
3 hours credit. Prerequisite: Approval of youth and human services coordinator.
Supervised experience relevant to youth and human services within selected youth and human service not-for-profit agencies. May be repeated for credit, but not more than 6 semester credit hours may be earned through the internship.
- 4936 Internship in Youth and Human Services**
6 hours credit. Prerequisite: Approval of youth and human services coordinator.
Supervised experience relevant to youth and human services within selected youth and human service not-for-profit agencies.

COURSE DESCRIPTIONS AMERICAN SIGN LANGUAGE (ASL)

- 1013 American Sign Language: Basic I**
(3-0) 3 hours credit.
A study of American Sign Language, including basic concepts and sign lexicon. Grammatical features, including structure of American Sign Language, will be stressed. Each student will be expected to demonstrate to the instructor basic expressive and receptive ASL skills and demonstrate in writing basic knowledge of ASL grammar rules.
- 1023 American Sign Language: Basic II**
(3-0) 3 hours credit. Prerequisite: ASL 1013 or consent of instructor.
Continued study of American Sign Language including sign language colloquialisms used in conversational signing. Expands students' receptive and expressive ASL skills and provides a summary of information currently available dealing with ASL grammatical structure and its sociolinguistic and pragmatic usage.
- 2013 American Sign Language: Intermediate I**
(3-0) 3 hours credit. Prerequisites: ASL 1013 and 1023, or consent of instructor.
This course is designed to help students improve their expressive, receptive, and general conversational ASL proficiency, particularly in phonology, morphology, semantics, syntax, lexicon, and discourse. Students will demonstrate their use of ASL for interactive purposes.
- 2023 American Sign Language: Intermediate II**
(3-0) 3 hours credit. Prerequisites: ASL 1013, 1023, and 2013, or consent of instructor.
This course is designed to further extend students' use of ASL skills for communicating with persons who are deaf or hard of hearing. Expands accuracy in using expressive and receptive skills. Students will encode and decode ASL forms related to a variety of topics and situations.

DIVISION OF SOCIAL AND POLICY SCIENCES

The Division of Social and Policy Sciences offers Bachelor of Arts degrees in Criminal Justice, Geography, Political Science, and Sociology. The division also offers Minors in Geography, Political Science, Sociology, International Studies, Legal Studies, Aerospace Studies, and Public Administration.

At least 30 semester credit hours of coursework are required to fulfill a social and policy sciences major. The 30-hour total is considered a minimum, and students are encouraged to deepen and broaden their control of their field through careful allocation of some of their elective semester credit hours.

All social and policy sciences degrees require the student to complete at least 6 semester credit hours of support work. These courses, which require advance approval from the advisor, should serve to introduce the student to aspects of the social sciences in addition to those entailed in the coursework within the student's major discipline.

INTERNSHIP STUDY

Majors in the Division of Social and Policy Sciences may apply 3 or 6 semester credit hours of internship study to their baccalaureate program. Internship entails supervised experience, usually within selected organizations in the San Antonio area. Placement is arranged by the internship coordinator of the Division of Social and Policy Sciences. Supervision and grading of the internship experience is normally done by division faculty members. Students from majors other than the social sciences are welcome to participate but should consult with their faculty advisors regarding the role of the internship within their own degree programs. Further information can be obtained from the internship coordinator.

DIVISION HONORS

The Division of Social and Policy Sciences awards Division Honors to certain of its outstanding students and provides the opportunity for advanced study under close faculty supervision.

Selection for honors designation is based on the student's academic performance and recommendation by the faculty of the student's major discipline. To be eligible for the program, students must have a minimum grade-point average of 3.0 overall at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students applying for Division Honors are expected to enroll in the appropriate honors thesis course during their final two semesters. The completed thesis must be approved by the supervising faculty sponsor and another divisional faculty member. Students interested in this program should contact their faculty advisors for additional information.

Bachelor of Arts Degree in Criminal Justice

The Bachelor of Arts degree in Criminal Justice is intended to provide the opportunity for a comprehensive study of criminal justice, with emphases in law enforcement,

corrections—juvenile justice, legal studies, or security management. Students completing the degree may pursue professional careers in government or the private sector as well as apply for admission to law or graduate schools.

The minimum number of semester credit hours required for this degree, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level. The criminal justice major, through consultation with faculty advisors, should choose elective courses within the Core Curriculum requirements that will develop a fundamental awareness of the complex social and cultural issues in contemporary American society.

All candidates for the degree must complete the following:

A. 30 to 33 semester credit hours of criminal justice coursework:

1. 15 semester credit hours of core courses:

CRJ	1113	The American Criminal Justice System
CRJ	2153	Nature of Crime and Justice
CRJ	3013	Research Methods in Criminal Justice
CRJ	3213	Administrative Organization
CRJ	3623	Substantive Criminal Law or
CRJ	4633	Criminal Procedure

2. 3 semester credit hours of policy studies selected from the following:

CRJ	4313	Minorities and Women in the Criminal Justice System
CRJ	4453	Drugs, Drug Laws, and Crime
CRJ	4643	Organized Crime
CRJ	4653	White-Collar Crime
CRJ	4753	Criminal Justice Policymaking
CRJ	4853	Sex Crimes and the Law

3. 9 semester credit hours from one of the following areas of emphasis:

Law Enforcement

CRJ	2213	Introduction to Policing
CRJ	3233	Introduction to Forensic Science
CRJ	4123	Concepts of Investigation
CRJ	4413	Contemporary Police Practices
CRJ	4423	Issues in Law Enforcement Administration

Corrections—Juvenile Justice

CRJ	2513	Corrections: Theory and Practice
CRJ	3533	Correctional Alternatives
CRJ	3563	Juveniles and the Law

CRJ	4573	Correctional Administration
CRJ	4613	Correctional Counseling and Services
CRJ	4623	Special Correctional Populations

Legal Studies

CRJ	2813	Introduction to Courts and the Legal System
CRJ	3603	Paralegal Management Practices
CRJ	3613	Legal Research and Writing
CRJ	3623	Substantive Criminal Law (if not used to fulfill core requirements)
CRJ	3633	Trial and Evidence
CRJ	4633	Criminal Procedure (if not used to fulfill core requirements)
CRJ	4823	Judicial Administration

Security Management

CRJ	2163	Introduction to Security Management
CRJ	3193	Security Management Practices
CRJ	4213	Legal Issues in Security Management
CRJ	4733	Intelligence Programs and National Security

4. 3 or 6 semester credit hours of CRJ 4933-6 Internship in Criminal Justice taken in consultation with the student's faculty advisor. 3 or 6 semester credit hours of appropriate upper-division coursework may be taken in lieu of the internship if a student has documented equivalent employment in a criminal justice position.
- B. 15 semester credit hours of upper-division electives chosen in consultation with the student's advisor
- C. 24 semester credit hours of electives

**COURSE DESCRIPTIONS
CRIMINAL JUSTICE
(CRJ)**

- 1113 The American Criminal Justice System**
(3-0) 3 hours credit.
Philosophy and history of criminal justice in America; examination of criminal justice agencies operating as an interacting system: police and security agencies, courts, and corrections. (Formerly CRJ 2113. Credit cannot be earned for both CRJ 1113 and CRJ 2113.) [TCCN: CRIJ 1301.]

- 2153 Nature of Crime and Justice**
(3-0) 3 hours credit.
A multidisciplinary survey of positivism and classical theories of crime causation with an overview of major crime control strategies. Incidence and patterns of violent, economic, and public-order crimes may be explored. (Formerly CRJ 3153. Credit cannot be earned for both CRJ 2153 and CRJ 3153.)
- 2163 Introduction to Security Management**
(3-0) hours credit.
Survey of security management in business, industry, and government; issues affecting the relationship between publicly funded law enforcement and the private sector; theory of public and private protection responsibilities. (Formerly CRJ 3163. Credit cannot be earned for both CRJ 2163 and CRJ 3163.)
- 2213 Introduction to Policing**
(3-0) 3 hours credit.
An introduction to the history of law enforcement, contemporary policing practices and technologies, and important trends in law enforcement. [TCCN: CRJ 2328.]
- 2513 Corrections: Theory and Practice**
(3-0) 3 hours credit.
A study of the history, philosophy, and practice of corrections in America. Theories and practices of incarceration; legal and administrative issues surrounding imprisonment and the death penalty. (Formerly CRJ 3513. Credit cannot be earned for both CRJ 2513 and CRJ 3513.) [TCCN: CRJ 2313.]
- 2813 Introduction to Courts and the Legal System**
(3-0) 3 hours credit.
Examines state and federal American court systems, their powers, remedies, limitations, and procedures, and the contributions of courts to governance. (Formerly CRJ 4813. Credit cannot be earned for both CRJ 2813 and CRJ 4813.) [TCCN: CRJ 1306.]
- 3003 Criminal Justice Foundations**
(3-0) 3 hours credit.
A course designed for new criminal justice majors to orient them to central themes in criminal justice, to encourage critical, ethical, and systematic thinking, to develop note-taking and communication skills, to offer training in library research and report preparation, and to stimulate interest in careers and professionalism in justice delivery organizations.
- 3013 Research Methods in Criminal Justice**
(3-0) 3 hours credit. Prerequisite: Completion of Core Curriculum requirement in mathematics.
Provides students with an opportunity to be knowledgeable consumers of criminal justice research. Provides an overview of principles of scientific inquiry, research designs, and statistical concepts and techniques.

Introduction to interpretation of data analysis and preparation of research reports. (Formerly SSC 3013. Credit cannot be earned for both CRJ 3013 and SSC 3013.)

3193 Security Management Practices

(3-0) 3 hours credit.

A study of the application of physical, personnel, and information security practices. Theory and application of physical protection, employee integrity programs, and information control measures. Management perspectives on security program planning, integration, and implementation.

3213 Administrative Organization

(3-0) 3 hours credit. Prerequisite: CRJ 1113 or an equivalent.

Theories and applications in the study of criminal justice organizations. Examination of traditional and innovative approaches to justice delivery in public and private agencies.

3233 Introduction to Forensic Science

(3-0) hours credit. Prerequisite: Completion of CRJ 1113 or an equivalent.

This course examines the nature of physical evidence and its part in our criminal justice system, basic scientific and legal principles involved with the utilization of physical evidence, and exposure to specific items of physical evidence to include their components, manufacture, methods of analysis, and value in case work. (Formerly CRJ 3133. Credit cannot be earned for both CRJ 3233 and CRJ 3133.)

3533 Correctional Alternatives

(3-0) 3 hours credit.

A study of probation, parole, and other community-based correctional programs. Examines policies and procedures, methods of selection and prediction, management and supervision styles, and evaluative research on their effectiveness.

3563 Juveniles and the Law

(3-0) 3 hours credit.

This course focuses on the needs and problems of neglected and dependent youth, status offenders, and delinquents in the justice system. The course will survey the history and philosophy of juvenile justice, judicial processing of juveniles, and dispositional alternatives for youthful offenders. (Formerly CRJ 3543. Credit cannot be earned for both CRJ 3563 and CRJ 3543.)

3603 Paralegal Management Practices

(3-0) 3 hours credit.

Examines the role and function of paralegal management practices in a variety of organizational settings. Integration of theory and practice is emphasized.

- 3613 Legal Research and Writing**
(3-0) 3 hours credit.
Detailed study of theory and practice of legal research. Development and refinement of legal writing techniques.
- 3623 Substantive Criminal Law**
(3-0) 3 hours credit. Prerequisite: CRJ 1113 or an equivalent.
Jurisprudential philosophy and case study of common law and statutory crimes. Includes functions and development of substantive criminal law, elements of specific offenses, and defenses.
- 3633 Trial and Evidence**
(3-0) 3 hours credit.
Issues and problems of proof in civil and criminal trials, admissibility, examining witnesses, constitutional considerations, and exclusionary rules.
- 4123 Concepts of Investigation**
(3-0) 3 hours credit. Prerequisite: CRJ 3233 or consent of instructor.
Examination of theories and practices of the investigation process in the criminal justice system; specific operational techniques; and application of innovative techniques.
- 4213 Legal Issues in Security Management**
(3-0) 3 hours credit. Prerequisite: CRJ 2163 or consent of instructor.
A comprehensive study of the legal issues affecting the management and operations of private and government security organizations (e.g., premises liability and other tort issues, employee dismissals for cause, intellectual property theft, arrest/detention and search actions, private use of force, guard force contracting, truth verification practices, and national security).
- 4313 Minorities and Women in the Criminal Justice System**
(3-0) 3 hours credit.
Study of the special problems faced by cultural minorities and women in the criminal justice system.
- 4413 Contemporary Police Practices**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An examination of the emergence of broad-based crime prevention and problem-solving methods, with an emphasis on "values driven" management practices and the evolution of a new partnership between the police and the community.
- 4423 Issues in Law-Enforcement Administration**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
The major issues confronting law-enforcement administration are examined, including those related to personnel, technological change, manpower usage, civil liability, and programs designed to improve the delivery of law-enforcement services.

