

# TCU Bulletin 2004-2005 **Undergraduate Studies**

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## TCU UNDERGRADUATE BULLETIN

## Undergraduate Studies 2004-2005

Bulletin for the 132nd academic year



#### Accreditation

Texas Christian University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097: Telephone number 404-679-4501) to award bachelor, master, and doctoral degrees.

## Notice of nondiscriminatory policy as to students

Texas Christian University does not discriminate on the basis of personal status, individual characteristics or group affiliation, including but not limited to classes protected under federal and state law.

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# Academic Organization

The M.J. Neeley School of Business
College of Communication
The School of Education
College of Fine Arts
AddRan College of Humanities and Social Sciences
College of Health and Human Services
The College of Science and Engineering
Ranch Management Program
Office of Extended Education

#### Overview

TCU is composed of seven academic units offering undergraduate bachelor's degrees in 98 majors. These colleges and schools also offer graduate degrees (see TCU Graduate Studies Catalog for more information). In addition, students can earn a certificate in Ranch Management or take a full range of non-credit courses through the Office of Extended Education.

While students normally concentrate their work in the school or college of their major field, they may have classes in any or all. All undergraduates will have some courses in AddRan College of Humanities and Social Sciences and the College of Science and Engineering, for a broad, liberal arts-based educational background in the humanities, natural and social sciences.

#### The M.J. Neeley School of Business

The M.J. Neeley School of Business prepares students to contribute to the professional world and to the larger community through emphasis on a balanced curriculum. A unified program of basic studies provides a solid knowledge base upon which students add principles of accounting, decision sciences, finance, management, marketing, and information systems and supply chain management, as well as distinct competencies that allow them to lead in the business world.

#### **College of Communication**

The College of Communication combines liberal arts studies with professional training. Within the departments of journalism, speech communication, and radio-TV-film, students learn to apply their classroom experiences. Located in the eighth largest media market in the U.S., graduates find ample opportunity to develop their skills in their desired field. Personal counseling and relatively small classes allow the faculty to give attention to the work of each student.

#### The School of Education

The School of Education offers programs that combine theory with practicality and offers courses focusing on teaching in a school setting, solving instructional problems, resolving ethical issues and making curricular decisions. Students learn that a teacher's role is to strengthen young people by building sensitivity and achievement. Graduates learn to expand the possibilities of what all individuals can achieve.

## College of Fine Arts

The College of Fine Arts represents a vital and integral part of TCU's educational history. The College houses the School of Music and the departments of art and art history, ballet and modern dance and theatre arts. These academic programs exact an appropriate balance between professional training and liberal arts studies. Personal counseling and relatively small classes allow the faculty to give attention to the work of each student.

#### AddRan College of Humanities and Social Sciences

AddRan College of Humanities and Social Sciences is the center of TCU's well-developed tradition of emphasis on liberal arts. Courses in the humanities and social sciences form a major part of the core studies for all students. Degree programs within AddRan's 10 departments provide the solid liberal arts base needed for professional study toward the ministry, law, medicine, business, teaching or other related fields. Some have a professional orientation within themselves, with specialized study leading toward specific career objectives. In all of the programs, students will find flexibility and freedom balanced by structure and discipline.

## **College of Health and Human Services**

College of Health and Human Services unites the Harris School of Nursing, the School of Nurse Anesthesia, and three departments -- communication sciences and disorders, kinesiology, and social work -- in an integrated unit. The degree programs offered by the College build on the excellent foundation provided by the liberal arts and sciences and prepare graduates to practice in complex and varied professional settings. Many of the courses offered in the College allow students to learn through practicing professional and clinical settings and encountering multiple and diverse disciplines, practitioners, and clients.

## The College of Science and Engineering

The College of Science and Engineering provides an interdisciplinary program that bridges liberal arts studies with the technical skills the world demands. Composed of the departments of biology, chemistry, computer science, engineering, geology, mathematics, nutritional sciences, physics and astronomy, and psychology, the College offers the bachelor of science degree with majors in 18 fields of study and the bachelor of arts degree with majors in 6 fields. The college also administers the bachelor of general studies degree and the pre-health professions programs (pre-dentistry, pre-medicine, pre-veterinary medicine).

#### **Ranch Management Program**

Two options for study in Ranch Management are available. First, study in all phases of ranch management is offered through a full-time program completed in one academic year. The program combines intensive classroom instruction in basic principles of land, grass, livestock, records, finance and marketing with site visits to ranches, feedlots, market and experiment stations. Students are selected by interview and are admitted only at the beginning of the fall semester.

Second, a program leading to the B.S. degree in Ranch Management is available through the College of Science and Engineering. Students in the degree program are advised by a designated representative of the dean of the college. Students normally are enrolled full time in the Ranch Management Program during their final year of study for the degree.

#### Office of Extended Education

Non-credit courses, certificate programs, professional development workshops and selected summer institutes are coordinated through the Office of Extended Education. Non-degree admissions are also processed through this office. The mission of Extended Education is to provide quality life-long learning opportunities for the community and to serve as an arm to link University resources with the community.

## The Bachelor's Degree

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Faculty, academic advisors and deans are available to help students understand and meet academic requirements for a degree, but the students themselves are responsible for understanding and fulfilling them. If requirements are not satisfied, the degree will be withheld pending adequate fulfillment. Thus it is essential that each student become familiar with all requirements and remain currently informed throughout the college career.

#### **Definitions and Regulations**

**Major.** A major is a prescribed set of courses, number of credit hours, or academic experiences in one or more academic disciplines. Completion of a major is designed to assure disciplined and cumulative study, carried on over an extended period of time in an important field of intellectual inquiry.

**Minor.** A minor is a prescribed set of courses, number of credit hours, or academic experiences in one or more academic disciplines. Completion of the minor is designed to assure more than an introduction to an important intellectual field of study but less than a major in that field. A minor is traditionally outside the major field of study. The department offering the minor typically defines the requirements.

**Emphasis and/or Concentration.** Unless otherwise defined specifically within the catalog, an emphasis and/or eoncentration are a guided subset of courses or academic experiences defined by the major department and are typically, but not always, within the major area. Emphasis may be further defined as consistent with specific accrediting body requirements (e.g., Journalism).

**Program.** A program is a shared series of courses or experiences (e.g., Honors Program).

**Area of Study.** While used generically throughout the catalog, area of study could be replaced by Major, Minor or Emphasis/Concentration in most cases.

**Career Track.** This term has meaning within student records software and is used with reference to preprofessional program advising as a way to provide appropriate guidance on course selection and experiences, not necessarily tied to a major or minor.

**Semester Hour.** The unit of measure for academic credit purposes is the semester hour. A semester hour is equivalent to one hour of recitation or a minimum of 2 hours of laboratory per week for a semester or an equivalent time for a shorter term. Two hours of preparation for each classroom hour, on the average, are expected.

**Grading.** The faculty definition of grades, and the point system designed to indicate quality of work, is as follows:

- A Designates exceptional work, 4 points per semester hour.
- B Designates superior work, 3 points per semester hour.
- C Designates satisfactory work, 2 points per semester hour.
- D Designates poor work, 1 point per semester hour.
- F Designates failure, 0 points per semester hour.
- P Passed the course.
- NC No credit awarded for the course.

Non-grade Designators:

- I Designates course has not been completed and a final grade has not been assigned. (The "I" must be removed within first 60 days of the semester immediately following or it is changed to an "F." Any extension must have written approval of the instructor and dean. This policy does not apply to senior honors research papers, graduate thesis or dissertation hours. The student must secure the permit from the Registrar's Office and take it to the instructor before offering work of any kind toward making up the "I" grade.)
- Q Removed from the course by an academic dean.
- W Officially withdrew from the course.
- AU Officially audited the course.

Pass/No Credit. Undergraduate students may elect a pass/no credit grading option. They may do so by indicating their choice in writing to the office of the Registrar not later than the date listed in the academic calendar for electing the pass/no credit grading option. Courses taken on a pass/no credit basis are graded "P" (pass) and "NC" (no credit). These P/NC courses are not counted in computing the student's grade point average. A "P" course, however, will carry credit hours and be used toward a student's total hours required for graduation. A "P" indicates achievement equivalent to "A," "B" and "C." Achievement equivalent to a "D" and "F" results in the grade of "NC." Students earn no credit hours in courses in which the grade of "NC" is received.

Before using this option, the student should be aware that some majors and degree programs may limit the applicability of courses graded on a P/NC basis. Courses that are offered only with the P/NC grade will be accepted for meeting requirements in a major or degree program and financial aid eligibility. Furthermore, courses offered only with the P/NC grade will not be counted toward a limit on the number P/NC hours that may be applied to a major or degree program. The student should also check on the acceptability of P/NC grades by any honor societies or graduate schools in which the student may be interested. The P/NC option is not allowed in any English as a Foreign Language (ENFL) course. Any questions or exceptions concerning the P/NC option should be directed to the dean of the college of the student's major.

**Student-Initiated Withdrawal.** The purpose of student-initiated withdrawal from courses is to enhance the learning opportunity in a program of study. On recognition that a student may lack the background needed for the mastery of course content, the subject matter in a course does not match student need or interest as anticipated, or that course requirements will limit effective appropriation of learning in a semester's overall program of study, a student may officially withdraw from a course and receive a "W" in accordance with the policy stated below.

Mere absence from a class does not constitute withdrawal. In order to withdraw from a course, a student must go through official established procedure.

By following established procedures, students may withdraw from any class until five (5) academic days following the published date mid-semester reports of unsatisfactory work are due to the Registrar. The date of withdrawal for all purposes, including tuition adjustment, shall be the date of official withdrawal.

There will be no withdrawals after this date during the fall and spring semesters, or a comparable period during a shorter term.

Any student who experiences unusual hardship may seek special consideration through a written petition to the dean of the college in which he or she is enrolled. Petitions should, where possible, be documented with supporting statements from a doctor, counselor, or family member. That a student is doing unsatisfactory work in a course will not be taken as sufficient reason for special consideration. If, in the opinion of the dean, the request is justified, a grade of Q (dropped by the dean's permission) may be assigned by the dean after consultation with (1) the instructor of the course, (2) the chairman of the department, and (3) the dean of the college in which the course is offered. Any dean assigning a Q will notify the Registrar's Office.

**Audit Enrollment (Course visitor).** Occasional visitation of classes by students is allowed with the consent of the instructor. Any extended attendance requires enrollment as an audit. Auditors are admitted to classes on a space-available basis only. An audit fee is charged. TCU Scholars (See Recognitions section) are given the opportunity to audit one class (for which auditing is permitted) without fee within 12 months after notification of eligibility. TCU Scholars will be expected to follow the established regulations for auditors. The following regulations are applicable:

- 1. Certain classes-laboratory and clinical classes, Ranch Management day classes, laboratory sections of lecture classes, activity and performance classes such as in studio art, music and ballet-may not be audited. (Evening Ranch Management classes may be audited at full tuition and fees.)
- 2. The only period during which students may register for an audit or change a credit class to audit is from the second day of late registration to the last day of late registration as published in the University calendar. It is recommended that prospective students consult the instructors of courses in which they are interested before they register. Students wishing to audit graduate courses must be admitted for graduate study and have written approval of either the instructor of the course for which they wish to register or the dean of the college in which the course is taught.
- 3. Classroom recitation and participation may be restricted at the discretion of the instructor; no grade is assigned and no credit is awarded.
- 4. If credit is desired, the student must register for and repeat the regular course after paying regular tuition.
- 5. The student's name will appear on the instructor's class roll. In order for "AU" to appear on the transcript, however, the instructor must certify at the end of the semester that the student has attended as an auditor. Audits not approved by the instructor as a final grade will be omitted from the student record.

#### **Grade Point Average**

Two grade point averages are maintained by Texas Christian University: (1) a semester average based on courses taken at TCU during a particular term, and (2) a cumulative average based on all work attempted at TCU.

A student's grade point average (GPA) is computed by dividing the number of grade points (grade points are earned per semester hour for the successful completion of academic work) by the number of hours (total credit hours attempted at TCU, excluding those attempted on a pass/no credit basis).

**Repeating a Course.** If a course taken at TCU is repeated at TCU, the official grade is the last letter grade made although all grades appear on the transcript. Only the last letter grade earned in the repeated course will be used in computing the GPA.

If a course is taken at TCU and then repeated at another institution, or if a course is taken at another institution and then repeated at TCU, only the grade earned at TCU is used to compute the student's GPA. Credit for any given course, regardless of where it was taken, may be counted only once.

The student is responsible for notifying the Registrar when a course is repeated.

**Transfer Credit.** Transfer credit is identified on the academic record as the total number of credit hours accepted from each institution attended and is added to the total number of cumulative earned hours. Transfer credit hours may satisfy degree requirements but are not used in the calculation of the cumulative GPA.

Pass/No Credit. Pass/no credit courses are disregarded in the calculation of the student's GPA.

**Credit by Examination and Portfolio Assessment.** Credit earned by examination or portfolio assessment is not assigned a letter grade and is not included in the calculation of the cumulative GPA.

#### **Course Credit**

**Credit for Transfer Work.** Students transferring to TCU must present a record of all transfer work for evaluation to the Office of Admissions for approval by the appropriate academic dean prior to their enrollment in the University. Transfer course work not presented prior to enrollment may not be counted toward a degree.

After enrolling at TCU, all students must receive prior written approval of the appropriate academic dean if they wish to take courses at another institution and have those courses count toward a degree at TCU. Transcripts of course work taken elsewhere must reach the Registrar's office within 30 days of completion of the course work. Course work taken without prior written approval may not be applied to a degree.

**Credit for Study Abroad.** TCU will accept as transfer credit courses taken by students enrolled in approved foreign colleges or universities if prior written approval is obtained from the appropriate academic dean.

Students who enroll at those foreign colleges or universities with which the University has a formal agreement of institutional affiliation may exercise the following option. Students have the option as to whether or not the courses taken during the foreign study will be used to meet residency requirements, in which case the grades in these courses will be computed in the official TCU grade point average. Students must declare their intent in writing prior to the period of foreign study and said declaration is irrevocable. The office of the Vice Chancellor for Academic Affairs will maintain a list of those institutions with which TCU has a formal agreement of institutional affiliation. The Study Abroad Coordinator will assist students in making arrangement for foreign study.

**Credit by Examination.** Students may earn academic credit for university-level learning by taking an examination in the appropriate area. Credit granted usually can be used to satisfy specific and general degree requirements. Credit by examination will not be awarded after the student has completed 66 hours of college credit.

For the currently enrolled student, the following conditions apply:

- 1. The approval of the academic dean must be obtained before taking CLEP or other recognized examinations for credit.
- 2. Credit by examination will not be awarded for a prerequisite course if credit has been earned in an upper division course.
- 3. Credit earned by examination is not assigned a letter grade, and is not counted toward special recognition or bonors
- 4. Duplicate credit is not allowed by enrolling in and completing a course for which credit was earned by examination.
- 5. Credit may be earned through selected CLEP General and Subject Examinations, College Board Achievement Test in Foreign Languages, and through locally constructed examinations.

For the entering student, the following conditions apply:

- 1. TCU grants credit in some subject areas through the following standardized examination programs: College Board Advanced Placement (AP); College Level Examination Program (CLEP); College Board Achievement Tests in Foreign Languages (ACH); International Baccalaureate (IB).
- 2. Credit may be obtained through the following institutional examinations: Locally constructed examinations in nursing; Conference examinations in music; Audition examination in ballet and/or modern dance; Certain non-U.S. Advance Level National Examinations.
- 3. Credit by examination awarded at another college or university will be honored by TCU if it is based on the same test(s) and minimum scores required at TCU.
- 4. Credit in English Composition earned by examination will be honored if it appears on an official college transcript.
- 5. A student whose native language is not English may satisfy the foreign language requirement for the B.A. degree by demonstrating proficiency in English through a specified score on TOEFL (Test of English as a Foreign Language). Although the language requirement will be satisfied, no semester hour credit will be awarded.

The Credit by Examination procedures are reviewed and updated annually. The current brochure, Credit by Exam, is available in the Office of Admissions, Sadler Hall Room 112.

**Credit for Military Service.** The University follows, with limitations, the recommendations of the American Council on Education as published in the Guide to the Evaluation of Educational Experiences in the Armed Forces in granting credit for military service schools. At a minimum, the following limitation applies:

Courses must be in the "baccalaureate/associate degree category" as defined by the ACE guide. This precludes acceptance of vocational, technical or certificate category courses, or military occupational specialties or job experience.

For consideration of credit for military service schools, the applicant may submit the following military records:

- 1. a certified original of the DD Form 295, or
- 2. a copy of the DD Form 214, or
- 3. course completion certificates.

The Office of the Registrar will assist persons eligible for veterans educational assistance benefits.

**Credit for Nonresidential Course Work.** As a general rule, TCU does not accept nonresidential courses taken prior to enrollment at TCU. However, a student may petition the appropriate academic dean to grant credit. Nonresidential courses taken while a student is in residence at TCU require prior written permission of the appropriate dean if the courses are to be applied toward a TCU degree.

**Credit for Independent Study.** Some departments at TCU offer an opportunity for independent study, usually pursued late in one's major. It has a broad range of purposes. Perhaps most important is exposure of the undergraduate student to methods and techniques usually reserved for graduate students. Seminars, reading and reviews, and independent research characterize this phase of a student's work, which normally is optional. Independent study courses are also available to exceptional students with exceptional needs. A student, for example, may want a more intensive exposure to a specific subject than a standard course provides. With faculty approval, an independent study course can provide the opportunity to go as far as interest and capability allow.

#### **Academic Load**

The student of average ability should be able to take successfully 15-18 semester hours. The student should regularly consult with his/her academic advisor, but the student must know the academic requirements of his/her degree program and plan accordingly for a timely graduation. After consultation with the academic advisor the student will select the appropriate courses and number of credit hours to be taken each semester. Decisions regarding the number of hours to be taken and class scheduling will differ among students based upon many variables, e.g., academic preparedness and commitments to out-of-class activities. The University's web-based registration allows a student to register for up to 18 semester hours. The student seeking to register for more than 18 hours must take written approval from the academic dean to the Office of the Registrar. Students enrolled through the Office of Extended Education must obtain approval of the director to register for more than 7 semester hours.

#### **Student Classification**

A student's classification is determined by the amount of credit earned or the degree for which the student is a candidate, as shown below:

Freshman - 0-23 semester hours

Sophomore - 24-53 semester hours

Junior - 54-83 semester hours

Senior - 84 and above semester hours

Graduate - Student enrolled for graduate study or in Brite Divinity School

Post Graduate - Student who possesses a baccalaureate degree but is not pursuing an advanced degree program

Special-Unclassified

### **Interpretation of Course Abbreviations**

Each course is assigned a five-digit number. The first digit indicates the level (year) at which the course is offered; the second, third and fourth digits distinguish one course from another within the same department; the fifth digit reflects the amount of semester hour credit assigned to the course. In indicating the level or year of the course, 0 is used for subfreshman; 1 for freshman; 2 for sophomore; 3 for junior; 4 for senior; 5 for senior-graduate; and 6, 7, 8 and 9 for graduate.

The fifth digit shows semester hour credit with one exception-zero is assigned those courses which include one or more of the following features: noncredit; credit value includes a fraction; the course has a variable credit value which is determined at the time of enrollment on an individual basis.

Thus the course, "English 10803" (or ENGL "10803") is a freshman level course (first digit) which carries 3 semester hours of credit (fifth digit). The three middle digits (second, third and fourth) identify it as a specific course in the English Department.

When the term "advanced courses" is used, it refers to those of junior rank (30000 level) or higher.

In designating courses, departments use the four-letter subject code (such as "ENGL" for English) that has been devised for web-based registration.

The codes are to be interpreted as follows:

ACCT - Accounting

AEST - Aerospace Studies

ANTH - Anthropology

ART - Art

BALT - Ballet

BIOL - Biology

BRST - British & Colonial/Post-Colonial Studies

**BUSI** - Business

CHEM - Chemistry

CITE - Computer Information Technology

COMM - Communication Studies

COSC - Computer Science

COSD - Communication Sciences & Disorders

CRJU - Criminal Justice

DEMT - Design, Merchandising, & Textiles

ECON - Economics

ENSC - Environmental Science

EDEC - Education - Early Childhood

EDEL - Education - Elementary

EDMS - Education - Middle School

EDRE - Education - Reading

EDSE - Education - Secondary

EDSP - Education - Special

EDUC - Education - General

ENFL - English as a Foreign Language

ENGL - English

ENGR - Engineering

FINA - Finance

FNRT - Fine Arts Interdisciplinary

FREN - French

GEOG - Geography

GEOL - Geology

GERM - German

GREE - Greek

HCOL - Honors Colloquia

HHIT - Honors Intellectual Traditions

HIST - History

HLTH - Health

HNRS - Honors: Origins & Images

HSPR - Honors Special Problems

INSC - Information Systems & Supply Chain Management

ITAL - Italian

JAPN - Japanese

JOUR - Journalism

KINE - Kinesiology

LAST - Latin American Studies

MANA - Management

MARK - Marketing

MATH - Mathematics

MISC - Military Science

MODA - Modern Dance

MUSI - Music

MUSP - Music Performance

NTDT - Nutritional Sciences

NURS - Nursing

PEAC - Physical Education Activity Courses

PHIL - Philosophy

PHYS - Physics & Astronomy

PORT - Portuguese

POSC - Political Science

PSYC - Psychology

RAMA - Ranch Management

RELI - Religion

RTVT - Radio-TV-Film

SOCI - Sociology

SOWO - Social Work

SPAN - Spanish

THEA - Theatre

**UNPR - University Programs** 

WOST - Women's Studies

### **Grade Reports**

Grades are reported to students at the end of each semester and summer term. Reports will also be made at midsemester on undergraduate students who are doing unsatisfactory work in one or more subjects. Unsatisfactory shall be defined as "D" or "F" work. Mid-semester reports of unsatisfactory work are not made a part of the official university transcript.

## **Academic Conduct Policy**

Information pertaining to the Academic Conduct Policy may be found in the Student Services section of this Bulletin. Students may obtain a complete copy of the policy statement in the offices of all academic deans, the Dean of Campus Life, the Vice Chancellor for Academic Affairs, and the Vice Chancellor for Student Affairs.

### **Academic Standing and Satisfactory Academic Progress**

A student is considered to be in "Acceptable Academic Standing" if the student is eligible to continue his/her enrollment at TCU. Verification of this status is made by the Registrar.

A student is considered to be making "Satisfactory Academic Progress" when the student is in Acceptable Academic Standing and course work is being completed (1) that leads to the degree being sought, (2) in a timely manner, and (3) which is consistent with reasonable expectations for individual circumstances. Satisfactory Academic Progress is determined by the academic dean of the major.

# Dismissal, Suspension, or Expulsion for the Lack of Academic Progress, Disruptive Behavior, or Professional Misconduct

A faculty member has both the authority and the responsibility to dismiss a student from any educational setting for which he/she is responsible if, in the faculty member's judgment, the student's behavior or lack of preparation is detrimental to the educational experience of others or could create unsafe conditions. Any such dismissal is reported, in writing, to his/her academic dean as soon as possible after the event.

Students may be withdrawn with a grade of "F" from individual courses for lack of academic progress, disruptive or unsafe behavior, or lack of preparation upon the recommendation of the faculty member and the approval of the appropriate academic dean.

Students may be suspended or expelled from the University at the discretion of the appropriate academic dean at such times as the student's performance of behavior clearly demonstrates that the student is not interested in, or making acceptable academic progress. Likewise, an academic dean has both the authority and the responsibility to take action, including dismissal, suspension, or expulsion from a program of study or the University itself, if a student's conduct is determined to be contrary to the professional and ethical standards of a field. If a student is suspended or expelled from the University, a grade of "F" or a designation of "Q" will be recorded for each course in progress as determined appropriate by the dean, and the transcript will note suspension or expulsion.

Students may appeal by contacting the chair of the Academic Appeals Committee.

### **Attendance Expectations and Official Absence Policy**

Regular and punctual class attendance is essential, and no assigned work is summarily excused because of absence, no matter what the cause. Records of class attendance are the responsibility of the faculty, and every course syllabus should clearly state the instructor's policy on class attendance and how attendance affects a student's final evaulation in the course. Students who miss an instructional experience are expected to meet with faculty to discuss their absence as soon as possible.

When a student is absent to represent the University (as in athletics, chorus, band, national or state meetings or organizations represented at TCU), then an Office University Absence may be granted by the Campus Life Office. Faculty/staff who wish to have an activity sanctioned for Official University Absence status must submit the names of all students, including date and hours absent from campus, to the Campus Life Office no later than one week prior to the date of the activity.

Students are encouraged to use the resources of the Campus Life Office if an emergency situation occurs, or if assistance is needed to resolve indivual concerns.

#### Family Educational Rights and Privacy Act

This Federal law states (a) that a written institutional policy must be established and (b) that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution maintain the confidentiality of student education records.

The University accords all the rights under the law to its students. Students wishing access to a complete copy of the regulation and the University policy governing their educational records may do so at these locations: Provost/ Vice Chancellor for Academic Affairs, Sadler Hall Room 302; Vice Chancellor for Student Affairs, Sadler Hall Room 310; Dean of Campus Life, Sadler Hall Room 101; Registrar, Sadler Hall Room 17; or Scholarships and Financial Aid, Sadler Hall Room 108.

There are six rights, which are summarized here:

- 1. The Right to be Informed. The University will give the students an annual notice of their rights and where copies of the policy may be reviewed.
- 2. The Right to Inspect. Students may inspect information contained in their educational record provided they make a written request to the custodian of the records. The request must be granted no later than 45 days from the receipt of the request.
- 3. Right to Limited Control of Release. No one outside the institution shall have access to, nor will the University disclose identifiable information from the educational records without written consent of the students, except directory information or other exceptions permitted by the Act, which the student has not refused to permit the University to disclose.
- 4. Right to Request a Change. Students may request that the record be amended if they feel the information is inaccurate, misleading, or in violation of the rights of privacy. The University will decide whether to change the record. The student may place a rebuttal in the record.
- 5. Right to a Hearing. If the University chooses not to amend the record, the student may request a hearing. The request must be in writing to the Vice Chancellor for Student Affairs or the Vice Chancellor for Academic Affairs. The student will be notified of the time, date, and place of the hearing.
- 6. Right to Report Alleged Violations. Students who feel their rights have been abridged may file complaints with the Family Educational Rights and Privacy Act Office, Department of Education, Washington, D.C. 20201.

At its discretion TCU may provide directory information in accordance with the provisions of the Act to include: student name, address, telephone number, email address, image, name of parents of dependent students, date and place of birth, major field of study, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities and sports, and weight and height of members of athletic teams. It is also permissible for the University to release information from a student's educational record to a parent, provided the student is a "dependent" as defined in Section 152 of the Internal Revenue Code of 1954. Students may withhold directory information by notifying the Registrar in writing. Requests for nondisclosure will be honored for only one academic year; therefore, authorization to withhold

directory information must be filed annually in the Office of the Registrar.

#### **Transcripts of Academic Records**

Students and former students may request official transcripts of their TCU academic record from the Office of the Registrar. While official copies of high school records and transfer credits from schools other than TCU must be requested from the institutions where the work was taken, unofficial copies may be requested from TCU. All transcript requests must be made by the student and must be in writing. Adequate notice, normally one week, is required for transcript processing. Transcripts cost \$5.00 each. Transcripts will not be released unless the student has satisfied all financial obligations to the University.

#### **Affirmative Action**

If there are matters having to do with discrimination, or matters concerning access for the handicapped, please notify the Affirmative Action Officer, Dr. Cornell Thomas, Sadler Hall, Room 327, Extension 7796.

#### **Academic Probation and Suspension**

All undergraduate students are required to meet certain academic standards. Academic probation/suspension policies are designed to provide careful supervision of the program of study and progress of the student. Failure to meet standards will place students on academic probation or academic suspension. The minimum satisfactory record at TCU for normal progress and graduation is an overall "C" average on all work taken at TCU.

Each semester's grades are reviewed to determine attainment of academic standards. Students are required to maintain academic progress according to the standards set forth below. Failure to meet these expectations will result in the following action:

**Academic Warning.** Students will be placed on Academic Warning if they have attempted (i.e., received a grade) at least 9 semester hours but fewer than 18 total semester hours at any accredited institution and their cumulative TCU grade point average falls below 2.00. Academic Warning will not become a part of the official transcript. Students will be placed on Academic Warning only once during their matriculation at TCU.

#### Academic Probation. Students who fail to achieve:

A. a 2.00 cumulative TCU grade point average in any semester of attendance following Academic Warning will be placed on Academic Probation, or,

B. a 2.00 cumulative TCU grade point average in any semester of attendance will be placed on Academic Probation if they have attempted 18 or more cumulative semester hours at any accredited institution.

Academic Probation will become part of their official transcript.

**Academic Suspension.** Students who have been placed on Academic Probation at any time during their matriculation at TCU will be subject to Academic Suspension if they fail to maintain a 2.00 cumulative grade point average at TCU in any subsequent semester of attendance.

Students who are subject to Academic Suspension will have their academic progress reviewed by their academic dean and will be notified in writing as to the Academic Suspension decision and any special conditions for reenrollment. A student's suspension may be for a single semester or for a full calendar year and may or may not include summer terms, at the discretion of the dean of the student's major. A second suspension will be for a minimum of a full calendar year.

Following suspension the student must apply for re-enrollment to the University. Re-enrollment requires the approval of the academic dean of the student's intended major. Credit earned from another college or university during a period of academic-related suspension may not be transferred to TCU.

Academic Suspension will become part of their official transcript.

Students Returning to the University Following Suspension. A student re-enrolled in the University following a period of suspension is automatically on probation.

#### **Requirements for Graduation**

The University requirements for graduation (e.g., University Curriculum, total credits and residence requirements) specified in the Undergraduate Studies Bulletin in effect at the time the student first enrolls at TCU as a degree-seeking student will be those required for graduation for a period of time not to exceed 6 (six) years. A year is defined as the 12-month period following the date of initial enrollment.

The major, college and specific degree requirements for graduation in effect when the student formally declares a specific major (or his/her intent to pursue a specific major) will be those required for graduation for a period of time not to exceed 6 (six) years from the time of declaration of major.

After 6 (six) years, requirements for graduation will be those specified in the Bulletin in effect at that time. A student may graduate under the requirements of a subsequent Bulletin, but he/she must satisfy all the requirements of the Bulletin chosen. When a student pursues a degree on a part-time basis, his/her enrollment pattern at TCU is a factor the academic dean may consider to determine whether an exception will be made to the 6-year rule.