- 4453 Drugs, Drug Laws, and Crime**
(3-0) 3 hours credit.
Study of major categories of controlled and abused substances, the effects of consumption, the historical emergence of substance control policies and the “drug war.” Examination of the externalities and trends in drug-control policies, drug-related crimes, and future social control strategies in the United States.
- 4573 Correctional Administration**
(3-0) 3 hours credit. Prerequisite: CRJ 2513, 3213, or an equivalent.
An examination of the administrative, organizational, and management issues affecting agencies that provide institutional and field supervision of adult offenders. Review of current theoretical, legal, social, and operational trends, including privatization, crowding, the role of public policy objectives, constitutional and professional standards for operation, and liability of corrections personnel.
- 4613 Correctional Counseling and Services**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
The role and techniques of counseling and interviewing in correctional programs. Study of service delivery programs tailored to the specific needs of the correctional clients. Recommended for all students who plan to engage in the counseling, advising, and interviewing of offenders, victims, or justice system employees.
- 4623 Special Correctional Populations**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An examination of distinct offender subgroups, including mentally ill, developmentally delayed, drug-addicted, and HIV-infected offenders, who present special treatment, management, or policy-related concerns in corrections settings. The course will also explore the needs of female and aged offenders.
- 4633 Criminal Procedure**
(3-0) 3 hours credit. Prerequisite: CRJ 3623 or consent of instructor.
A procedurally oriented discussion of criminal law, including law of arrest, search and seizure, preliminary examination, bail, the grand jury, indictment and information, arraignment, trial, and review.
- 4643 Organized Crime**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Study of the development of organized crime; social and legal definitions; theories and research on factors sustaining organized and conspiratorial crimes; containment strategies. Federal, state and global responses to organized crime; links with white-collar crime. (Formerly CRJ 4713. Credit cannot be earned for both CRJ 4643 and CRJ 4713.)

- 4653 White-Collar Crime**
(3-0) 3 hours credit.
Study of the theory, nature, scope, and impact of occupational, political, and organizational and corporate crime. Comparison of white-collar crime to street crime. Examination of the structural foundations for these types of crimes. The current and future social control systems for control of white-collar crimes. (Formerly CRJ 4713. Credit cannot be earned for both CRJ 4653 and CRJ 4713.)
- 4723 The Media and Criminal Justice**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Impact of radio, television, motion pictures, records, books, and newspapers on the public's perception of criminal justice media images of events, conditions, and people associated with the criminal justice system.
- 4733 Intelligence Programs and National Security**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Examines a wide range of issues concerning intelligence and national security.
- 4743 Crime in Fiction**
(3-0) 3 hours credit.
An examination of fictional characterizations of crime and justice, fictional applications of social science methodologies, and concerns for social conditions and crime through such authors as Chekhov, Dickens, Dostoyevsky, Norris, Puzo, Twain, Wright, Wambaugh, and others.
- 4753 Criminal Justice Policymaking**
(3-0) 3 hours credit.
Examines the response of law and the justice system to crime and violence. Emphasis is given to the origins, incentives, conditions, organizations, initiatives, and outcomes involved in criminal justice policymaking.
- 4763 Great Controversies in American Justice**
(3-0) 3 hours credit.
An intensive study of major legal and social controversies in American justice, both historical and contemporary. Emphasis is given to matching concepts, theories, and models of justice with factual events, laws, administrative decisions and policies, and judicial holdings.
- 4803 Advanced Studies in Law, Courts, and the Legal System**
(3-0) 3 hours credit. Prerequisites: Upper-division standing and CRJ 2813 or consent of the instructor.
Readings from fiction, history, sociology, and anthropology that illuminate English Common Law and its American adaptations. Judicial selection and tenure. Supreme Court process, the links between judicial review and judicial restraint, and the role of the judiciary in creating as well as reflecting social change. May address contemporary controversies before the courts. This course contains a substantial writing requirement.

- 4823 Judicial Administration**
(3-0) 3 hours credit.
Examination of the role of state courts in the criminal justice system. Topics may include sources and limitations of state judicial administration, relations between state and federal courts, administrative reorganization of state courts, court finances, major court services, and the future of state courts. Special attention will be given to state courts of Texas.
- 4833 Violent Crime**
(3-0) 3 hours credit.
Examination of crimes of personal violence, focusing on homicide, robbery, assault and rape. Discussion of major theories of violent personal behavior and examination of historical and current data on violent crime. Consideration of rates of violent crime, how these rates have changed, and factors that contribute to violent crimes.
- 4853 Sex Crimes and the Law**
(3-0) 3 hours credit
Examination of the nature and etiology of the major categories of sexual offending and overview of contemporary justice system responses.
- 4913 Independent Study**
3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in Criminal Justice**
3 or 6 hours credit. Prerequisites: CRJ 2153; CRJ 3213 and either 3623 or 4633; at least one course in area of emphasis; consent of academic advisor and internship coordinator.
Supervised experience in an administrative setting that provides the opportunity to integrate theory and practice in criminal justice agencies. May be repeated for credit when agency setting varies, but no more than 6 semester credit hours will apply to a bachelor's degree.
- 4953 Special Studies in Criminal Justice**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but no more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4993 Honors Thesis

3 hours credit. Prerequisites: Enrollment limited to candidates for Honors in Criminal Justice during their last two semesters; completion of honors examination and approval by the honors program coordinator. Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

Bachelor of Arts Degree in Geography

The minimum number of semester credit hours required for the Bachelor of Arts degree in Geography, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 33 semester credit hours in the major, 24 of which must be at the upper-division level:

1. 15 semester credit hours:

9 required semester credit hours:

GRG	2613	Physical Geography
GRG	2623	Human Geography
GRG	3323	Spatial Analysis

6 additional semester credit hours selected from the following:

GRG	3113	Geography of the United States and Canada
GRG	3123	Geography of Latin America
GRG	3133	Geography of Europe
GRG	3143	Geography of Mexico
GRG	3153	Geography of Texas

2. 18 additional semester credit hours of geography electives chosen in consultation with the student's advisor. A maximum of 6 of these hours, as approved by student's advisor, may be applied to the major from selected courses in the following three areas:

Urban and economic studies
International studies
Earth science and resources

B. 6 semester credit hours of courses in the social sciences outside the major, chosen with the consent of the advisor

C. 30 semester credit hours of electives

Minor in Geography

All students pursuing the Minor in Geography must complete 18 semester credit hours.

A. 6 semester credit hours of courses in core concepts and regions:

GRG	1013	Fundamentals of Geography
GRG	1023	World Regional Geography

B. 3 semester credit hours of upper-division regional geography selected from the following:

GRG	3113	Geography of the United States and Canada
GRG	3123	Geography of Latin America
GRG	3133	Geography of Europe
GRG	3153	Geography of Texas

C. 9 semester credit hours of upper-division electives in geography

To declare a Minor in Geography, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Social and Policy Sciences.

COURSE DESCRIPTIONS GEOGRAPHY (GRG)

- 1013 Fundamentals of Geography**
(3-0) 3 hours credit.
Introduction to the study of physical and cultural features of the earth and their distributions, causes, and consequences to man. Topics include landforms, climate, natural resources, population, human behavior in spatial context, economic growth, and urbanization.
- 1023 World Regional Geography**
(3-0) 3 hours credit.
Study of the world's regions, focusing on salient physical, cultural, economic, and political characteristics, including physiography, climate, natural resources, population, economic structure and development, urban growth, cultural institutions, and political structure. Regions include North America, Latin America, Europe, Middle East/North Africa, Sub-Saharan Africa, South Asia, East Asia, the former USSR, and Australasia. (Formerly GRG 2633. Credit cannot be earned for both GRG 1023 and GRG 2633.) [TCCN: GEOG 1303.]
- 2613 Physical Geography**
(3-0) 3 hours credit.
Study of the earth's major landforms and climatic patterns, the processes giving use to these patterns, and their relationship to human activity. [TCCN: GEOG 1301.]

- 2623 Human Geography**
(3-0) 3 hours credit.
Study of the relationship between the social and spatial structures of society, including spatial stereotyping, spatial perception, human territoriality, innovation diffusion, migration, and spatial planning. [TCCN: GEOG 1302.]
- 3113 Geography of the United States and Canada**
(3-0) 3 hours credit.
Selected geographic aspects of the major regions of the United States and Canada, emphasizing current social and economic issues in these regions.
- 3123 Geography of Latin America**
(3-0) 3 hours credit.
Selected geographic aspects of Mexico, Central America, the West Indies, and South America, emphasizing economic development and social change.
- 3133 Geography of Europe**
(3-0) 3 hours credit.
Survey of the European culture area, including Western Europe, Eastern Europe, and the Baltics. Discussion of urban, political, ethnic, and economic forces shaping the post-Cold War geography of Europe, including the European Union and the Russian Federation.
- 3143 Geography of Mexico**
(3-0) 3 hours credit.
Investigation of Mexico's physical and social geography, including climatic and geomorphologic influences, the historical imprint of the Amerindians and the Spanish, population growth and migration, urbanization, patterns of agriculture and industry, and current social and economic issues.
- 3153 Geography of Texas**
(3-0) 3 hours credit.
An analysis of the physical, economic, and cultural patterns of Texas as they vary across the state's geographic regions. Examines physical and settlement patterns, changes in patterns of agriculture, and manufacturing, population, and regional growth issues.
- 3213 Cultural Geography**
(3-0) 3 hours credit.
Study of human culture hearths, the distribution of languages and religion, environmental perception, environmental determinism, and human settlement patterns.
- 3313 Cartography and Geographic Information Systems**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
The design, construction, and reproduction of maps; cartographic theory, computer cartography, and an introduction to Geographic Information Systems.

- 3323 Spatial Analysis**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Conceptualization and statistical analysis of spatial variables. Topics may include the scientific method in the social sciences, research design, spatial sampling, spatial pattern analysis, and the univariate and multivariate analysis of areal data.
- 3513 Urban Geography**
(3-0) 3 hours credit.
Topics include the relationship between the physical environment and urbanization; the origin and evolution of cities; urban hierarchies; models of internal structure; and land uses in American, Third World, and other urban centers.
- 3523 Introduction to Urban Planning**
(3-0) 3 hours credit.
An introduction to the nature, use, purpose, and preparation of a master plan for the future physical growth and development of a community. The course focuses on the planning process by which a city prepares and implements its master plan. (Formerly URB 3723. Credit cannot be earned for both GRG 3523 and URB 3723.)
- 3533 Geography of Economic Activity**
(3-0) 3 hours credit.
Analysis of the location of economic activities at local, regional, and national levels. Agricultural, industrial, retail, and service locations are discussed, using locational theoretic models and illustrated by local case studies.
- 3613 Conservation of Resources**
(3-0) 3 hours credit.
A survey of world resources, environmental policies, and global conservative strategies. Topics include agriculture, water resources, air pollution, endangered species, wildlife preservation, habitat conservation, scenic and recreational resources, and other selected components of the biosphere and lithosphere.
- 3633 Geography of Development**
(3-0) 3 hours credit.
Survey and analysis of economic growth and social change in different parts of the world. Topics may include the evolution of global inequalities, the definition of development, the impacts of population growth and migration, and the role of agriculture, industry, and transportation.
- 3643 Political Geography**
(3-0) 3 hours credit.
Investigates the role of the political state in society and the evolution of state organization from classical times to the present. Topics may include centrifugal and centripetal forces, geopolitics, territorial morphology, boundaries, core areas, and emerging supranationalism.

- 3653 Geographic Perspectives on Women**
(3-0) 3 hours credit.
The course studies the role of women in the spatial organizations of society. Of particular importance is the substantial gender differences in the perception of the physical, social, and built environments, and the consequent policy expressions in the political and built environment.
- 3713 Weather and Climate**
(3-0) 3 hours credit.
Analysis of the elements and causes of daily weather, climatic classifications, and climate change. Study of world distributions and components of climate, with studies of air pressure, precipitation, air masses, optical phenomena, and wave cyclones. Regional attention to weather patterns, including tornadoes and hurricanes.
- 3733 Urban and Regional Analysis**
(3-0) 3 hours credit.
Applied models of urban and regional growth, structure, interaction, influence, and inequality over space, with emphasis on the United States. Stresses practical skills.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in Geography**
3 or 6 hours credit. Prerequisite: Consent of internship coordinator and faculty supervisor.
Supervised experience relevant to geography within selected community organizations. A maximum of 6 semester credit hours may be earned through the internship.
- 4953 Special Studies in Geography**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4993 Honors Thesis**
3 hours credit. Prerequisites: Enrollment limited to candidates for Honors in Geography during their last two semesters; completion of honors examination and approval by the honors program coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

Bachelor of Arts Degree in Political Science

The minimum number of semester credit hours required for the Bachelor of Arts degree in Political Science, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

A. 33 semester credit hours in the major, 21 of which must be at the upper-division level. Courses must be selected in the following manner:

1. 6 semester credit hours of courses selected from the following:

POL	2503	Introduction to Political Theory
POL	2513	Public Administration and Public Policy
POL	2533	Introduction to Political Science
POL	2603	International Politics
POL	2623	Law and Society
POL	2633	Comparative Politics

2. POL 2703 Scope and Methods of Political Science

3. 18 semester credit hours of political science electives, 15 of which must be at the upper-division level, with at least 3 hours in each of the following areas:

American politics
 Political theory
 Comparative politics or international relations
 Public administration or public law

With advisor approval, a maximum of 6 semester credit hours may be applied to the major from the following disciplines: economics, history, sociology, and social science.

4. 3 semester credit hours of social science courses

5. One senior-level seminar selected from the following:

POL	4153	Seminar in Jurisprudence
POL	4973	Seminar in Political Science
Approved section of POL 4953 Special Studies in Political Science		

B. 6 semester credit hours of courses in the social sciences outside the major, chosen with consent of the advisor

C. 30 semester credit hours of electives

Public Administration Emphasis: Students interested in a public administration emphasis within the political science major should consult with their faculty advisor concerning specific course requirements and scheduling.

Minor in Political Science

All students pursuing the Minor in Political Science must complete 18 semester credit hours, 12 of which must be upper-division.

A. 6 semester credit hours of lower-division courses selected from the following:

POL	2503	Introduction to Political Theory
POL	2513	Public Administration and Public Policy
POL	2533	Introduction to Political Science
POL	2603	International Politics
POL	2623	Law and Society
POL	2633	Comparative Politics

B. 12 upper-division semester credit hours. Students must take at least one upper-division class in three of the six subfields:

American Politics

POL	3083	Ethnic Politics in the United States
POL	3093	Mexican American Politics
POL	3233	Political Campaigns and Elections
POL	3243	Mass Media and Public Opinion
POL	3283	The American Presidency
POL	3313	The American Federal System
POL	3363	Political Parties and Interest Groups
POL	3373	The Legislative Process
POL	3413	The Politics of Urban Development
POL	3723	Ethics in Government

Public Administration

POL	3603	Public Policy Formulation and Implementation
POL	3613	Public Budgeting and Taxation
POL	3623	Public Policy Evaluation
POL	3703	Personnel Administration in the Public Sector
POL	3713	Comparative Systems of Public Administration
POL	3733	Urban Human Resources Policy
POL	4323	Administrative Law

Public Law

POL	3223	Judicial Politics
POL	3323	Constitutional Law
POL	4153	Seminar in Jurisprudence
POL	4323	Administrative Law

International Politics

POL	3483	Politics of the International Economy
POL	3503	American Foreign Policy since World War II

POL	3513	International Organizations
POL	3523	Force in International Politics
POL	3543	Russian Foreign Policy

Comparative Politics

POL	3343	Communism and Post-Communism
POL	3393	Latin American Politics
POL	3403	European Politics
POL	3423	Politics in Russia and the Post-Soviet States
POL	3443	Governments and Politics of East Asia
POL	3453	The Politics of Mexico
POL	3463	Politics of the Third World
POL	3473	Theories and Problems in Latin American Politics
POL	3493	Politics of the Middle East

Political Theory

POL	3103	Political Ideology
POL	3113	American Political Theory
POL	3133	Political Philosophy: Ancient and Medieval
POL	3143	Political Philosophy: Modern
POL	3153	Political Philosophy: Contemporary
POL	3333	Political Power

Internship hours cannot count toward the minor.

To declare a Minor in Political Science, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Social and Policy Sciences.

COURSE DESCRIPTIONS POLITICAL SCIENCE (POL)

- 1013 Introduction to American Politics**
(3-0) 3 hours credit.
A broad survey of the basic elements of American and Texas politics. Attention is given to the normative and Constitutional foundations of the political culture, the development of major governmental institutions, political organizations and processes, and major policy outputs. (Formerly POL 1053. Credit cannot be earned for both POL 1013 and POL 1053.) [TCCN: GOVT 2301.]
- 1023 The Politics of the American Economy**
(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor.
Theory and practice of classical and modern political economy. Historical interaction between American capitalism and political structures, processes,

and public policy. Topics may include current fiscal, monetary, and other regulatory policies in economic context. (Formerly POL 2063. Credit cannot be earned for both POL 1023 and POL 2063.)

1063 Ethics in America

(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor. Philosophical, legal, and practical problems at the intersection of American goals and values. Comparison of deontological, utilitarian, and radical-critical ethical theories, with special attention to the ethical challenge presented by women, people of color, homosexuals, and people with disabilities. Historical account of the changing position of religion and tradition in America. Investigation of ethical ambiguity of the state, the problem of accountability, obligation, and civil disobedience.

1083 The United States in the World

(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor. The development of conceptions of the United States' role in the world. The foreign policy decision-making process and its legal and constitutional basis. The relationship of domestic politics to the conduct of foreign policy.

1133 Texas Politics and Society

(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor. Topics may include discussions of the Texas and U.S. Constitutions; the role of state and federal systems; the diverse demographic, economic, and cultural bases; elections, interest groups, and elites; legislative, executive, judicial, urban, and county politics. [TCCN: GOVT 2306.]

1173 States, Communities, and Public Policy

(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor. This course presents basic state and local political structures and processes, placing Texas in a broader comparative framework. Its principal emphasis is on the social and economic policies involving both federal and state or local components.

2023 Civil Liberties in American Law and Practice

(3-0) 3 hours credit. Prerequisite: POL 1013 or consent of instructor. An analytical, normative, and empirical examination of civil liberties and rights in the United States. Topics may include freedom of speech, religion and assembly, equal protection of the laws, due process, and privacy.

2083 Current Issues in World Politics

(3-0) 3 hours credit. An examination of the issues that divide the people of the world. The structure of contemporary world problems will be studied and possible strategies for the reduction of international conflict will be assessed. Topics may include nuclear proliferation, world hunger, revolution and intervention, transnational enterprises, competing ideologies of international relations, and global ecology.

- 2503 Introduction to Political Theory**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The fundamental concepts and problems of politics as viewed by the classical political philosophers and contemporary theorists: justice, power, authority, obligation, freedom, and equality.
- 2513 Public Administration and Public Policy**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The role of bureaucratic agencies in the formulation and implementation of public policy. Organization theory and administration in the public sector. While the approach of the course is comparative, special emphasis is placed on bureaucracy in the United States.
- 2533 Introduction to Political Science**
(3-0) 3 hours credit.
An introduction to the discipline of political science, with particular emphasis devoted to its development from 1880 to the present. Topics may include types of political institutions, uses of political science, participation by political scientists in public affairs or public policy, and career options available to political science majors. [TCCN: GOVT 2304.]
- 2603 International Politics**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The major issues of North-South and East-West conflicts will be explored: international aid and trade transnational enterprises, economic development and debt, military conflicts and nuclear weapons, and the new frontiers of oceanic resources, tropical forests, and outer space.
- 2623 Law and Society**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
An examination of the role of law in society. Topics examined may include natural law, legal realism, and constitutional, statutory, common, civil, socialist, and administrative law. The structure and functions of the judiciary, police, and legal profession.
- 2633 Comparative Politics**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
A comparative examination of the diverse forms, goals, styles, and practices of government in democratic and authoritarian states. Several major polities will be studied in detail.

2703 Scope and Methods in Political Science

(3-0) 3 hours credit.

An introduction to methods of conducting and interpreting research in political science. Topics include principles of the philosophy of science; research designs, statistical concepts and techniques (conceptualization, operationalization, and measurement), and data-gathering procedures; data analysis; and qualitative methods. May also include standard computer packages and secondary data analysis. (Formerly SSC 3013. Credit cannot be earned for both POL 2703 and SSC 3013.)

3083 Ethnic Politics in the United States

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The role of ethnic and racial minorities in the politics of the United States; the responsiveness of existing political structures to ethnic problems; ethnic political organizations and influence.

3093 Mexican American Politics

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

An opportunity to study Mexican American participation in the electoral process, political and economic institutions, labor organizations, and alternative modes of political action.

3103 Political Ideology

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

An examination of ideology as a social phenomenon affecting political behavior, and of the specific doctrines of liberalism, socialism, conservatism, fascism, and communism.

3113 American Political Theory

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The political theory of the Constitution, the Federalist Papers, Adams, Jefferson, Paine, Calhoun, Thoreau, Social Darwinism, Pragmatism, and twentieth-century political thought.

3133 Political Philosophy: Ancient and Medieval

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The major works of Western political philosophy from ancient times to the Renaissance. Writers examined may include Plato, Aristotle, Thucydides, Augustine, and Machiavelli.

3143 Political Philosophy: Modern

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The major works of political philosophy from the Renaissance to the nineteenth century. Writers examined may include Hobbes, Locke, Rousseau, Hegel, Marx, and Mill.

- 3153 Political Philosophy: Contemporary**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Political thought from the late nineteenth century to the present. Topics examined may include contemporary Marxism and critical theory, analytic political theory, positivism and social science, phenomenological approaches, existentialism, and contemporary ethics.
- 3163 Introduction to Feminist Theory**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 A reading-intensive upper-level lecture course for departmental majors and women's studies minors, introducing students to feminist approaches to theory. Covers feminist critiques of some of the dominant traditions in Western political and social theory as well as ways in which women have begun to construct theories from their own distinctive perspectives within the intersecting hierarchies of race, class, and gender.
- 3173 Women in Western Political Theory**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 A reading-intensive upper-level lecture course for departmental majors and women's studies minors. It will introduce students to classical discussions within the Western political theory tradition through an inquiry into their conceptions of women. Students will acquire understanding of the conceptions of women, the family, and the domestic sphere as they have come to us through a male-centered philosophical tradition.
- 3223 Judicial Politics**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Political behavior of the major participants in the judicial process: judges, attorneys, juries, defendants, and litigants; the political and administrative context of the judicial process; judicial-executive and judicial-legislative relations; the impact of court decisions.
- 3233 Political Campaigns and Elections**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 A study of the ways in which public officials are recruited and elected in the United States and other democracies. Campaign strategy and tactics; nominations and primaries; the legal framework of elections; the problem of constituency; voting studies; campaign finance.
- 3243 Mass Media and Public Opinion**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Explores the acquisition of political attitudes, the role of the mass media in society and politics, and the relationship between political attitudes and

values, the mass media, and public policy. (Formerly POL 3253, 3263, and 3273. Credit cannot be earned for both POL 3243 and either POL 3253, 3263, or 3273.)

3283 The American Presidency

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The U.S. president's role in the American political system. Topics may include the constitutional framework and historical development of presidential powers, presidential personality, and legislative, foreign policy, and war-making powers. (Formerly POL 3303. Credit cannot be earned for both POL 3283 and POL 3303.)

3293 Political Movements

(3-0) 3 hours credit.