The University faculty expects a bachelor's degree from TCU to indicate both a breadth of knowledge and comparative mastery of some field. Thus the curricula for all bachelor's degrees are built around:

- 1. Study in specified subject areas as stated in the University Curriculum, and
- 2. Concentration upon a combination of related courses as outlined by the department, school or college in which study is emphasized, and

3. In some cases, "free electives" or other courses through which educational goals can be reached.

Since an important goal of the University is to help its students learn the ways and habits of articulate thought, the rationale for the University Curriculum is the belief that there exists an identifiable body of studies central to achieving that goal. All bachelor's degree plans include these requirements. Each school and college may require some variation, and students should refer to the specific degree requirements found in the school and college sections of this bulletin.

#### University Curriculum Requirements (UCR)

Texas Christian University seeks to provide undergraduate instruction that will help its students (1) understand the social and physical world, (2) appreciate our history and cultures, (3) develop the capacity for rational choices, creative thinking and expression, and responsible citizenship, (4) cultivate the skills needed for the lifelong pursuit of learning. To serve these objectives the University Curriculum Requirements include Foundations-requirements in written expression and in mathematics; and Explorations -requirements in specified areas of human knowledge and experience.

## I. FOUNDATIONS: 9 credit hours

The Foundations requirements, which include courses to refine and enhance skills in critical reading, written composition, and mathematics, allow students beginning the undergraduate curriculum to increase their proficiency in these essential skills.

### A. Writing Requirement - 6 credit hours, and the Writing Emphasis Experience

#### 1. Writing Workshop - 6 credit hours

This requirement is to be met by courses designated "Writing Workshop," with no more than three of these hours in freshman-level study. Writing Workshop courses assume the student's successful completion of four units of high school English.

This requirement is to be met by at least one course in various modes of composition, including analytical writing and research techniques and writing. Both writing courses are to include a reading component providing composition models of suitable kinds. Student writing in these courses is expected to increase competence in grammar, mechanics, and other conventions customary in written discourse.

AP or CLEP credit may satisfy up to 6 hours of the writing requirement.

#### 2. Writing Emphasis Experience

To allow juniors and seniors to increase their writing skills, the University Curriculum includes a writing emphasis component. This requirement, which ordinarily should not increase the credit hours required by the University Curriculum, is to be satisfied by two upper-division courses (three credit hours for each) with a "writing emphasis" designation. Because any academic unit of the University may offer courses with a writing emphasis, courses satisfying other baccalaureate degree requirements may also meet the writing emphasis requirement of the University Curriculum. Writing should occur throughout the course and total a minimum of 2500 words.

## **B. Mathematics** - 3 credit hours

This requirement is to be satisfied by Department of Mathematics courses at or above the freshman level. Appropriate courses assume the student's successful completion of three units of high school mathematics: two in algebra and one in geometry.

AP or CLEP credit may satisfy this requirement.

## II. EXPLORATIONS: 36 credit hours

The Explorations requirements assure that all baccalaureate candidates encounter certain broad areas of knowledge. Through this experience, the student will gain knowledge and perspectives by studying various domains of human knowledge and experience.

The Explorations requirements allow no more than 6 credit hours from courses in a single department or in that department's cross-listed courses. This limitation applies regardless of the UCR groups in which the department's course offerings appear. Approved integrative courses are excluded from this restriction.

Satisfactory fulfillment of an Explorations section requires completion of a prescribed minimum number of credit hours and not more than a stated maximum number of credit hours. Minimum requirements of the four sections total thirty credit hours. The additional 6 credit hours may be selected from any of the four sections but the credit hour maximum of a section may not be exceeded.

### A. Physical and Life Sciences - minimum of 6 credit hours, maximum of 9 credit hours

(NOTE: Courses in mathematics and computer science do not satisfy this requirement.)

6 credit hours must be in laboratory courses such as those offered in biology, chemistry, geology, physics, psychology.

The purpose of the requirement is to include study in scientific disciplines in which observation, deduction, and analytical reasoning are essential methods. The requirement also ensures that students gain an understanding of scientific discoveries achieved by such methods.

Courses meeting this requirement involve observing experimental parameters, recording and interpreting such observations, and drawing conclusions based on appropriate theoretical frameworks. The experimental dimension is to include appropriate mathematical concepts and applications. Students are also required to demonstrate their

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ability to present such material in a narrative form.

B. Social Sciences - minimum of 6 credit hours, maximum of 9 credit hours

The 6 hour minimum is to be satisfied by courses using the methods of one or more of the social sciences. The courses customarily will include study of institutions as they affect individuals and groups. The approach to such study is through disciplines such as economics, political science, and sociology.

C. Cultural Heritage - minimum of 12 credit hours, maximum of 15 credit hours

The minimum must be distributed as specified below. The additional 3 hours can be in any subsection of Section C. Students are encouraged to take courses which explore cultures other than their own.

- 1. Religion-Studies minimum of 3 credit hours. Courses satisfying this requirement examine the role of religion in human culture, with this examination directed to a single religion or to a comparative consideration of major religions. These courses include appropriate historical study as well as texts important to the religions.
- 2. Historical Studies minimum of 3 credit hours. The minimum is to be met by a 3-credit-hour course in U.S. historical studies. Courses meeting this requirement make evident the methods of history. Such courses may be general in their subject matter or specific or topical in focus, but are to encourage the development of a critical and evaluative attitude toward historical texts and sources.
- 3. Critical Inquiry minimum of 3 credit hours. Courses satisfying this requirement are primarily critical/evaluative in approach. This approach can be applied to modes of inquiry, to methods in various disciplines, or to public issues and contemporary views. These courses make evident the individual's responsibility for making informed decisions.
- 4. Fine Arts minimum of 3 credit hours. The requirement is to be met by critical and/or historical courses studying one or more of the fine arts (e.g., theater, music, visual arts). Performance courses do not satisfy this requirement.
- D. Language and Oral Communication/Literature minimum of 6 credit hours, maximum of 9 credit hours

If foreign language study is used to meet this requirement, the 6-credit-hour minimum must be in the same language. Students may demonstrate competency in a language other than English by meeting the TCU non-language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of course work at TCU, or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by: (1) scores on standardized tests approved by the University, for which the student will receive 3-12 hours of credit depending on the examination score; or (2) successful completion of one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

Students electing the oral communication/literature option are to meet the minimum in both of these disciplines.

- 1. Foreign Language minimum of 6 credit hours. Foreign Language courses at or above the freshman level satisfy this requirement.
- 2. Oral Communication and Literature minimum of 6 credit hours.
- a. Oral Communication minimum of 3 credit hours. This requirement is satisfied by courses directed to developing skills in oral communication; to training in clear, logical, and persuasive communication appropriate in various contexts; and to evaluating such communication.
- b. Literature minimum of 3 credit hours. Courses satisfying this requirement enable students to learn to analyze and criticize literary texts. These courses are to include appropriate historical, biographical, and ideological materials, and to be developed around a single writer or group of writers, a period, a literary form or genre, and/or critical theories by which the same works are examined by various means.

### III. HEALTH CONCEPTS/PHYSICAL EDUCATION: 2 credit hours

One credit hour of this requirement must be in a course presenting health concepts and strategies important for continuing participation in a sport or exercise. Such one-hour courses may also include instruction in mind-body interaction, stress management, nutrition, and physical exercise as important to health maintenance.

The second credit hour of this requirement may be satisfied by an additional health concepts course. If the second credit hour is satisfied by an activity course, the following substitutions are allowed:

- 1. Veterans of the Armed Forces may substitute 1 semester hour of academic credit for a Physical Education activity course.
- 2. ROTC courses in which the student participates in leadership laboratory may be substituted for a Physical Education activity course.
- 3. Students who participate in the Marching Band or in a Dance technique course may substitute these for Physical Education activity.
- 4. Students with physical disabilities may substitute 1 hour of academic credit for a Physical Education activity course. To qualify, students must obtain approval of the University physician.

Successfully completed Physical Education courses presented from institutions which grant no credit, or less than one credit hour for a semester course, may be used to fulfill TCU requirements. However, students who receive course credit will receive no more semester hour credit than was allowed by the issuing institution.

NOTES:

- 1. 6 hours of UCR credits in a given department may be applied to other baccalaureate requirements in that department such as those for major, minor, teaching specialty, etc.
- 2. Students transferring to TCU must complete a minimum of 6 hours in Writing Emphasis courses and also satisfy the Critical Inquiry requirement at TCU.
- 3. No more than 8 semester hours of Physical Education activity courses may be applied toward graduation requirements.

## **Total Credits and Residence Requirements**

Beyond the curricular requirements, each candidate for a bachelor's degree is required to:

- 1. Successfully complete at least 124 semester hours of credit.
- 2. Earn, under the point system of the University, a cumulative GPA of at least 2.0 in all work attempted at TCU (including courses attempted during foreign study which are designated by the student to fulfill residency requirements), earn a cumulative GPA of at least 2.0 in all courses attempted in the department of the major at TCU (including courses attempted during foreign study which are designated by the student to fulfill residency requirements), and earn a cumulative GPA of at least 2.0 in all courses applied to the minor (including courses attempted during foreign study which are designated by the student to fulfill residency requirements). Some major and minor programs may require a GPA greater than 2.0.
- 3. Do residence work in this university earning at least 58 semester hours applicable to the degree program in addition to any number accepted from other schools. **To be eligible for graduation with honors and to receive certain awards and recognitions, additional hours may be required (see Honors and Recognitions section).** The last 30 semester hours for the degree must be taken at TCU except as provided for in certain degree programs.
- 4. Successfully complete at TCU at least 42 of the total hours required for graduation in advanced courses numbered 3000 or above.
- 5. Successfully complete at TCU at least 12 semester hours of advanced work in the field of the major and at least 6 semester hours of advanced work in the field of the minor.

#### **Declaration of an Academic Major**

The premajor option is intended to provide students with more time to explore academic majors. Students may not remain nor declare as premajors after they have earned 54 semester hours of credit. The premajor student must formally declare a major by filing the "Change of Major" form with the Office of the Registrar.

#### **Multiple Majors**

Although students are encouraged to seek a broad educational experience at TCU, the approval to earn multiple majors is not automatic. In some cases, receiving multiple majors may require actually earning multiple degrees. Because the requirements of multiple majors and multiple degrees are complex, students wishing to pursue more than one major should investigate major and degree requirements early in their career at TCU (i.e., refer to the appropriate school/college section of this Bulletin which delineates the requirements for multiple majors and degrees). To pursue multiple majors or degrees, written permission from the academic dean responsible for each major or degree is required and must be filed with the Registrar's office.

#### **Additional Bachelor's Degrees**

A TCU student who wishes to pursue multiple bachelor's degrees concurrently must (a) declare his/her intent and file all degree plans prior to completing the last 15 hours of either degree; (b) fulfill all specific major, college/school and University degree requirements in force at the time of his/her initial enrollment (subject to the 6-year limitation); and (c) successfully complete 30 hours on each bachelor's degree that did not apply toward any of the other bachelor's degrees. A second bachelor's degree will not be awarded until the student has completed at least 30 hours in addition to those counted toward the bachelor's degree that requires the higher number of credit hours.

To return to TCU to earn an additional bachelor's degree, an applicant holding a bachelor's degree from TCU must apply to pursue a specific degree and, if admitted, must successfully complete a minimum of 30 semester hours at TCU which did not apply to the first degree and fulfill all specific major, college/school and University degree requirements in force at the time of enrollment at TCU for the additional degree. A second bachelor's degree will not be awarded until the student has completed at least 30 hours in addition to those counted toward the bachelor's degree that requires the higher number of credit hours.

An applicant holding a bachelor's degree from another accredited institution must be accepted to pursue a specific degree, successfully complete a minimum of 58 semester hours in residence at TCU, and fulfill all specific major, college/school and University degree requirements in force at the time of enrollment at TCU for the additional degree.

Courses applied toward a previously earned bachelor's degree will be evaluated on an individual basis to determine their applicability to University degree requirements.

#### **Degree Plan**

The undergraduate should make a formal request for a degree plan from the Office of the Dean of the college or school in which the degree objective is offered. The request should be made when the student has completed 60 semester hours unless the school or college specifies an earlier time in its section of the bulletin. After a degree is awarded, no subsequent work may be applied to that degree.

## AddRan College of Humanities & Social Sciences

Organization
Degree Programs
The Bachelor of Arts Degree
The Bachelor of Science Degree
Multiple Majors

## Overview

The University was founded as AddRan Male and Female College, and its largest and most central academic unit continues to carry the distinctive name that Addison and Randolph Clark devised for their school.

AddRan College also continues TCU's well-developed tradition of emphasis on the liberal arts. The college's faculty and programs provide a sound foundation for a lifetime of intellectual growth and preparation for the multiple careers that most will experience in the twenty-first century. Courses in the humanities and social sciences form a major part of the core studies of all University students and concentrated effort in one AddRan area can provide the base for future personal and vocational choices.

Degree programs within AddRan vary widely. Some provide the solid liberal arts base needed for professional study toward the ministry, law, medicine, business, teaching, and related fields. Some have a professional orientation within themselves, with specialized study leading toward specific career objectives.

In all of the programs, students will find flexibility and freedom balanced by structure and discipline.

AddRan's academic advisement system is part of its intent to help individual students meet their educational needs. Faculty members in each academic program serve as advisors. Students are expected to meet with their advisors at least once each semester as they plan studies for the next term, and appointments are encouraged at other times when students feel the need to discuss their academic options. All first year students, whether entering Freshmen or transfers, are required to see an advisor prior to registering. Names of advisors are available at the departments concerned. Pre-majors are advised through the Center for Academic Services.

#### Organization

AddRan College is organized into ten departments, two interdepartmental programs, two units of Reserve Officers' Training Corps, and one academic service unit.

#### **Departments:**

Design, Merchandising, and Textiles
Economics
English
History
Modern Languages and Literatures
Philosophy
Political Science
Religion
Sociology, Criminal Justice and Anthropology
Spanish and Latin American Studies

## Interdepartmental program:

Latin American Studies

#### Cooperative programs:

Master's in Education (3-2 program With School of Education) Master of Business Administration (3-2 program with M.J. Neeley School of Business)

### **Reserve Officers' Training Corps:**

Aerospace Studies, Air Force ROTC Military Science, Army ROTC

#### **Academic Service Unit:**

English Language Center

## **Residence Study Abroad:**

TCU Fashions, Foods, Furnishings and Cultural Tour of Europe.

TCU Summer Study Tours in Europe.

TCU Summer Study Courses in Italy, Great Britain; and Germany.

Administrative offices for AddRan College are on the first floor of Dave Reed Hall. Reed Hall also houses departmental offices of English, History, Modern Languages, Philosophy, and Spanish and Latin American Studies. Political Science is in M. E. Sadler Hall. Sociology, Criminal Justice and Anthropology is in the Sociology Building. Design, Merchandising, and Textiles is in the Annie Richardson Bass Building. Religion is in Theodore Beasley Hall. Economics is in the Economics Building.

#### **Degree Programs**

AddRan College administers programs which lead to the following baccalaureate degrees:

**The Bachelor of Arts** degree with majors in the following fields: Anthropology

Anthropology

Economics
English
French
Geography
History
Latin American Studies
Philosophy
Political Science
Religion
Sociology
Spanish

## The Bachelor of Science degree with majors in the following fields:

Economics Fashion Merchandising Interior Design International Economics Political Science

#### **Professions program**

The Bachelor of Science in Criminal Justice degree.

#### **Approved Minors**

Asian Studies Anthropology British and Colonial/Post-Colonial Studies Classical Studies Criminal Justice Economics English French Geography German History Japanese Latin American Studies Lighting for Visual Presentation Merchandising and Textiles Philosophy Political Science Religion Sociology Spanish Women's Studies

In addition, minors are accepted from the other colleges and schools at TCU. However, minors are accepted from the School of Education only if the student is seeking Teacher Certification in that field.

#### The Bachelor of Arts Degree

Students pursuing a program leading to a Bachelor of Arts degree must complete a minimum of 124 semester hours, 42 of which must be advanced (30000 level or above) from TCU, with a major selected from the approved list of majors below and a minor chosen in consultation with the student's advisor. The specific number of hours required for the major and minor may be found in the appropriate section of the Bulletin.

A maximum of 36 semester hours in any one subject field may be counted toward the 124-semester-hour minimum required for the Bachelor of Arts degree. English 10803 or 10833 and English 20803 are excluded from the 36-semester-hour maximum for students majoring in English.

In addition, students must complete the following UCR for the Bachelor of Arts degree:

#### I. Foundations: 9 credit hours

The Foundations requirements, which include courses to refine and enhance skills in critical reading, written composition, and mathematics, allow students beginning the undergraduate curriculum to increase their proficiency in these essential skills.

A. The Writing Requirement-6 credit hours, and the Writing Emphasis Experience.

## 1. Writing Workshop-6 credit hours

This requirement is to be met by courses designated "Writing Workshop," with no more than 3 of these hours in freshman-level study. Writing Workshop courses assume the student's successful completion of four units of high school English.

This requirement is to be met by at least one course in various modes of composition, including analytical writing and research techniques and writing. Both writing courses are to include a reading component providing composition models of suitable kinds. Student writing in these courses is expected to increase competence in grammar, mechanics, and other conventions customary in written discourse.

 $\ensuremath{\mathsf{AP}}$  or CLEP credit may satisfy up to 6 hours of the writing requirement.

#### 2. Writing Emphasis Experience

To allow juniors and seniors to increase their writing skills, the University Curriculum includes a writing emphasis component.

This requirement, which ordinarily should not increase the credit hours required by the University Curriculum, is to be satisfied by two upper-division courses (3 credit hours for each) with a "writing emphasis" designation. Because any academic unit of the University may offer courses with a writing emphasis, courses satisfying other baccalaureate degree requirements may also meet the writing emphasis requirement of the University Curriculum. Writing should occur throughout the course and total a minimum of 2,500 words.

#### B. Mathematics-3 credit hours

This requirement is to be satisfied by Department of Mathematics courses at or above the freshman level. Appropriate courses assume the student's successful completion of 3 units of high school mathematics: two in algebra and one in geometry.

AP or CLEP credit may satisfy this requirement.

#### II. Explorations: 42 credit hours

The Explorations requirements assure that all baccalaureate candidates encounter certain broad areas of knowledge. Through this experience, the student will gain knowledge and perspectives by studying various domains of human knowledge and experience.

The Explorations requirements allow no more than 6 credit hours from courses in a single department or in that department's cross-listed courses. This limitation applies regardless of the UCR groups in which the department's course offerings appear. Approved integrative courses are excluded from this restriction.

Satisfactory fulfillment of the Explorations section requires completion of 42 credit hours. AddRan students are required to choose a course which exposes them to a non-U.S. cultural perspective as they fulfill the requirements of this section.

A. Physical and Life Sciences-9 credit hours (NOTE: Courses in mathematics and computer science do not satisfy this requirement.)

Six (6) credit hours must be in laboratory courses such as those offered in biology, chemistry, geology, physics, psychology.

The purpose of the requirement is to include study in scientific disciplines in which observation, deduction, and analytical reasoning are essential methods. The requirement also ensures that students gain an understanding of scientific discoveries achieved by such methods.

Courses meeting this requirement involve observing experimental parameters, recording and interpreting such observations, and drawing conclusions based on appropriate theoretical frameworks. The experimental dimension is to include appropriate mathematical concepts and applications. Students are also required to demonstrate their ability to present such material in a narrative form.

#### B. Social Sciences-9 credit hours

The requirement is to be satisfied by courses using the methods of the social sciences. The courses customarily will include study of institutions as they affect individuals and groups. The approach to such study is through disciplines such as economics, political science, and sociology.

#### C. Cultural Heritage-15 credit hours

Students must choose at least one course from each sub-section of Section C.

## 1. Religion-minimum of 3 credit hours

Courses satisfying this requirement examine the role of religion in human culture, with this examination directed to a single religion or to a comparative consideration of major religions. These courses include appropriate historical study as well as texts important to the religions.

## 2. Historical Studies-minimum of 3 credit hours

The minimum is to be met by a 3-credit-hour course in U.S. historical studies. Courses meeting this requirement make evident the methods of history. Such courses may be general in their subject matter or specific or topical in focus, but are to encourage the development of a critical and evaluative attitude toward historical texts and sources.

#### 3. Critical Inquiry-minimum of 3 credit hours

Courses satisfying this requirement are primarily critical/evaluative in approach. This approach can be applied to modes of inquiry, to methods in various disciplines, or to public issues and contemporary views. These courses make evident the individual's responsibility for making informed decisions.

#### 4. Fine Arts-minimum of 3 credit hours

The requirement is to be met by critical and/or historical courses studying one or more of the fine

arts (e.g., theater, music, visual arts). Performance courses do not satisfy this requirement.

#### D. Language and Literature-9 hours

- 1. Foreign Language-6 hours in the same language at the 20000 level or above satisfy this requirement.
- 2. Oral Communication or Literature-3 hours
  - a. Oral Communication

This requirement is satisfied by courses directed to developing skills in oral communication; to training in clear, logical, and persuasive communication appropriate in various contexts; and to evaluating such communication.

b. Literature

Courses satisfying this requirement enable students to learn to analyze and criticize literary texts. These courses are to include appropriate historical, biographical, and ideological materials, and to be developed around a single writer or group of writers, a period, a literary form or genre, and/or critical theories by which the same works are examined by various means.

#### III. Physical Education: two credit hours

The Physical Education policies and exceptions listed in Requirements for Graduation in *The Bachelor's Degree* section of this bulletin also apply to the Bachelor of Arts degree.

NOTES:

- 1. 6 hours of UCR credits in a given department may be applied to other baccalaureate requirements in that department such as those for major, minor, etc.
- 2. Students transferring to TCU must complete a minimum of 6 hours in Writing Emphasis courses at TCU.
- $3.\ No$  more than eight (8) semester hours of Physical Education activity courses may be applied toward graduation requirements.
- 4. Specific courses have been approved to meet the UCR. These courses are so identified in the schedule of classes for each term's offerings.
- 5. Foreign Language Requirements: Students may demonstrate competency in a language other than English by meeting the TCU non-English language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of course work at TCU, or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by: (1) scores on standardized tests approved by the University, for which the student will receive 3-12 hours of credit depending on the examination score; or (2) successful completion of one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

#### Approved majors for the B.A. degree:

Anthropology
Economics
English
French
Geography
History
Latin American Studies
Philosophy
Political Science
Religion
Sociology
Spanish

#### The Bachelor of Science Degree

Students pursuing a program leading to a Bachelor of Science degree must complete the minimum number of semester hours (typically 124 or 132), 42 of which must be advanced (30000 level or above), specified for their particular major chosen from the list of approved majors for a B.S. degree below. Specific requirements of each major are to be found in the appropriate section of this bulletin. Where a minor is called for, it is to be selected with the assistance of the student's adviser from the list of approved minors.

In addition to the specific requirements, students must complete the following UCR for the Bachelor of Science degree:

I. Foundations: 9 credit hours

The Foundations requirements, which include courses to refine and enhance skills in critical reading, written composition, and mathematics, allow students beginning the undergraduate curriculum to increase their proficiency in these essential skills.

A. The Writing Requirement-6 credit hours, and the Writing Emphasis Experience.

#### 1. Writing Workshop-6 credit hours

This requirement is to be met by courses designated "writing workshop," with no more than 3 of these hours in freshman-level study. Writing workshop courses assume the student's successful completion of 4 units of high school English.

This requirement is to be met by at least one course in various modes of composition, including analytical writing and research techniques and writing. Both writing courses are to include a reading component providing composition models of suitable kinds. Student writing in these courses is expected to increase competence in grammar, mechanics, and other conventions customary in written discourse.

AP or CLEP credit may satisfy up to 6 hours of the writing requirement.

#### 2. Writing Emphasis Experience

To allow juniors and seniors to increase their writing skills, the University Curriculum includes a writing emphasis component.

This requirement, which ordinarily should not increase the credit hours required by the University Curriculum, is to be satisfied by two upper-division courses (3 credit hours for each) with a "writing emphasis" designation. Because any academic unit of the University may offer courses with a writing emphasis, courses satisfying other baccalaureate degree requirements may also meet the writing emphasis requirement of the University Curriculum.

#### B. Mathematics-3 credit hours

This requirement is to be satisfied by Department of Mathematics courses at or above the freshman level. Appropriate courses assume the student's successful completion of 3 units of high school mathematics: two in algebra and one in geometry.

AP or CLEP credit may satisfy this requirement.

#### II. Explorations: 42 credit hours

The Explorations requirements assure that all baccalaureate candidates encounter certain broad areas of knowledge. Through this experience, the student will gain knowledge and perspectives by studying various domains of human knowledge and experience.

The Explorations requirements allow no more than 6 credit hours from courses in a single department or in that department's cross-listed courses. This limitation applies regardless of the UCR groups in which the department's course offerings appear. Approved integrative courses are excluded from this restriction.

AddRan students are required to choose a course which exposes them to a non-U.S. cultural perspective as they fulfill the requirements of this section.

## A. Physical and Life Sciences-9 credit hours

Six (6) credit hours must be in laboratory courses such as those offered in biology, chemistry, geology, physics, psychology.

The purpose of the requirement is to include study in scientific disciplines in which observation, deduction, and analytical reasoning are essential methods. The requirement also ensures that students gain an understanding of scientific discoveries achieved by such methods.

Courses meeting this requirement involve observing experimental parameters, recording and interpreting such observations, and drawing conclusions based on appropriate theoretical frameworks. The experimental dimension is to include appropriate mathematical concepts and applications. Students are also required to demonstrate their ability to present such material in a narrative form.

#### B. Social Sciences-9 credit hours

The requirement is to be satisfied by courses using the methods of the social sciences. The courses customarily will include study of institutions as they affect individuals and groups. The approach to such study is through disciplines such as economics, political science, and sociology.

## C. Cultural Heritage-15 credit hours

Students must choose at least one course from each subsection of Section C.

#### 1. Religion-minimum of 3 credit hours

Courses satisfying this requirement examine the role of religion in human culture, with this examination directed to a single religion or to a comparative consideration of major religions. These

courses include appropriate historical study as well as texts important to the religions.

2. Historical Studies-minimum of 3 credit hours

The minimum is to be met by a 3-credit-hour course in U.S. historical studies.

Courses meeting this requirement make evident the methods of history. Such courses may be general in their subject matter or specific or topical in focus, but are to encourage the development of a critical and evaluative attitude toward historical texts and sources.

3. Critical Inquiry-minimum of 3 credit hours

Courses satisfying this requirement are primarily critical/evaluative in approach. This approach can be applied to modes of inquiry, to methods in various disciplines, or to public issues and contemporary views. These courses make evident the individual's responsibility for making informed decisions.

4. Fine Arts-minimum of 3 credit hours

The requirement is to be met by critical and/or historical courses studying one or more of the fine arts (e.g., theater, music, visual arts). Performance courses do not satisfy this requirement.

D. Languages and Literature-9 credit hours

If any foreign language credit is used toward this requirement, 6 hours must be taken in the same language.

- 1. Foreign Language-Foreign language courses at or above the freshman level satisfy this requirement. AP or CLEP credit may also be applied.
- 2. Oral Communication or Literature-If foreign language credit is used, the remaining 3 credit hours are to be selected from oral communication or literature; otherwise, the 9 hours are to come from oral communication and literature courses.
  - a. Oral Communication-This requirement is satisfied by courses directed to developing skills in oral communication; to training in clear, logical, and persuasive communication appropriate in various contexts; and to evaluating such communication.
  - b. Literature-Courses satisfying this requirement enable students to learn to analyze and criticize literary texts. These courses are to include appropriate historical, biographical, and ideological materials, and to be developed around a single writer or group of writers, a period, a literary form or genre, and/or critical theories by which the same works are examined by various means.

#### III. Physical Education: 2 credit hours

The Physical Education policies and exceptions listed in Requirements for Graduation in "The Bachelor's Degree" section of this bulletin also apply to the Bachelor of Science degree.

#### NOTES:

- 1. Six (6) hours of UCR credits in a given department may be applied to other baccalaureate requirements in that department such as those for major, minor, teaching specialty, etc.
- 2. Students transferring to TCU must complete a minimum of 6 hours in Writing Emphasis courses at TCU.
- 3. No more than eight (8) physical activities courses may be applied toward graduation requirements.
- 4. Specific courses have been approved to meet the UCR. These courses are so identified in the schedule of classes for each term's offerings.
- 5. Foreign language requirements: Students may demonstrate competency in a language other than English by meeting the TCU non-English language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of course work at TCU, or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by: (1) scores on standardized tests approved by the University, for which the student will receive 3-12 hours of credit depending on the examination score; or (2) successful completion of one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

#### Approved Majors for the B.S. Degree

Economics Fashion Merchandising

Interior Design International Economics Political Science

**Other Bachelor of Science Degrees.** The UCR listed above for the Bachelor of Science degree also apply to the degree of Bachelor of Science in Criminal Justice.

#### **Multiple Majors**

Students with a first major in AddRan may declare an additional major in lieu of or in addition to a minor. The additional major may be selected from the other colleges and schools at TCU. Students seeking an additional major in a school other than AddRan must have the approval of the dean of AddRan and the dean of the additional major.

Students with a first major in another TCU school or college may select additional majors from those available in AddRan with the approval of the dean of the school or college of the first major and the dean of AddRan. Students who seek a second major from AddRan need only meet the version of the UCR that applies to the school or college of their first major with one exception. If the AddRan major is one approved for the B.A., then students must satisfy the foreign language requirement of 6 hours in the same language at or above the 20000 level.

The degree awarded will be that appropriate to the major designated as the first major. All degree requirements for each major must be satisfied. These include all University Curriculum Requirements (UCR) associated with any particular major as well as all associated requirements.

#### Pass/No Credit Option

Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. The P/NC option is not allowed in any English as a Foreign Language course offered by the English Language Center.

#### **Transfer Credit**

Students wishing to take courses at another college or university following their admission to Texas Christian University must receive approval of such courses through the office of the Dean of AddRan College before enrolling in them.

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# Aerospace Studies

Programs Available
General Qualifications
Courses of Instruction

#### (AEST)

The United States Air Force Reserve Officer Training Corps (AFROTC) provides women and men at Texas Christian University, Texas Wesleyan University, Dallas Baptist University, University of Texas at Arlington, Embry Riddle Aeronautical University, Weatherford College and Tarrant County College the education and training necessary to develop the management and leadership skills vital to professional Air Force officers.