Examines the history, political dynamics, and social basis of mass political movements as vehicles for social reform. Selected examples may include the civil rights, labor, women's, abolitionist, temperance, antiabortion, old age pension, and antiwar movements.

3313 The American Federal System

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The political theory of federalism; the constitutional provisions; interstate coordination of policies; local-state-federal relations; the political role of private and public interest within the federal framework.

3323 Constitutional Law

(3-0) 3 hours credit. Prerequisites: POL 2023, 2623; HIS 3093; or consent of instructor.

An examination of major constitutional issues, past and present, through the intensive study of leading cases. Recommended for prelaw students.

3333 Political Power

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

A theoretical and empirical analysis of power in the political setting. Group, elite, organizational, and structural approaches will be considered. Case studies of the translation of economic and social power into political power.

3343 Communism and Post-Communism

(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.

The theory, historical origins, development, and decline of Communism as a system of rule, and the problems of creating new political and economic systems in the place of the former Communist states. Examples may be drawn from Eastern Europe, Asia, and Latin America. (Formerly POL 3383. Credit cannot be earned for both POL 3343 and POL 3383.)

- 3353 Comparative Political Executives**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of national political executives in parliamentary and presidential democracies and in authoritarian states. Topics examined may include the selection process, decision making, leadership and bureaucracy, executive-legislative relations, neocorporatism, and the executive.
- 3363 Political Parties and Interest Groups**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 The function of political parties on the political process; interest groups and their function as private governments and role in shaping public policy.
- 3373 The Legislative Process**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 The functions, structures, and politics of legislatures and their relationships to their constituencies and other branches of government.
- 3393 Latin American Politics**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of political institutions and their relationship to social and economic change in Latin America. Profiles of major Latin American countries, such as Mexico, Brazil, Argentina, Peru, and Cuba.
- 3403 European Politics**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 The interplay of politics with the changing social and economic environment in the advanced industrial societies of Western Europe. Elites, participation, governmental structures, party systems, interest groups, and public policy will be examined in several selected polities and the Common Market.
- 3413 The Politics of Urban Development**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An opportunity to pursue a political-economic analysis of the metropolis, focusing on the problems and conflicts stemming from urban growth and stagnation. Topics examined may include uneven development, planning, industrial development policy, taxation, and intergovernmental rivalry. Case studies may be drawn from societies other than the United States.
- 3423 Politics in Russia and the Post-Soviet States**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Politics and government in Russia and other states of the former Soviet Union. Economic and social problems and policies. The legacy of Communism.

- 3433 Governments and Politics of Southeast Asia**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
A comparative examination of the political systems of selected Southeast Asian countries and their efforts to deal with political, economic, and social change. Countries studied may include Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam.
- 3443 Governments and Politics of East Asia**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
A comparative examination of the political systems of selected East Asian countries and their efforts to deal with problems of political, economic, and social change. Countries studied may include the People's Republic of China, the Republic of China, and South Korea. (Formerly titled "Asian Politics"; credit cannot be earned for both courses.)
- 3453 The Politics of Mexico**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
Background to the contemporary political system of Mexico, including Independence, foreign intervention, the Diaz regime, and the 1910-17 revolution. Other topics may include the constitution, the structure of government, political parties, the presidency, economic development and policy, contemporary leadership, and elites.
- 3463 Politics of the Third World**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The political system of various Third World nations. An inquiry into the political and economic problems of these countries, such as development, instability, and political change.
- 3473 Theories and Problems in Latin American Politics**
(3-0) 3 hours credit. Prerequisite: POL 3393, POL 3453, SSC 3533, HIS 2533, or consent of instructor.
Advanced survey of major theories about Latin American problems and major problems in Latin American political and economic development. Theories of dependency, corporatism, bureaucratic authoritarianism, and transitions of democracy. Selected problems such as political stability, land reform, economic integration, multinational corporations, inflation, foreign debt, revolution and reform, and the military in politics.
- 3483 Politics of the International Economy**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
Demonstrates the linkage between politics and economics. Students will be introduced to the current international economic system as well as money and trade. Foreign aid and tariff and nontariff barriers may also be analyzed.

- 3493 Politics of the Middle East**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of past, present, and future of Middle East politics, with an emphasis on culture, politics, religion, and conflicts in the area; the international relations of Middle Eastern countries as well as superpowers' involvement.
- 3503 American Foreign Policy since World War II**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Major private interests and public institutions involved in American foreign policymaking; public opinion and foreign involvement; specific policies toward international organizations and major world regions.
- 3513 International Organizations**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Major issues involving international organizations: nationalism and globalism; financing problems; international staffing; voting patterns; peacekeeping; and international conferences. Organizations examined include the United Nations system, regional development banks, alliance systems, cartels, and common markets.
- 3523 Force in International Politics**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of modern research into the use of coercion in international relations, specifically economic sanctions, war, and terrorism. Special emphasis will be placed on the causes, trends, and consequences of interstate wars. Peace movements and the technologies of peacemaking will also be covered.
- 3533 Japan in World Politics**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of Japan's emerging global role. Topics may include Japan's domestic, regional, and international politics, as well as the economy, foreign aid, and transfer of technology, investment, culture, and management techniques.
- 3543 Russian Foreign Policy**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An examination of the theory and practice of Russian involvement in the world. Topics may include the legacy of the Russian Empire and the former Soviet Union, institutions involved in foreign policymaking, structure of foreign aid and trade, and specific policies toward the world's major regions.

- 3553 Social Policy in Modern Welfare States**
(3-0) 3 hours credit.
History and development of social policies in modern societies. Policy areas covered may include Social Security, health care, poverty and income maintenance, housing, education, employment, and child care.
- 3603 Public Policy Formulation and Implementation**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
An analysis of public policy formulation and implementation in social and political contexts. The implications of the policy process for democracy. Problem areas may include energy, health, the environment, and the fiscal crisis.
- 3613 Public Budgeting and Taxation**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
An examination of the process and politics of public budgeting and taxation, and of the bureaucratic behavior accompanying them.
- 3623 Public Policy Evaluation**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The process and politics of public policy evaluation. The methodology of program evaluation will be examined as well as the political problems associated with policy evaluation. Case studies of specific government programs will be examined.
- 3703 Personnel Administration in the Public Sector**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
A survey of personnel management in the public sector. Topics examined may include recruitment, civil service and patronage appointments, career development, manpower utilization, conflict of interest questions, employee organization and relations, and affirmative action.
- 3713 Comparative Systems of Public Administration**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
Administrative goals, structures, processes, and behavior in comparative perspective. Bureaucracies in Western democratic, communist, and developing political systems will be examined.
- 3723 Ethics in Government**
(3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
The philosophical, legal, and practical problems of establishing accountability in government and promoting ethical standards among government officials.

- 3733 Urban Human Resources Policy**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 Explores the basic relationships between government, citizens, and those forces that affect the dispensation of government largesse. The manpower programs and policies of municipal government and the ability of public agencies to manage human resources and other social services programs will be examined in detail. (Formerly URB 3013. Credit cannot be earned for both POL 3733 and URB 3013.)
- 4103 Latin America and the World**
 (3-0) 3 hours credit. Prerequisite: POL 3393, 3453, 3473, HIS 2533, SSC 3533, or consent of instructor.
 Advanced study of the past, present, and future roles of Latin America in the world arena. An examination of relations between Latin America and other Third World nations, countries of the Pacific Basin, the United States, and Canada.
- 4153 Seminar in Jurisprudence**
 (3-0) 3 hours credit. Prerequisite: Completion of the Core Curriculum requirement in political studies.
 An analytic inquiry into the normative, empirical, and ideological underpinnings of law. The functions, nature, and utilities of law in various social and conceptual schemes. Alternatives to formal law and jural dispute settling.
- 4323 Administrative Law**
 (3-0) 3 hours credit. Prerequisite: POL 2023, 2513, 2623, or consent of instructor.
 A survey of those aspects of public law of particular relevance to public administration, analyzing such problem areas as the delegation of authority, formal accountability, open records and confidentiality, and responsiveness to democratic value in decision making.
- 4913 Independent Study**
 3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in Political Science**
 3 or 6 hours credit. Prerequisite: Consent of internship coordinator.
 Supervised experience relevant to political science within selected community organizations. A maximum of 6 semester credit hours may be earned through the internship.

- 4953 Special Studies in Political Science**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4973 Seminar in Political Science**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
The opportunity for an intensive study of a selected topic. Primary emphasis on supervised research on various aspects of the topic. May be repeated for credit when topics vary. Enrollment limited to juniors and seniors majoring in political science.
- 4993 Honors Thesis**
3 hours credit. Prerequisites: Enrollment limited to candidates for Honors in Political Science during their last two semesters; completion of honors examination and approval by the honors program coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

Bachelor of Arts Degree in Sociology

The minimum number of semester credit hours required for the Bachelor of Arts degree in Sociology, including the Core Curriculum requirements, is 120. Thirty-nine of the total semester credit hours required for the degree must be at the upper-division level.

All candidates for the degree must complete the following:

- A. 33 semester credit hours in the major, 24 of which must be at the upper-division level:
1. 15 semester credit hours of required courses:
 - 6 semester credit hours:

SOC	1013	Introduction to the Study of Society
SOC	3343	Classical Sociological Theory
		or
SOC	3353	Contemporary Sociological Theory
 - 6 semester credit hours of methods courses:

SOC	3313	Conceptualization and Measurement in Sociology
SOC	3323	Research Design and Application in Sociology
		or
SOC	3333	Survey Research Methods

3 semester credit hours:

- SOC 4973 Sociology Senior Seminar
 or
 SOC 4993 Honors Thesis

2. 18 additional semester credit hours of sociology electives as approved by the student's advisor. To encourage students to develop specific interest areas, 6 hours may be selected from courses in the following areas:

Crime and deviance
 Demography
 Gerontology and/or medical sociology
 Race/ethnic relations
 Social stratification
 Urban studies
 Women's and/or family studies
 Work and occupations
 Culture and mass media

- B. 6 semester credit hours of support work in the social sciences outside the major, chosen with the consent of the advisor
- C. 30 semester credit hours of electives

It is *strongly* recommended that theory and research methods requirements be completed by the first semester of the junior year.

Minor in Sociology

All students pursuing a Minor in Sociology must complete 21 semester credit hours, 12 of which must at the upper-division level.

- A. 9 semester credit hours of required courses:

- SOC 1013 Introduction to the Study of Society
 SOC 3013 Conceptualization and Measurement in Social Research
- SOC 3343 Classical Sociological Theory
 or
 SOC 3353 Contemporary Sociological Theory

- B. 12 semester credit hours of sociology electives

To declare a Minor in Sociology, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Social and Policy Sciences.

COURSE DESCRIPTIONS
SOCIOLOGY
(SOC)

- 1013 Introduction to the Study of Society**
(3-0) 3 hours credit.
An introduction to the study of human groups, the relations of individuals to groups, and the process of becoming a group member and functioning in a group setting. [TCCN: SOCI 1301.]
- 2013 Social Problems**
(3-0) 3 hours credit.
An examination of major contemporary social problems and their causes and consequences. Topics may include poverty, racism, sexism, deviance and crime, drug and alcohol dependence, the urban crisis, overpopulation, and war. [TCCN: SOCI 1306.]
- 2053 Marriage and the Family**
(3-0) 3 hours credit.
A sociological analysis of the modern family and marriage, its structures and functions, variant patterns, and the influence of contemporary society on this institution. Topics may include dating, marital roles, divorce, child-raising, and alternative life styles. [TCCN: SOCI 2301.]
- 3003 Sociological Foundations**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
A seminar for new sociology majors to orient them to basic theoretical, methodological, and ethical issues in sociology. Topics considered may also include the role of theory in sociology and the process of theory building and testing, the utility of various modes of investigation and analysis, the critical examination of research literature, and the relevance of sociology to real-world problems.
- 3013 Social Stratification**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Theory and research pertaining to inequalities of power, prestige, and economic privilege. Major emphasis upon inequality and social mobility in the United States.
- 3023 Urban Sociology**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Development of modern world cities, the ecology of cities, the organization of cities, major social problems, and the social psychology of urban life for both more and less developed countries. (Formerly SOC 2023. Credit cannot be earned for both SOC 3023 and SOC 2023.)