Enrollment in the General Military Course (first two years) is voluntary for eligible students and does not obligate non-scholarship students for further military service. The Professional Officer Course (last two years) is also voluntary but competitive. Because the POC leads to a commission in the United States Air Force, those selected to continue training will incur military obligation.

Aerospace studies courses are taken concurrently with other degree programs. No degree is offered in aerospace studies, but up to 24 semester hours may be earned in aerospace studies over the four-year period. Some of the classes may be used to meet major elective requirements. See your academic advisor for confirmation. Students who enroll in aerospace studies classes must attend both classroom and leadership laboratory classes at Texas Christian University, 2800 W. Lowden St., Fort Worth, Texas. The laboratory classes give students first hand experience in developing leadership and organizational skill while preparing them for enrollment in the Professional Officer Course.

#### **Programs Available**

**Four Year Program:** This program enables students to take advantage of four years of aerospace studies courses. Each semester, for the first two years, cadets take a one-credit hour academic class and a one-credit hour pass/no credit Leadership Laboratory (LLab). The first two years collectively are referred to as the General Military Course (GMC). Upon successful completion of the GMC and an ensuing four-week Air Force paid field training course, qualified and selected students may elect to enroll in the final two years referred to as the Professional Officer Course (POC). Each semester in the POC, students will take a three-credit hour academic class and a one-credit hour pass/no credit LLab. AFROTC uniforms and textbooks are issued by the unit.

**Two Year Program:** This program is commonly known as the Professional Officer Course (POC) and enables eligible graduate and undergraduate students to obtain a commission in the United States Air Force. Formal selection for entering the POC requires completion of a summer field training course.

Students electing this option must apply to the Professor of Aerospace Studies early in their sophomore year or before entering a graduate degree program, pass the Air Force Officer Qualifying Test, and pass a physical examination prior to attending the field training course. Two-year students enrolled in the POC receive similar benefits and advantages to those enrolled in the four-year program, including the opportunity to apply for various Air Force ROTC college scholarships. Students selected for the POC receive a monthly subsistence allowance.

#### **General Qualifications**

A student enrolling in AFROTC must:

- 1. Be a full-time student (12 semester hours or more; 9 hours for postgraduate students)
- 2. Be a United States citizen
- 3. Be in good physical condition/health
- 4. Have good moral character
- 5. Be no older than 34 years old upon commissioning

**Scholarships**. Air Force ROTC offers 4, 3, 2, and 1 year (in some situations) scholarships. Scholarships pay for most of tuition, textbooks, and fees plus a monthly, nontaxable stipend during the school year. Scholarships are offered in various majors. In addition to meeting the general qualifications mentioned above, scholarship applicants must be at least 17 years of age when the scholarship is activated and must be under 27 years of age as of June 30 of their commissioning year. Individuals with previous military experience may obtain a year extension of the maximum age restriction for up to 3 years of prior service. Requirements for each scholarship category may vary; therefore, applicants should contact the Department of Aerospace Studies at (817) 257-7461 for specific details.

High School students may apply for a 4-year scholarship no later than Dec. 1 of their high school senior year. Scholarship applications for college students are made through the Aerospace Studies Department in the spring semester. Scholarship applicants are selected using the whole person concept, which includes objective factors (i.e. grade point average and physical fitness test) and subjective factors (i.e. personal evaluations). Students who are enrolled in Air Force ROTC generally improve their scholarship selection opportunity.

Those students who are offered an AFROTC scholarship with an SAT of 1100 or ACT of 24, and who attend TCU, may be offered a TCU Room and Board subsidy. Three-year scholarship winners with the above scores may also receive an additional semester of tuition paid if attending TCU.

Program Benefits. As Air Force ROTC cadets, students are entitled to selective benefits. Social and co-curricular

activities, together with leadership and academic training, are all part of Air Force ROTC. Contracted cadets receive a nontaxable subsistence allowance each month during the school year. The detachment sponsors a Civil Air Patrol where cadets can obtain front-seat and back-seat flying time in Cessna aircraft for a small fee. Drill team, honor guard, Arnold Air Honor Society, and Silver Wings Service Organization are just a few social outlets for the cadets. Summer opportunities for cadets can include a paid visit to a military installation for 5 days, Rising Sophomore Program (4 weeks paid visit to a military installation - shadowing program), Freefall Parachuting, Combat Survival Training, Flight Nurse shadowing, and cadet training assistant duty at field training.

**Receiving Commission.** Upon successful completion of the AFROTC program and baccalaureate or graduate degree, a student will be commissioned a second lieutenant in the U. S. Air Force. Newly commissioned officers can normally expect to be called into active service within 60 days from the date of their commissioning. In some instances, active service can be delayed by students continuing in post-baccalaureate degree programs.

**Additional Information.** More detailed information about the Air Force ROTC program is available through the Department of Aerospace Studies. The department is located at 2800 W. Lowden Street on the Texas Christian University campus. The telephone number is (817) 257-7461 or call 1-800-TCU-FROG and ask for Air Force ROTC.

#### **Courses of Instruction**

**AEST 10001 Leadership Lab.** The Leadership Lab (LLab) also includes studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The AS3000 and AS4000 LLabs consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps; and the preparation and presentation of briefings and other oral and written communications. LLabs also include interviews, guidance, and information which will increase the understanding, motivation, and performance of other cadets.

**AEST 10211 Foundation of the United States Air Force.** Air Force AEST 10211 in the fall and 10221 in the spring: A survey course designed to introduce students to the U.S. Air Force and Air Force ROTC. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory 10001 complements this course by providing cadets with followership experiences.

**AEST 10221 Foundation of the United States Air Force.** Air Force AEST 10211 in the fall and 10221 in the spring: A survey course designed to introduce students to the U.S. Air Force and Air Force ROTC. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory 10001 complements this course by providing cadets with followership experiences.

**AEST 20211 The Evolution of USAF Air and Space Power.** Air and Space Power (AEST 20211 in the fall and 20221 in the spring): A survey course designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g. Principles of War and Tenets of Air and Space Power. As a whole, this course provides the student with a knowledge level understanding for the general element and employment of air and space power, from an institutional, doctrinal, and historical perspective. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. In addition, Leadership Laboratory is mandatory for Air Force ROTC cadets (not special students), and it complements this course by providing cadets with followership experiences.

**AEST 20221 The Evolution of USAF Air and Space Power.** Air and Space Power (AEST 20211 in the fall and 20221 in the spring): A survey course designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g. Principles of War and Tenets of Air and Space Power. As a whole, this course provides the student with a knowledge level understanding for the general element and employment of air and space power, from an institutional, doctrinal, and historical perspective. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. In addition, Leadership Laboratory is mandatory for Air Force ROTC cadets (not special students), and it complements this course by providing cadets with followership experiences.

**AEST 30113 Leadership Studies.** Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officertype activities, giving students the opportunity to apply leadership and management principles of this course.

**AEST 30123 Leadership Studies.** Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officertype activities, giving students the opportunity to apply leadership and management principles of this course.

**AEST 40113 National Security Affairs/Preparation for Active Duty.** Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. An additional Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

**AEST 40123 National Security Affairs/Preparation for Active Duty.** Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining

communication skills. An additional Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

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## Anthropology

Requirements for the B.A. degree with a major in Anthropology Requirements for a minor in Anthropology Courses of Instruction

#### (ANTH)

Administered by the Department of Sociology, Criminal Justice, and Anthropology. Available as a major on the B.A. degree and a minor on the B.A. and B.S. degrees.

Anthropology is the scientific study of humankind, from its beginnings millions of years ago to the present day. The goal of Anthropology is to advance knowledge of who we are and how we came to be that way. Anthropology is a social science that focuses on the human species and the human condition in all its diversity. Anthropology is committed to describing, interpreting, and explaining the historical, biological, and cultural diversity of the human species. Anthropology investigates the social and cultural life of human beings in all times and all places.

### Requirements for the B.A. degree with a major in Anthropology

30 semester hours, at least 24 of which must be in Anthropology, including at least nine hours from the following:

ANTH 20613 Introduction to Physical Anthropology ANTH 20623 Introductory Cultural Anthropology ANTH 30613 Introduction to Archaeology ANTH 30913 Language and Culture

A maximum of six hours from the following list of approved courses may be applied toward the major:

ART 20113 New World: Survey of American Art HIST 30943 The Spanish Borderlands HIST 30983 Aztecs, Mayas, and Incas HIST 40703 Indians of the United States HIST 40713 Indians of the Greater Southwest RELI 30343 Black Religion in America RELI 30553 African Religions SOCI 30683 Sociology of Religion

Other courses may be accepted if approved by the Anthropology faculty.

Courses taken through the Departamento de Antropologia of Universidad de las Americas (Puebla, Mexico) may be accepted towards the major or minor with approval of the TCU Anthropology faculty.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Anthropology are subject to the pass/no credit policy of their major department.

## Requirements for a minor in Anthropology

Eighteen semester hours of anthropology courses, including at least 6 hours from among the following:

ANTH 20613 (Introduction to Physical Anthropology)

ANTH 20623 (Introductory Cultural Anthropology)

ANTH 30613 (Introduction to Archaeology)

ANTH 30913 (Language and Culture)

### **Courses of Instruction**

ANTH 10433 Freshman Seminar in Anthropology. Topics may vary each time it is offered.

ANTH 10533 Freshman Seminar in Anthropology. Topics may vary each time it is offered.

**ANTH 20613 Introduction to Physical Anthropology.** Survey of human origins and evolution. Human biological variation and adaptation. Primate comparative behavior and anatomy. Basic techniques of measurement and analysis of human physical traits.

**ANTH 20623 Introductory Cultural Anthropology.** Analysis of human cultural life by comparison of varied lifeways; emphasis on non-western peoples; economics, social organization, political organization, art styles, and similar cultural conditions.

**ANTH 30613 Introduction to Archaeology.** An introduction to basic techniques, methods, and concepts in archaeology and a review of selected archaeological findings. History and development of archaeology, basic field methods, the evolution of humans and culture, reconstruction and processual interpretation. Site visits to excavations in process.

**ANTH 30623 Urban Anthropology.** Development and characteristics of urban societies and the culture of modern cities. Evaluation of theories and methods for understanding the structure, function and change in the social and cultural systems of urban areas.

**ANTH 30633 Anthropology and Sports.** The relationship between social science and the study of sports and other play forms; games and play in cross-cultural contexts; American sports and recreation.

**ANTH 30643 Anthropology and Education.** A comparative study of the teaching and learning processes in societies of differing complexity and cultural variability. Empirical data is examined from an anthropological

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perspective and in the context of theories about culture and perception, world view, rites of passage, culture and personality, and change.

**ANTH 30653 Culture and Human Sexuality.** This course examines the importance of culture for understanding human sexuality issues. Topics covered include biological, social, emotional, cognitive and spiritual issues related to sexuality. Contemporary political, legal and health issues are discussed critically, and gender is discussed as a cultural construct.

**ANTH 30713 Intermediate Archeology.** Prerequisite: ANTH 30613. A continuation of ANTH 30613, with an indepth treatment of basic techniques, methods and concepts of archaeology and a continued update in recent archaeological discoveries, emphasizing North America. Concentrated research using published site reports and professional journals. Site visitations to excavations in process will be initiated whenever applicable.

**ANTH 30723 Ethnology of Selected Areas.** Origin and distribution of the native populations of selected areas. The historical development and current perspectives of institutions, belief and value systems, and comparative organization of cultural areas. Possible areas to be examined include Native North Americans, peoples of South America, peoples of Africa.

**ANTH 30913 Language and Culture.** Introduction to anthropological linguistics with emphasis on social aspects of language, including cultural categories of phenomena, translation difficulties, dialect prestige, bilingualism and body language.

**ANTH 30923 Studies in Anthropology.** Topics of interest in anthropology, including substantive areas of the discipline.

**ANTH 30933 Studies in Ethno-Archeology.** An examination of world cultures based on the results of information secured by technologists and archaeologists working in the field. The topical focus may vary each semester.

**ANTH 30973 Anthropology and Religion.** Interpretations of myths, symbols and religious beliefs and practices in cross-cultural perspective; comparative functions of religion in society; religion and cultural change. Focus is on non-Western, technologically-primitive people and their religions. (Offered as ANTH 30973 or RELI 30673.)

**ANTH 30983 Anthropological Field Methods.** Prerequisite: ANTH 20623 or permission of instructor. The phases and problems of the cultural anthropological field experience, including methods for collecting ethnographic data, entry into the field, role and image conflict, participant-observation, interviewing, life histories, network analysis. Practice in instruments and techniques both in the classroom and local "field laboratory."

**ANTH 40620 Directed Reading or Research in Anthropology.** For upper-division students who undertake projects in anthropology in regular consultation with the instructor, for one to three semester hours credit.

**ANTH 50623 Advanced General Anthropology.** An overview of the field, including archaeology, linguistics, ethnology, and physical anthropology. Description and analysis of the profession, its history, theoretical foci, intellectual leaders and current ethical dilemmas. For advanced undergraduates and graduate students with opportunities to pursue individual interests within the field.

**ANTH 50923 Kinship and Social Organization.** Prerequisite: ANTH 20623 or permission of instructor. Principles of descent, kinship terminology and formation of descent groups, including an examination of specific terminological systems in relation to other features of social organization; the adaptive dynamics of family, groups, kinship, and extra-familial associations in simple and complex societies.

## Asian Studies

#### Overview

Available as a minor on the B.A. and B.S. degrees.

The Asian Studies minor offers the student multidisciplinary opportunities to study subjects concerning the peoples and cultures of Asia. Students are required to take 18 hours, selected from at least 3 departments, from a variety of courses focusing on the history and thought of the peoples in Asia. The minor requires 3 hours from HIST 10943, 10953, 20943, and 20953 and 3 hours from RELI 30513, 30523, 30533, and 30773. No more than nine hours may be taken in any one department, and at least nine hours must be at the 30000 level or above.

**Pass/No Credit Option.** Students minoring in Asian Studies are subject to the pass/no credit policy of their major department.

#### **CURRENTLY APPROVED COURSES**

HIST 10943 ASIAN CIVILIZATIONS TO 1500
HIST 10953 ASIAN CIVILIZATIONS SINCE 1500
HIST 20943 HONORS ASIAN CIVILIZATIONS TO 1500
HIST 20953 HONORS ASIAN CIVILIZATIONS SINCE 1500
HIST 30443 HISTORY OF CHINA AND JAPAN TO THE 19TH CENTURY
HIST 30443 HISTORY OF CHINA FROM 1800 TO THE PRESENT
HIST 30453 HISTORY OF JAPAN FROM 1800 TO THE PRESENT
HIST 40843 THE VIETNAM WAR

ONE SEMESTER OF COLLEGE JAPANESE (selected from JAPN 10163, 20053, OR 20063) JAPA 30113 JAPANESE CULTURE AND CIVILIZATION

#### PHIL 20333 ASIAN PHILOSOPHY

RELI 30523 EAST ASIAN RELIGIOUS PERSPECTIVES RELI 30533 BUDDHISM: THOUGHT AND PRACTICE RELI 30513 HINDU RELIGIOUS PERSPECTIVES RELI 30573 DAOISM AND CHINESE RELIGIONS RELI 30773 INDIA: TEXTS AND TRADITIONS

Course offerings may vary, and other courses may be allowed with approval of the minor coordinator when those courses focus on Asia.

For more information, contact the program coordinator, Dr. Andrew O. Fort in the Religion department.

## British and Colonial/Post-Colonial Studies

#### Courses of Instruction

#### (BRST)

This minor is designed to provide students with an understanding of the current state and history of Great Britain and its former and current colonies. It is interdisciplinary in nature, drawing upon departments and course offerings throughout the university, as well as the TCU London Centre. Through this minor, students become aware of how different areas of study, including art, film, history, journalism, literature, religion, and social behavioral and natural sciences, coalesce and contribute to the knowledge of a particular region. It also provides the student with a framework for investigating issues of globalization, such as the impact of colonization on nations and their history and the state of the former colonies in contemporary life.

**Requirements for a minor.** The minor requires completion of two core courses, a disciplinary concentration consisting of two courses, an elective course, and the senior seminar. The designated core courses draw from a variety of disciplines and are selected to complete the following goals: to provide the student with foundational knowledge about Great Britain, its history and culture, and the processes of change over time; and to provide the student with an introduction to the critical issues of Colonial/Post-Colonial Studies. The disciplinary concentration allows the student to develop an area of specialization-Communications, Fine Arts, Humanities, Natural Sciences, or Social Sciences-within the minor.

The minor is 18 hours. These 18 hours must draw from at least three different departments. A maximum of 6 hours can be completed at the 10000/20000 level and no more than 9 hours can be completed through the London TCU Centre. Special problems courses, independent study courses, courses taken through U.K. based study abroad programs, internships, and other courses of this nature may be included in the minor with the approval of the Program Director. For further information, including a list of eligible courses and a recommended plan of study, contact the Program Director or the AddRan Dean's Office.

**Pass/No Credit Option.** Students minoring in British and Colonial/Post-Colonial Studies are subject to the pass/no credit policy of their major department.

#### **Courses of Instruction**

**BRST 40003 Senior Seminar: British Colonial/Post-Colonial Study.** This is the capstone course for the minor, and includes readings in British and colonial/postcolonial studies and an independent project. The independent project is pursued in consultation with the program director, and aims to reflect on the student's work in the minor, to synthesize the skills developed through the student's coursework, and to consider how they might be applied after graduation. Projects may include: an original creative performance; a scientific investigation; a portfolio of critical writing; or a U.S.-based internship with an employer with substantial interests in Britain or the former colonies. All projects also require a journal documenting and reflecting on the student's progress.

**BRST 40900 Internship in Political Science/British Studies.** Washington Center or at The London Centre. Full-time internships with a public or private agency in Washington, D.C. or in London, England, offered either through the Washington Center or through TCU's London Centre. The internship will allow students to integrate theory and practice in a supervised professional setting, up to 12 sem. hrs. credit. (Offered as BRST or POSC credit.)

## Business (3-2 Program)

#### Overview

AddRan College of Humanities and Social Sciences and M.J. Neeley School of Business offer a combined program leading to a bachelor's degree in Humanities and Social Sciences and a master's degree in Business Administration (MBA). The Three-Two Program, as it is called, takes five years to complete. (Note: Students intending to pursue the 3-2 program should make their plans known, as early as possible, to the AddRan Dean's Office.)

Students interested in the program spend the first three years in AddRan completing the University Curriculum Requirements and meeting the requirements of their major field. By the end of their third year, Three-Two Program students must complete at least 100 hours in non-business courses, including sufficient coursework in mathematics to satisfy the MBA Program prerequisites. To be considered for admission to the MBA Program, Three-Two Program participants must submit the usual MBA application during their third year of study, including scores for the GMAT (Graduate Management Admissions Test). Only Three-Two candidates demonstrating superior undergraduate academic performance and strong GMAT scores will be considered for admission.

If admitted to the MBA Program, the student completes the first 27 semester hours of the MBA Program during the fourth year of study. These courses apply to both the undergraduate degree and toward the MBA degree. Candidates should work with their undergraduate academic advisors to determine how the courses will apply to the undergraduate degree (electives, minor requirements, area of emphasis, etc.). At the end of the fourth year, assuming that all other graduation requirements are met, the student earns his or her undergraduate degree. The student must petition the Dean of AddRan to be awarded the undergraduate degree at this time. During the fifth year the student completes the remaining 27 semester hours of MBA courses.

## Classical Studies

#### Overview

Available as a minor on B.A. and B.S. degrees.

**Requirements for the minor in Classical Studies:** 18 semester hours, including at least 9 at the upper level, selected from at least three areas. Currently approved courses include:

ART 20003 Classical Tradition in Art ENGL 50253 Classical Rhetoric ENGL 50603 Classical Drama GREE 40970 Directed Studies in Greek HIST 30003 The Greek World HIST 30013 The Roman Empire and Republic PHIL 40213 History of Ancient and Medieval Philosophy

In addition, six hours of Greek or Latin at the 20000 level can be counted toward the minor. Other courses may be applied to the minor with the approval of the minor coordinator. Students are encouraged to take part in a Study Abroad program relevant to the minor.

**Pass/No Credit Option.** Students minoring in Classical Studies are subject to the pass/no credit policy of their major department.

## Criminal Justice

Requirements for the B.S. in Criminal Justice Degree
Requirements for a minor in Criminal Justice.
Honors Program
B.S./M.B.A. 3-2 Program
Alpha Phi Sigma
Courses of Instruction

#### (CRJU)

Available as a major on the B.S. degree and as a minor on the B.A. and B.S. degrees.

Criminal Justice serves the academic needs and career objectives of a variety of students. The major in Criminal Justice can serve as preparation for further formal education in graduate or law school, as well as for immediate entry into careers in the criminal justice system. Courses may be selected to emphasize any of the three components of the criminal justice system: police, courts, or corrections. Alternatively, students may choose courses that provide exposure to special issues and problems in criminal justice. In addition, the internship program provides students opportunities to experience working in the criminal justice field.

Transfer students may receive a maximum of 9 hours credit in the major for criminal justice courses taken at accredited colleges and universities. A maximum of 6 hours may be counted toward the minor. The Director of the Criminal Justice Program will determine the applicability of such coursework to the program's degree requirements.

#### Requirements for the B.S. in Criminal Justice Degree

A total of 124 semester hours is required. The degree does not require a foreign language. The major requires 39 hours in criminal justice courses and 6 hours in associated courses:

39 semester hours in Criminal Justice (CRJU) must include:

CRJU 20413 Introduction to Criminal Justice CRJU 20423 Critical Issues in Crime and Justice CRJU 20873 Criminal Justice Research Methods I CRJU 20883 Criminal Justice Research Methods II CRJU 30313 Criminology

At least one law enforcement course (CRJU 30613 or 30623)

At least one course in law, courts, or legal process (CRJU 30403, 30413, 30423, 30903)

At least one corrections course (CRJU 30393 or 30643)

CRJU 40963 Internship in Criminal Justice

6 hours of associated courses:

POSC 10133 American and Texas Government SOCI 20213 Introductory Sociology

Although taught regularly, not all required courses are scheduled every semester. It is the student's responsibility to complete the major requirements for graduation as early in their tenure as possible. Exemptions to the major requirements will not be made because of student failure to complete coursework in a timely fashion.

**Pass/No Credit.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Criminal Justice are subject to the pass/no credit policy of their major department.

## Requirements for a minor in Criminal Justice.

The minor in criminal justice requires 18 hours. CRJU 20413 Introduction to Criminal Justice and CRJU 30313 Criminology are required courses for the minor.

### **Honors Program**

Criminal Justice majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in CRJU 30003 during their junior year and CRJU 40003 during the fall semester of their senior year.

#### B.S./M.B.A. 3-2 Program

Criminal Justice is an approved major for TCU's three-two program. A student completing this program will receive both a B.S. in Criminal Justice and a Master's in Business Administration over the course of five school years. Students should start this program early in their tenure at TCU and must be admitted to the M.J. Neeley School of Business. Students interested in federal law enforcement or in administrative/policy development positions within the criminal justice system are encouraged to apply.

#### Alpha Phi Sigma

The Criminal Justice program sponsors a chapter of Alpha Phi Sigma, the national honor society in the discipline. Any major or minor in Criminal Justice with a 3.0 overall GPA and a 3.2 in criminal justice related courses is eligible.

#### **Courses of Instruction**

**CRJU 20413 Introduction to Criminal Justice.** An examination of the history, theory, and structure of the criminal justice system in the United States, with an emphasis on the various components of the criminal justice process including police, the courts, corrections.

**CRJU 20423 Critical Issues in Crime and Justice.** An examination of the major controversies and issues confronting the criminal justice system. Emphasis is on development of critical thinking skills and their application to justice-related problems.

**CRJU 20873 Criminal Justice Research Methods I.** An introduction to the statistical vocabulary and techniques basic to criminal justice. The course covers measures of central tendency, measures of variation, one- and two-sample t and z test statistics, paired t-tests, basic sampling distribution theory, Chi Square goodness of fit and independence tests, measures of association and simple linear regression. Students are taught basic programming using SPSS Statistical Package for the Social Sciences. It is expected the student will enroll in CRJU 20883 in the semester following completion of this course.

**CRJU 20883 Criminal Justice Research Methods II.** Prerequisite: CRJU 20873. An introduction to criminal justice research procedures, with emphasis on the collection, analysis and interpretation of data.

**CRJU 30003 Honors in Criminal Justice.** For Honors students and other selected superior students with permission of the Director of the Criminal Justice Program. Studies, reports, and discussions of the literature of criminal justice. Examination of significant problems and trends.

**CRJU 30223 Contemporary Topics in Criminal Justice.** An examination of topics of current interest in crime and justice. Topics change, therefore this course may be taken more than once.

**CRJU 30313 Criminology.** Prerequisite: SOCI 20213, or permission of instructor. An examination of crime in America, with focus on sociological theories of crime causation, treatment, and prevention. (Offered as CRJU or SOCI credit.)

**CRJU 30393 Sociology of Corrections.** The examination of correctional agencies and programs, including the social structure of prisons and its impact on the offender, deterrent and treatment effects of correctional practices, probation and parole, and an examination of various experiments in institutional and community based corrections. (Offered as CRJU or SOCI credit.)

**CRJU 30403 Legal Aspects of Criminal Justice I.** Prerequisite: 20413 or permission of instructor. An examination of major issues in criminal law and procedure emphasizing the police and the prejudicial process. The focus of the course is on the nature of criminal law, the basic elements of crime, legal issues in law enforcement such as search and seizure, interrogation, and basic evidentiary concepts.

**CRJU 30413 Legal Aspects of Criminal Justice II.** Prerequisite: CRJU 20413 or permission of instructor. Continued examination of fundamental legal issues and procedure, emphasizing the post arrest process. Discussion of such areas as right to counsel, pretrial release, the appeals process, and prisoner legal rights.

**CRJU 30423 Courts and Judicial Process.** An examination of the American court system. Special topics will include a comparison of state and federal court systems, socialization processes within the legal profession, and an evaluation of the impact of politics on the judicial process.

**CRJU 30453 Juvenile Justice.** An examination of the law of juvenile delinquency and the administration of the juvenile justice system. The historical development of the concept of delinquency, the special status of juveniles before the law, and juvenile justice procedural law are examined in detail. CRJU 20413 is recommended but not required as a prerequisite.

**CRJU 30523 Crime Scene Investigation.** An introduction to the recognition, collection and evaluation of physical evidence arising from a crime or suspicious incident, concentrating on the various techniques of crime scene investigation including crime scene search, note-taking, sketching, photography, and preservation of evidence.

**CRJU 30533 Counseling Skills and Crisis Intervention in the Criminal Justice System.** An examination of theories and methods of professional intervention with emphasis on those professionals with clients in the criminal justice system. Focus is on the development of skills which can be applied to individuals, families, and groups in both community-based and institutional settings. This course is primarily for Criminal Justice majors and Social Work minors. (Offered as CRJU or SOWO credit.)

**CRJU 30543 Criminalistics.** An examination of the various techniques and instruments used to analyze organic and non-organic evidence obtained from crime scenes, with an examination of new techniques such as DNA analysis.

**CRJU 30613 Police in a Free Society.** An examination of the organization and administration of law enforcement agencies, the function of police, police discretion, ethics, police-community relations, and the future of policing in American society.

**CRJU 30623 Police and the Community.** An examination of the relationship between police and the communities they serve. Topics include police and public opinion, police violence, citizen complaints, politics and the police function, police ethics, police and the media.

**CRJU 30633 Criminal Justice Personnel Administration.** An examination of personnel management and administration in criminal justice agencies and institutions with a particular focus on recruitment and selection, placement, evaluation, dismissal, benefit systems, minority recruitment, training, education, promotion, career development, and retirement.

**CRJU 30643 Community Corrections.** An examination of the role of the community in the reintegration of offenders, with a focus on correctional programs designed to be administered in a community setting, including probation, parole, halfway houses, restitution, and community service.

**CRJU 30803 Victimology.** An examination of the major aspects of victimology. Topics include the historical role of victims, the nature of victimization in modern America, the victimization experience, legal aspects of victimization, victimization and the political process, solutions to victimization, and the future of victims rights and victimology.

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(Offered as CRJU or SOCI credit.)

**CRJU 30813 Race and Gender Issues in Criminal Justice.** An examination of race and gender issues within the criminal justice system. Potential topics can include the importance of race and gender in the development and organization of the criminal justice system; the discretionary application of justice to minorities and women in the criminal justice system, sexual harassment; and the relationship between poverty and crime.

**CRJU 30823 Criminal Violence.** An examination of the various types of criminal violence and the criminal justice system's responses to it. Discussion topics include domestic violence, mass murder, serial killing, riots, and gang violence.

**CRJU 30903 Law and Society.** An examination of the relationship between legal institutions and social processes. Topics include the nature of law, historical evolution of legal systems, creation and organization of law in modern societies, social functions of law, and the limits of law as an instrument of social control. (Offered as CRJU or SOCI credit.)

**CRJU 30913 Psychology and Criminal Justice.** Prerequisite: CRJU 20413, SOCI 20213 or PSYC 10213 or equivalent. An examination of the psychological and social psychological dimensions of criminal justice. Discussion topics will include: psychological and social psychological origins of criminal behavior, addiction and crime, insanity and the law, sex offenders, and eyewitness accounts.

**CRJU 30923 Organized Crime.** An examination of organized crime including its relationship to social structure, its historical development through groups such as the Italian/Sicilian Mafia, the extent and impact of modern and nontraditional organized crime syndicates, and prospects for its control.

**CRJU 30933 Crime and The Media.** An examination of the effects that the media have on the perception of crime, including discussion of the social construction of many myths that surround crime and criminal justice.

**CRJU 30973 Victimless Crime.** An examination of victimless crime highlighting its social control and social construction. Specific topics include gambling, prostitution, drug and alcohol use, and pornography.

**CRJU 40003 Senior Honors Paper in Criminal Justice.** For Honors students obtaining a B.S. in Criminal Justice. A research study and paper, under faculty direction, in some area of criminal justice.

CRJU 40400 British Criminal Justice Travel Study. British Criminal Justice Travel Study course.

**CRJU 40463 Juvenile Delinquency.** Prerequisite: SOCI 20213, or permission of instructor. An examination of the causes, treatment, and prevention of delinquency, with particular focus on the relationships between juveniles, clinics, and the court, and the philosophical, historical, and traditional foundations of juvenile law. (Offered as CRJU or SOCI credit.)