- 3033 Population Dynamics**
(3-0) 3 hours credit.
Trends in mortality, fertility, and migration for selected countries, and their projected consequences. Associated population policies and options are considered. (Formerly SOC 2033. Credit cannot be earned for both SOC 3033 and SOC 2033.)
- 3043 Race and Ethnic Relations**
(3-0) 3 hours credit.
Dominant-subordinate relations in world societies, with major emphasis on the United States. Models of assimilation, colonial and class society, and consequences for minority and majority populations may be examined. (Formerly SOC 2063. Credit cannot be earned for both SOC 3043 and SOC 2063.)
- 3053 Deviance and Conformity**
(3-0) 3 hours credit.
Consideration of sociological and social-psychological factors associated with compliant and deviant behavior; the links between deviance and strategies for social control.
- 3063 Collective Behavior**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Case studies and associated theory dealing with various forms of collective behavior and social movement, including mobs, revolutions, cults, and panics.
- 3073 Migration and Adjustment**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Geographic movement of populations, ties to economic, physical, ideological, and social features, and resultant problems of adjustment. Historical as well as contemporary examples will be examined. Attention will be given to both legal and illegal immigration.
- 3083 Social Change**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Principal models and theories of social transformation applied to examples of societal change.
- 3093 Religion and Society**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Religious institutions and movements in the United States with comparative data from other countries. The relationship of religious institutions to social stratification, economic institutions, and political and social change.
- 3103 Complex Organizations**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The sociology of public and private bureaucratic organizations, the structure and behavior of management, and patterns of mobility within corporate organizations.

- 3113 Criminology**
(3-0) 3 hours credit.
Examination of government and social policies and programs designed to deal with crime. Analysis of different types of crime, including street crime, organized crime, political crime, and white-collar crime. Social and legal responses to crime.
- 3133 Sociology of Pluralism in the Southwest**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The principal minority groups in the American Southwest, with emphasis on form and consequences of intergroup relations, social movements and related social changes, and formal models of southwestern plural society.
- 3173 Economy and Society**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The relationship of the economic system to the social system as a whole in selected societies. The varieties of capitalist and socialist economic organizations, and their social implications.
- 3193 The Sociology of Work and Occupations**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Occupational structures in selected societies. The relationship between occupations and economic rewards, lifestyles, and worldview. Determinants of work satisfaction.
- 3203 Gerontology**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An examination of historical and cross-cultural differences in the status of the elderly in society. Includes interaction of the elderly with social institutions and policy implications of the demographic shift toward an aging population in the United States.
- 3213 Medical Sociology**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The identification of social factors in the distribution and cause of disease; relationships between patients and medical professionals; the contribution of lay belief to health, illness, treatment, and recovery; health institutions; the distribution of medical resources; and the organization of health care delivery.
- 3233 Sociology of Adult Life**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Examines how a person's life history develops out of individual, social, and historical influences. Also surveys research on age patterns in work, family, and community participation. May include the writing of a life history.
- 3253 The Individual and Society**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An examination of major theories dealing with the effects of culture and social structure on the development and functioning of the personality and the self.

- 3283 Poverty**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The causes and consequences of poverty in the United States and selected other societies. An examination of social programs designed to combat poverty.
- 3293 Sex Roles**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The nature of sex roles in our own and other societies. Consideration of how people learn sex roles and the outcomes of this learning for individuals, families, and societies. Alternatives to conventional sex roles.
- 3313 Conceptualization and Measurement in Sociology**
(3-0) 3 hours credit. Prerequisites: Completion of the Core Curriculum requirement in mathematics and SOC 1013.
Introduction to conceptualization, operationalization, and measurement in the social sciences. Use of elementary measures of central tendency and dispersion, crosstabulation, and linear model procedures to evaluate relationships among variables; problems of description and inference. May also include use of standard computer packages and secondary analysis of data. Enrollment limited to sociology majors or minors or students in other degree programs requiring the course. (Formerly SSC 3013. Credit cannot be earned for both SOC 3313 and SSC 3013.)
- 3323 Research Design and Application in Sociology**
(3-0) 3 hours credit. Prerequisites: Completion of Core Curriculum requirement in mathematics and SOC 3313.
Introduction to the philosophy of science and the logic of major types of research designs, including field, experimental, and survey projects. Methods of data gathering, analysis, and reporting applied to research on policy-relevant problems in the social sciences. Enrollment limited to sociology majors. (Formerly SSC 3023. Credit cannot be earned for both SOC 3323 and SSC 3023.)
- 3333 Survey Research Methods**
(3-0) 3 hours credit. Prerequisite: SOC 3313, an equivalent, or consent of instructor.
A course in survey research, including research design, questionnaire construction, sampling, interviewing, control procedures, and data processing. (Formerly SOC 3123. Credit cannot be earned for both SOC 3333 and SOC 3123.)
- 3343 Classical Sociological Theory**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The transition from social philosophy to sociology, with special emphasis upon European theorists in the nineteenth and early twentieth centuries. (Formerly SOC 3153. Credit cannot be earned for both SOC 3343 and SOC 3153.)

- 3353 Contemporary Sociological Theory**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An examination of current trends in sociological theory: contemporary functionalism, evolutionism, exchange theory, radical criticism, phenomenology and symbolic interactionism, and formal theory construction. (Formerly SOC 3183. Credit cannot be earned for SOC 3353 and SOC 3183.)
- 3403 Mexican American Stratification**
(3-0) 3 hours credit.
Offers the opportunity to study the variables affecting the social status of Mexican Americans and relations between this group and the dominant society. Issues studied may include the position of Mexican Americans in economic, political, and status hierarchies and the major factors limiting mobility within these systems.
- 3413 Mexican American Family**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Focuses on contemporary issues regarding the Mexican American family. Topics of discussion include family structure, child-rearing practices, gender roles, marital stability, and intermarriage. Comparison with other minorities and the majority group will allow discussion of variant family patterns.
- 3423 Mass Media in Society**
(3-0) 3 hours credit.
The course will examine media production and its role in the economy; the construction of media meaning, signification, and ideology; and the role of the audience in making sense of messages. Larger issues of societal power will be treated, along with an examination of alternative media.
- 3463 Sociology of Sport and Leisure**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Examines the social meanings of play and leisure in advanced industrial societies. Emphasis will be on the origins, structure, and function of these phenomena in the United States, with major emphasis on sport as an institution.
- 4063 Civil-Military Relations**
(3-0) 3 hours credit.
Explores the past, present, and future structure and use of the U.S. military. Topics examined may include the historical events and social trends affecting the relationship between the military organization and the civilian government and issues surrounding such controversies as a draft vs. a conscription military, the increasing minority representation, and the use of women, particularly in combat.
- 4173 Comparative Family Structures**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
A review of research comparing major conventional and alternative family structures in preindustrial and industrial societies.

- 4203 Field Research**
 (3-0) 3 hours credit. Prerequisite: SOC 1013.
 An examination of theories, methods, and techniques of fieldwork. The course will consider research in organizations, communities, and other settings, and ethical problems involved in such research.
- 4433 Culture and Society**
 (3-0) 3 hours credit.
 The goal of this course is to comprehend the social significance of cultural production, including the relationships between art, consciousness, the economy, and history. Themes examined may include the social production of art, art and ideology, the problem of artistic reception, and art movements and cultural resistance. Topics such as art and culture in minority social movements, the relation between high and low culture, and the recent culture wars of the National Endowment for the Arts may be explored.
- 4913 Independent Study**
 3 hours credit. Prerequisites: Permission in writing (form available) from the instructor, the student's advisor, and the Division Director and Dean of the college in which the course is offered.
 Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 semester credit hours of independent study, regardless of discipline, will apply to a bachelor's degree.
- 4933,6 Internship in Sociology**
 3 or 6 hours credit. Prerequisites: Completion of two upper-division sociology courses and consent of internship coordinator.
 This course offers supervised work experience relevant to sociology within selected organizations and agencies. Internships should be relevant to previous coursework. A maximum of 6 semester credit hours may be earned through this internship.
- 4953 Special Studies in Sociology**
 (3-0) 3 hours credit. Prerequisite: Consent of instructor.
 An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.
- 4973 Sociology Senior Seminar**
 (3-0) 3 hours credit. Prerequisites: Completion of theory and methods requirements and senior standing in the sociology major.
 A capstone course designed to integrate sociological theory and methods and to guide students in the conduct of social research.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment limited to candidates for Honors in Sociology during their last two semesters; completion of honors examination and approval by the honors program coordinator. Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

**COURSE DESCRIPTIONS
SOCIAL SCIENCE
(SSC)**

3103 Major Theories of the Social Sciences

(3-0) 3 hours credit.

A survey of major theories and types of theories in nineteenth- and twentieth-century social science. Particular attention is paid to the origin of distinctions among the social sciences and to competing visions of the connections between them.

3113 The Contemporary City

(3-0) 3 hours credit.

An introduction to urban America from a multidisciplinary perspective. Attention is given to the economic, social, political, and environmental factors that have produced the physical form and institutional arrangements of the contemporary city. Problems and opportunities currently facing American cities. (Formerly URB 3523. Credit cannot be earned for both SSC 3113 and URB 3523.)

3123 Urban Environmental Values

(3-0) 3 hours credit.

An interdisciplinary inquiry into how environmental perceptions are formed. The influence of human values on the quality of both the natural and the built environments will be explored in detail. Special emphasis will be given to a comparative analysis of sometimes conflicting values represented by differing cultures, disciplines, and frames of reference and the role they play in the formulation of public policy. (Formerly URB 3103. Credit cannot be earned for both SSC 3123 and URB 3103.)

3153 Women in American Society

(3-0) 3 hours credit.

Examines aspects of women's experience in contemporary American society. Topics may include labor-force participation and economic decision making, political and religious status, gender role socialization, family organization, and the feminist and antifeminist movements. When possible, cross-cultural and historical comparisons will be introduced. Topics and approaches will vary.

- 3203 Violence and Society**
 (3-0) 3 hours credit.
 Examines the major theories that attempt to explain why violence occurs in society. Certain forms of violence, both legal and illegal, are studied from a variety of perspectives in the social sciences to determine whether present explanations of violent behavior are adequate.
- 3253 Race, Ethnicity, and Public Policy**
 (3-0) 3 hours credit.
 An examination of the historical and societal causes of economic deprivation among American Indians, Blacks, and Hispanics, with special attention on social, political, and economic strategies for the elimination of minority poverty in the United States.
- 3303 Economy and Polity**
 (3-0) 3 hours credit.
 The political, legal, and ethical context of modern commercial society is explored through the evolution of conceptions of the economy, the individual, and the state. Topics may include the ethical and legal impact of business practices, normative implications of the interaction of modern government and economic activity, and the impact of markets on concepts of public and private life.
- 3533 Inter-American Relations**
 (3-0) 3 hours credit.
 The development of political, economic, and cultural relations among nations of the Americas. (Formerly HIS 3533. Credit cannot be earned for both SSC 3533 and HIS 3533.)
- 4223 Research Applications in the Social Sciences**
 (3-0) 3 hours credit. Prerequisite: CRJ 3013, POL 2703, SOC 3313, or an equivalent.
 Provides students the opportunity to apply research and quantitative techniques as analytical tools in the social and policy sciences.
- 4343 Transitions to Democracy**
 (3-0) 3 hours credit.
 An empirical and theoretical analysis of transitions from authoritarian to democratic political systems. Topics will include political order reform and change. Specific examples may be drawn from Africa, Asia, Latin America, Western Europe, or North America.
- 4353 Leadership and Elites**
 (3-0) 3 hours credit.
 A survey of the major theoretical and empirical approaches to the study of elites and leadership. Political, sociological, psychological, and historical perspectives are examined. (Formerly POL 4353. Credit cannot be earned for both SSC 4353 and POL 4353.)

4373 Program Evaluation

(3-0) 3 hours credit. Prerequisite: CRJ 3013, POL 2703, SOC 3313, an equivalent, or consent of instructor.

Theoretical and applied perspectives on the evaluation of social change programs. Focus on the problems involved in designing, implementing, and evaluating community-based intervention.

4953 Special Studies in Social Sciences

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

4973 Senior Seminar in Social Sciences

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

The opportunity for an intensive study of a selected topic. Primary emphasis on supervised research on various aspects of the topic. May be repeated for credit when topics vary. Enrollment limited to juniors and seniors majoring in political science.

Minor in International Studies

The Minor in International Studies offers students the opportunity to combine a major in a standard discipline with an interdisciplinary examination of the contexts and structures of relationships among nations.

All students pursuing a Minor in International Studies must complete 21 semester credit hours.

A. INS 2403 Introduction to International Study

B. 12 semester credit hours selected in the following manner:

1. 3 semester credit hours of history or geography courses selected from the following:

GRG	1023	World Regional Geography
GRG	3613	Conservation of Resources
GRG	3633	Geography of Development
HIS	3283	Twentieth-Century Europe
HIS	3303	History of Mexico
HIS	3343	Modern Central America and the Caribbean
HIS	3353	Latin America since Independence
HIS	3373	Revolution in Latin America
HIS	3523	European Cultural History
HIS	3643	Modern Spain
HIS	3753	The Soviet Union and After
HIS	3823	History of American Foreign Policy

2. 3 semester credit hours of economics, finance, or marketing selected from the following:

ECO	3193	The International Economy
ECO	4303	Economic Problems of Developing Countries
FIN	4613	Introduction to International Finance
MGT	4073	International Management
MKT	4073	International Marketing

3. 3 semester credit hours of humanities selected from the following:

CSH	1203	Introduction to Hispanic Cultures
CSH	1213	Topics in World Cultures
FRN	3433	French Civilization
FRN	3613	Contemporary French Culture and Society
GER	4213	German Studies: Culture
HUM	3093	World Religions
HUM	3623	Topics in National Cultures and Civilizations
PHI	3073	Oriental Philosophy
SPN	3613	Spanish Culture and Civilization
SPN	3623	Spanish American Culture and Civilization
SPN	3653	Contemporary Spain
SPN	3663	Contemporary Spanish America
SPN	3673	Hispanic Cultural Systems

4. 3 semester credit hours of social sciences selected from the following:

ANT	3363	Indians of Mesoamerica
INS	4953	Special Studies in International Studies
POL	2603	International Politics
POL	2633	Comparative Politics
POL	3393	Latin American Politics
POL	3403	European Politics
POL	3423	Politics in Russia and the Post-Soviet States
POL	3433	Governments and Politics of Southeast Asia
POL	3443	Governments and Politics of East Asia
POL	3453	The Politics of Mexico
POL	3463	Politics of the Third World
POL	3473	Theories and Problems in Latin American Politics
POL	3483	Politics of the International Economy
POL	3493	Politics of the Middle East
POL	3503	American Foreign Policy since World War II
POL	3513	International Organizations
POL	3523	Force in International Politics
PSY	3053	Cross-Cultural Psychology
SSC	3533	Inter-American Relations
SSC	4343	Transitions to Democracy

- C. 6 additional semester credit hours, selected from any two of the sections from B.1 through B.4

D. Four college semesters or the equivalent in a single foreign language

To declare a Minor in International Studies, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Social and Policy Sciences.

COURSE DESCRIPTIONS INTERNATIONAL STUDIES (INS)

2403 Introduction to International Study

(3-0) 3 hours credit.

Examination of international and multicultural issues through the perspectives of core disciplines. Study includes lectures, discussions, reading and films on culture, culture shock, and cross-cultural communication; American and foreign values; language issues; and investigations of issues related to a particular nation and culture.

4953 Special Studies in International Studies

(3-0) 3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies may be repeated for credit when topics vary, but not more than 6 semester credit hours, regardless of discipline, will apply to a bachelor's degree.

Minor in Legal Studies

A Minor in Legal Studies provides the student with an opportunity to examine the foundations, operations, and impact of the law in society from multidisciplinary and interdisciplinary perspectives. This minor is designed to facilitate the development of an enriched background in legal studies for students planning to pursue law-related higher education or careers.

All students pursuing a Minor in Legal Studies must complete 21 semester credit hours, at least 12 of which must be at the upper-division level.

A. 9 semester credit hours of required courses:

LGS	2013	Introduction to Legal Studies
LGS	3013	Legal Research
LGS	4013	Issues in Law and Society

B. 12 additional semester credit hours (at least 9 of which must be at the upper-division level) from the following list, in at least two disciplines other than the student's major:

BLW	2003	Gender Law
BLW	3013	Business Law

BLW	3213	Legal Relations of Business
BLW	4953	Special Studies in Business Law
CRJ	2813	Introduction to Courts and the Legal System
CRJ	4743	Crime in Fiction
CRJ	4763	Great Controversies in American Justice
HIS	3093	United States Constitutional History
HIS	3183	Law and American Development
POL	2023	Civil Liberties in American Law and Practice
POL	2623	Law and Society
POL	3323	Constitutional Law
POL	4153	Seminar in Jurisprudence
LGS	4913	Independent Study
LGS	4933	Internship in Legal Studies

To declare a Minor in Legal Studies or to obtain advice, information, or approvals for course requirement substitutions, students should consult the Undergraduate Advisor of Record in the Division of Social and Behavioral Sciences.

COURSE DESCRIPTIONS LEGAL STUDIES (LGS)

- 2013 Introduction to Legal Studies**
(3-0) 3 hours credit.
An introduction to legal studies from an interdisciplinary perspective, exploring historical and contemporary aspects of the content, operations, and effects of law in societies.
- 3013 Legal Research**
(3-0) 3 hours credit.
Provides students with the opportunity to explore the modes and sources of legal research.
- 4013 Issues in Law and Society**
(3-0) 3 hours credit.
Provides students with the opportunity to conduct research on selected issues associated with the law and society.
- 4913 Independent Study**
3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, the Director of the Division of Social and Policy Sciences and Dean of the College of Social and Behavioral Sciences. Independent reading, research, discussion, and writing under direction of a faculty member. Maximum of 3 semester credit hours may be applied to the minor.

4933 Internship in Legal Studies

3 hours credit. Prerequisite: Consent of internship coordinator and faculty supervisor.

Supervised experience relevant to legal studies within selected community organizations. A maximum of 3 semester credit hours may be applied to the minor.

Minor in Public Administration

This minor is designed to work in tandem with all the other disciplines in the Division of Social and Policy Sciences as well as with many other majors. A Minor in Public Administration, in combination with a student's major, may improve the student's marketability for jobs in either the private or public sectors.

All students pursuing a Minor in Public Administration must complete 18 semester credit hours, 9 of which must be at the upper-division level.

A. 3 semester credit hours are required:

POL 2513 Public Administration and Public Policy

B. 3 additional semester credit hours of research methods selected from the following:

CRJ 3013 Research Methods in Criminal Justice
ECO 3123 Forecasting Techniques in Business and Economics
GRG 3323 Spatial Analysis
POL 2703 Scope and Methods of Political Science
SOC 3313 Conceptualization and Measurement in Sociology

C. 3 additional semester credit hours selected from the following:

ECO 2003 Introduction to Political Economy
LGS 3013 Legal Research
POL 2023 Civil Liberties in American Law and Practice
POL 2623 Law and Society
POL 3323 Constitutional Law
SOC 3173 Economy and Society
SSC 3303 Economy and Polity

D. 9 additional semester hours selected from the following:

IS 3003 Principles of Information Systems for Management
MGT 3013 Introduction to Organization Theory, Behavior, and Management
POL 3553 Social Policy in Modern Welfare States
POL 3603 Public Policy Formation and Implementation
POL 3613 Public Budgeting and Taxation
POL 3623 Public Policy Evaluation
POL 3703 Personnel Administration in the Public Sector
POL 3713 Comparative Systems of Public Administration

POL	3723	Ethics in Government
POL	3733	Urban Human Resources Policy
POL	4323	Administrative Law
SOC	3103	Complex Organizations
SSC	3253	Race, Ethnicity, and Public Policy
SSC	4373	Program Evaluation

To declare a Minor in Public Administration, obtain advice, or seek approval of substitutions for course requirements, students should consult the Undergraduate Advisor of Record in the Division of Social and Policy Sciences.

Reserve Officer Training Corps Programs

Air Force R.O.T.C.: UTSA students may enroll in courses that are required in order to become a commissioned officer in the U.S. Air Force. The Air Force Reserve Officer Training Corps (R.O.T.C.) is voluntary and open to all qualified students, male and female. All courses are held on the UTSA campus.

Trinity University students may enroll in Air Force R.O.T.C. at UTSA. These students will attend classes on the UTSA campus.

Nursing students at The University of Texas Health Science Center may enroll in Air Force R.O.T.C. at UTSA. Two- or three-year nursing scholarships are available to qualified applicants.

Army R.O.T.C.: UTSA students may pursue courses in military science designed to develop the knowledge and skills required for a commission as an officer in the U.S. Army. The Army Reserve Officer Training Corps (R.O.T.C.) is open to all qualified students on a voluntary basis at both UTSA and The University of Texas Health Science Center. All courses for those enrolled in the program are held on the UTSA campus.

Air Force Reserve Officer Training Corps Program

To obtain a commission as an officer in the U.S. Air Force, a baccalaureate degree in one of the disciplines offered by UTSA and completion of either the Four-Year Program or the Two-Year Program in Aerospace Studies is required. Entering students may enroll in the Four-Year Program, and students with at least two academic years remaining in college may apply for the Two-Year Program.

Credit for aerospace studies courses may be applied toward a baccalaureate degree, but only as free electives. There is a maximum number of semester credit hours of aerospace studies that may be applied to the free electives allowed in the degree requirements for each major. Credit for aerospace studies courses awarded by another accredited college or university is accepted by UTSA as free elective credit, within the same limitations as aerospace studies credit earned at the University.

Four-Year Program: This program does not require a formal application for admission and consists of 16 semester credit hours of aerospace studies. Any student wishing to participate in the freshman- and sophomore-level courses of Air Force R.O.T.C. may enroll for these classes at the same time and in the same manner as for other UTSA courses. The freshman and sophomore courses comprise the General Military Course (GMC). Membership as a cadet in the GMC does not confer any military status or commitment upon the student. During the GMC, students can compete for admission to the Professional Officer Course, which is described below. Cadets in the Four-Year Program attend a paid four-week field training course.

Two-Year Program: This program consists of the Professional Officer Course (POC), the last two years of the Four-Year Program, and requires 12 semester credit hours. Acceptance into the Two-Year Program is based upon competitive standards, and students must be accepted by the Air Force before registration for classes. Since the processing for admission into the Two-Year Program must be completed well in advance of enrollment, students interested in the program are encouraged to start the application process in the fall semester preceding the academic year in which they intend to enter the program. Application can be made in person or in writing to the professor of aerospace studies. All students entering the Two-Year Program must first complete a paid six-week field training program.

All students in the Air Force R.O.T.C. are issued books and uniforms for use in the R.O.T.C. classes. In addition, all POC students enlist in the Air Force Reserve and receive a monthly subsistence allowance.

A required leadership laboratory graded on a pass/fail basis is conducted in conjunction with all aerospace studies courses. This laboratory offers students the opportunity to learn and practice the skills and techniques required to be an Air Force officer within a realistic Air Force organizational framework. It also provides the cadets with opportunities to learn about the actual conduct of Air Force missions and operations through guest lectures and field trips.

Cadets may apply for Air Force R.O.T.C. scholarships. Three- and two-year scholarships are available and pay tuition, fees, books, and a monthly subsistence allowance for the duration of the scholarship. All eligible students in the GMC may apply for these scholarships. Scholarships are awarded competitively, based on academic merit and the career field for which the cadet is qualified. Two-Year Program applicants may apply for two-year scholarships the summer before the entry into the POC.

Minor in Aerospace Studies

This minor is designed to enhance the aerospace studies (Air Force Reserve Officer Training Corps) curriculum. A Minor in Aerospace Studies (ASC) will develop a well-rounded perspective of a future Air Force officer's role and decision-making ability in political, sociological, historical, and geographical arenas.

All students pursuing a Minor in Aerospace Studies must complete 20 semester credit hours.