**CRJU 40503 White Collar Crime.** An examination of white collar and organizational crime addressed from a sociological perspective. Emphasis is placed on the nature, extent, and costs of white collar crime, with special attention to the social structural and organizational forces which give rise to such crimes.

**CRJU 40903 Ethics in Criminal Justice.** Prerequisite: CRJU 20413. An examination of the major value dilemmas confronting practitioners and professionals in the criminal justice system. Particular focus is on police conduct, courtroom conduct, and correctional professional's conduct.

**CRJU 40963 Internship in Criminal Justice.** Prerequisite: Permission of Criminal Justice Internship Director. Students serve for a minimum of 125 hours per semester as participant-observers in a local criminal justice agency. Students submit weekly verified report on hours worked to the Internship Director, who meets with all interns in a seminar discussion of internship problems and activities on a regular basis. Each student will submit a final written report and evaluation.

**CRJU 40970 Independent Study in Criminal Justice.** A specific program of study that must be approved by the Director of the Criminal Justice Program prior to enrollment in this course. Independent studies may be taken for credit ranging from 1 to 6 semester hours depending on the project undertaken.

## Design, Merchandising and Textiles

<u>Interior Design</u>
<u>Fashion Merchandising</u>
<u>Courses of Instruction</u>

### (DEMT)

Available as a B.S. degree with two major options: Interior Design Fashion Merchandising

**Accreditations**. The Interior Design Program is accredited by the Foundation for Interior Design Education Research.

**Affiliations**. Students who demonstrate high scholarship are eligible for membership in the Beta Zeta chapter of Phi Upsilon Omicron, a national honor society. The department sponsors the Texas Christian University Interior Design Association, a pre-professional organization. Opportunities are available for students to affiliate with student sections of professional organizations including: The American Society of Interior Designers, International Interior Design Association, Illuminating Engineering Society and Fashion Group International.

**Pass/No Credit Policy** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Lighting or Merchandising and Textiles are subject to the pass/no credit policy of their major department.

**Minimum Grade Required:** To graduate with a Fashion Merchandising or an Interior Design major, students must obtain a "C" or better in all major courses. In addition, students must obtain a grade of "C" or better in all Fashion Merchandising and Interior Design courses in order to satisfy any prerequisite requirements.

**Summer Study Programs.** The New York Study Program provides a study of the textile, apparel and merchandising industries and the significance of New York City as an international business center. The course is available for 3 semester hours of undergraduate credit.

Costume History in Paris focuses on the study of costume in museums, textile, apparel and merchandising firms in major European fashion centers. The course is available for 3 to 7 semester hours of undergraduate credit including DEMT 30233, 40233, and 40970.

Summer study programs in Italy and Scotland are available for Interior Design majors. The Italian study abroad program exposes students to a broad range of design activity, history and current influences in design education and the profession. The course is available for 3 to 6 hours of undergraduate credit towards the major. The TCU in Scotland program, an interdisciplinary program, focuses on the Scotlish Enlightenment. The course is available for 3 to 6 hours of undergraduate credit towards the major and university core requirements.

**Honors Program.** Departmental Honors are available. See DEMT 30003, 40003.

**Career Development.** A formal portfolio review process is required for all interior design majors and is implemented during the sophomore year. Acceptance of the portfolio by the Interior Design faculty is required for continuation in the program.

## **Interior Design**

This program prepares the student for a career as a professional interior designer. It educates the student in creativity, design process, technical skills and theory in order to successfully enter the profession. The FIDER accredited program prepares students for the opportunity to complete the necessary steps to obtain state licensing and NCIDQ certification. **Major Requirements:** DEMT 10423, 10413, 10453, 20403, 20413, 20433, 20443, 30073, 30091, 30413, 30423, 30453, 30473, 30483, 30493, 40433, 40453, 40464, 40474, 40493. Related Requirement: ART 10063. Electives to total 124 semester hours.

**Requirements for a Minor in Lighting for Visual Presentation.** DEMT 10453, 20283, 40053, THEA 30503 and 40543, and one of the four following courses: DEMT 10413 Design Fundamentals I, PSYC 30423 Experimental Psychology: Perception, THEA 40553 Dance Lighting, ART 20743 Photography.

Requirements for Interior Design Majors minoring in Lighting: DEMT 20283, 40053, 40970, THEA 30503, 40543, and PSYC 30423 or THEA 40553 or Art 20743.

Requirements for Fashion Merchandising Majors minoring in Lighting: DEMT 10453, 40053, 40970, THEA 30503, 40543 and PSYC 30423 or THEA 40553 or ART 20743.

**Transfer Policy**. Transfer students must present a current transcript and a portfolio, photographs, or slides of their work for evaluation by the department at least one week prior to registration or at a time of advisement in order to determine the appropriate levels of competency.

**Senior Show Policy**. All interior design majors are required to participate in a group exhibition of student work during their senior year. One exhibition will be held during each spring semester. Students expecting to graduate in May will participate during their final semester. Students whose graduation is expected to be delayed until the following December will participate during the preceding May exhibition.

**Retention of Student Work Policy.** The Department of Design, Merchandising & Textiles reserves the right to photograph, display, and exhibit student work in order that a continuing "body" of work will be available. This policy applies during the completion of the student's undergraduate degree program and for a period of two years

following graduation.

#### **Fashion Merchandising**

This program involves all activities related to the development, buying, and selling of merchandise. This major is for the student planning a career in retail buying, product development, management, wholesale or retail sales, public relations, event planning or visual merchandising. A supervised internship is required during the senior year. **Major requirements:** DEMT 10243, 20253, 20273 or 30273, 20283, 30073, 30091, 30263, 30283, 40013, 40203, 40213, 40223, 40243, 40263, 40286. **Minor requirement:** General Business, Journalism, Speech, Art, Radio-Television-Firm, Foreign Language, or other approved minor. Other: University Curriculum Requirements and electives to total 124 semester hours.

**Requirements for a Minor in Merchandising and Textiles**. A minor consists of 18 hours in including 10243, 20253, 20283 or 40263, and 40213, and 6 other hours approved by the chair of the department.

#### **Courses of Instruction**

**DEMT 10433 Freshman Seminar in Design, Merchandising and Textiles.** Topics may vary each time it is offered.

**DEMT 30003 Honors Tutorial in Design, Merchandising and Textiles.** Prerequisite: Departmental major and enrollment in the Honors Program. An examination of a significant issue affecting design, merchandising and/or textiles. The specific topic and presentation format oral, written, graphic, model, garment prototype, computer simulation are determined by the student and faculty directing the study. DEMT 30003 is the first of two courses required for departmental honors. Arrangements for this directed study must be made the semester prior to enrollment in the course.

**DEMT 30073 CAD for Apparel and Interiors.** Prerequisites: A grade of 'C' or better in DEMT 20283 or 30413, or permission of the instructor. Two 1-hour lectures, one 2-hour lab per week. Overview and application of AutoCAD and specialized computer software as they relate to design in the apparel and interior industries.

**DEMT 30091 Career Development.** Prerequisite: Junior standing or permission of instructor. A study in careers, requisite to completion of a directed internship. Particular emphasis on self assessment paralleled to career research, employment resources, and skills in career development, i.e., resume writing, interviews, leadership concepts and effective communication and advancement skills.

**DEMT 40003 Senior Honors Project.** Prerequisite: Departmental major, enrollment in the Honors Program and completion of DEMT 30003. The execution of a project or paper reflecting creative investigation or research. Supervision by a three-member faculty committee is required. DEMT 40003 must be completed prior to the student's final semester of undergraduate work. May be based on subject matter explored in DEMT 30003.

**DEMT 40013 Entrepreneurship in Design, Merchandising and Textiles.** Prerequisites: A grade of 'C' or better in DEMT 10243 and minimum junior standing or permission of instructor. The purpose of this course is to introduce the student to the opportunities, risks and management problems involved in establishing and operating new enterprises specifically related to Design, Merchandising & Textiles.

**DEMT 40053 Lighting for Visual Presentation.** Prerequisites: A grade of 'C' or better in DEMT 10453, 30253, and THEA 30503 or permission of instructor. The interrelationship between lighting and merchandising with specific concentration on lighting merchandise as three dimensional form, the use of color in merchandising, and the practical applications of lighting as a merchandising tool. Exploration of the impact that interior design, fashion merchandising, and theater have on the way merchandise is illuminated and displayed.

**DEMT 40093 New York Study Program.** One week study tour of New York City's textile, apparel and merchandising industries accompanied by two weeks of on-campus study.

**DEMT 40970 Special Problems.** Hours to be arranged. Special problems requiring independent research and study within a related area, or field experience in design, merchandising and/or textiles. (1-6 semester hours).

#### **Interior Courses**

**DEMT 10413 Design Fundamentals I.** Six studio hours per week. Prerequisite: Declared major in Interior Design; pre-major or permission. A design introduction to the traditions and resources of space, form, light and color perception. The elements and principles of design will be used to create two-dimensional and three-dimensional representations with freehand sketching, lettering and mechanical drawing.

**DEMT 10423 Introduction to Interior Design.** An introduction to interior design including the study of cultural, technological and economic influences upon the profession. Topics of study include fundamental design vocabulary and concepts, the historical evolution of interior design and the role of interior design upon the built environment.

**DEMT 10453 Lighting Fundamentals.** Two one-hour lectures, one two-hour lab per week. A series of lectures and laboratory experiments through which students will develop both technical and aesthetic understanding of lighting and space. Special emphasis on the mechanics of light, types of lighting and the electrical systems that support lighting.

**DEMT 20403 Design Fundamentals II.** Six lecture/studio hours per week. Prerequisite: A grade of 'C' or better in DEMT 10413, 10423, and concurrent enrollment in DEMT 20413. A continuation of Design Fundamentals I to include color theory and the practice of rendering spaces in color and light. Techniques include pencils and markers.

**DEMT 20413 Interior Design Concepts.** Prerequisites: A grade of 'C' or better in DEMT 10413 and 10423. A studio course exploring the theories and applications of the design of interiors of 2000 square feet or less. Focus is on developing the problem-solving process which encourages creativity, depth of exploration and solutions with substance and aesthetic beauty. Graphic, written and verbal communication formats are used to express all stages of the design thinking process sequence from concept to final conclusions.

**DEMT 20433 Interior Design Illustration.** Six studio hours per week. Prerequisites: A grade of 'C' or better in DEMT 20403, 20413 and concurrent enrollment in DEMT 20443. Shade and shadows. Interior illustration techniques using plans, elevations and perspectives illustrated in marker, line, tone and color.

**DEMT 20443 Interior Design I.** Six studio hours per week. Prerequisites: A grade of 'C' or better in DEMT 20403, 20413, and concurrent enrollment in DEMT 20433 and 30453. Development of a functional approach to interior design stressing physiological and psychological design considerations through small scale commercial projects. Introductory specifications and lighting. Grid one- and two-point design perspectives.

**DEMT 30413 Interior Design II.** Six studio hours per week. Prerequisites: A grade if 'C' or better in DEMT 20433, 20443, and 30453. Residential interior space/form problem comprehension and solution with concern for aesthetics, utility and life-styles. Rooms are studied independently as well as relative to each other. Specification, lighting and budget. Mixed illustration techniques.

**DEMT 30423 Architectural Components.** Six lecture/studio hours per week. Prerequisite: A grade of 'C' or better in DEMT 20443. A study of architectural factors affecting interiors: structural systems, methods of construction, HVAC and electrical systems, cabinet detailing and related building codes.

**DEMT 30433 Rendering Techniques.** Six studio hours per week. Prerequisite: A grade if 'C' or better in DEMT 20433. Advanced rendering techniques in timed sketches in graphite pencil and marker as well as refined renderings in colored markers and prismacolor pencil. Includes the illustration of human figures in interior spaces.

**DEMT 30453 Interior Components.** Two lecture hours and two lab hours per week. Prerequisite: A grade of 'C' or better in DEMT 20413. Selection and specification of interior materials and finishes for various design situations. Includes textile characteristics of interior materials, decision making criteria and estimating processes and preparation of finish schedules and specification documents.

**DEMT 30473 History of Interiors I.** Prerequisites: A grade of 'C' or better in DEMT 10423 or permission. History of the style of architecture, interiors, furnishings and decorative arts from the Stone Age to 1900 A.D. The designs of architects, furniture designers and interior designers are examined within the context of social history and culture.

**DEMT 30483 History of Interiors II.** Prerequisite: A grade of 'C' or better in DEMT 30473 or permission. History of the styles of architecture, interiors, furnishings, and decorative arts after 1900 A.D. Includes the influence of technology, industrialization, and various modern movements. The designs of architects and interior designers are examined within the context of social history and cultural influences.

**DEMT 30493 Interior Design III.** Six seminar/studio hours per week. Prerequisites: A grade of 'C' or higher in DEMT 20453, 30413, and DEMT 30473. Development of an aesthetically and functionally based process for the design of commercial interiors. Emphasis on space planning, furniture selection and layout and programming. Includes interior design theory, research and communication of design solutions, design for the physically limited including the American Disabilities Act and flammability issues.

**DEMT 40433 Special Purpose Design.** Six lecture/studio hours per week. Prerequisites: A grade of 'C' or better in DEMT 40453 and 40464. The design of interiors to serve special purposes or populations. Included will be one project entered in a national student competition.

**DEMT 40453 Professional Practices.** Six lecture/field trip hours per week. Prerequisite: A grade of 'C' or better in DEMT 40493. Business practices, management and professional procedures for the interior designer. An examination of the design profession within an economic framework.

**DEMT 40464 Interior Design IV.** Six studio hours and two seminar hours per week. Prerequisites: A grade of 'C' or better in DEMT 30423, 30493, 30493, and 30483. Advanced problems in contemporary environments as relevant expressions of technological and cultural change. Includes advanced application of various research methodologies to document design solutions.

**DEMT 40474 Interior Design V.** Six studio hours and two seminars per week. Prerequisite: A grade of 'C' or better in DEMT 40464. Large scale design of specialty space with emphasis on program interpretation, space planning, FF&E furniture, fixtures and equipment, themed environment and ADA Americans with Disabilities Act requirements. Course work may be in conjunction with a professional architectural design firm project and firm professionals.

**DEMT 40493 Interior Design Internship.** Seminar and work experience hours to be arranged. Prerequisite: A grade of 'C' or better in DEMT 30091 and 30493. Supervised apprenticeship with a professional interior designer or architectural firm. On-the-job experience in an interior design or architectural firm. Students must attend preparatory seminars prior to beginning the internship experience.

#### **Merchandising and Textile Courses**

**DEMT 10243 Merchandising Principles.** A survey of the fashion industry and the dynamics of fashion theory and principles.

**DEMT 20253 Textile Fundamentals.** Prerequisites: Merchandising major or minor; a grade of 'C' or better in DEMT 10243, and sophomore standing. Analysis of fibers, yarns, fabrication structures and processing including fabric dyeing, printing and finishing; physical, optical and chemical testing; textile labeling and legislation; and care of textile products.

**DEMT 20273 Clothing Construction.** Prerequisites: Merchandising major or minor; a grade of 'C' or better in DEMT 10243, and sophomore standing. Two 1-hour lectures, two 2-hour laboratories per week. Pattern alteration and fitting techniques; basic clothing construction techniques are applied to woven fabrics.

**DEMT 20283 Promotion Principles.** Prerequisites: Merchandising major or minor only; a grade of 'C' or better in DEMT 10243, and sophomore standing. An analysis of non-personal selling including direct marketing, advertising, visual merchandising, publicity, special events and fashion shows.

**DEMT 30263 Product Development.** Prerequisite: Merchandising major or minor; a grade of 'C' or better in DEMT 20253, 20283, and 20273 or 30273. or permission of the instructor. The creative process of product development including market research, aesthetic properties and design components, manufacturing processes, quality and cost analysis.

DEMT 30273 Fashion Illustration. Prerequisites: Merchandising major or minor; a grade of 'C' or better in DEMT

10423, and sophomore standing. Use of illustration for merchandise development and promotion.

**DEMT 30283 Principles of Textile Testing and Analysis.** Prerequisites: Merchandising major or minor; a grade of 'C' or better in DEMT 30263, and junior or senior standing. Two 1-hour lectures, two-2 hour laboratories per week. Emphasis is on testing and analyzing the performance of textile products using industry methods and specifications.

**DEMT 40203 Clothing in Society.** Prerequisite: 2.0 GPA, Merchandising major, ENGL 20803, senior standing, and a grade of 'C' or better in DEMT 30091. A global exploration of the sociological, economical, psychological and cultural aspects of apparel and dress.

**DEMT 40213 History of Costume.** Prerequisite: 2.0 GPA, Merchandising major or minor only, senior standing, a grade of 'C' or better in DEMT 30091. The study of the interrelationship between costume and the social, cultural, political and economic environment through the 18th century.

**DEMT 40223 History of Contemporary Dress.** Prerequisite: 2.0 GPA, Merchandising major, ENGL 20803, junior or senior standing. The study of the interrelationship of costume with the social, cultural, political and economic environment from the 19th century to the present.

**DEMT 40243 International Trade of Textiles and Apparel.** Prerequisites: 2.0 GPA, Merchandising major or minor only, senior standing, a grade of 'C' or better in DEMT 30091, ECON 10223 or 10233. A study of the economic principles involved in the production, marketing and distribution of textiles and apparel in relation to the global market.

**DEMT 40263 Merchandising: Buying.** Prerequisite: 2.0 GPA, Merchandising major or minor, junior or senior standing, UCR math, ECON 10223 or 10233. An analysis of fashion buying. Emphasis on applied mathematical operations to planning and control procedures in various types of retail organizations, buying techniques and merchandise selection.

**DEMT 40286 Fashion Internship.** Prerequisites: 2.0 GPA, Merchandising major, a grade of 'C' or better in DEMT 30091, senior standing, and minors must obtain permission from instructor. Supervised full-time work experience in a fashion related establishment. Weekly logs and assigned papers will be required.

# **Economics**

Requirements for the B.A. degree with a major in Economics
Requirements for the B.S. degree with a major in Economics
Requirements for the B.S. degree with a major in International Economics
Requirements for a minor in Economics
Requirements for Economics Majors minoring in Finance or Accounting
Honors Program
Omicron Delta Epsilon
Courses of Instruction

## (ECON)

Available as a major or a minor on the B.A. and B.S. degrees. Also available is a B.S. degree in International Economics. The B.A. is provided for the student who has a general interest in economics but who does not plan to pursue a graduate degree or a career in Economics. Students who plan a graduate program or a career in Economics should enroll in the B.S. curriculum.

## Requirements for the B.A. degree with a major in Economics

24 semester hours in Economics, 18 of which must be at the 30000 level or above, plus a minimum of 6 semester hours in Associated Requirements. A grade of "C" or better must be attained in any course which is to count as one of the 24 hours in Economics or as one of the Associated Requirements. Specific requirements are as follows:

I.Foundations (12 hours)

ECON 10223 Introductory Microeconomics ECON 10233 Introductory Macroeconomics ECON 30223 Intermediate Microeconomics ECON 30233 Intermediate Macroeconomics

II.Breadth Requirements (6 hours - 3 hours must be chosen from subsection A)

## A.Contextual Inquiry

ECON 30413 American Economic History ECON 40233 History of Economic Thought ECON 50483 Financial History

## **B.International Economics**

ECON 30213 Development Theory ECON 30433 Development Studies ECON 50123 International Trade and Payments ECON 50133 International Monetary Economics ECON 50443 International Economic Studies

## C.Public Policy Economics

ECON 30133 Labor Economics ECON 30143 Public Finance ECON 40153 Economics of Financial Markets ECON 40463 Regional and Urban Economics ECON 50423 Regulation of Economic Activity

## III.Additional Electives in Economics (6 hours)

Associated Requirements: MATH 10283 or MATH 10524 and MATH 10043 or DESC 20153.

**Minor:** A minor is required. Any minor approved by AddRan College is acceptable. In addition, subject to prior approval by the Chair of the Economics Department and the Associate Dean of Undergraduate Studies of the M.J. Neeley School of Business, Economics majors may minor in Finance or Accounting. See below for specific requirements.

No more than six hours from sections II and III should be completed until the student has satisfactorily completed the Foundations (Group I) and the Associated Requirements.

## Requirements for the B.S. degree with a major in Economics

33 semester hours in Economics, 27 of which must be at the 30000 level or above, plus a minimum of 6 semester hours in Associated Requirements. A grade of "C" or better must be attained in any course which is to count as one of the 33 hours in Economics or as one of the Associated Requirements. Specific requirements are as follows:

## I.Foundations (15 hours)

ECON 10223 Introductory Microeconomics ECON 10233 Introductory Macroeconomics ECON 30223 Intermediate Microeconomics ECON 30233 Intermediate Macroeconomics ECON 30313 Research Methods in Economics or ECON 50343 Econometrics

#### II.Breadth Requirements (9 hours - 3 from each subsection)

# A.Contextual Inquiry

ECON 30413 American Economic History ECON 40233 History of Economic Thought ECON 50483 Financial History

#### **B.International Economics**

ECON 30213 Development Theory ECON 30433 Development Studies ECON 50123 International Trade and Payments ECON 50133 International Monetary Economics ECON 50443 International Economic Studies

## C.Public Policy Economics

ECON 30133 Labor Economics ECON 30143 Public Finance ECON 40153 Economics of Financial Markets ECON 40463 Regional and Urban Economics ECON 50423 Regulation of Economic Activity

## III.Additional Electives in Economics (6 hours)

IV.Capstone Experience (3 hours)

ECON 40013 Senior Seminar in Economics ECON 40003 Senior Honors Research Paper

**Associated Requirements:** MATH 10283 or MATH 10524, MATH 10043 or DESC 20153. Students planning to pursue graduate study in economics are advised to take MATH 20524 and MATH 30224.

**Minor:** A minor is required. Any minor approved by AddRan College is acceptable. In addition, subject to prior approval by the Chair of the Economics Department and the Associate Dean of Undergraduate Studies of the M.J. Neeley School of Business, Economics majors may minor in Finance or Accounting. See below for specific requirements.

No more than six hours from sections II and III should be completed until the student has satisfactorily completed the Foundations (Section I) and the Associated Requirements.

## Requirements for the B.S. degree with a major in International Economics

33 semester hours in Economics, 27 of which must be at the 30000 level or above, plus a minimum of 18 semester hours in Associated Requirements and sophomore-level proficiency in a foreign language. A grade of "C" or better must be attained in any course which is to count as one of the 33 hours in Economics or as one of the Associated Requirements. Specific requirements are as follows:

## I.Foundations (15 hours)

ECON 10223 Introductory Microeconomics
ECON 10233 Introductory Macroeconomics
ECON 30223 Intermediate Microeconomics
ECON 30233 Intermediate Macroeconomics
ECON 30313 Research Methods in Economics or ECON 50343 Econometrics

## II.International Economics (12 hours)

A.Core (6 hours)

ECON 50123 International Trade and Payments ECON 50133 International Monetary Economics

# B.Electives (6 hours)

ECON 30213 Development Theory ECON 30433 Development Studies ECON 50443 International Economic Studies III.Additional Electives in Economics (3 hours)

III.Addicional Electives III Economics (3 not

IV. Capstone Experience (3 hours)

ECON 40013 Senior Seminar in Economics ECON 40003 Senior Honors Research Paper

## Associated Requirements (18 hours)

I. Quantitative Skills (6 hours)

MATH 10283 or 10524 (latter recommended) DESC 20153 or MATH 10043 (latter recommended)

II. International and Comparative Politics (6 hours)

POSC 20303 International Politics POSC 30303 Topics in International Politics POSC 30503 Topics in Comparative Politics

III. Language, History, and Culture (6 hours)

Internationally-related courses from ANTH, GEOG, HIST, JOUR, RELI, FINA, MANA, or MARK, or upper-division foreign language, selected with department approval (current list of approved classes available; offerings by other departments may be substituted with permission). Participation in TCU's Study Abroad program may waive three hours of this requirement (with prior approval from the Economics Department).

In addition, students planning to pursue graduate study in economics are advised to take MATH 20524 and MATH 30224.

**Minor:** A minor is required. Any minor approved by AddRan College is acceptable. In addition, subject to prior approval by the Chair of the Economics Department and the Associate Dean of Undergraduate Studies of the M.J. Neeley School of Business, Economics majors may minor in Finance or Accounting. See below for specific requirements.

No more than six hours from sections II and III should be completed until the student has satisfactorily completed the Foundations (Section I) and the Associated Requirements.

#### Requirements for a minor in Economics

18 semester hours in Economics to be distributed as follows:

ECON 10223 Introductory Microeconomics ECON 10233 Introductory Macroeconomics ECON 30223 Intermediate Microeconomics

or

ECON 30233 Intermediate Macroeconomics

Nine additional hours in Economics at the 30000 level or above.

## Pass/No Credit Option

Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Economics are subject to the pass/no credit policy of their major department.

## Requirements for Economics Majors minoring in Finance or Accounting

For Finance:

12 hours of required courses

FINA 30153 Financial Management

FINA 30203 Money and Banking or ECON 40153 Economics of Financial Markets

FINA 30213 Investments I

ACCT 30153 Intermediate Financial Accounting I

6 semester hours of finance electives from the following:

FINA 40153 Advanced Financial Management

FINA 30233 Investments II

FINA 40183 Educational Investment Fund

FINA 40193 Educational Investment Fund

FINA 40613 Real Estate Finance and Investment Analysis

FINA 40623 International Finance

For Accounting:

ACCT 20153 Principles of Financial Accounting

ACCT 20163 Principles of Managerial Accounting

ACCT 30153 Intermediate Financial Accounting I

ACCT 30163 Cost Accounting

ACCT 30253 Intermediate Financial Accounting II

ACCT 30303 Introduction to Federal Taxation

Economics students minoring in Accounting or Finance must also pass the Neeley School computer tests prior to enrolling in 30000 and higher business courses. Students should contact the Neeley Student Resource Center for information about these tests. The Lower Division Sequence Requirements of the Neeley School must also be met. ECON 40153 may not be used to satisfy both the major and minor requirements.

#### **Honors Program**

Economics majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in ECON 30003 during their junior year and ECON 40003 during the fall semester of their senior year.

#### **Omicron Delta Epsilon**

The Eta of Texas Chapter of Omicron Delta Epsilon is sponsored by the Department of Economics. ODE is the national honor society in Economics.

#### **Courses of Instruction**

**ECON 10223 Introductory Microeconomics.** Overview of economics, introduction to microeconomic theory and policy; demand, supply, price determination in product and factor markets, principle of comparative advantage, concept of economic efficiency, perfect and imperfect competition.

**ECON 10233 Introductory Macroeconomics.** Prerequisite: ECON 10223. Introduction to macroeconomic theory and policy; measurement of economic aggregates, inflation, unemployment, business cycles, fiscal and monetary policies, economic growth, exchange rates, balance of payments, and financial capital flows.

**ECON 10241 Laboratory in Microeconomics.** Prerequisite: Concurrent registration in, or completion of, ECON 10223. Use of computer simulations, games, and formal exercises to build on, and to reinforce, concepts and procedures covered in ECON 10223.

**ECON 10251 Laboratory in Macroeconomics.** Prerequisite: Concurrent registration in, or completion of, ECON 10233. Use of computer simulations, games, and formal exercises to build on, and to reinforce, concepts and procedures covered in ECON 10233.

ECON 10433 Freshman Seminar in Economics. Topics may vary each time it is offered.

ECON 10533 Freshman Seminar in Economics. Topics may vary each time it is offered.

**ECON 30003 Junior Honors Seminar.** Prerequisite: Advanced standing in Economics and recommendation of the Chairman. Discussion of important books in the literature of economics and of significant economic problems.

**ECON 30133 Labor Economics.** Prerequisites: ECON 10223 and 10233. Economic analysis of labor market issues, including minimum wage legislation, compensating wage differentials, human capital investment, discrimination, and collective bargaining.

**ECON 30143 Public Finance.** Prerequisites: ECON 10223 and 10233. Theory of public choice; budgeting procedures; theory and methods of financing government expenditures; fiscal policy.

**ECON 30213 Development Theory.** Prerequisites: ECON 10223 and 10233. An analysis of the changes that must take place in a society in order for economic development to proceed. Economic Theories of development and growth.

**ECON 30223 Intermediate Microeconomics.** Prerequisites: ECON 10223 and 10233, MATH 10283 or MATH 10524. Details of allocation and distribution theory of market economies. Explanations of product and factor market activities. Elements of partial and general equilibrium theories.

**ECON 30233 Intermediate Macroeconomics.** Prerequisites: ECON 10223 and 10233. Employment, monetary theory, aggregate demand and supply theory, economic performance and tools of measurement.

**ECON 30313 Research Methods in Economics.** Prerequisites: ECON 10223 and 10233, DESC 20153 or MATH 10043. Applications of statistical techniques in research. Includes methods of literature search, proposal writing, computer-based statistical programs, preparation of research reports.

**ECON 30413 American Economic History.** Prerequisites: ECON 10223 and 10233. Developments in agriculture, industry, commerce, transportation, labor, and finance in the United States.

**ECON 30423 Introduction to Security Analysis.** Prerequisite: ECON 10223 and 10233; ACCT 20153 recommended. Survey of financial markets including their historical evolution, their relation to the macroeconomy, economic influences on prices of financial assets, government polices, and basic portfolio management.

**ECON 30433 Development Studies.** Prerequisites: ECON 10223 and 10233. Survey of development experience in a country or group of countries or analysis of general development experiences such as external finance, foreign trade and payments, development policy sets, or other experiences typical of developing countries.

**ECON 40003 Senior Honors Research Paper.** Prerequisites: ECON 30003 with recommendation of the Department. Each student will prepare a substantial paper under the direction of a faculty member.

**ECON 40013 Senior Seminar in Economics.** Prerequisites: Senior standing and 21 semester hours in Economics, including successful completion of the Foundations requirements. Capstone seminar exploring selected issues in economic theory or policy.

**ECON 40153 Economics of Financial Markets.** Prerequisites: ECON 10223 and 10233. Analysis of the structure and operations of financial markets and analysis of the role of money and capital markets in the economy.

**ECON 40233 History of Economic Thought.** Prerequisites: ECON 10223 and 10233. The study of economic ideas. May include the ideas of any major contributor from Adam Smith to contemporary economists.

**ECON 40463 Regional and Urban Economics.** Prerequisites: ECON 10223 and 10233. An introduction to, and overview of, regional and urban economic theory. Examination of location factors and costs including transportation rate structures, migration, firm location, structure of regions and urban areas, and urban problems.