A. 2 semester credit hours of required core courses:

ASC	2031	The Air Force Way I
ASC	2041	The Air Force Way II

B. 9 semester credit hours (6 of which must be at the upper-division level) selected from the following:

ASC	1031	The Air Force Today I
ASC	1041	The Air Force Today II
ASC	3013	Air Force Leadership and Management I
ASC	3023	Air Force Leadership and Management II
ASC	4013	Preparation for Active Duty I
ASC	4023	Preparation for Active Duty II

B. 9 semester credit hours (6 of which must be upper-division level) selected from the following:

CRJ	4733	Intelligence Programs and National Security
GRG	1023	World Regional Geography
GRG	3313	Cartography
GRG	3643	Political Geography
HIS	3823	History of American Foreign Policy
POL	1083	The United States in the World
POL	2603	International Politics
POL	3293	Political Movements
POL	3343	Communism and Post-Communism
POL	3403	European Politics
POL	3423	Politics in Russia and the Post-Soviet States
POL	3433	Governments and Politics of Southeast Asia
POL	3443	Governments and Politics of East Asia
POL	3463	Politics of the Third World
POL	3493	Politics of the Middle East
POL	3503	American Foreign Policy since WWII
POL	3523	Force in International Politics
PSY	2533	Social Psychology
SOC	3103	Complex Organization
SOC	4063	Civil-Military Relations
SSC	3303	Economy and Polity
SSC	4353	Leadership and Elites

To declare a Minor in Aerospace Studies, obtain advice, or seek approval of substitutions for course requirements, students should consult the professor of aerospace studies in the Division of Social and Policy Sciences.

COURSE DESCRIPTIONS AEROSPACE STUDIES (ASC)

- 1031 **The Air Force Today I****
(1-1) 1 hour credit.
A survey course discussing topics relating to the Air Force and national defense. It focuses on Air Force organizations, structure, and mission; officership, military customs and courtesies, and professionalism; and Air Force communication skills.
- 1041 **The Air Force Today II****
(1-1) 1 hour credit.
A continuation of ASC 1031, the course will examine Air Force professions; defense policy and strategy; and the missions of other military services. Students will also practice Air Force communication skills.
- 2031 **The Air Force Way I****
(1-1) 1 hour credit.
This course focuses on factors contributing to change in the nature of military conflict, the development of air power from its earliest beginnings through two world wars, the evolution of air power doctrine and the role of technology, a history of air power employment in support of national objectives, and an assessment of communicative skills.
- 2041 **The Air Force Way II****
(1-1) 1 hour credit.
A continuation of ASC 2031, focusing on the role of air power from the 1960s to the present. Various events and trends in the history of air power are examined, especially where these provide significant examples of the impact of air power on strategic thought. Contemporary defense strategy, concepts, and doctrine are explored. Basic leadership principles are introduced. Includes practice in the use of effective Air Force communications.
- 3013 **Air Force Leadership and Management I****
(3-1) 3 hours credit.
A seminar course studying management fundamentals and communicative skills required of an Air Force junior officer. Case studies are used to examine Air Force management situations as a means of demonstrating and exercising practical applications of the concepts being studied. Includes study and practice in the use of Air Force communicative skills.
- 3023 **Air Force Leadership and Management II****
(3-1) 3 hours credit.
A continuation of ASC 3013, this seminar explores the meaning of professional responsibilities, leadership, and leadership ethics as applicable to the junior officer. Case studies are used to examine Air Force leadership situations as a means of demonstrating and exercising practical applications of the concepts being studied.

4013 Preparation for Active Duty I

(3-1) 3 hours credit.

A study of national security forces in contemporary society. Includes an examination of the evolution of national security, key players and processes in formulation of security policy, national security policy issues, and studies on various regions of the world. Students are given the opportunity to learn and practice leadership and communication skills necessary to become future junior officers in the U.S. Air Force.

4023 Preparation for Active Duty II

(3-1) 3 hours credit.

Continuation of ASC 4013, emphasizing leadership and communication. Included is an extensive analysis of officership, Air Force roles and missions, current Air Force issues, and a study of the military justice system.

Army Reserve Officer Training Corps Program

To obtain a commission as an officer in the U.S. Army, students must complete either the Four-Year Program or the Two-Year Program in Military Science and be a full-time student pursuing a baccalaureate degree in one of the disciplines offered by UTSA.

Credit for military science courses may be applied toward a baccalaureate degree, but only as free electives. There is a maximum number of hours of military science that may be applied to the free electives allowed in the degree requirements for each major. Credit for military science courses awarded by another accredited college or university is accepted by UTSA as free elective credit, within the same limitations as military science credit earned at the University.

Four-Year Program: This program consists of 18 semester credit hours of military science courses and is offered in two parts: a Basic Course and an Advanced Course. A formal application is not required for students entering the Four-Year Program. Registration is accomplished at the same time and in the same manner as for other UTSA courses. The Basic Course, consisting of 6 semester credit hours of coursework, is normally taken during the freshman and sophomore years. Enrollment in the Basic Course does not confer any military status or commitment upon the student. Students who successfully complete the Basic Course are eligible for entry into the Advanced Course.

The Basic Course requirements may be compressed into one academic year. The Basic Course may be waived without credit for students with prior military service and/or junior R.O.T.C.

Students who desire enrollment in the Advanced Course but have not completed the Basic Course may attend a six-week paid summer camp.

Two-Year Program: This program consists of the Advanced Course, the last two years of the Four-Year Program. It consists of 12 semester credit hours of coursework and is normally taken during the junior and senior years at the University. Students

must have two academic years remaining at either the undergraduate or graduate level (or a combination of both) and satisfy the Basic Course requirements through any of the options listed above in the discussion of the Four-Year Program.

Upon entering the Advanced Course, a student is required to sign a contract that obligates him or her to complete the R.O.T.C. program and serve a tour of duty as a commissioned officer in the United States Army or Army Reserve. Students enrolled in the Advanced Course receive a subsistence allowance and are eligible to receive additional pay as an "officer trainee" with a local Reserve or National Guard as a participant in the Simultaneous Membership Program.

Students in the Advanced Course attend a paid six-week summer camp between their junior and senior years.

The Army R.O.T.C. program offers competitive scholarships for up to three years to selected students. These scholarships provide tuition, fees, and a subsistence allowance.

Participation in a leadership laboratory is required in conjunction with all courses. The laboratory provides the opportunity to acquire leadership skills and experiences that will enhance a student's ability to perform as an Army officer.

All individuals enrolled in R.O.T.C. classes will be required to participate in physical fitness training and to take the Army Physical Readiness Test each semester.

Students enrolled in Army R.O.T.C. courses are furnished, free of charge, complete uniforms, texts, and necessary equipment.

☞ The program requirements for the Basic and Advanced Courses are as follows:

A. Basic Course:

MSC	1011	Fundamentals of Leadership and Management I
MSC	1021	Fundamentals of Leadership and Management II
MSC	2012	Applied Leadership and Management I
MSC	2022	Applied Leadership and Management II

B. Advanced Course:

MSC	3013	Advanced Leadership and Management I
MSC	3023	Advanced Leadership and Management II
MSC	4013	Seminar in Leadership and Management of the Military Team
MSC	4023	Seminar in Leadership and Management

COURSE DESCRIPTIONS MILITARY SCIENCE (MSC)

- 1011 Fundamentals of Leadership and Management I**
(1-2) 1 hour credit.
Organization of the Army and R.O.T.C. Discussion of career opportunities for R.O.T.C. graduates and the military as a profession. Customs and traditions of the service. Development of leadership potential.
- 1021 Fundamentals of Leadership and Management II**
(1-2) 1 hour credit.
Leadership case studies of problems facing junior leaders in today's Army in noncombat situations. Evaluation of weapons and warfare using the principles of warfare as a catalyst. Effects of technological and sociological change on the military. Continuation of customs and traditions of the service. Development of leadership potential.
- 2012 Applied Leadership and Management I**
(2-2) 2 hours credit.
Instruction in land navigation using a map and compass, conduct of drill and ceremonies, and administration of basic first aid, including performance of cardiopulmonary resuscitation (CPR).
- 2022 Applied Leadership and Management II**
(2-2) 2 hours credit.
American military history. A study of the development of American military institutions, policies, experience, and traditions in peace and war from colonial times to the present. Emphasis will be on the evolution of warfare, military theory, and the military profession. Introduction to the operation of basic military teams, with emphasis on organization and equipment.
- 3013 Advanced Leadership and Management I**
(3-2) 3 hours credit. Prerequisites: MSC 1011, 1021, 2012, and 2022, or consent of instructor.
Performance-oriented instruction in preparation for Advanced Camp. Analysis of psychological, physiological, and sociological factors that affect human behavior. Analysis of leadership and management processes. Techniques in planning, presenting, and evaluating performance-oriented instruction.
- 3023 Advanced Leadership and Management II**
(3-2) 3 hours credit. Prerequisite: MSC 3013 or consent of instructor.
Performance-oriented instruction in preparation for Advanced Camp. Development of the leader's ability of expression, analysis of military problems, and preparation and delivery of logical solutions. Analysis of the leader's role in planning, directing, and coordinating the efforts of individuals and small units in the execution of offensive and defensive tactical missions.

- 4013 Seminar in Leadership and Management of the Military Team**
(3-2) 3 hours credit. Prerequisite: MSC 3023 or consent of instructor.
Analysis of selected leadership and management problems. Responsibilities of the commander and staff in areas of personnel intelligence, operations, and logistics. Administration of military law. The interrelationships of the military team.
- 4023 Seminar in Leadership and Management**
(3-2) 3 hours credit. Prerequisite: MSC 4013 or consent of instructor.
Analysis of selected leadership and management problems. Responsibilities of the commander in the management of personnel, account logistics, operations, maintenance, and unit readiness. Seminars in the role of the officer in the conduct of personal affairs.
- 4033 Practical Leadership**
(3-0) 3 hours credit. Prerequisite: MSC 4023 or consent of instructor.
Performance-oriented instruction and preparation for commissioning. Additional development of the leader's ability to plan, coordinate, and direct the efforts of Army small-unit organizations in the execution of tactical missions. Planning and execution of leadership laboratories.

UNIVERSITY HONORS PROGRAM

The philosophy of the University Honors Program is that well-educated individuals should understand broad, interdisciplinary perspectives while demonstrating expertise in their chosen fields. The University Honors Program offers qualified students specialized interdisciplinary seminars on a variety of topics and opportunities for advanced research within their major fields. The program also offers special honors sections of Core Curriculum courses.

To graduate with University Honors, students must complete an honors thesis* and take a minimum of 24 semester credit hours of honors courses, including at least 6 semester credit hours of HON 3203 or HON 3213 and 3 semester credit hours of HON 4993 and IDS 2203 or IDS 2213. Seniors may receive honors credit for taking a graduate course in their major.

COURSE DESCRIPTIONS HONORS (HON)

- 1011 Honors Preceptorial**
(1-0) 1 hour credit. Prerequisite: Enrollment in the University Honors Program or consent of instructor.
A special honors discussion section designed to accompany a large lecture course. May be repeated for credit when topics vary.
- 3203 Honors Seminar on Diversity of Thought**
(3-0) 3 hours credit. Prerequisite: Enrollment in the University Honors Program or consent of instructor.
Interdisciplinary seminar that explores broad topics concerning the diversity of thinking on various problems or issues. May be repeated for credit when topics vary.
- 3213 Honors Seminar on Diversity of Culture**
(3-0) 3 hours credit. Prerequisite: Enrollment in the University Honors Program or consent of instructor.
Interdisciplinary seminar that explores broad topics relating to the diversity of cultures. May be repeated for credit when topics vary.
- 4913 Honors Independent Study**
3 hours credit. Prerequisite: Enrollment in the University Honors Program and consent of supervising faculty member.
Independent reading, research, and writing under the direction of a faculty member. Designed as preparation for completion of an honors thesis.
- 4953 Honors Internship**
3 hours credit. Prerequisite: Consent of honors director.
Supervised experience relevant to an honors education. A maximum of 6 semester credit hours may be earned through Honors Internship.

*Honors theses are kept on file in the Office of University Honors Programs and may be made available to the public.

4993 Honors Thesis

3 hours credit. Prerequisite: Enrollment in the University Honors Program and consent of supervising faculty member. Supervised research in the student's major field. May be repeated for credit with the supervisor's approval.

CORE CURRICULUM COURSES

The following interdisciplinary courses are part of the Core Curriculum and are offered under the direct supervision of the director of the Core Curriculum.