**ECON 40970 Experimental Course.** Prerequisites: Vary according to nature of material. For use when instructor has new material or new teaching strategies which are not appropriate to existing courses.

**ECON 50113 Industrial Organization.** Prerequisites: ECON 30223 or graduate standing in economics or business. Theoretical and empirical examination of the interrelationships between market structure, conduct and performance in the industrial sector of the economy.

**ECON 50123 International Trade and Payments.** Prerequisites: ECON 10223 and 10233 or graduate standing in business. Surveys of international trade relationships, balance of payments accounting, theories explaining the pattern of trade and its relationship to economic welfare, policies affecting the pattern of a country's trade with the rest of the world.

**ECON 50133 International Monetary Economics.** Prerequisites: ECON 10223 and 10233 or graduate standing in business. Surveys of various theories of exchange rate determination, along with evaluation of fixed, flexible and mixed exchange rate regimes. In addition, long-term and short-term capital flows are described and explained.

**ECON 50343 Econometrics.** Prerequisites: ECON 10223 and 10233 and either MATH 10043 or DESC 20153, or graduate standing in business. Techniques of simple and multiple regression. Methods for correcting problems of autocorrelation, heteroscedasticity, and multicollinearity.

**ECON 50353 Modeling and Simulation.** Prerequisites: DESC 20153 or Econometrics, computer experience or permission of instructor. An analysis of systems and modeling techniques. The application of such techniques to economic systems. The study of regional economic models and their use of public policy design.

**ECON 50413 Industry Studies.** Prerequisites: ECON 30223 or graduate standing in economics or business. Study of the market structure, conduct and performance of American industries using a case study approach.

**ECON 50423 Regulation of Economic Activity.** Prerequisite: ECON 30223 or graduate standing in business. Public policy relative to commercial and industrial enterprise. Federal agency regulation. Emphasis on industrial and market concentration, competition and monopoly, public utilities, consumer protection and environmental pollution and control policies.

**ECON 50443 International Economic Studies.** Prerequisites: At least nine 9 semester hours credit in economics or graduate standing in business. Detailed analysis of current problems in international economic relationships. The list of topics selected on the basis of their significance in policy design, policy analysis, or contemporary economic well-being.

**ECON 50453 Macroeconomic Studies.** Prerequisites: ECON 30233 or graduate standing in business. Analysis of current macroeconomic issues in theory and policy. Topics may include economic growth, fluctuations in business activity, investment behavior, consumption functions, macroeconomic planning, and the policy formulation process.

**ECON 50463 Regional Economic Development.** Prerequisites: ECON 30223 or graduate standing in business. Theoretical and empirical examination of regional economic development. Topics may include regional economic resources, development potential, factors affecting industrial location, planning and organization of industrial development, spatial aspects of poverty and urban problems, and methods of regional analysis.

**ECON 50473 Seminar in Financial Economics.** Prerequisites: ECON 30423 or graduate standing in economics or business. Analysis of significant contributions to the literature on investment. Portfolio selection and management giving attention to fundamentalist technical and cyclical approaches.

**ECON 50483 Financial History.** Prerequisites: ECON 10223 and ECON 10233 or graduate standing in Economics or Business. Examines important topics in the development of American and Western European monetary and financial systems. Historical perspectives on innovation, stabilization, and regulation within the major themes of monetary regimes, banking systems, and capital markets.

**ECON 50970 Directed Studies in Economics.** Prerequisites: 12 hours in economics and senior or graduate standing. Supervised reading, research, and preparation of a substantial paper.

# English as a Foreign Language

## Courses of Instruction

## (ENFL)

English as a Foreign Language (ENFL) courses offer elective credits for international students who have been admitted to the University. These courses are designed to provide additional help in composition, reading, and general study skills development.

**Placement.** Placement in these courses is based on the results of the Test of English as a Foreign Language (TOEFL) section scores, the Test of Written English (TWE), and/or other standardized English proficiency exams, which are given to new students during their orientation. Those required to take any ENFL course(s) must successfully complete the course(s) before they will be allowed to continue their academic program.

**Credit.** Elective credit for ENFL courses is granted only for a grade of "C" or better. Students who make a "D" will receive a grade of "NC" (no credit) and must repeat the course. A student who receives an "F" must also repeat the course if eligible to enroll. The Pass/No Credit grading option is not permitted for ENFL courses.

Foreign language requirement. Students may demonstrate competency in a language other than English by meeting the TCU non-English language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of course work at TCU, or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by: (1) scores on standardized tests approved by the University, for which the student will receive 3-12 hours of credit depending on the examination score; or (2) successful completion of one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

## **Courses of Instruction**

**ENFL 10003 Reading/Study Skills.** A course designed to introduce and reinforce the reading and study skills necessary for success in the U.S. university.

**ENFL 10103 Intermediate Composition Skills.** Introduction to the major rhetorical modes and practice in writing various types of paragraphs. The TWE is required as a final exam.

**ENFL 10113 Advanced Composition Skills.** A composition/readings course designed to prepare advanced ESL students for freshman composition and to further develop the language and research report skills required by other courses. The TWE is required as a final exam.

# English

Requirements for the B.A. degree with a major in English Requirements for a minor in English Courses of Instruction

## (ENGL)

Available as a major on the B.A. degree and as a minor on the B.A. and B.S. degrees.

English majors who plan to pursue Departmental Honors must be members of the University's Honors Program and enroll in ENGL 30003 in the junior year and ENGL 40003 in the fall semester of the senior year.

**Pass/No-Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in English are subject to the pass/no credit policy of their major department.

## Requirements for the B.A. degree with a major in English

Each student forms a program of study in consultation with a faculty adviser in English. It is possible to concentrate in writing or literature if the student chooses.

#### **General requirements:**

To earn a major in English, students must complete 30 hours in English (exclusive of 10803, 10833, and 20803). Of these, at least 24 hours must be in upper-division English courses (30000 level and above). No more than 6 hours of lower-division credit may be applied to the major.

ENGL 30973 and 50970, courses in special topics which change from semester to semester, usually satisfy one or more of the requirements for majors. Consult the Department for information on these courses or check our website.

#### Specific requirements:

To earn a major, students must complete at least 6 of the 30 hours in courses in pre-1800 materials in American Literature, British literature, or Rhetorical Traditions. Select from this list (or consult the Department): 20433, 20603, 20633, 20913, 30113, 30253, 30413, 30423, 30433, 30583, 30623, 30633, 30643, 40403, 40403, 40453

These additional distribution requirements apply:

- a. 6 upper division hours of American literature, selected from this list: 30133, 30143, 30503, 30513, 30523, 30533, 30543, 30553, 30563, 30573, 30583, 30593, 30693, 40523, 40533, 40583, 40593;
- b. 6 upper division hours of British literature, selected from this list: 30113, 30123, 30413, 30423, 30433, 30443, 30453, 30463, 30633, 30673, 30773, 40403, 40413, 40423, 40433, 40443, 40453, 40463, 40483, 40493;
- c. 3 upper division hours of writing, selected from this list: 30213, 30223, 30233, 30263, 30273, 40203, 40213, 40223, 40233, 40243;
- d. 3 upper division hours of either language theory, literary theory, or rhetorical theory, selected from this list: 30103, 30243, 30253, 30283, 30303, 30313, 30323, 40123, 40253, 40323, 40333:
- e. 12 elective hours of any courses offered by the Department of English; of these, at least six hours must be at the upper division.

## Requirements for a minor in English

To earn a minor, students must complete 18 semester hours in English (exclusive of 10803, 10833, and 20803). Of these, 9 hours must be in upper-division courses. These distribution requirements apply:

- a. 3 hours of British literature, selected from this list: 20403, 20433, 30113, 30123, 30413, 30423, 30433, 30443, 30453, 30493, 40403, 40413, 40423, 40433, 40443, 40453, 40463, 40483, 40493, 40693;
- b. 3 hours of American literature, selected from this list: 20503, 20533, 20583, 30133, 30143, 30503, 30513, 30523, 30553, 30553, 30563, 30573, 30583, 30593, 30693, 40523, 40533, 40593;
- c. 3 hours of writing, selected from this list: 10203, 30213, 30223, 30233, 30243, 30253, 30263, 30273, 40203, 40213, 40223, 40233, 40243, 40253, 40273, 50243;
- d. 9 hours of elective English courses, chosen from any category.

## **Courses of Instruction**

These general prerequisites apply to all upper-division English courses: ENGL 10803 (or 10833) and at least one 20000-level English course. Specific prerequisites also apply to some courses, as noted in their descriptions below.

## **Approaches to Literary Studies**

**ENGL 10103 Introduction to Fiction.** Reading and analysis of prose fiction by a variety of authors. The course may focus on a specific historical period or may cover a more extensive time span. Students will become familiar with interpretive strategies and will examine the course texts in relation to literary antecedents, the conventions of various genres, and the cultural circumstances of composition.

**ENGL 10113 Introduction to Poetry.** Reading and analysis of a wide variety of American and British poetry. The goal of the course will be to help students understand that poetry is not difficult and dull, but understandable, worthwhile, and enjoyable.

ENGL 10123 Introduction to Drama. Reading and analysis of the various dramatic genres.

ENGL 10433 Literature: Freshman Seminar. Topics may vary each time it is offered.

**ENGL 30103 Introduction to Literary Theory.** Prerequisite: One literature course and sophomore standing (24 hours). An introductory investigation into the peculiar aesthetic problems involved in reading and interpreting literary language. Particular attention is given to the tensions between literature, readers, and cultural contexts. Both traditional and contemporary approaches are examined. Readings range from folk tales to literary classics to recent writing in the philosophy of language.

**ENGL 40123 Literary Criticism.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An historical study of major developments in the theory of literature since Plato. The first half of the course surveys representatives of the most important positions, the second half surveys how these positions remain influential in 20th century thought.

#### Writing Workshops

**ENGL 10803 Introductory Composition: Writing from Sources.** Prerequisite to all advanced writing courses at TCU. Strategies for reading, evaluating, and responding to written texts in academically productive ways, and for revising and editing students' own work. The course also teaches students how to present their own ideas and how to incorporate the ideas of others into their own writing. Course activities include writing summaries, analyses, syntheses, and arguments.

ENGL 10833 Comp: Freshman Seminar. Topics may vary each time it is offered.

**ENGL 20803 Intermediate Composition: Writing within Communities.** Prerequisite: English 10803 and sophomore standing 24 hours. Strategies for adjusting one's writing to a variety of tasks, genres, contexts, and audiences. The course also teaches research techniques, with an emphasis on identifying sources that are valuable to a given community and building an argument from them. Course activities include critical reading, collaborative writing and editing, and revising for style.

# Studies in Writing and Rhetoric

**ENGL 10203 Introduction to Creative Writing.** Workshops in which students present their writing (fiction, poetry, drama, creative nonfiction) for class analysis will be complemented by lectures on the genres and readings that exemplify outstanding technique.

**ENGL 30213 Advanced Composition.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A development of the principles, primarily of exposition, into a more advanced level of composing than might be expected of the first year college student.

**ENGL 30223 Technical Writing and Document Design.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A course in practical communication with a concentration on report writing, including oral presentations and use of visual materials. Assignments are tailored to fit students' major fields and professional interests. Students may not receive credit for both ENGL 30223 and ENGL 40243.

**ENGL 30233 The Essay.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Primarily a writing course with an emphasis on developing a personal style appropriate to private journal, letters, or magazine journalism, the course includes reading of major essayists from the Renaissance to the present.

**ENGL 30243 Rhetoric in Social Interaction.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Appropriation of the vocabulary, taxonomies, and strategies of classical and modern rhetoric for the purposes of critical inquiry into contemporary communication and behavior.

**ENGL 30253 Rhetorical Traditions.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An introduction to the ideas, issues and individuals that shaped rhetoric and its relationship to literature and poetics, including the relationship between orality and literacy, the impact of cultural and religious views on discourse, and the role of technology in communication.

**ENGL 30263 Style and Usage.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Analysis of the ways in which writers deploy vocabulary and syntax to create a prose voice that is responsive to the demands of audience, purpose, and occasion.

**ENGL 30273 Argument and Persuasion.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Analysis of the logic by which writers construct arguments; analysis of the various means that writers use to persuade an audience; practice in writing one's own argumentative and persuasive discourse.

**ENGL 30283 Cyberliteracy.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. This course will investigate issues related to cyberliteracy: what it means to read, write, communicate, and make knowledge in a digital world. In particular, the course will consider how computer technologies challenge traditional notions of literacy, identity, and community.

- **ENGL 40203 Creative Writing-Fiction.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An advanced fiction-writing workshop, focusing on the growth of students' own work. Enrollment requires instructor's permission.
- **ENGL 40213 Creative Writing-Poetry.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An advanced poetry-writing workshop, focusing on the growth of students' own work. Enrollment requires instructor's permission.
- **ENGL 40223 Creative Writing-Drama.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An advanced drama-writing workshop, focusing on the growth of students' own work. Enrollment requires instructor's permission.
- **ENGL 40233 Writing for Publication.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of the possibilities of writing for magazine publication and the construction of essays and articles for specific markets.
- **ENGL 40243 Professional Writing and Editing.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A course in writing and editing appropriate to diverse professions. Examples from the writing of lawyers, scientists, and other professional writers are used as models and for editing practice. Students learn to write prose that is lucid, concise, and graceful. Students may not receive credit for both ENGL 30223 and ENGL 40243.
- **ENGL 40253 Propaganda Analysis and Persuasion.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The nature of persuasive discourse and social movements involving propaganda explored through illustrations and theories that facilitate their understanding.
- **ENGL 40273 Writing Internship.** Prerequisites: 60 credit hours; GPA of 3.0, English GPA of 3.0; approval of the department. Students are placed with agencies in publishing or related fields for workplace experience. Duties, varied to fit the needs and opportunities associated with the participating agencies, generally include writing, editing, and production of published documents.
- **ENGL 50243 Teaching Writing.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A course for teachers of English combining theories of composition with practical pedagogy and classroom strategies for the teaching of writing. Not applicable toward degree requirements for the Ph.D. in English.

#### Studies in Language

- **ENGL 30303 Modern Grammar.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of modern approaches to English grammar, traditional, structural, and transformational, with an emphasis on generative-transformational theory. Students are introduced to modern developments in phonology, morphology, syntax, and semantics as time permits.
- **ENGL 30313 Introduction to Language Study.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A general survey, for the nonspecialist, of language history, structure, acquisition, and diversity.
- **ENGL 30323 Comparative Linguistics.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Language is an integral part of life, and disputes over language are often very divisive. These disputes typically involve comparison of one form of language with another and are usually accompanied by value judgments. In this course we examine the nature of the differences among language varieties. In the process, we will explore the ways in which language is shaped by how people use and view it and the ways in which it affects those who use it.
- **ENGL 40323 History of the Language.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The study of the origins and development of Modern English.
- **ENGL 40333 Language and Society.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An introduction to the ways in which social organizations influence the development of language and language creates cultural patterns.

# Studies in British Literature

- **ENGL 20403 Major British Writers.** Studies of texts by major British writers from the beginnings of English literature to the present. Texts vary by semester.
- **ENGL 20433 Introduction to Shakespeare.** Introduction to and analysis of 6-7 plays, with reference to the sociocultural context in which the plays were composed and the ways they (and their author) have been interpreted and appropriated since the late sixteenth century. This course is designed for undergraduates with little or no preparation in literary studies.
- **ENGL 30113 British Literature to 1800.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An introductory investigation into the peculiar aesthetic problems involved in reading and interpreting literary language. Particular attention is given to the tensions between literature, readers, and cultural contexts. Both traditional and contemporary approaches are examined. Readings range from folk tales to literary classics to recent writing in the philosophy of language.
- **ENGL 30123 British Literature since 1800.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Two period surveys, the first of medieval and early modern literature, and the second of nineteenth- and twentieth-century literature. Both courses will consider literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. Students may take both courses or either. The English Department recommends that ENGL 30113 and 30123 be taken consecutively.
- **ENGL 30413 British Literature to 1500.** Prerequisite: ENGL 30113 or permission of instructor. A survey of Old and Middle English literature from Beowulf to medieval drama. Emphasis is on introducing a wide range of medieval poetic and narrative forms including epic, lyric and romance, and a selection of recurring themes such as pilgrimage, death and antifeminism. Some texts are read in modern English translations.
- ENGL 30423 Early British Drama. Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course.

Survey of early British dramatic literature, from morality- and mystery-plays of the 15th century through revenge tragedies and city comedies of the 16th and 17th. The course examines drama as a cultural force and traces the growth of tragic and comic genres.

**ENGL 30433 Renaissance Poetry.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Survey of 16th- and 17th-century English verse, with particular attention to aesthetic, political, and religious functions of poetry; the status of poets in early modern England; and the effects of societal changes on the production of poetry in the period.

**ENGL 30443 Twentieth Century Irish Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of drama, poetry, prose and film from all 32 counties of Ireland beginning with the Irish literary revival exemplified by, for example, W.B. Yeats, Augusta Gregory, James Joyce, J.M. Synge and concluding with Ireland's second renaissance e.g., works by Seamus Heaney, Paula Meehan, Roddy Doyle, Brian Friel, and Neil Jordan.

**ENGL 30453 The Victorian Novel.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. This course examines the genre of the Victorian novel, asking why it emerges in this period to challenge the preeminence of poetry, why realism becomes its dominant style, and how particular novelists respond to the substantial changes occurring in British society, including industrialization, political reform, and changing relations between the sexes and classes.

**ENGL 30463 British Literature: The Bloomsbury Group.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of British, American and Anglophone women poets from the 16th century to the present. Emphasis will be given to women writers' engagement with, contribution to, and rewriting of poetic tradition; to the social and historical conditions affecting women's poetic production; and to the relation between poetry, poetics, and theories of gender.

**ENGL 30493 Women Poets and Poetic Tradition.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of British, American and Anglophone women poets from the 16th century to the present. Emphasis will be given to women writers' engagement with, contribution to, and rewriting of poetic tradition; to the social and historical conditions affecting women's poetic production; and to the relation between poetry, poetics, and theories of gender.

**ENGL 40403 Chaucer.** Prerequisite: 30113 or permission of instructor. An intensive study of Chaucer's major poetry, especially The Canterbury Tales and Troilus and Criseyde, in Middle English. Emphasis is on Chaucer as inheritor and innovator of medieval ideas about God, social order, gender, authorship, the morality of reading and the function of poetry. Some prior experience with early literature is expected.

**ENGL 40413 Renaissance in England.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The prose writers, dramatists, and poets of sixteenth- and seventeenth-century England in relation to the cultural circumstances influencing and being influenced by their works. Topics may include the prospect and enactment of censorship; the centrality of the patronage system; courts and courtiers; changing views of monarchy and obedience; religious controversy; issues of gender, ethnicity, and class; literature and science; pseudo-nonfictional strategies; adaptations of the bible, history, and mythology; and early book production and circulation.

**ENGL 40423 Restoration and 18th Century Literature, 1660-1790.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The poetry and prose of Pepys, Dryden, Prior, Pope, Swift, Defoe, Thomson, Goldsmith, Gray, Johnson, Burns, and others writing between 1660 and 1798.

**ENGL 40433 19th Century Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A general survey of British literature from 1790-1900.

**ENGL 40443 20th Century Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A general survey of British literature from 1900 to the present.

**ENGL 40453 British Novel to 1832.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Survey of the novel through the early 19th century.

**ENGL 40463 British Novel since 1832.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Survey of the novel from the mid-19th century to the present.

**ENGL 40483 Shakespeare and Marlowe.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Comparative study of several plays each by Shakespeare and Marlowe, placing their work in historical and social contexts. Reading includes historical documents and literary theory.

**ENGL 40493 Issues in Shakespeare Studies.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An intensive study of 3-5 of Shakespeare's plays, their sources, performance history, substantive textual variants, the Elizabethan/Jacobean milieu in which the plays were composed, and the changing cultural conditions under which the plays were appropriated and reworked. The plays will be examined from a variety of interpretive perspectives. Topics to be considered include how changes in aesthetic values and sociopolitical concerns have affected editorial decision-making and the development of interpretive strategies, and why Shakespeare, one of a number of inventive early modern authors, has over the centuries been transformed into a cultural icon. ENGL 20433 is a recommended, but not required, prelude to this course.

# Studies in American Literature

**ENGL 20503 Major American Writers.** Studies of texts by major American writers from the beginnings of American literature to the present. Texts vary by semester.

**ENGL 20533 The American Dream.** The American success dream as depicted and evaluated by major writers from Colonial times to the present.

**ENGL 20583 The Western.** The American West and the Western hero in fiction, from James Fenimore Cooper to selected contemporary authors.

**ENGL 30133 American Literature to 1900.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Two period surveys, the first from Colonial times to the Realist movement, and the second from the Realist

movement to the present. Both courses will consider literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. Students may take both courses or either. The English Department recommends that ENGL 30133 and 30143 be taken consecutively.

**ENGL 30143 American Literature since 1900.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Two period surveys, the first from Colonial times to the Realist movement, and the second from the Realist movement to the present. Both courses will consider literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. Students may take both courses or either. The English Department recommends that ENGL 30133 and 30143 be taken consecutively.

**ENGL 30503 The Roaring Twenties.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A study of major American authors emerging in the Twenties, the cultural context for their art, and the influences of their achievements.

**ENGL 30513 American Poetry.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Survey emphasizing major poets from Colonial times to the present, including some poetic theory and criticism.

**ENGL 30523 Sports in Modern American Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An examination of the question of why so many of modern America's greatest authors employ sports-centered materials in their work. The readings will focus on baseball, football, basketball, and boxing.

**ENGL 30533 Modern American-Jewish Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of the contributions of major American-Jewish authors to modern American literature. Prospective students need no special knowledge, since this is a course in American literature and not in Judaism.

**ENGL 30543 The American Short Story.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of the American short story from its origins to the present.

**ENGL 30553 19th Century American Novel.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Development of the American novel from its origins through the beginning of the 20th Century. Readings may include works by James Fenimore Cooper, Nathaniel Hawthorne, Herman Melville, Louisa May Alcott, Henry James, Harriet Beecher Stowe, Mark Twain, Sarah Orne Jewett, and Frank Norris, and will emphasis the novels' close ties to contemporaneous social, scientific, and political issues.

**ENGL 30563 American Drama.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Representative plays by the major playwrights of the American theatre. Movements in theater and changes in theatrical conventions will provide a historical context. Limited readings in criticism.

**ENGL 30573 Travail and Triumph: A Survey of African-American Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An analysis of the fiction, poetry, drama and essays of African-Americans from the slave era through post-civil rights, exploring chronologically the historical, social, cultural and racial contexts which shape the literature.

**ENGL 30583 Early American Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The development of American literature from the period of earliest settlement through the era of the Early Republic, emphasizing the religious and socio-political evolution of American thought; attention will also be given to the development of imaginative literature, such as the novel. Among the figures included will be William Bradford, Anne Bradstreet, Edward Taylor, Thomas Jefferson, Benjamin Franklin, Susannah Rowson, and Charles Brockden Brown.

**ENGL 30593 American Fiction, 1960 to the Present.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A study in the development of American Fiction from 1960 to the present. Explores the relationship between literature and the concerns of contemporary society. Examines current trends and topics in American Fiction and introduces students to recent literary analysis and critical debates.

**ENGL 30693 Multi-Ethnic Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An analysis of the fiction, poetry, drama and essays of major ethnic writers from the United States and other parts of the world. From a comparative angle, this course will explore the historical, social, cultural and racial contexts which shape the literature. Several critical approaches will be taken to show interrelationships among writers.

**ENGL 40523 Emerson and Thoreau.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Works of two 19th century American literary masters, read in their social and historical context.

**ENGL 40533 Toni Morrison.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An intensive study of the works of Toni Morrison. Attention will also be given to the cultural contexts (historical and contemporary) which structure the worlds of Morrison's fiction and influence the reception of her work.

**ENGL 40583 Contemporary American Poetry.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Intensive study of contemporary American poets, poetic movements and relevant issues in aesthetics.

**ENGL 40593 Faulkner.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Examination of several of Faulkner's major Yoknapatawpha County novels and of Faulkner scholarship. The course will be a mixture of lecture and discussion.

## **Studies in Comparative Literature**

**ENGL 20603 Western World Literature I.** Two period surveys, the first from ancient Greece to the Renaissance, and the second from the Enlightenment to the present. The primary emphasis will be historical, but individual instructors may vary the choice and treatment of texts to explore important developments of theme (e.g., the hero, journey, monsters) or genre (e.g., tragedy, epic, romance, lyric). Students may take both courses or either.

**ENGL 20613 Western World Literature II.** Two period surveys, the first from ancient Greece to the Renaissance, and the second from the Enlightenment to the present. The primary emphasis will be historical, but individual instructors may vary the choice and treatment of texts to explore important developments of theme (e.g., the hero, journey, monsters) or genre (e.g., tragedy, epic, romance, lyric). Students may take both courses or either.

**ENGL 20623 Women in Literature and Culture.** Using gender as a category for literary and cultural analysis, this course examines women writers who create forms of expression as well as contribute to traditional genres. The course may focus on a specific historical period or may cover a more extensive timespan. Writers may include Sappho, Marie de France, Behn, Wollstonecraft, Bronte, Austen, Dickinson, Woolf, Hurston, Welty, Plath, Morrison, Kingston, Tan, Joubert, McCafferty, Maraga, and Menchu.

**ENGL 20633 Mythology.** Study of major Greek and Roman myths, gods, and heroes, as these reflect cultural values and problems, and including some study of major literary forms.

**ENGL 20643 Fable and Fantasy.** An examination of a wide range of texts, some that are classified as fable or fantasy literature as well as some that incorporate elements from these genres. The course may focus on a specific historical period or may cover a more extensive timespan. Texts may include The Arabian Nights, Lucian's A True History, Aesop's and Marie de France's Fables, medieval Arthurian romances, eighteenth- to twentieth-century versions of fairy tales, Ursula LeGuin's A Wizard of Earthsea, Salman Rushdie's The Satanic Verses, and Naguib Mahfouz's Arabian Nights and Days.

**ENGL 20653 The Romantic Imagination.** A study of the means by which the spirit of romanticism is embodied in literature since the late 18th century.

**ENGL 20733 Science Fiction.** Historical development of science fiction as a literary genre with particular attention given to significant authors and themes.

**ENGL 20743 Detective Novel.** Detective and suspense fiction in its social and historical context, illustrated by selected major works and authors.

**ENGL 20913 Literature and Civilizations I.** This two-semester sequence explores the role of literary, rhetorical and dramatic expression in the development of cultural ideas, institutions and values. The first semester will focus on the cultural foundations of Britain and the United States; the second semester will focus on responses to these developments registered within various literary and rhetorical texts from around the world.

**ENGL 20923 Literature and Civilizations II.** Prerequisite: ENGL 20913. This two-semester sequence explores the role of literary, rhetorical and dramatic expression in the development of cultural ideas, institutions and values. The first semester will focus on the cultural foundations of Britain and the United States; the second semester will focus on responses to these developments registered within various literary and rhetorical texts from around the world.

**ENGL 30613 Women's Lives: Memoir and Fiction.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Readings in contemporary women's writing that reflect women's lives and experiences with self, family, and society, with some attention to the theory and practice of writing the memoir. Discussion of works as both literature and social commentary.

**ENGL 30623 Medieval Literature in Translation.** A survey of major thinkers and writers of the West from the fall of Rome to 1500, in part devoted to drawing a coherent picture of medieval thought: Heavenly versus earthly order; the nature of desire; the power of human agency; the value and uses of the past, including the classical past; gender roles. The often surprising ways in which individual writers deviate from and even criticize this cultural heritage.

**ENGL 30633 Medieval and Early Modern Women Writers.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The development of beliefs about women's roles and characters and the ways these beliefs were accepted, challenged, or discredited. Authors studied are writers of prose fiction, poetry, drama, autobiography, biography, letters, religious visions. They may include Christine de Pizan, whose Book of the City Ladies (1405) attempts to counteract the negative view of women, and Aphra Behn, whose Oroonoko, or the Royal Slave (1688) questions hierarchizing of people according to gender, ethnicity, religion, and class.

**ENGL 30643 The Bible as Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A study of Biblical works as examples of literary types; poetry, short story, essay, drama.

**ENGL 30673 King Arthur in Literature and Legend.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Surveys the growth of the Arthurian tradition from legend and medieval literature into the 19th and 20th centuries, with special attention to Malory, Tennyson, Twain, and Bradley.

**ENGL 30683 Post-Colonial Anglophone Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. This course examines contemporary writers of English whose literary works were influenced or shaped by colonialism or its aftermath. Emphasis will be placed on writers from India, Australia, Ireland, Africa or the Caribbean.

**ENGL 30723 Short Story.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A survey of the development of the genre through the 19th and 20th centuries.

**ENGL 30733 Satire.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Examines the nature and uses of satire, concentrating on the variety of satiric forms. Readings will include prose fiction, essays, and poetry written by European and American satirists.

**ENGL 30753 Literature and Film.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A study of aesthetic and ideological differences, considering both how various literary works have been filmed and how films images may be analyzed using interpretive techniques developed by literary criticism.

**ENGL 30773 India: Texts and Traditions.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A consideration of selected classic works of religious and literary imagination in Indian culture. Versions and interpretations of the Hindu epics Mahabharata and Ramayana will be examined in translation.

**ENGL 30783 Working-Class Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. A study of the working class in fiction, poetry, and essays. Some attention will also be given to portrayals of the working class on TV, in film, and in photography.

ENGL 40653 Renaissance Literature and the 'New' Science. Prerequisites: ENGL 10803 or 10833, and one

20000-level ENGL course. This course examines how and why artists and scientists in the century c. 1550-1650 interacted intellectually as they did. Topics include influences of scientific developments and discoveries upon European (chiefly British) letters; strategies used by writers to appropriate, revise, or contest scientific development in astronomy, medicine, philosophy and other disciplines; and relationships between scientific and literary discourses of change.

**ENGL 40663 Modern Fiction.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Considerations of modernism as a literary movement with readings in modernist fiction. Among figures included will be Dostoevsky, Mann, Kafka, Ellison, Faulkner, Barth, and Barthelme.

**ENGL 40673 Modern Drama.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Close study of representative plays marking significant movements in modern theater, including realism, surrealism, absurdism, and the theatre of alienation.

**ENGL 40693 20th Century British and Irish Poetry.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An intensive study of contemporary British and/or Irish poets, poetic movements and relevant issues in aesthetics.

**ENGL 40733 Social History of Children's Literature.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. British and American children's literature of the 19th and 20th centuries, examined in its social and historical context and illustrated by selected major themes, works, and authors.

**ENGL 40743 The Long Novel.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. An intensive study of the pleasures and difficulties of long novels, which represent a unique genre of literature. Each semester focuses on three or four novels generally regarded as works of tremendous influence, but which may be too involved for study in survey courses. The novels will be selected from different periods, cultures, and languages.

**ENGL 30003 Junior Honors Seminar.** Independent projects in literature.

**ENGL 40003 Senior Honors Seminar.** Independent projects in literature resulting in Senior Honors Thesis.

**ENGL 30973 Directed Studies in English.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Directed Study in English.

**ENGL 50603 Classical Drama.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. The study of plays surviving from ancient Greece and Rome.

**ENGL 50970 Directed Study in English.** Prerequisites: ENGL 10803 or 10833, and one 20000-level ENGL course. Directed Study in English.

# Geography

#### Courses of Instruction

#### (GEOG)

Administered by the Department of History.

Available as a major on the B.A. degree and as a minor on the B.A. and B.S. degrees.

Requirements for the B.A. degree with a major in Geography. No grade lower than "C" can be applied to the

major. 30 semester hours including: GEOG 10003 World Regional Geography GEOG 20013 Human Geography GEOL 10113 Understanding the Earth

At least six hours of the following regional courses:

GEOG 30503 Topics in Regional Geography

GEOG 30513 United States

GEOG 30523 Latin America

GEOG 30533 Western Europe

At least six hours of the following systematic courses:

GEOG 30703 Topics in Systematic Geography

GEOG 30713 Urban Geography

GEOG 30723 Cultural Geography

And at least three hours of the following Geology courses:

GEOL 30113 Weather and Climate

GEOL 40493 Geomorphology

A maximum of six hours from the following list of approved courses may be applied toward the major:

ANTH 30723 Ethnology of Selected Areas

BIOL 50313 Biogeography

GEOL 50113 Soils

GEOL 50493 Physical Hydrology

GEOL 50721 Geographic Information Systems GEOL 50731 Remote Sensing Technology

GEOL 50741 Image Processing

GEOL 50751 Image Interpretation

GEOL 50762 Advanced GIS

Requirements for a minor in Geography. Eighteen semester hours including GEOG 10003, GEOG 20013, nine semester hours of upper-division geography courses, and 3 semester hours from GEOL 1013, GEOL 30113, or GEOL 40493. No grade lower than "C" can be applied to the minor.

Pass/No-Credit Option. Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Geography are subject to the pass/no credit policy of their major department.

## **Courses of Instruction**

GEOG 10003 World Regional Geography. A survey of the world's primary regions and the human and physical geography that shape them. Interactions between natural environment, cultural geography, geopolitics, history, land use, and economic geography are highlighted.

GEOG 20013 Human Geography. The systematic subdivisions of human geography are surveyed, including urban, cultural, political, economic, historical, agricultural, and population geography. Within each subdiscipline, applications of geographic concepts and processes are emphasized.

GEOG 30503 Topics in Regional Geography. An analysis of the human and physical geography of a specific region. Examples of regions include Texas, Sub-Saharan Africa, and Eastern Europe. Regional characteristics investigated may include economic, political, historical, and cultural components as well as topography, climate, and natural resources. May be repeated for credit provided the specified region changes.

GEOG 30513 Geography of the United States. An exploration of the human and physical geography of the United States. Areas of the country, such as the Pacific Northwest and New England, will be surveyed, analyzing the physical, historic, cultural, and economic characteristics that embody their unique regional identities.

GEOG 30523 Geography of Latin America. An exploration of the human and physical geography of Latin America. This course analyzes Latin America from a geographical perspective and addresses topics such as landforms, climate, environmental hazards, indigenous peoples, culture, ethnicity, religion, agriculture, political geography, population, cities, and economic production.

GEOG 30533 Geography of Western Europe. An exploration of the human and physical geography of Western Europe. Countries and regions of the realm will be surveyed, analyzing their economic, political, language and religious characteristics as well as topography, climate, and natural resources. Themes may include the impact of

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population trends, environmental problems, trade and economic development, interactions between ethnic groups, and geopolitical change.

**GEOG 30703 Topics in Systematic Geography.** Concepts, principles, patterns, and processes associated with a specific subdiscipline in geography. Examples of topics include Economic Geography, Geopolitics, Medical Geography, and Physical Geography. May be repeated for credit provided the specified subdiscipline changes.

**GEOG 30713 Urban Geography.** Urban Geography is the geographical study of cities. Examples of topics include: urban ecosystems; the role of physical geography in the origins and growth of cities; theoretical models of urban size, location, and land use structure; the internal geography of urban economic and social activity; and international and historical variation in the form, functions, and degree of urbanization.

**GEOG 30723 Cultural Geography.** Cultural Geography is the study of human culture from the perspectives of its five geographic themes: culture region, diffusion and migration, cultural ecology, cultural landscape, and cultural integration. Each theme is applied to a variety of topics, which may include religion, language, cultural conflict, folk culture, popular culture, and demography.

GEOG 30970 Topical Studies in Geography. Topical studies in Geography.

**GEOG 40010 Field Studies in Geography.** An intensive field study in the regional and systematic geography of a selected area. Examples include France, Central America, and the American West. May be repeated for credit provided the selected area changes.

**GEOG 50970 Special Studies in Geography.** Supervised reading, research, and preparation of a substantial paper focused on a specific regional analysis or topical subdiscipline of geography. Regional characteristics investigated may include economic, political, historical, and cultural components as well as topography, climate, and natural resources. Examples of topics include advanced studies in Urban Geography, Cultural Geography, Geopolitics, and Historical Geography.

# History

#### Courses of Instruction

## (HIST)

Available as a major on the B.A. degree and as a minor on the B.A. and B.S. degrees.

Requirements for the B.A. degree with a major in History. 27 semester hours which will include HIST 10003, 10013 and 9 additional hours dealing with areas outside the Western Hemisphere, 6 of which must be in courses numbered 30000 or above; and 12 hours selected from courses dealing with the Western Hemisphere, 6 of which must be numbered 30000 or above. Students who complete the Honors Intellectual Traditions track (HHIT 10113, 20123, 20133) are exempted from HIST 10013 but must take HIST 10003 for the history major. In this Bulletin, courses dealing with the Western Hemisphere are marked (WH); Non Western Hemisphere courses are marked (NWH). Some courses may count in either category.

**Requirements for a minor in History.** 18 hours distributed as follows: 9 hours selected from courses dealing with the Western Hemisphere and 9 hours from courses dealing with areas outside the Western Hemisphere. (HIST 10003-10013 and HIST 10603-10613 are recommended, but are not required.) 6 hours must be 30000 or above.

**Requirements for Secondary Certification.** 24 semester hours which will include HIST 10003 and 10013, HIST 10603 and 10613 or 10903 and 10913, HIST 40743, and 9 semester hours at the 30000 level or above (with a maximum of 6 hours in either WH or NWH).

**Honors Program.** History majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in HIST 30153 during their junior year and HIST 40103 during the fall semester of their senior year.

**Honor Society.** The Department of History sponsors the Eta Kappa Chapter of Phi Alpha Theta, national honor society in the discipline of history.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in History are subject to the pass/no credit policy of their major department.

## **Courses of Instruction**

**HIST 10003 History of Civilization**. See the topical treatment listed below. This course provides an introduction to all the social sciences. It is required of all history majors. Note that the emphasis and focus of the course differ depending on the topic specified in the subheading. The student may select whatever topic he wishes, but the course may not be repeated for credit.

**HIST 10003 History of Civilization: A Survey To 1500.** Examination of the developments of the foundation pillars of western civilization. Topics include the rise of civilization in the Near East, ancient Greece and Rome, the rise of Christianity, the impact of the Germanic invasions, Europe in the High Middle Ages, the Renaissance, the beginnings of overseas expansion. (NWH)

**HIST 10003 History Of Civilization: Great Figures in World History to 1500.** The role of the individual in shaping the course of man's history. Outstanding men and women are examined as to their personalities, motivations, contributions, and as a reflection of the values and life styles of their own areas. Some of the figures treated are: The Egyptian Pharaoh Ikhnaton, Socrates, Pericles, Alexander the Great, Caesar, Cleopatra, Jesus Christ, Charlemagne, Henry II, and St. Francis of Assisi. (NWH)

**HIST 10013 History of Civilization.** See the topical treatment listed below. This course provides an introduction to all the social sciences. It is required of all history majors. Note that the emphasis and focus of the course differ depending on the topic specified in the subheading. The student may select whatever topic he wishes, but the course may not be repeated for credit.

**HIST 10013 History of Civilization: A Survey From 1500 to The Present.** The development of European society from the Reformation to the twentieth century. Topics include the Protestant and Catholic Reformations, cultural encounters with the New World, the rise of absolutism, the Enlightenment and democratic revolutions, industrialization, the emergence of liberalism, capitalism and socialism, and the two world wars. (NWH)

**HIST 10013 History of Civilization: Great Figures In World History From 1500 to The Present.** Introduction to history through a study of the prominent individuals who have helped shape the course of world events. Each figure will be treated in detail as an individual, but will also be associated with, and shown as, a reflection of the age in which he or she lived. Included will be such individuals as Luther, Elizabeth I, Napoleon, Hitler, Stalin, and Mao Tsetung. (NWH)

HIST 10433 Freshman Seminar in History. Topics may vary each time it is offered.

HIST 10533 Freshman Seminar in History. Topics may vary each time it is offered.

**HIST 10603 United States History: A Survey to 1877.** Review of evolution of the American nation from the discovery of the New World to the end of the Civil War era, with emphasis on major forces shaping its development. (WH)

**HIST 10613 United States History: A Survey since 1877.** Review of the emergence of the American nation through the transitional crises of the past hundred years, with emphasis on the roots of movements persisting into the modern period. (WH)

**HIST 10703 African American Experience Since 1619.** Comprehensive survey of African Americans in the United States from 1619 to 1968 with special emphasis on the internal changes (such as citizenship, work, family, culture, religion, and community) and external challenges (such as slavery, racial segregation, urbanization, industrialization, major wars, and mass migrations) faced by African Americans from the start of the Transatlantic Slave Trade to the culmination of the Civil Rights Movement.

**HIST 10903 Ethnic Elements of American History.** Comprehensive survey of the Old World antecedents, migrations, and socioeconomic contributions of the various ethnic groups comprising the American nation - Indians, Africans, Iberians, French, Dutch, English, Scots, Irish, German, Italians, Scandinavians, Eastern Europeans, Mexicans, and Asians - with emphasis on the continuing quest for identity, assimilation, and acculturation in the 20th century (WH) Note: Credit will not be awarded for both 10603 and 10903 or for both 10613 and 10913.

**HIST 10913 Ethnic Elements of American History.** Comprehensive survey of the Old World antecedents, migrations, and socioeconomic contributions of the various ethnic groups comprising the American nation - Indians, Africans, Iberians, French, Dutch, English, Scots, Irish, German, Italians, Scandinavians, Eastern Europeans, Mexicans, and Asians - with emphasis on the continuing quest for identity, assimilation, and acculturation in the 20th century (WH) Note: Credit will not be awarded for both 10603 and 10903 or for both 10613 and 10913.

**HIST 10923 Latin American History: Colonial Period.** Hispanic and native backgrounds of the Spanish Conquest; a description and analysis of the evolution of colonial institutions; the independence movements in Hispanic America. (WH)

**HIST 10933 Latin American History: National Period.** The colonial inheritances which influenced national development; political and economic trends of the nineteenth century; revolutionary trends in the twentieth century; inter-American relations. (WH)

**HIST 10943 Asian Civilization to 1500.** This course is an introduction to the history and culture of traditional Asia from Neolithic times to approximately 1500. We will focus on the major political, economic, cultural, religious and intellectual trends of the people of East, South and Southeast Asia. Students in this course will pursue a greater knowledge and understanding of Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments.

**HIST 10953 Asian Civilization Since 1500.** This course is an introduction to the history and culture of modern Asia from approximately 1500 to 1989. We will focus on the internal changes and external challenges faced by the people and governments of such East, South and Southeast Asian states as China, Japan, Korea, India, Pakistan, Indonesia and Vietnam. Students in this course will pursue a greater knowledge and understanding of modern Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments.

### **Classical Studies: The Ancient World**

**HIST 30003 The Greek World.** Archaeological and cultural survey from pre-Greek beginnings to the Roman conquest of Greece. Emphasis on discovery of the Minoan and Mycenaean world, the origins of Greek civilization, life in the Greek city-state, the Greek world view, and the conquests of Alexander the Great. (NWH)

**HIST 30013 The Roman Republic and Empire.** Archaeological and cultural survey of the Roman world from its origins to the barbarian invasions. Emphasis on the origins of Rome, Roman imperialism and its impact on the Roman way of life, the Roman Revolution, the political absolutism of the empire, the historical Jesus and Christianity in the Roman context, and the decline and fall of the Roman Empire. (NWH)

**HIST 30023 Ancient Egypt and the Near East.** Archaeological and cultural survey of the ancient civilizations of Egypt and the Near East. Visual presentation of archaeological evidence is emphasized along with the origins of civilization, the life and death of civilization, comparison of different values and world views, the origin of monotheism, and the rise and decline of the Assyrian and Persian empire. (NWH)

**HIST 30033 Ancient Mysteries: Sense and Nonsense.** A survey of ancient Mediterranean and Near Eastern history from the Paleolithic Age to the Fall of Rome, including ancient Mesopotamia, Egypt, the Levant, Greece and Rome. The course examines in a scholarly manner various topics from this period to show the history of the interest and expose common misinformation. Typical mysteries considered are the fall of Rome, the historical Jesus, the pyramids, Biblical events, the Neanderthal problem, the search for the Trojan War. (NWH)

## The Middle Ages

**HIST 30133 The Middle Ages.** A political and cultural survey of medieval civilization in the period A.D. 500 450. Topics of emphasis include the reign of Charlemagne, early Byzantine and Islamic civilization, feudalism and the code of chivalry, the manorial economy, the crusades, the conflict of state and church, the rise of towns and universities, the Hundred Years' War, and the Black Death. (NWH)

# **Early Modern Europe**

**HIST 30203 The Renaissance.** The political, social and cultural development of Europe from 1300 to 1517. Topics include the Black Death and its impact, politics and culture in the city-states, the social and economic bases of Renaissance society, the Renaissance in Northern Europe. (NWH)

**HIST 30213 The Reformation.** Europe in the 16th century. Topics include the Protestant and Catholic Reformations, 16th century monarchies, early modern society and popular culture, witchcraft, the impact of European expansion overseas. (NWH)

**HIST 30223 The Seventeenth Century.** Europe in crisis? Topics include civil wars, social and religious instability, absolutism, the debate over the crisis of the seventeenth century. (NWH)

**HIST 30233 Enlightenment Europe.** A new world in Europe. Topics include the spread of the Enlightenment, the role of intellectuals, social and political changes, challenges to the old order, the coming and impact of the American and French Revolutions (NWH).

**HIST 30243 History of Spain and Portugal to 1830.** An examination of Iberian culture, interpreting the present in terms of past developments, emphasizing the values and beliefs reflected in literature, art, and philosophy

through the centuries, and analyzing the impact of values and beliefs upon the social stratification system and politico-economic institutions. (NWH)

## **Modern Europe**

**HIST 30303 The Age of Great Transformation: Europe, 1815-1870.** The nineteenth century ushered in the industrial age in Europe and the modern consumer society. This course will examine the economic, social, and political change that came with the process of industrialization. Topics include: workers, women, socialism, revolution, nationalism and unification, and imperialism. (NWH)

**HIST 30313 The End of an Era: Europe, 1870-1918.** World War I marked the end of the long nineteenth century. This course will examine the events leading up to the war and the social, economic, and political impact of the war. Topics include: the Belle Epoque, the suffrage movement, unification, imperialism, and the immediate postwar world. (NWH)

**HIST 30323 Peace or Pause?: Europe, 1919-1945.** World War II was the second global conflict in two generations. This course will examine the events of the interwar years that precipitated World War II and the war's impact on Europe. Topics include: the Treaty of Versailles, the Great Depression, the rise of fascism and its national variations, the Resistance. (NWH)

**HIST 30333 A Whole New World: Europe since 1845.** World War II left Europe in ruins. This course will examine Europe's recovery from the war and its position in the post war world. Topics include: the "economic miracle," the Cold War and its impact, decolonization and the European Union. (NWH)

**HIST 30343 The French Revolution: from Subjects to Citizens.** The 1789 French Revolution marked a watershed in modern world history. This course examines events from 1750 to 1815, exploring the origins of the Revolution, the shifts in the 1790s from constitutional monarchy to the Terror's radical republicanism to Napoleon's dictatorship. Topics include: the emergence of new ideas and new media; the roles of writers, working people, and women; the involvement of other countries, including America; the long term political and social consequences; historians; interpretations of the Revolution. (NWH)

HIST 30353 France 1815 to the Present: The Quest for the Republic. France has had a revolution, a civil war, and four republics since 1815. This course will examine the role of revolution, civil war and the women and men involved in France's evolution as a republic. Topics include the 1848 Revolution, the Paris Commune, the World Wars, and Vichy, and political and social change. (NWH)

**HIST 30363 Modern Germany, 1815 to the Present.** Traces the political, diplomatic, military, economic, and social events in Germany in the period. Topics include the impact of the French Revolution and Napoleon, the rise of nationalism, the social impact of industrialization, political unification under Bismarck, the two world wars and their effects on Germany, the division of Germany following World War II and its reunification. Includes recent developments in the Federal Republic. (NWH)

**HIST 30373 European Thought and Culture, 1800 to the Present.** Traces European thought and culture in the nineteenth and twentieth centuries. Topics include nationalism, industrialism, romanticism, naturalism, socialism, the search for place, and the rise of fascism. Includes key developments in literature and the arts. (NWH)

## **Russia and Asia**

**HIST 30403 History of Russia to 1861.** The evolution of the early Russian state and its development under the Grand Princes and Czars to the emancipation of the serfs. Emphasis on the institutions, literature, religion, personalities, and cultural developments as well as major political events. (NWH)

**HIST 30413 History of Russia from 1861 to the Present.** The forces and personalities that molded modern Russia after the emancipation of the serfs, the revolutionary movements and their leaders, and the economic and political factors that brought the downfall of the czarist regime. Special attention to the Marxist-Leninist doctrine and the Soviet attempt to implement it, Stalinism, the emergence of rival communist states, and the post-Stalin era. (NWH)

**HIST 30423 Central Europe since 1700.** The nationalist rivalries that led to Sarajevo, the cultural and economic conflicts that kept the Balkans divided, the problems faced by the region in the period following the First World War. Special attention to the struggle of the Czechs and the Poles to maintain their national existence despite threats from Hitler and Stalin. The effects of World War II on the region. (NWH)

**HIST 30433 History of China and Japan from Earliest Times to the 19th Century.** The underlying foundations of Chinese and Japanese culture, emphasizing especially the values, religious, and personalities as well as the political and social institutions in the region. Attention to similarities and differences that characterize the peoples of East Asia. (NWH)

**HIST 30443 History of China from 1800 to the Present.** The major events and personalities influencing the development of China and Japan and the impact of the West upon the region. (NWH)

**HIST 30453 History of Japan from 1800 to the present.** The major events and personalities influencing the development of Japan and the impact of the West upon the region.

## **England and the British Empire**

**HIST 30503 History of England to 1603.** A survey of British history from pre-Roman times to the death of Elizabeth, emphasizing the constitutional, political, social, cultural, and economic developments. Special stress on the evolution of institutions and ideas which America and England share. (NWH)

**HIST 30513 History of England and Great Britain since 1603.** A survey of the revolutionary developments in the seventeenth and eighteenth centuries which brought the development of parliamentary government, social and political reform movements of the nineteenth and twentieth centuries, the transformation from Empire to Commonwealth, and the emergence of the welfare state. Britain's role as a world power will be examined and special emphasis will be given to the diplomatic developments that led to the two world wars. (NWH)

HIST 30523 Tudor-Stuart England, 1485-1714. Tudor-Stuart kings and their parliaments, emphasizing the

English Reformation, the Elizabethan Age, the Puritan Revolution and Oliver Cromwell, the Restoration and the Glorious Revolution, and the rise of cabinet-political parties-civil rights struggles. (NWH)

**HIST 30533 England, 1815-1901, Politics, Prudery, and the Pax Britannica.** An examination of the political, social and imperial themes in English history for the period 1815-1901, with emphasis on the impact of the Industrial Revolution, the new social order, demands for political reform, and the growth of British imperial power. (NWH)

**HIST 30543 Twentieth-Century Britain, Empire to Welfare State: 1901 to the Present.** The major political, economic, imperial and intellectual developments of the period. Also discussed will be reforms, the rise of labor, and the impact of the two world wars. (NWH)

**HIST 30563 The British Empire, 1603-1857.** Examination of the empire-building experience of Great Britain in the early modern period beginning with its experiences in Ireland, North America, and the Caribbean. Particular emphasis will be given to motivation, cultural collision, and the evolution of systems of control and administration. For the period following the American Revolution, the course will examine the development of new patterns of empire that emerge from the interplay of exploration, the missionary movement, the Napoleonic Wars and technological change. (NWH)

**HIST 30573 British Empire and Commonwealth, 1857-1975.** Examination of the British Empire from its highpoint in the second half of the Nineteenth Century to its dissolution after 1945. Particular attention will be given to the so-called New Imperialism and the scramble for African and Pacific territories, the place of empire in Victorian culture, the informal empire of economic investment, the impact of World War I on the imperial system, and the role of nationalism in the empire's eventual dissolution. The course will also introduce the theoretical arguments concerning the nature and function of the British Empire and its role in shaping the post-colonial world. (NWH)

**HIST 30583 Living in London.** Focuses on experiences of ordinary men and women living in London during the past five hundred years. Examines the rise of London from its first period of rapid growth in the 1500s to its emergence as a multi-cultural and multi-racial city in the second half of the twentieth century.

**HIST 30593 Making of Modern England.** This a course that combines lecture, discussion and field trips in order to introduce major themes and developments which have shaped English history. Although the course proceeds chronologically, emphasis will be placed on social structures and contexts rather than a timeline of events. The course is designed to take advantage of resources available in London; therefore, several classes will be held at sites such as Westminster Abbey, Parliament, Battle Abbey, and Bodiam Castle.

#### **Latin America**

**HIST 30913 History of Central America.** Survey of Central America from colonial times to the present with emphasis on the region's economic and political development and the emergence of revolutionary movements in the twentieth century.

**HIST 30923 The United States and Latin America.** Early diplomatic relations among the independent republic; the Monroe Doctrine in Hemispheric politics; the movement for Pan American union; the Big Stick and Dollar Diplomacy; the Good Neighbor Policy and the Alliance for Progress. (WH)

**HIST 30933 Revolution in Latin America.** Survey and analysis of revolutionary movements in modern Latin America, with special emphasis on Argentina, Brazil, Chile, Cuba, Mexico, and Central America. (WH)

**HIST 30943 The Spanish Borderlands.** The clashing and mingling of cultures in regions formerly held by Spain in the southeastern and southwestern United States.

**HIST 30953 History of Argentina and Chile.** Southern South America from colonial times to the present; a comparison of the colonial experiences of both countries and their impact on national development; problems of modernization and the movements of social revolution. (WH)

**HIST 30963 History of Brazil.** The growth of the Brazilian nations and civilization from colonial plantation beginnings through experiments with monarch and republic, to the rank of major nation. (WH)

**HIST 30973 Biography in Latin American History.** Examination of a selected period of colonial or modern history through biography of prominent individuals. Individuals will include people such as Sor Juana or Fidel Castro although biographies and periods will vary with each semester.

**HIST 30983 Aztecs, Incas, and Mayas: The Indians of Middle and South America.** Investigation and analysis of the Indian Civilizations of Mexico, the Caribbean Region, Central and South America with particular emphasis on the Mayas, Aztecs, and Incas. Also discussed will be the impact of European culture on the native population and the contemporary problem of integrating the Indian into modern society. (WH)

**HIST 30993 History of Mexico.** The native peoples, the Spanish Conquest and cultural conflict, evolution of colonial society, the movement for independence, 19th century efforts at modernization, revolutionary Mexico and U.S.-Mexican relations. (WH)

## Period Studies in U.S. History

**HIST 40603 Colonial America: From the Age of Discovery to 1763.** Examination of the political, ideological, religious, social, economic and institutional development of colonial America from the earliest discoveries and settlements to the end of the French and Indian War in 1763. Emphasis is on the English colonies that became the United States with some consideration given to other empires. (WH)

**HIST 40613 Revolutionary America, 1763-1789.** Introduces the origins of the revolutionary movement; analyzes the social, economic, political and diplomatic consequences of independence from Great Britain; and examines the emerging political and constitutional order of the postwar years. (WH)

**HIST 40623 The Age of Jefferson, 1789-1828.** The period of the Virginia Dynasty, with emphasis on the shaping of Jeffersonian ideals and the rise of the national spirit after the War of 1812. (WH)

HIST 40633 The Age of Jackson, 1829-1860. The period of Manifest Destiny, with special attention to the

developing antagonisms between North and South before, during and after the War with Mexico. (WH)

**HIST 40643 Civil War and Reconstruction, 1861-1876.** The Civil War and slow recovery from the effects of conflict. (WH)

**HIST 40653 The Progressive Period in American History, 1877-1919.** The rise of industrial America, including reform movements, and the transformation of rural society in the half-century between the administrations of U. S. Grant and Woodrow Wilson. (WH)

**HIST 40663 America Between World Wars, 1919-1941.** Detailed analysis of political scandals, prohibition, immigration, labor, women's rights, and the Great Depression, with emphasis on the response of the New Deal to these problems. (WH)

**HIST 40673 The United States from 1941 to 1975 US from 1941 to 1975.** Domestic and foreign policies of the starting with entry into World War II through 1975. Special attention to social, cultural, and ideological development. (WH)

## Topical Studies in U.S. History

**HIST 20763 U. S. Military History.** Traces the role of the armed forces in American society through a study of the origins and developments of military institutions, traditions, and practices. Traces principal wars, including their causes, course, and effects, and treats the effects of leadership and new technologies. (WH)

**HIST 40683 Foundations of American Foreign Policy: From Colony to Empire.** An interpretive review of diplomatic relations with Europe, Latin America, and the Orient from the Declaration of Independence to the First World War. (WH)

HIST 40693 The United States as a Great Power: Its Foreign Policy from World War I to the Present. Major international involvements of the United States since the emergence of the nation as a global power at the turn of the century. (WH)

**HIST 40703 Indians of the United States.** A survey of Native American history, organized chronologically beginning with native origin stories and scientific theories and ending with present issues of urbanization, self-determination, and the political economy of bingo. (WH)

**HIST 40713 Indians of the Greater Southwest.** The major Indian tribes of the cultural area comprising the southwestern United States and northern states of Mexico. (WH)

**HIST 40723 The Early American Frontier.** Topical study of the westward movement from the Atlantic seaboard to the Appalachians, and the Mississippi Valley, with emphasis on America's emerging institutions in an pioneer environment. (WH)

**HIST 40733 The American West.** Topical study of Plains Indians, Spaniards, mountain men, miners, railroad and cattle barons, cowboys, Mormons, soldiers, and pioneer farmers in the Trans-Mississippi domain of the United States. (WH)

**HIST 40743 History of Texas.** The political, social, and economic study of Texas from the coming of the Spaniards in 1528 to the present. The role of ethnic groups in the development of Texas is emphasized, and a study of the state constitution is made. (WH)

**HIST 40763 The Old South.** How and why antebellum Southerners differed from Northerners (and many other folk). Lectures and discussions focus on the cultural heritage of the South, the social life of Southerners before the American Civil War, the survival of European and African traditions, immigration and settlement patterns, herding, slavery, plantation life, sectionalism, various southern ways and values, and some of the myths about the Old South. (WH)

**HIST 40783 Constitutional History of the United States.** The historical background and impact of judicial decisions that have changed and directed the economic, social, political, and legal patterns of federal and state governments as well as other human institutions. Includes a detailed analysis of majority and minority opinions in leading Supreme Court cases. (WH)

**HIST 40793 Business in American Life.** Survey, development and structure of the American economy and business enterprise in response to changing markets and technology. (WH)

**HIST 40803 History of Medicine and Public Health.** An examination of medicine and public health in the United States with emphasis on social and cultural factors. (WH)

**HIST 40823 The New South, 1877-Present.** An examination of the political, economic and cultural factors in the South with emphasis on the modern period. (WH)

**HIST 40833 The American Presidency.** The history of the presidency from the beginning of the office to the present. (WH)

**HIST 40843 The Vietnam War.** Traces the history of pre-European Vietnam, French conquest, Indo-China Ward, roots of US involvement, Vietnam War and US domestic developments, and events in post-1975 Socialist Republic of Vietnam. (NWH or WH)

**HIST 40853 American Environmental History.** This course surveys the complex interactions between human beings and their environment in North America from pre-Columbian times to the present. Important topics will include the Columbian exchange, changing conceptions of wilderness, influences of agriculture and industry, and the development of conservation movements.

## **Honors and Pre-Honors Courses**

**HIST 20003 Honors Western Civilization to 1500.** \* Prerequisite: Membership in the Honors Program. In the first semester of the western civilization track, students examine a) the cultural frameworks and development of ideas about human nature; b) the political structures; c) the social and economic patterns as they evolved in the first civilizations of the near east and the creation of civilization in Europe. As the same issues are examined in the

Greco-Roman world, in the Middle Ages and in the Renaissance, students analyze the development of a world-view that is peculiar to the West and its Judeo-Christian heritage. Extensive analysis through discussion and writing.

**HIST 20013 Honors Western Civilization from 1500.** \* Prerequisite: Membership in the Honors Program. In the second semester of the western civilization track, students continue to examine the distinctive development of the West. Problems include the Reformations, the rise of capitalism, the causes and consequences of European expansion and its subsequent encounters with Africa, Asia and the Americas, industrialism, the rise of new political philosophies in the wake of democratic revolutions including liberalism and socialism, the challenges posed to those ideas by the ideas and experiences of the twentieth century. Extensive analysis through discussion and writing.