COURSE DESCRIPTIONS

CORE (COR)

- 1103 Topics in Mathematics**
(3-0) 3 hours credit.
An organized course focusing on a topic in mathematics or statistics. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IA.
- 1113 Topics in Science and Technology: Level One**
(3-0) 3 hours credit.
An organized course focusing on a topic in science or technology (Level One). Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IB, Level One.
- 1123 Topics in Computer Science and Logic**
(3-0) 3 hours credit.
An organized course focusing on a topic in computer science or logic. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IC.
- 2103 Topics in Science and Technology: Level Two**
(3-0) 3 hours credit.
An organized course focusing on a topic in science or technology (Level Two). Topics will vary. Not more than 6 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IB, Level Two.
- 2203 Topics in the Social and Behavioral Sciences**
(3-0) 3 hours credit.
An organized course focusing on a topic in the social and behavioral sciences. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IIC.
- 2213 Engineering and Civilization**
(3-0) 3 hours credit.
Technology and engineering as central features of modern world civilization. Topics treated in a historical framework may include the relationship between technology and science; the Industrial Revolution; technology, society, politics, and ethics in the nineteenth and twentieth centuries; and the rise of the engineering profession.

2303 Topics in Literature

(3-0) 3 hours credit.

An organized course focusing on a topic in literature. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IIIA.

2313 Topics in the Arts

(3-0) 3 hours credit.

An organized course focusing on a topic in the arts. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IIIB.

3403 Topics in Intellectual Diversity

(3-0) 3 hours credit.

Interdisciplinary course focusing on a topic requiring that different intellectual perspectives be employed and compared. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IVA. (Formerly COR 3003. Credit cannot be earned for both COR 3403 and COR 3003.)

3413 Topics in Cultural Diversity

(3-0) 3 hours credit.

Interdisciplinary course focusing on a topic requiring cross-cultural comparison. Topics will vary. Not more than 3 semester credit hours in COR Topics courses may be taken to satisfy Core Curriculum requirements in Domain IVB. (Formerly COR 3013. Credit cannot be earned for both COR 3413 and COR 3013.)

PREPROFESSIONAL COURSES OF STUDY IN LAW, MEDICINE, OR BUSINESS

UTSA does not offer specific prelaw, premedical, pre dental, or prenursing programs. Students interested in legal, medical, dental, or nursing careers are encouraged to select undergraduate courses of study that comply with the specific program requirements of professional schools.

As a general guide, minimum requirements are set forth below. However, satisfactory completion of these minimums does not guarantee admission to any professional school or program. Specific professional schools may have more specialized requirements, and the selection process for admission to professional schools is highly competitive.

Preparation for Law School. Most law schools do not recommend or encourage students to concentrate in a particular area or discipline, although they do recommend that students acquire certain skills during their undergraduate career. Since these vary from school to school, students should be familiar with the requirements and preferences of the particular school or schools to which they intend to apply. That information can be obtained from the collection of current catalogs and directories for law schools in Texas and throughout the United States available through UTSA's Prelaw Advisory Committee. Information on the procedures for admission to law schools and the Law School Admission Test (LSAT) is also available from the committee. Appointments to consult with members of the committee may be made through the Division of Social and Policy Sciences or the Division of Behavioral and Cultural Sciences.

Preparation for Medical and Dental Schools. In general, medical and dental school admission committees do not state a preference about an undergraduate major field, leaving the student free to choose a degree program suited to the student's special abilities and interests. The vast majority of entrants have four years of college with a bachelor's degree. A few students with outstanding records and a high degree of maturity are admitted to medical school after completing 90 semester credit hours and to dental schools after completing 90 semester credit hours.

Admission requirements for The University of Texas Medical and Dental Schools are representative of admission requirements for most other American schools. These requirements include one year of college English; two years of biology as required for college science majors (one year must include laboratory work); one year of physics as required for college science majors, including laboratory; one year of general chemistry and one year of organic chemistry as required for college science majors, including the corresponding laboratories; and one-half year of college calculus (not required for dental school).

Each applicant is required to take the Medical College Admission Test or the Dental Admission Test. The preferred time to take these tests is at the spring test date before late summer or fall application for admission.

Students are encouraged to consult with the chairperson of the Health Professions Advisory Committee in the Division of Life Sciences early in their college career for

advisement and information concerning professional school requirements. The committee chair also should be consulted concerning the written evaluation that must be submitted for each applicant.

Applications for all University of Texas System Medical and Dental Schools are processed by the Medical and Dental Application Centers, 201 West Seventh Street, Suite 712, Austin, Texas 78701.

Preparation for Nursing School. Admission requirements for The University of Texas Schools of Nursing (outlined in the UTHSCSA Bachelor of Science in Nursing degree plan elsewhere in this catalog) are representative of admission requirements for most other American nursing schools. A minimum of 60 semester credit hours is required, including 6 semester credit hours of college English, 9 hours in behavioral sciences, 12 hours in history and government, 3 hours in statistics, and 18 hours in natural sciences which must include chemistry, anatomy, physiology, microbiology, and nutrition.

Additional information and advisement may be obtained from the chairperson of the Health Professions Advisory Committee in the Division of Life Sciences.

3-4 Dental Early Admission Program. This is a joint program between The University of Texas at San Antonio and The University of Texas Health Science Center at San Antonio Dental School. This program offers students with an interest in dentistry the opportunity to receive early acceptance to the dental school and to receive both a Bachelor of Science degree in Biology at UTSA and a Doctor of Dental Surgery degree at UTHSCSA within seven years. A list of the requirements for acceptance into the program and for its completion are available in the Division of Life Sciences.

Preparation for Graduate Study in Business. Nonbusiness majors who are interested in pursuing an M.B.A. are encouraged to use the electives in their degree program to complete the requirements for an outside field of business. Completion of this outside field may offer students the opportunity of gaining direct admission to many M.B.A. programs.

Undergraduates who are interested in a liberal arts background and are considering graduate or professional study in business, law, or medicine may be interested in the noncertification track of the Bachelor of Arts degree in Interdisciplinary Studies (outlined elsewhere in this catalog). For more information, contact the Division of Education.

**APPENDIX.
FACULTY**



COLLEGE OF BUSINESS*DIVISION OF ACCOUNTING AND INFORMATION SYSTEMS***PROFESSORS**

- Russell F. Briner**, B.B.A., Texas Tech University; M.B.A., Texas A&M University; Ph.D., Oklahoma State University
James F. Gaertner, B.B.A., M.B.A., Sam Houston State University; Ph.D., Texas A&M University
Susan L. Nordhauser, B.A., Cornell University; M.S., Purdue University; Ph.D., University of Texas at Austin

ASSOCIATE PROFESSORS

- R. Mark Alford**, B.B.A., M.B.A., Ph.D., Texas A&M University
Glenn B. Dietrich, B.S., University of Missouri; M.B.A., University of Texas at San Antonio; Ph.D., University of Texas at Austin
Martha A. Fasci, B.S., Our Lady of the Lake University; M.B.A., University of North Texas; Ph.D., University of Texas at Austin
James E. Groff, B.A., University of Iowa; M.B.A., Stetson University; Ph.D., University of Iowa
Fred Nordhauser, B.S., Cornell University; M.S., Ph.D., Purdue University
Marshall K. Pitman, B.S., M.B.A., Eastern Illinois University; Ph.D., University of Mississippi
James U. Ross, B.A., J.D., University of Texas at Austin
Ted D. Skekel, B.S., Florida State University; Ph.D., University of Oregon
Diane B. Walz, B.A., St. Louis University; M.B.A., Washington University; Ph.D., University of Texas at Austin
Sandra T. Welch, B.S., Texas Women's University; M.P.A., University of Texas at San Antonio; Ph.D., Texas A&M University
Judy L. Wynekoop, B.A., Cornell University; M.A., Michigan State University; M.S., Ph.D., Georgia State University

ASSISTANT PROFESSORS

- William D. Burg**, B.S., B.B.A., University of Nebraska—Omaha; Ph.D., Texas Tech University
Chak-Tong Chau, B.B.A., M.Acc., Stetson University; Ph.D., Florida State University
Cheryl L. Fulkerson, B.S., Colorado State University; M.B.A., Pittsburgh State University; Ph.D., Oklahoma State University
K. Dianne Jackson, B.B.A., Texas Tech University; M.S., Memphis State University; Ph.D., University of Memphis
Scott B. Jackson, B.S., M.S., San Diego State University; Ph.D., University of Nebraska—Lincoln
William L. Kuechler, Jr., B.S., Drexel University; Ph.D., Georgia State University
Robin R. Radtke, B.S., Marquette University; Ph.D., University of Florida
V. Srinivasan Rao, B.T., Indian Institute of Technology; M.S., Colorado School of Mines; Ph.D., University of Texas at Austin

- D. Elaine Sanders**, B.B.A., Eastern New Mexico University; M.Acc., University of Oklahoma
Karen L. Williams, B.S., M.B.A., University of West Florida; B.A., University of Colorado; Ph.D., Florida State University

DIVISION OF ECONOMICS AND FINANCE

PROFESSORS

- Lynda Y. de la Viña**, B.A., Pan American University; M.A., Ph.D., Rice University
Daniel R. Hollas, B.B.A., University of Houston; M.A., Ph.D., University of Illinois
Lalatendu Misra, C.M.E., Utkal University, India; M.B.A., Ph.D., University of Texas at Austin
Ronald C. Rutherford, B.A., Valdosta State College; M.B.A., Ph.D., University of Georgia
Dale B. Truett, B.A., Purdue University; M.A., Ph.D., University of Texas at Austin
Lila J. Truett, B.A., Kansas State University; M.A., Ph.D., University of Iowa

ASSOCIATE PROFESSORS

- Ronald M. Ayers**, B.S., M.A., University of New Orleans; Ph.D., Tulane University
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Robert A. Collinge, B.A., M.A., Ph.D., University of Maryland
Keith Wm. Fairchild, B.A., Ph.D., University of Texas at Austin
Fathali Firoozi, B.A., Iran College of Banking; M.B.A., Oklahoma City University; M.S., Ph.D., University of Oklahoma
Palani-Rajan Kadapakkam, B.S., Loyola College, India; Ph.D., University of Michigan
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John D. Merrifield, B.S., California Polytechnic State University; M.A., University of Illinois; Ph.D., University of Wyoming
Rodolpho Sandoval, B.B.A., Texas A&I University; J.D., Texas Southern School of Law; M.A., Notre Dame University; L.L.M., Harvard Law School
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DIVISION OF MANAGEMENT AND MARKETING

PROFESSORS

- Geralyn M. Franklin**, B.B.A., M.B.A., Stephen F. Austin State University; Ph.D., University of North Texas
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Joel G. Saegert, B.A., Ph.D., University of Texas at Austin

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William T. Flannery, B.S., M.S., Ph.D., University of Houston
Juan J. Gonzalez, B.S., Universidad Nacional Autónoma de México; M.I.B.S., Ph.D., University of South Carolina
Victor L. Heller, B.A., M.P.A., D.P.A., Arizona State University
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John P. McCray, B.A., Chapman College; M.B.A., Northwestern Louisiana State University; Ph.D., Texas A&M University
William G. Mitchell, M.B.A., University of Chicago; Ph.D., Arizona State University
Paul Preston, B.S., Florida Atlantic University; M.B.A., University of Miami; D.B.A., University of Colorado
Gary C. Raffaele, B.S., State University of New York; M.B.A., University of Texas at Austin; D.B.A., Harvard University
Woodie A. Spivey, B.A.E., Georgia Institute of Technology; M.M.S., Texas Christian University; Ph.D., University of Houston
Raydel Tullous, B.A., M.M.S., Texas Christian University; Ph.D., University of Santa Clara
Richard L. Utecht, B.B.A., M.B.A., Texas A&I University; Ph.D., University of North Texas
Richard B. Wadsworth, B.S., Texas A&M University; M.S., Ph.D., University of Arizona

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Brian C. Murray, B.S., University of Houston; M.A., Ph.D., Cornell University

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COLLEGE OF FINE ARTS AND HUMANITIES

DIVISION OF ARCHITECTURE AND INTERIOR DESIGN

PROFESSORS

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DIVISION OF ENGLISH, CLASSICS, PHILOSOPHY, AND COMMUNICATION

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Steven R. Levitt, B.A., Montana State University; M.A., West Virginia University; Ph.D., Ohio State University
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