**HIST 20603 The American Mind (HON).** HIST 20603 covers the same era as HIST 10603 but emphasizes interdisciplinary themes of intellectual history developed in Honors Intellectual Traditions or Honors Western Civilization courses. The course will focus upon how ideas translated from the European experience to influence American history and helped create a distinctly American mind. Though a strong historical narrative will be evident, the course will include literature, politics and philosophy.

**HIST 20923 Honors History of Latin American Civilization to 1830.** Through lectures, reading, classroom discussions, and research assignments, this course examines the indigenous, European, and African roots of Latin American civilization and culture; the evolution of colonial institutions and ideas; the emergence of a distinctly Latin American culture; and the independence movements that established national states in most of Spanish and Portuguese America by 1830. The course will also include some comparative analysis with other civilizations.

**HIST 20933 Honors History of Latin American Civilization since 1830.** Through lectures, reading, classroom discussions, and research assignments, this course examines the civilization and culture of modern Latin America, including the formation of national states; continuing colonial economic and political characteristics; the impact of ideas on Latin American development; class struggle and conflict between socialist and capitalist models of development; and the emergence of distinctive Latin American and national cultures.

**HIST 20943 Honors History Asian Civilization to 1500.** This course is an introduction to the history and culture of traditional Asia from Neolithic times to approximately 1500. We will focus on the major political, economic, cultural, religious and intellectual trends of the people of East, South and Southeast Asia. Students in this course will pursue a greater knowledge and understanding of Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments.

**HIST 20953 Honors History of Asian Civilization Since 1500.** This course is an introduction to the history and culture of modern Asia from approximately 1500 to 1989. We will focus on the internal changes and external challenges faced by the people and governments of such East, South and Southeast Asian states as China, Japan, Korea, India, Pakistan, Indonesia and Vietnam. Students in this course will pursue a greater knowledge and understanding of modern Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments.

**HIST 30153 Junior Honors Tutorial.** Prerequisite: Junior standing as a history major and membership in the Honors Program. An examination of a major issue in history. This course is only offered as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment. (NWH or WH)

**HIST 40103 Senior Honors Project.** Prerequisite: Departmental major, enrollment in the Honors Program, and completion of HIST 30153. The execution of a project or paper reflecting creative investigation or research. Supervision by a three-member faculty committee is required. HIST 40103 must be completed prior to the student's final semester of undergraduate work. May be based on subject matter explored in HIST 30153. (NWH or WH)

## **Topical Studies in History**

(Area selected by student)

**HIST 30970 Topical Studies in History.** Courses dealing with problems and historical questions in a particular area of specialization. The topics will be changed from semester to semester and the course may be repeated when the topic is different. (3 hours NWH or WH)

**HIST 40003 The Women's Movement in England and America, 1792-1972.** A survey and analysis of women's role in modern history with special emphasis on monarchs, scholars, laborers, and political activists. (NWH)

**HIST 40013 History of War.** The causes, course and effects of war from ancient times to the present. Major changes in the technology and nature of war will also be discussed. (NWH)

**HIST 40023 Women in the Western World since 1500.** A broad survey of women's experiences and roles in Western society in the last 500 years. Topics include the Reformations, witchcraft, urban and rural women, the Revolutionary era, industrialization, and World Wars. (NWH)

**HIST 40033 Women and Family: 1500-1800.** This course will focus on the changing patterns of gender and sexuality in Europe and America between the sixteenth and eighteenth centuries. In a period of dramatic political change and dynamic cultural conflict, early modern peoples often used ideas about gender to express and to contain the changes occurring around them. This was true of Native Americans confronted with European expansion, settlement and mission activity as well as statesmen and religious leaders in Europe upheavals of colonization, religious reformation, emerging capitalism and political transformation.

**HIST 40043 Witches, Workers and Wives.** This course will focus on the changing patterns of gender and sexuality in Europe and America between the sixteenth and eighteenth centuries. In a period of dramatic political change and dynamic cultural conflict, early modern peoples often used ideas about gender to express and to contain the changes occurring around them. This was true of Native Americans confronted with European expansion, settlement and mission activity as well as statesmen and religious leaders in Europe upheavals of colonization, religious reformation, emerging capitalism and political transformation.

HIST 50970 Special Studies in History. Special Studies in History. (NWH or WH)

## **Professional Courses for Archivists and Specialists**

**HIST 30063 Introduction to Historical Research.** An introduction to the techniques of historical methodology with emphasis on the role of documents and other historical artifacts, the preparation and writing of historical papers. Prerequisite: junior standing as a History major (minimum of 12 hours of history) or consent of department chairman (NWH or WH).

**HIST 50063 Historical Methods.** Techniques of historical research and documentation. Evaluation of documents, applying internal and external criticism to determine validity of use. Oral history research evaluation and interviewing techniques.

**HIST 50070 History, Administration, and Management of Archives, I and II.** The historical development of archival institutions, procedures and techniques with special emphasis on American federal, state and local records, both public and private. Students will be introduced to professional field work in the archives of the participating institutions.

**HIST 50080 Archival Internship.** Supervised professional training at the Federal Archives and Records Center of Fort Worth, the Regional State Archives of Texas, the Amon Carter Library and the Manuscript Collection of Texas Christian University. Open only to students who are taking or have completed HIST 50070. Required of all students who select the Archives Studies option.

**HIST 50933 Philosophy of History.** Prerequisites: six hours of history, three hours of philosophy. A philosophical analysis of historiography: the logical, conceptual and epistemological characterization of what historians do; also includes a study of traditional attempts to discover some meaning which transcends the intelligibility sought and achieved by ordinary historical work.

**HIST 50960 Historiography and Bibliography.** The major historians of the past, changes in the interpretation and philosophies of history and the major bibliographic sources utilized in the writing of history.

**HIST 50980 Historical Writing and Editing.** The methods and problems of research and historical writing. Also covers the principles and methods of editing historical journals and documents including archival manuscripts. 3 hours NWH or WH.

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# Military Science

Four-Year Program
Two-Year Program
Scholarships
Leadership Laboratory
Curriculum
Waivers
Graduate Studies
Courses of Instruction

## (MISC)

Military Science offers opportunities to develop confidence, self-esteem, and leadership and life skills to succeed in college and beyond. It is an academic curriculum that supplements your major and is designed to prepare qualified, high potential students for service as commissioned officers in the United States Army and its Reserve Components (the Army Reserve and the Army National Guard).

The Military Science program is composed of a two year Basic Course, a five week Leader Development and Assessment Course (LDAC) summer program and a two year Advanced Course. Nonscholarship students enrolling in only freshman and sophomore level classes incur no obligation to serve in the military after graduation. Further, these classes satisfy the UCR Physical Education Activity course requirement and can be used for select elective credit.

Upon completion of the requirements for the baccalaureate degree and Military Science training requirements, students are commissioned as second lieutenants. Further, highly qualified commissionees who desire graduate or professional schooling prior to fulfilling their service obligation may apply for a fully funded educational delay.

Four-year, three-year, and two-year programs are offered. Each program includes the option for qualified students to benefit from a full tuition and fees scholarship, and TCU offers room and board grants for qualified ROTC scholarship winners.

## **Four-Year Program**

The four-year program is divided into two portions, each consisting of four classes normally taken in sequence. The first is the Basic Course, which is usually completed during the freshman and sophomore years. The second portion of the four-year program is called the Advanced Course; it is normally completed during the junior and senior years. To enroll in the Advanced Course, students must successfully complete the Basic Course (or be given equivalent credit by the Professor of Military Science), be of good moral character, have a minimum of two years remaining as a full-time student, have a minimum GPA of 2.0, and be physically qualified. A paid and highly adventurous five-week training session (LDAC) between the junior and senior years is a critically important part of the Advanced Course. All Advanced Course students (both scholarship and non-scholarship) receive a monthly cash allowance while participating (full-time) in on-campus instruction. This allowance can be collected up to 10 months each year.

# **Two-Year Program**

The two-year program is designed for students who either transfer into TCU or elect to begin pursuing a commission in the fall of their junior year. It includes a paid six-week summer training session between the sophomore and junior years and the Advanced Course described under the four-year program. Application for the two-year program is normally made during the second semester of the sophomore year. However, the two-year program is also open to juniors and seniors planning attendance at graduate school. The monthly cash allowance for students in the two-year program is the same as for other students in the Advanced Course. Numerous full tuition and fees scholarships are available for qualified two-year program applicants.

## **Scholarships**

Four-year, three-year and two-year scholarships are available to qualified applicants. Scholarships are worth up to \$17,000 annually. Scholarships can be applied toward tuition and mandatory fees, and provide \$600 per year for books. The scholarship also provides a cash stipend for each month the student is participating in full-time oncampus instruction (limited to 10 months each year). The stipend amount varies by class year, and ranges from \$250 for freshman to \$400 for seniors.

**Four-Year Scholarships.** High school students wishing to compete for a four-year scholarship should apply during the summer between their junior and senior year. Outstanding candidates can be notified of their selection as early as November of their senior year. Students who wait until their senior year to apply must apply early. Completed applications must be received at the evaluation center before Nov. 15 of the students senior year in high school.

**Three-Year Scholarships.** Freshman students enrolled at TCU or students planning to transfer into TCU at the beginning of their sophomore year may apply for three-year scholarships. Students applying for the three-year scholarship must have at least 27 semester hours credit at the beginning of the sophomore year and meet the other specified eligibility criteria.

**Two-Year Scholarships.** Any student, presently enrolled or planning to transfer to TCU, who will have 54 semester hours completed by the beginning of the next fall semester may apply for a two year scholarship. To validate their scholarships, recipients will be required to satisfactorily complete a paid six-week summer training session prior to entering school in the fall semester.

**Nursing Scholarships.** The Army ROTC provides four-, three-, and two-year scholarships for students interested in becoming officers in the United States Army Nurse Corps. Application forms and information about these scholarships may be obtained by writing to the Professor of Military Science, Department of Military Science, TCU Box 298910, Fort Worth 76129, or by calling collect (817) 257-7455.

Tuition Assistance. The Financial Aid office can provide further information.

#### **Leadership Laboratory**

Every Military Science student is required to participate in the weekly leadership lab in addition to the scheduled class periods. The lab meets every Thursday, 3:30 - 5 p.m., during the semester and provides leadership training, military skills and tactical training, and drill and ceremonies instruction. Leadership experience is gained by students managing, leading and teaching other students within the framework of the Cadet Battalion. All leadership positions are filled by upperclass cadets who are responsible for planning and executing each lab period under the guidance of seasoned Army officers and noncommissioned officers.

#### Curriculum

The curriculum consists of the Basic Course and the Advanced Course described previously under the Four-Year Program and further described below.

Pass/No Credit Option. Military Science classes may not be taken on the Pass/No Credit basis.

**Basic Course.** The Basic Course should include 10041, 10081, 20042, and 20092. Leadership Lab is required for all courses listed below.

#### Waivers

Part or all of the Basic Course may be waived for veterans with acceptable active duty service. Students transferring from a military academy or military junior college may also receive a waiver for the Basic Course.

#### **Graduate Studies**

Upon application, Military Science graduates may be granted a delay before entering active duty for a period of two or three years from the date of their commission. Authorized purposes are attending graduate school, medical school, or law school. In some cases, the delay may exceed three years. A number of salaried and fully funded graduate programs are also available to top academic performers and medical school applicants who complete the ROTC curriculum.

## **Courses of Instruction**

**MISC 10001 Leadership Lab.** Fall/Spring. One class per week. This course facilitates the development of leadership skills while giving practical experience in military skills. Areas of emphasis include drill and ceremonies, squad level tactics, first aid and land navigation. Advanced Course cadets conduct the training and lead the cadet battalion under cadre supervision. A weekend field training exercise and weekly physical fitness training are included in the course.

**MISC 10031 Pistol Marksmanship.** Fall/Spring. One class per week. Fundamentals of small arms marksmanship including aiming, holding techniques, firing positions, pistol maintenance and basic firearms safety. Introduction to Army Reserve Officers Training Corps program and the U.S. defense organization. The course offers opportunity to participate in outdoor excursions and visits to Army posts.

**MISC 10041 Introduction to Leadership I.** Fall. One class per week. A progressive overview of the U.S. Army to include its history, its organization, its customs and courtesies, its strategic mission, dynamic structure, and methods of tactical deployment. Included is a field trip, where students are exposed to on- and off-duty Army life and have the opportunity to observe new combat arms lieutenants in action.

**MISC 10081 Introduction to Leadership II.** Spring. One class per week. Fundamentals of basic tactics to include movement techniques, battle drill/assault techniques, squad tactical control measures, land navigation, and first-aid training. Designed to give the student an initial level of tactical proficiency and a degree of leadership training.

**MISC 20042 Basic Leadership I.** Fall. Two classes per week. Challenges the student to become tactically and technically proficient. Students study the military element of power, learn and practice first aid, use light infantry tactics, and gain a fundamental knowledge of map reading. Prerequisite: Concurrent or past enrollment in MISC 10041.

**MISC 20092 Basic Leadership II.** Spring. Two classes per week. This course prepares students to be positive and assertive leaders and conduct instruction through the study and application of basic military leadership principles. Includes leadership assessment training and student classroom presentations. Prerequisite: Concurrent or past enrollment in MISC 10041 Introduction to Military Science.

**MISC 20970 Special Topics in Military Science.** Fall/Spring. Special study opportunities as directed by the Department Chairman. (1-6 sem. hrs.)

**MISC 30053 Intermediate Leadership I.** Fall. Two classes per week. Students learn effective counseling, writing, and human relation skills necessary to positively influence human behavior. Students develop confidence and leadership experience in addition to land navigation skills and tactical proficiency. Group participation and exposure to leadership reaction situations. Prerequisite: Basic Course or equivalent credit.

MISC 30063 Intermediate Leadership II. Spring. Two classes per week. An analysis of the leaders role in directing and coordinating the efforts of individuals and organizations. This professional block of instruction involves student role modeling and analysis of controversial leadership case situations. Students practice and learn the necessary skills to take charge when responsible, as well as control and positively influence personnel under stressful situations. Additional professional skills are also taught. Prerequisite: Completion of MISC 30053 or permission of department chair.

**MISC 30970 Directed Studies in Military Science.** Fall/Spring. Opportunity for independent study as directed by the instructor prior to enrollment. (1-6 sem. hrs.)

**MISC 40053 Advanced Leadership I.** Fall. Two classes per week. Designed to review the mission and structure of the Army as well as discuss its professional and social aspects. The course focuses on oral and written

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communication skills, counseling techniques, evaluation, and reporting procedures, as well as introducing the combined arms concept. Prerequisite: Completion of MISC 30053 and 30063 or permission of department chair.

**MISC 40063 Advanced Leadership II.** Spring. Two classes per week. An examination of the dynamics of modern warfare from the perspective of the combat battalion task force. The integration of maneuver forces, air power, intelligence, logistics, and air mobility by a ground combat commander is studied in both practical exercise and case studies. A variety of other subjects relating to staff procedures and command and control are covered. Prerequisite: Completion of MISC 30053 and 30063 or permission of department chair.

# Modern Languages and Literatures

French
German
Japanese
Greek
Italian
Courses of Instruction

#### Overview

French is available as a major on the B.A. degree and as a minor on the B.A. and B.S. degrees. German and Japanese are available as minors only. Study is also available in Greek and Italian.

**Placement.** Students with academic or life experience in a foreign language are urged to enroll at a level appropriate to their skills. In order to encourage students to enroll in a first course appropriate to their ability, TCU offers the following incentive-based placement policy:

Students whose first language class at TCU is beyond the first semester level may earn additional language credit (if credit has not already been awarded for transfer, CLEP, or AP work) as follows:

- $\cdot$  If the first foreign language class is at the second semester level (10163) and a grade of B or higher is earned, as a reward for superior work, three semester hours credit will also be awarded for the first-semester course (10153).
- If the first foreign language class is at the third semester level (20053) and a grade of B or higher is earned, as a reward for superior work, six semester hours credit will also be awarded for the first and second semester courses (10153 and 10163).
- If the first foreign language class is at the fourth semester level (20063) and a grade of B or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the first, second and third semester courses (10153, 10163 and 20053).
- · If the first foreign language class is beyond the fourth semester level (numbered 30000 or above) and a grade of B or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the second, third and fourth semester courses (10163, 20053 and 20063).

If the student takes a foreign language class at a level beyond the first one and earns a C or D, no additional credit will be awarded, but the student will be deemed to have satisfied the foreign language requirement of the UCR consistent with the level of the course passed. For example, if a student's first foreign language class at TCU is at the fourth semester level (20063), and the student earns a C as the final grade, the student will not receive additional credit, but will have satisfied the foreign language requirement at the sophomore level.

To determine proper placement level, students should consult the level descriptions on the department's website, take the computerized CAPE examination, or consult with an advisor in the Department of Modern Languages & Literatures. Details concerning the CAPE placement exam will be provided to incoming students prior to orientation and registration.

Additional credit may also be earned by means of exams administered by the College Board (AP or CLEP). Please consult the TCU Credit by Exam booklet, available through the Office of Admissions, for details.

Students considering a major in French should bear in mind that 10000 and 20000 level courses do not count toward a major. However, 20000 level courses do count toward a minor. Note: Students entering the program at a certain level may not receive credit for course work taken below that level.

**Honors Program.** French majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in FREN 40003 during the fall semester of their senior year.

**Resident Study Abroad.** The Department strongly supports foreign study and recommends certain summer study or semester/year programs abroad, particularly the summer study programs in French, German and Japanese. Other study abroad programs are available through the Institute of European and Asian Studies. Consult the Chairman and the Foreign Study Adviser. A maximum of nine credit hours transferred from study abroad programs may be counted toward the French major or minor.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in any of the languages in the Department are subject to the pass/no credit policy of their major department.

## French

(FREN)

Requirements for the B.A. degree with a major in French. A minimum of 30 semester hours of French, exclusive of courses on the 10000 and 20000 level, 15 hours of which must be at the 40000 level or higher. French 30053 and 30063 are prerequisites to all higher-numbered courses; however, French 30153, 30163 and 30253 may be taken concurrently with them. All courses in the language sequence except 10153 require as prerequisite either satisfactory completion of the previous semester or the appropriate score on the CLEP test or AP exam. Students may not receive credit for a course that is a prerequisite or is a lower level after having received credit for a higher level course

All French majors must take a minimum of two Survey of French Literature courses (FREN 40073, 40083, or 40093) in any order. All majors in French must also take Advanced Composition (FREN 40173) and at least one Seminar in French Studies (FREN 40123). Courses taken at TCU approved study abroad programs and transfer credit must be pre-approved by the Modern Languages Department. Approval may be granted for courses

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containing French language, literature, and culture/civilization content up to a maximum of 9 credit hours.

**Requirements for a minor in French.** A minimum of 18 semester hours, exclusive of courses on the 10000 level, and including at least one Survey of French Literature (FREN 40073, 40083, or 40093).

#### Requirements for teacher certification.

**A. Texas Oral Proficiency Test (TOPT).** Students seeking Texas teaching certification with an elementary specialization or secondary teaching field in French must take the TOPT. This test must be taken in addition to the ExCET exams required. Candidates who attain the TOPT's passing standard of advanced oral proficiency or higher will be recommended for certification. Candidates who do not meet the TOPT's passing criteria, but who have met all other course work and certification requirements, may be recommended for a general elementary certificate or a single secondary teaching field.

Students who plan to earn a teaching certificate requiring a passing score in the TOPT must submit a language assessment form from the Department of Modern Languages and Literatures when applying for admission to the Teacher Education Program of the University.

Candidates seeking teacher certification and preparing for the ExCET and TOPT exams are strongly encouraged to take advantage of the Resident Study Abroad program (French 30173). They are also advised to include Advanced French Conversation (French 30043) and French Culture and Civilization (French 30153 and 30163) in their course of study.

**B.** Students seeking certification for teaching French at the secondary school level should be advised by the departmental secondary certification advisor. Specific requirements for French as a teaching field follow:

10153 First Semester College French	3
10163 Second Semester College French	3
20053 Third Semester College French	3
20063 Fourth Semester College French	3
30053 Intermediate Reading and Writing	3
30063 Readings in selected French genres	3
Select six hours from the following:	6
30033,30043,40073,40083,40093,30153,	
30163,30253,40123,40163,40173,40970	
50033 (when available)	
Total hours	18-24

*Note:* Some students will not have to take 10153-10163. Some will receive credit by exam for 20053-20063. No credit is given for 10153-10163 by exam.

For more information regarding elementary and secondary teacher certification in French, see the School of Education section of this bulletin.

## **Courses of Instruction**

**FREN 10033 Practical Conversational French.** Emphasis on active skills, in a two-semester sequence. May not be used to satisfy the B.A. language requirement.

FREN 10043 Practical Conversational French. Continues FREN 10033. Prerequisite: FREN 10033 or equivalent.

**FREN 10053 French for Reading Knowledge.** Intensive reading in the humanities, the social sciences and the natural sciences. Intended for students preparing for graduate reading examination. May not be used to satisfy the B.A. language requirement.

FREN 10063 French for Reading Knowledge. Continuation of FREN 10053.

**FREN 10153 First Semester College French.** A beginning course in French intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of listening, speaking, reading and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in French-speaking countries. No prerequisite.

**FREN 10163 Second Semester College French.** Prerequisite: FREN 10153 or permission. Continuation of FREN 10153.

**FREN 20053 Third Semester College French.** Prerequisite: FREN 10163 or appropriate score on an approved placement test. Continues development of the skills of listening comprehension, speaking, reading, and writing on the intermediate level. Includes regular language laboratory assignments.

**FREN 20063 Fourth Semester College French.** Prerequisite: FREN 20053 or permission. Enhances language skills on the intermediate level through a combination of readings and oral activities. Emphasizes acquisition of active and passive vocabulary.

FREN 30003 Junior Honors Seminar. Junior Honors Seminar.

**FREN 30033 Phonetics.** Prerequisite: FREN 20053-20063 or permission. Description and study of French sounds and intonation. Transcriptions using the International Phonetic Alphabet and orthophonic drills. Laboratory practice.

**FREN 30043 Advanced Conversation.** Prerequisite: FREN 30033 or permission. Essentially a performing class with emphasis on motivating the students to speak. Opportunity not only to hear but to use everyday spoken French and to acquire systematically the vocabulary and idioms necessary to express oneself correctly and comfortably in practical situations. This course will count toward the major in French, but does not replace either French 30053 or 30063.

FREN 30053 Intermediate Reading and Writing. Prerequisite: FREN 20063 or appropriate score on an

approved college placement test. This course is a prerequisite to higher-numbered courses, although some higher-numbered courses may be taken concurrently with it. This course emphasizes the development of reading and writing skills in French, building on oral and listening comprehension skills developed in previous courses.

**FREN 30063 Readings in Selected French Genres.** Prerequisite: FREN 30053 or permission. This course further develops students' reading skills in French, exposing them to literary texts in a variety of genres from different periods. Includes an introduction to the study and analysis of literary works.

**FREN 30153 French Culture and Civilization I.** Prerequisite: FREN 30063 or permission. Study of French history, art, geography, government and customs to the revolution of 1789.

**FREN 30163 French Culture and Civilization II.** Prerequisite: FREN 30063 or permission. Continuation of 30153 from the revolution of 1789 to the present day.

**FREN 30176 French Culture and Civilization: Angers et L'Anjou.** Prerequisite: FREN 10163. A Summer course conducted by TCU on the campus of the Universite Catholique de I'Ouest (Angers, France) in the heart of the Chateau country of the Loire Valley. The course, directed by members of the TCU faculty, offers students the opportunity to improve linguistic and cultural proficiency by interacting with natives of the culture. Students are directed to actively investigate topics highlighting various aspects of Angevin culture and history.

**FREN 30183 Introduction to French Cinema.** Prerequisite: FREN 20063 or equivalent. This course proposes the study of several films representative of modern French cinema. Terminology pertaining to filmmaking and an overview of cinematic techniques will be introduced at the beginning of the semester, enabling students to express their insights and impressions with accuracy, and to make meaningful cultural comparisons between French and American filmmaking styles. Films will be supplemented by readings selected to give additional insight into their cultural and artistic significance. These texts will consist primarily of 1) journalistic articles pertaining to historical events or social issues portrayed in the films, 2) historical documents pertaining to political situations addressed in the films, and 3) critical texts and interviews pertaining to the making of the film and their public reception.

**FREN 30253 Contemporary France as Reflected in the Press.** Prerequisite: FREN 30063 or permission. Reading of current newspapers, magazines and other periodical literature. Work with tapes of radio and television broadcasts. Emphasis on everyday, idiomatic French.

**FREN 40003 Senior Honors Research Paper.** Prerequisite: Admission to Honors Program in Modern Languages and senior standing or permission. Senior honors students will write a major paper on a topic agreed upon between the student and two professors, one of whom will direct the research and development of the paper. This paper, when completed, is to be read and approved by the two designated professors of the department.

**FREN 40013 French Literature in Translation.** Prerequisite of FREN 30053-30063 does not apply. Topic to be announced each time the course is offered. Lectures, discussions and readings in English. Open to French majors and minors for elective credit only.

**FREN 40073 Survey of French Literature I.** Prerequisite: FREN 30063 or permission. The study of early French literature from the Middle Ages through the 17th century. Readings of representative works of major French writers from each period or movement. Includes techniques of literary analysis and study.

**FREN 40083 Survey of French Literature II.** Prerequisite: FREN 30063 or permission. The study of French literature of the 18th and early 19th centuries through Romanticism. Readings of representative works of major French writers from each period or movement. Includes techniques of literary analysis and study.

**FREN 40093 Survey of French Literature III.** Prerequisite: FREN 30063 or permission. The study of French literature of the late 19th century and the 20th century. Readings of representative works of major French writers from each period or movement. Includes techniques of literary analysis and study.

**FREN 40123 Seminar in French Studies.** Prerequisite: FREN 30063 or permission. A specific author, genre, period or theme will be chosen for study.

**FREN 40133 Topical Readings: French Non-Fiction.** Prerequisite: FREN 30063 or permission. A specific author, genre, period or theme will be chosen for study.

**FREN 40143 Non-European French Prose and Poetry.** Prerequisite: FREN 30063 or permission. Study of French language writings from Africa, the Caribbean, Canada or other French-speaking areas. A specific author, genre, period or theme will be chosen for study.

**FREN 40163 Advanced French Grammar.** Prerequisite: FREN 30063 or permission. An intensive review of French grammar designed to clarify fine points of grammar while increasing proficiency in the four skills of reading, writing, listening, and speaking.

**FREN 40173 Advanced French Composition.** Prerequisite: FREN 30053. Intensive practice in various forms of written expression in French, including correspondence, short essay, explication de texte, and problems of translation.

**FREN 40970 Directed Study.** Prerequisite: FREN 30063 or permission. Topic and credit hours announced yearly. Opportunity for independent study. 1-6 hours

**FREN 50033 The Teaching of Modern Foreign Languages.** Prerequisite: Junior standing, and FREN 30063 or concurrent enrollment. Analysis and consideration of values, objectives, content and methods, with special reference to the teaching of foreign languages in the high school. Demonstrations of modern techniques, use of audiovisual aids and realia, and operation of a foreign language laboratory. Required of students seeking Texas Public School Certification. Cross-listed under German 50033 and Spanish 50033.

**FREN 50163 Renaissance.** The literature of the 16th century and its major figures. Some attention to characteristics of the 16th century French language.

**FREN 50173 Classical Period.** The literature of the 17th century and its major figures, with emphasis on the drama of Corneille, Moliere and Racine and the critical theories of classicism.

**FREN 50183 Enlightenment.** The literature of the 18th century and its major figures, including consideration of scientific, philosophic and political thought of the period.

FREN 50203 Modern Novel. The development of the novel during the first half of the 20th century.

**FREN 50213 Modern Drama.** The development of the theatre from the 1920s to the present. Some consideration of the backgrounds of modern theatre and of the latest avant-garde trends.

**FREN 50293 Romanticism.** The literature of the Romantic period, including representative readings in prose, poetry, drama and critical theory of the first half of the 19th century.

#### German

(GERM)

**Requirements for a minor in German.** A minimum of 18 semester hours, exclusive of courses on the 10000 level. German 30053-30063 are prerequisites to all higher-numbered courses. All courses in the language sequence except 10153 require as prerequisite either satisfactory completion of the previous semester or the appropriate score on the CLEP Test, or AP exam.

#### **Courses of Instruction**

**GERM 10053 German for Reading.** This course stresses the basic grammar of German and, with its heavy passive vocabulary load, serves those students who wish to develop very rapidly a reading ability so that translation and analysis of scientific, literary and other prose texts may be achieved as soon as possible. Recommended for graduate students preparing for the graduate reading examination. Open to minors in German for elective credit only.

GERM 10063 German for Reading. Prerequisite: GERM 10053, or permission. Continues GERM 10053.

**GERM 10153 First Semester College German.** A beginning course in German intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in German-speaking countries. Substantial language laboratory assignments required. No prerequisite.

**GERM 10163 Second Semester College German.** Prerequisite: GERM 10153 or permission. Continuation of GERM 10153.

**GERM 20053 Third Semester College German.** Prerequisite: GERM 10163, or appropriate score on an approved college placement test, or permission. Continues GERM 10163. Further develops the skills of listening comprehension, speaking, reading, and writing. Includes regular language laboratory assignments.

**GERM 20063 Fourth Semester College German.** Prerequisite: GERM 20053 or permission. Enhances language skills on the intermediate level through a combination of readings and oral activities. Emphasizes acquisition of active and passive vocabulary.

**GERM 30053 Third Year College German.** Prerequisite: GERM 20063, or appropriate score on an approved college placement test, or permission. This course is a recommended prerequisite to all higher-numbered courses in German. It is not open to students whose native language is German. Extensive development of the language skills acquired in GERM 10153-10163 and 20053-20063 or other elementary and intermediate training. Concentration on the spoken language.

**GERM 30063 Third Year College German.** Prerequisite: GERM 30053 or permission. Continuation of 30053. Concentration on reading and writing.

**GERM 30173 German Culture in Cologne, the Rhineland and Beyond.** This site-enhanced course will offer participants an intensive immersion experience in the German culture, and is offered in tandem with GERM 40970. The program will last approximately 4 weeks in length, the first three weeks being spent in Cologne and other Rhineland sites, the last week being reserved for an excursion to another important German destination, such as Berlin or Munich.

**GERM 30193 Introduction to German Literature.** Prerequisite: GERM 30063 or permission. Critical reading of representative works from various periods for the purpose of developing skill in the analysis and interpretation of literature.

**GERM 40023 German Culture and Civilization.** Prerequisite: GERM 30063 or permission. The main developments in German history, philosophy, science and the arts, with emphasis on the 18th, 19th and 20th centuries. All class discussion and assignments in German, providing advanced practice in grammar and usage.

GERM 40970 Directed Study. Prerequisite: Permission of instructor. 1-6 hours

**GERM 50033 The Teaching of Modern Foreign Languages.** Prerequisite: junior standing, and GERM 30063 or concurrent enrollment. Analysis and consideration of values, objectives, content and methods, reference to the teaching of foreign languages in the high school. Demonstrations of modern techniques, use of audiovisual aids and realia, and operation of a foreign language laboratory. Required of students seeking Texas Public School certification. Cross-listed under FREN 50033 and SPAN 50033.

## Greek

(GREE)

## **Courses of Instruction**

**GREE 10053 First Semester College Greek (Hellenistic).** An introduction to the grammar of ancient Greek, utilizing as the basis of study the elements of the Hellenistic Greek of the first century A.D. found in the best known documents of the period, the New Testament.

**GREE 10063 Second Semester College Greek (Hellenistic).** HELLENISTIC Prerequisite: GREE 10053 or its equivalent. Continuation of GREE 10053. In the second half of the semester, students will read from the New Testament Gospels.

**GREE 20053 Third Semester College Greek (Hellenistic).** Prerequisite: GREE 10053 and 10063 or equivalent. Further study of Hellenistic Greek grammar, through extensive reading in the New Testament, especially the letters of Paul.

**GREE 20063 Fourth Semester College Greek (Hellenistic).** Prerequisite: GREE 20053 or equivalent. Continuation of GREE 20053, with reading and interpretation of the New Testament and other Hellenistic texts.

**GREE 40970 Directed Studies in Greek.** Prerequisite: permission of instructor. Opportunity for independent study of Hellenistic text. (1-6 semester hours.)

#### Italian

(ITAL)

## **Courses of Instruction**

ITAL 10153 First Semester College Italian. A beginning course in Italian intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of listening, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Italy or any other Italian-speaking region (e.g., southern Switzerland). No prerequisite.

ITAL 10163 Second Semester College Italian. Prerequisite: ITAL 10153 or permission. Continuation of 10153.

**ITAL 20053 Third Semester College Italian.** Prerequisite: ITAL 10163 or appropriate score on a college-level placement test, or permission. Continuation of ITAL 10163. Further develops the skills of listening comprehension, speaking, reading, and writing. Includes language laboratory assignments.

**ITAL 20063 Fourth Semester College Italian.** Prerequisite: ITAL 20053 or permission. Combines a "targeted" review of grammatical topics with work in reading and writing that goes beyond the level of third semester. Class discussions in Italian. In addition, there will be substantial assignments involving audio and video material.

**ITAL 30970 Italian - Study Abroad.** Credits taken at an approved study abroad site. Credit accepted only for graded courses taught in Italian. 1-6 semester hours.

#### **Japanese**

(JAPN)

**Requirements for a minor in Japanese.** 18 semester hours including language courses JAPN 10153, 10163, 20053, 20063, 30123, and Japanese Culture and Civilization JAPN 30113. All courses in the language sequence require as prerequisite either satisfactory completion of the previous semester.

## **Courses of Instruction**

**JAPN 10153 First Semester College Japanese.** No prerequisite. A beginning course in Japanese intended for students with no previous knowledge of the language or insufficient knowledge to qualify for placement in a more advanced course. Aural comprehension, speaking, reading, and writing are taught, with emphasis on Japanese as it is spoken today in Japan. Japanese kana will be introduced.

**JAPN 10163 Second Semester College Japanese.** Prerequisite: JAPN 10153 or permission. Continues JAPN 10153.

**JAPN 20053 Third Semester College Japanese.** Prerequisite: JAPN 10163 or permission, or acceptable score on appropriate competency test. Continues JAPN 10163. Further develops aural comprehension, speaking, reading, and writing skills. Assignments will include written work in Japanese.

**JAPN 20063 Fourth Semester College Japanese.** Prerequisite: JAPN 20053 or permission. Continues JAPN 20053.

**JAPN 30113 Japanese Culture and Civilization.** No prerequisite. This course emphasizes modern Japan from a sociocultural perspective, focusing on contemporary Japanese life and perceptions of the West. So as to allow maximum class time for discussion, substantial reading assignments are required. Taught in English.

**JAPN 30123 Japanese for Daily Use.** Prerequisite: JAPN 20063 or permission. This course is designed to advance students' overall ability in Japanese. Journal writing and speech making are emphasized.

**JAPN 40970 Directed Study: Japanese.** Prerequisite: Permission of instructor. Opportunity for work on one's own under supervision. (1-6 semester hours).

# Philosophy

General Guidelines Honors Program Courses of Instruction

## (PHIL)

Available as a major on the B.A. degree and as a minor on the B.A. or B.S. degree.

**Requirements for a B.A. degree with a major in Philosophy.** Twenty-four semester hours in philosophy with at least 6 in Topical Studies, 6 in Historical Studies and 3 in Logical Studies. At least 12 hours must be at the 40000 level or above. An accompanying minor should be chosen in consultation with the adviser for the Philosophy Department.

**Requirements for a minor in Philosophy.** Eighteen semester hours in philosophy with at least 3 hours in each of the 3 divisions (Topical, Historical and Logical Studies) at least 9 hours at the 40000 level or above. Selection of courses should be made in consultation with the designated adviser for the Philosophy Department.

#### **General Guidelines**

The study of academic philosophy is unfamiliar and often intimidating to most beginning college students. But those students who do study philosophy quickly learn that philosophical issues touch on all aspects of life. Philosophy deals with issues such as human nature, ethics, mind and reasoning. Although approaching these issues with the rigors of the philosophical method is both new and challenging to beginning students, most of those who study philosophy usually find the experience both an interesting and rewarding one in which they learn much about themselves and the world in which they live.

PHIL 10003 must be completed prior to taking almost any other philosophy course except for those in Logical Studies. After completion of PHIL 10003, it is generally required that students take one or more 30000 level courses, where more detailed and rigorous treatment of specific areas as well as initial instruction in philosophical writing will be provided. Successful completion of courses at the 30000 level should prepare students for 40000 level courses, most of which (except for Logical Studies) satisfy the UCR Writing Emphasis requirement (see this Bulletin's UCR section on Writing Emphasis).

Important Note: The description of a number of 30000 or 40000 level courses include specific prerequisites for those courses. For example, in order to take PHIL 40343 (Advanced Issues in Philosophy of Law) students must first complete PHIL 10003 as well as PHIL 30413 (Introduction to Philosophy of Law). Other 40000 level courses (e.g. History of Ancient and Medieval Philosophy) require only that students have taken some 30000 level course. The department strongly urges students interested in courses beyond PHIL 10003 to consult with a member of the department in choosing courses best suited to their curricular needs.

## **Honors Program**

Philosophy majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in PHIL 30003 during their junior year and PHIL 40000 during the fall semester of their senior year. (Note: PHIL 30003 may be included in the 24 semester hours required for the major, but PHIL 40000 may not.)

# Pass/No Credit

Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Philosophy are subject to the pass/no credit policy of their major department.

## **Courses of Instruction**

PHIL 10533 Freshman Seminar in Philosophy. Topics may vary each time it is offered.

## **Topical Studies**

**PHIL 10003 Philosophy One.** (Subtitle and content may vary in different sections.) This course focuses on the basic human concerns treated under the classical core elements of philosophical inquiry, and prepares students for more detailed treatments of these areas in courses at the 30000 level. Major topics include ethics, epistemology, metaphysics and the philosophies of religion, science, art and mind, and introductory logic.

PHIL 30003 Junior Honors Seminar. Prerequisite: Permission of instructor.

**PHIL 30313 Moral Problems.** Prerequisite: PHIL 10003. A examination of contemporary moral issues. Typical topics include abortion, euthanasia, discrimination, preferential hiring, the enforcement of community standards, the morality of war, punishment, the rights of distant peoples and future generations, and environmental ethics.

**PHIL 30323 Philosophy of Religion.** RELI 30633 Prerequisite: PHIL 10003 or any religion course. Philosophy of Religion today is centrally concerned with issues relating to the rationality and justification of religious convictions. There is also an interest in the coherence of religious concepts. In this course various philosophical models for understanding and evaluating religious convictions and practices are examined and applied.

**PHIL 30333 Asian Philosophy.** Prerequisite: PHIL 10003. A survey of the three intellectual traditions of Asia: Japanese, Chinese, and Indian philosophy. Topics include causality, concepts of the individual and Nature, and the nature of reality and knowing.

**PHIL 30343 Philosophy of Sport.** Prerequisite: PHIL 10003. Various philosophical theories regarding the nature of sport and its role in society are examined with a view to understanding the basic concepts involved in games, such as rule-governed behavior, habitual skills, strategy, competition and contingency.

- **PHIL 30353 Political Philosophy.** Prerequisite: PHIL 10003. An introduction to the classical systems and central issues in political philosophy. The approach is largely historical, and selected major thinkers of most recent four centuries form the focus of the course.
- **PHIL 30363 Ethics and Health Care.** Prerequisite: PHIL 10003 or permission of the instructor. An introduction to ethical and philosophical issues in healthcare. Case studies supplemented with readings from medical, nursing, and philosophical literature.
- **PHIL 30373 Existential Philosophy.** Prerequisite: PHIL 10003. This course offers students an opportunity to reflect on such topics as alienation, the search for meaning, freedom, embodiment, authenticity, love, and ethics as they are deal with in texts by major writers in the 19th and 20th century movement known as existentialism.
- **PHIL 30383 Theories of Human Nature.** Prerequisite: PHIL 10003. A survey of Western ideas about the nature of human beings. The course examines theories about the fundamental characteristics of human individuals and their bearing on the nature of social groups.
- **PHIL 30393 Philosophy of Mind.** Prerequisite: PHIL 10003. A survey of past and present accounts of human mentality. Beginning with the classical ideas of the soul the course concentrates on the major theories of mind advanced by Western philosophers in the last four centuries.
- **PHIL 30403 Environmental Philosophy.** Prerequisite: PHIL 10003. This course surveys several contemporary approaches for understanding our moral obligation to the environment, including intuitionism, utilitarianism, deontology and feminism. By applying these approaches to concrete environmental issues, the course illustrates how efforts to preserve the environment raise special difficulties for traditional moral categories, such as intrinsic and instrumental value. The course also explores the peculiarly aesthetic dimension of environmental ethics, including claims about the value of natural beauty and unspoiled wilderness.
- **PHIL 30413 Introduction to Philosophy of Law.** Prerequisite: PHIL 10003. An examination of the basic issues in Legal Theory. Topics typically include the nature of legal reasoning, the relationship between law and morality, and classical theories of law.
- **PHIL 30970 Philosophical Studies.** Prerequisite: Permission of instructor. Topics vary as announced. May be repeated for credit. 1-6 hours
- PHIL 40000 Senior Honors Research Paper. Prerequisite: Permission of instructor. 1-3 hours
- **PHIL 40203 Seminar in Metaphysics.** Prerequisite: Permission of instructor. Course content to vary by semester and will include such areas as philosophy of mind, philosophy of history, action theory, ontology, Process Philosophy and Continental Philosophy.
- **PHIL 40303 Seminar in Value Theory.** Prerequisite: Permission of instructor. Course content to vary by semester and will include such areas as metaethics, phenomenology of values, philosophy of religion, legal philosophy, philosophy of sport and aesthetics.
- **PHIL 40323 Philosophy of Science.** Prerequisites: PHIL 10003 or advanced standing as a major in one of the physical, life, or social sciences or permission of the instructor. Includes What are the aims of science? What are the roles of theory and experiment in science? What is explanation? What is a scientific law? How do scientists justify their claims? How does scientific knowledge develop and grow? What are the differences between physical and live sciences and the social sciences?
- **PHIL 40343 Advance Issues in Philosophy of Law.** Prerequisites: PHIL 10003 and 30413. A rigorous examination of specific issues in legal theory and jurisprudence. Topics may include the nature of law, legal adjudication, law and economics, theories of punishment, and legal responsibility and obligation.
- **PHIL 40373 Art and the Aesthetic.** Prerequisite: PHIL 10003. Philosophical theories are presented regarding the nature of art and aesthetic experience. The concepts of representation, expression, formalism, the work of art, intention, meaning, truth, and criticism are discussed along with how they contribute to answering the question, What is art?
- **PHIL 40383 Advanced Topics in Human Nature.** Prerequisites: PHIL 10003 and PHIL 30383 or PHIL 30393. Critical analysis of contemporary theories of human nature advanced by philosophers, psychologists, biologists, cognitive scientists and others. The thinkers under consideration will vary but examples would include E. O. Wilson, B. F. Skinner, Sigmund Freud, John Searle and Daniel Dennett.
- **PHIL 40393 Ethical Theory.** Prerequisites: PHIL 10003 and PHIL 30353 or PHIL 30313 or PHIL 30363. A systematic treatment of basic issues in moral theory, critically examining such issues as the possibility of providing rational foundations for moral belief, and the nature of moral judgments and moral reasoning, focusing on the work of major historical and contemporary figures.
- **PHIL 40403 Seminar in Epistemology.** Prerequisite: Permission of instructor. Course content to vary by semester and include areas such as theories of perception, theories of truth, analytic philosophy, philosophy of science, phenomenology, pragmatism and empiricism.
- **PHIL 50933 Philosophy of History.** (HIST 50933) Prerequisites: 6 hours history and 3 hours philosophy. A philosophical analysis of historiography; the logical, conceptual and epistemological characterization of what historians do; also includes a study of traditional attempts to discover some meaning which transcends the intelligibility sought and achieved by ordinary historical work.
- PHIL 50970 Directed Studies in Philosophy. Prerequisite: Permission of instructor.

## **Historical Studies**

- **PHIL 40213 History of Ancient and Medieval Philosophy.** Prerequisites: PHIL 10003 and any 30000 level PHIL course. A survey of the major figures in Western thought between 600 BCE and 1500 CE. Among those included are the Presocratics, Plato, Aristotle, Plotinus, Augustine and Aquinas.
- PHIL 40220 Contemporary Philosophy. Prerequisite: Permission of instructor. An historical study of one or more

philosophical movements in the twentieth century. Topics vary and include analytic, existential, phenomenological and process philosophy. May be repeated for credit. (3-6 hours).

**PHIL 40223 History of Modern Philosophy.** Prerequisites: PHIL 10003 and PHIL 30383 or PHIL 30393 or permission of instructor. A survey of the major figures in Western thought from 1500 to 1800. Among those included are Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant.

**PHIL 40233 History of continental Philosophy in the 19th and 20th Centuries.** Prerequisites: PHIL 10003 and 40223. The philosophical tradition after Kant developed in different ways in Continental Europe from the ways it did in English speaking countries. This course examines those developments, especially in Germany and France. Such thinkers as Hegel and the German Idealists, Kierkegaard and Nietzsche, Husserl and Heidegger, Sartre and Merleau-Ponty, Gadamer, Ricoeur and Derrida are discussed.

**PHIL 40243 Anglo-American Philosophy.** Prerequisites: PHIL 10003 and 40223. A historical study of either the analytic or pragmatic tradition. Such figures as Carnap, Neurath, Schlick, Moore, Russell, and Ayer; or Royce, Peirce, Mead, James Dewey, and Quine; or a combination of philosophers are studied.

**PHIL 40253 Seminar in History of Philosophy.** A philosophical study of one or more philosophers or philosophical movements of the ancient, medieval, ormodern periods. Course content will vary by semester. Course may be repeated for credit.

## **Logical Studies**

**PHIL 20103 Critical Reasoning.** How to detect, analyze, and critically evaluate reasoning in ordinary language and its technical counterparts found in business, economics, etc. The course is designed to enhance skills for handling arguments in a variety of texts. Understanding the arguments and theories encountered in one's situations is stressed, along with how one can improve one's own expression of arguments and theories, especially in writing. Topics include techniques of reconstruction and evaluation in a process of self-editing, detection of fallacies, and distinguishing correct from incorrect reasoning.

**PHIL 30133 Symbolic Logic I.** An introduction to the scope and limits of modern logic. The nature of logical systems and the various areas of logic are discussed. Alternative proof- procedures in propositional logic and predicate logic are presented. (Offered as MATH or PHIL credit.)

**PHIL 30143 Symbolic Logic II.** Prerequisite: PHIL 30133. A continuation of 30133, with an emphasis on predicate logic, nonstandard logic, and metalogic. (Offered as MATH or PHIL credit.)

**PHIL 40103 Seminar in Logic.** Prerequisite: PHIL 30133 or MATH 20524 (or permission of instructor). Advanced topics in logic. Course content to vary by semester and will include areas such as formal languages, mathematical logic, deontic logic, modal systems, and philosophy of language.

# Political Science

Requirements for a bachelor's degree
Requirements for a minor in Political Science
Honors Program
Honor Society
London Internship Program
Washington Internship Program
Courses of Instruction

### (POSC)

Available as a major and a minor on the B.A. and B.S. degrees.

The Department offers students options for course concentrations in the following subfields: American politics, political theory, international politics, comparative politics, public law, research methods, and public affairs internships.

Students seeking certification for teaching Political Science/Government at the secondary school level should be advised by the departmental secondary certification advisor. Specific requirements for Political Science as a teaching field include:

10133 American and Texas Government	3
20093 Scope and Methods of Political Science	3
20203 Introduction to Political Theory	3
or 20303 International Politics	3
30103 Topics in American Politics	3
30303 Topics in International Politics	3
30403 Topics in Public Law	3
30503 Topics in Comparative Politics	3
Total	24

**Pass/No Credit Policy.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Political Science are subject to the pass/no credit policy of their major department.

## Requirements for a bachelor's degree

The B.A. degree with a major in Political Science requires 27 hours of Political Sciences courses passed with a grade of "C" or better and a maximum of 12 hours below the 30000 level. The degree requires POSC 20203 (Introduction to Political Theory) and any two of the following three: POSC 20093 (Scope and Methods of Political Science), POSC 20123 (Issues in American Politics) and POSC 20303 (Introduction to International Politics). The degree also requires POSC 30203 (Topics in Political Theory) plus any 12 advisor-approved, 30000-level political science hours and one three-hour political science elective. Any "Topics" courses may be repeated provided the specific subject matter changes. Students intending to do graduate work in international or comparative fields are encouraged to continue foreign language study beyond the 20000 level. No more than six hours of internship credit may be counted. The three-hour seminar taken in conjunction with the Washington Center internship program may be counted in addition to six hours of internship. A minor is required; any minor approved for the B.A. degree is accentable.

**The B.S. degree with a major in Political Science** requires 27 semester hours of Political Science courses passed with a grade of "C" or better and a maximum of 12 hours below the 30000 level. The degree requires POSC 20093 (Scope and Methods of Political Science), POSC 20123 (Issues in American Politics) and either POSC 20203 (Introduction to Political Theory) or POSC 20303 (Introduction to International Politics). The degree also requires POSC 30093 (Topics in Political Science Methods), POSC 30103 (Topics in American Politics) plus any 9 advisorapproved, 30000-level political science hours and one three-hour political science elective.

The B.S. degree has the following associated requirements, a total of nine hours chosen from each of the following groups:

I. Statistics (3 hours)

DESC 20153 Statistical Analysis MATH 10043 Elementary Statistics

II. Calculus (3 hours)

MATH 10283 Applied Calculus or MATH 10524 Calculus I

III. Methods in Social Science Research (3 hours)

ECON 30313 Research Methods in Economics ECON 50343 Econometrics HIST 30063 Introduction to Historical Research PSYC 30503 Behavioral Research SOCI 30383 Research Methods in Sociology

IV. Enrichment of Research Skills (3 hours)

DESC 30253 Introductory Operations Research

DESC 30353 Regression Analysis

ENGL 30223 Technical Writing

ENGL 30283 Cyberliteracy

JOUR 40513 Media Analysis and Research

JOUR 40903 Research Methods for Mass Media

MARK 40113 Marketing Research PHIL 30133 Symbolic Logic I

PHIL 40323 Philosophy of Science

PSYC 30263 Problem Solving in Task Oriented Groups

Students intending to do graduate work in the social sciences or business are encouraged to take the B.S. degree program. It is also recommended for students interested in employment in government and politics. Students should be aware that some graduate programs in the social sciences require calculus (MATH 10283 or 10524) for admission. Any "Topics" courses may be repeated provided the specific subject matter changes. Students intending to do graduate work in international or comparative fields are encouraged to study relevant foreign languages. No more than six hours of internship credit may be counted. The three-hour seminar taken in conjunction with the Washington Center internship program may be counted in addition to six hours of internship. A minor is required; any minor approved for the B.S. degree is acceptable.

The B.A. degree in Political Science with emphasis in International Relations requires 27 hours of Political Sciences courses passed with a grade of "C" or better and a maximum of 12 hours below the 30000 level. The degree requires POSC 20203 (Introduction to Political Theory), POSC 20303 (Introduction to International Politics) and either 20093 (Scope and Methods of Political Science) or POSC 20123 (Issues in American Politics). The degree also requires either POSC 30093 (Topics in Political Science Methods) or POSC 30203 (Topics in Political Theory) as well as POSC 30303 (Topics in International Politics) and POSC 30503 (Topics in Comparative Politics) plus any 6 advisor-approved, 30000-level political science hours and one three-hour political science elective.

Any "Topics" courses may be repeated provided the specific subject matter changes. No more than six hours of internship credit may be counted. The three-hour seminar taken in conjunction with the Washington Center Internship program may be counted in addition to six hours of internship.

This emphasis requires an interdisciplinary minor, which consists of 18 semester hours selected from the following groups:

- I. Third-year foreign language (up to 6 hours 6 hours required if the student has no foreign language minor)
- II. Upper-division international ECON or advisor-approved, upper-division ECON (at least 3 and up to 6 hours)
- III. Upper division, international-related courses from ANTH, GEOG, HIST, JOUR or RELI, selected with advisor approval (at least 9 hours and up to 15 allowed for students with a foreign language minor.

The department strongly encourages students to participate in an international educational experience; it especially encourages an international educational experience in a setting where the student's language of study is used.

## Requirements for a minor in Political Science

A minor requires 18 semester hours in Political Science passed with a grade of "C" or better. No more than three semester hours may be earned at the 10000 level and no more than nine semester hours may be earned below the 30000 level. Students must take either POSC 20093 or 20203. Any "Topics" course may be repeated provided the specific subject matter changes. No more than six hours of internship credit may be counted. The three-hour seminar taken in conjunction with the Washington Center internship program may be counted in addition to six hours of internship.

# **Honors Program**

Political Science majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in POSC 30003 during their junior year and POSC 40003 during the fall semester of their senior year.

## **Honor Society**

The Department sponsors the Beta Lambda Chapter of Pi Sigma Alpha, national honor society in Political Science. Membership in Pi Sigma Alpha requires completion of a minimum of 10 semester hours of political science courses (at least six of which must be in regular classroom courses on TCU's campus and at least three of which must be advanced, i.e., 30000-level or above) and members must have at least a 3.0 GPA in political science courses and at least a 3.5 GPA overall. Applicants need not be political science majors or minors.

## **London Internship Program**

TCU's London Internship Program is part of TCU's London Centre, which provides an academic program, as well as housing and supervision of internships. A student in any major may apply for an internship appropriate to her or his career interests. The work obligation of each intern will be either three days per week (9 credit hours) or four days per week (12 credit hours). Students may take academic courses at The London Centre to total 15 credit hours. Professor Jackson (Political Science) is the Director of the London Internship Program.

## **Washington Internship Program**

TCU is affiliated with the Washington Center, which provides placements, supervision, and housing for students who seek a professional experience in a public or private organization in the nation's capital. Students selected for the program are required to have a minimum GPA of 3.0 and must return to TCU for at least one semester after internship. Students apply each fall, a year in advance of their internship, and are required to attend a noncredit preparatory seminar in the spring. Students may earn up to 15 hours of credit through this program, which is multi-disciplinary and available to students in any major field.

## **Courses of Instruction**

#### Political Science as a Discipline

**POSC 10093 Introduction to Political Science.** Introduces students to varying thought on and divergent practices of politics in a variety of nations.

POSC 10433 Freshman Seminar in Political Science. Topics may vary each time it is offered.

**POSC 20093 Scope and Methods of Political Science.** Prerequisites: Prior completion of or concurrent enrollment in MATH 10043 Elementary Statistics or an equivalent course. Introduction to political science as a field of study and to the major issues in relating theory and empirical research to the study of political behavior.

**POSC 30003 Honors in Political Science.** Examination of a significant political issue. This is generally offered on a tutorial basis and the specific topic is determined jointly by the student and the instructor. POSC 30003 and 40003 cannot be taken simultaneously.

**POSC 30093 Topics in Political Science Methods.** Prerequisites: POSC 20093 or consent of the instructor and COSC 10403 Introduction to Computer Science or MANA 20103 Introduction to Data Processing. Topics include political science methods applied to various research problems such as political behavior, public policy analysis, and program evaluation.

**POSC 40003 Senior Honors in Political Science.** The writing of a substantial research paper under the supervision of a three person faculty committee. A grade of I Incomplete will be carried in this course until the paper is completed. The sequence of POSC 30003 and 40003 must be planned so that 40003 is taken prior to the student's final semester of undergraduate work.

#### **American Government and Politics**

**POSC 10123 Issues in American Politics.** Introduction to the dynamics of American governmental institutions and political processes through the study of significant contemporary issues in the American political arena. The particular issues may vary from semester to semester in accordance with the changing interests of students and instructor.

**POSC 10133 American and Texas Government.** The American political system at national and state levels, including a survey of the federal and Texas Constitutions. This course satisfies the Texas state certification requirements for education majors.

**POSC 30103 Topics in American Politics.** Topics related to the study of American political institutions, processes, behavior, and policy, such as Congress, the Presidency, political parties and elections, interest groups, social and defense policy, and Texas politics.

#### **Political Theory**

**POSC 20203 Introduction to Political Theory.** Introduction to the normative or value dimensions of political inquiry through the study of selected classics in political literature.

**POSC 30203 Topics in Political Theory.** Prerequisites: POSC 20203. Topics will be selected from varying periods of Western history: ancient, medieval, modern, and contemporary. Topics may focus on individual thinkers (Hobbes), groups of thinkers (the Liberal Tradition), or on policy questions (Human Nature and Public Policy).

### **International Politics**

**POSC 20303 International Politics.** Introduction to both the major actors and issues which comprise contemporary international politics. A major goal of the course is to familiarize students with non-western perspectives on international phenomena.

**POSC 30303 Topics in International Politics.** Topics studied include such areas as U.S. foreign policy, Russian foreign policy, and various regional issues.

#### **Public Law**

**POSC 30403 Topics in Public Law.** The course sequence includes Gender and Sexual Orientation in Contemporary Law, International Human Rights, and several courses on American Constitutional Law. A simulation of the U.S. Supreme Court is offered in alternate years.

#### **Comparative Politics**

**POSC 30503 Topics in Comparative Politics.** European politics, Latin American politics, Middle Eastern politics, developing political systems, etc.

**POSC 30903 Contemporary British Politics.** This course is designed to provide an introduction to British politics and comparative political analysis of current issues. Classroom instruction will be augmented by two weeks inside parliament, where students are given the opportunity to observe British government firsthand. Primary texts include Developments in British Politics 5 and The British Polity; students will also be reading at least one English newspaper a day, as well as consulting the Economist for weekly overview and analysis. Student evaluations will be based on two essays, two exams, and class presentations; furthermore, student will submit written assignments relating to field experiences in London.

# **Independent Study**

**POSC 40900 Internship in Political Science/British Studies.** Washington Center or at The London Centre. Full-time internships with a public or private agency in Washington, D.C. or in London, England, offered either through the Washington Center or through TCU's London Centre. The internship will allow students to integrate theory and practice in a supervised professional setting, up to 12 sem. hrs. credit. (Offered as BRST or POSC credit.)

**POSC 40950 Internship in Political Science.** Internship (usually local in Tarrant County) arranged with the consent of an instructor, taken on a strictly Pass/No Credit basis. (3 sem. hrs.)

**POSC 40970 Independent Study in Political Science.** Prerequisite: A specific program of study approved by instructor prior to enrollment. (1-6 sem. hrs.)

# Religion

Requirements for a B.A. degree with a major in Religion.
Requirements for a minor in Religion
Writing Proficiency
Honors Program
Courses of Instruction

#### (RELI)

Available as a major on the B.A. degree and as a minor on the B.A., B.S. and B.B.A. degrees.

The meaning of human existence in relation to ultimate reality has been a concern of all cultures past and present. Any adequate understanding of human culture must take seriously the phenomenon of religion. The academic study of religion, therefore, is a central part of a liberal arts education, at home among the disciplines called the humanities. The Department provides an informed understanding of various aspects of the Christian traditions. More broadly, it supports the University's commitment to multiculturalism and education from a global perspective through study of the cultural diversity apparent in the world's religious traditions. Interdisciplinary and foreign studies contribute to the development of such awareness and we encourage students to explore those possibilities.

Courses in the Department approach religious traditions historically, textually, philosophically, and comparatively, and consider the role of religion in society, culture, and individual life. Their aims are to introduce students to various methods and issues in the study of religion; to familiarize them with the beliefs and practices of various religious traditions; to develop their critical thinking, reading and writing skills; and to encourage them to explore and evaluate their own culturally-conditioned self-understandings and ultimate commitments. Students will find the multidimensional study of religion to be fertile ground for developing habits of mind that are excellent foundations for professional life. Those planning for seminary, graduate study in religion, or any aspect of church-related vocation will be well prepared by Department courses and well supported by faculty advisement.

#### Requirements for a B.A. degree with a major in Religion.

Twenty-seven semester hours distributed from the various groups of the Religion curriculum as follows: one Introductory Course; four courses from Group I (one from each of the four subcategories of Group I: Biblical Studies, Historical Studies, Contemporary Developments, Other World Religions); two courses from Group II (40603 plus one other course); and two courses from Group III. At least 15 hours of the major must be in junior-level courses or higher. Freshman seminars do not count toward the major.

**Pass/No Credit Policy.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Religion are subject to the pass/no credit policy of their major department.

# Requirements for a minor in Religion

Eighteen semester hours distributed from the various groups of the Religion curriculum as follows: one Introductory Course; three courses in Group I (one from third digit 1 if 10013 is taken, one from third digit 5 if 10003 is taken); and one course from Group II; one course from Group III. At least 9 of the 18 hours must be in junior-level courses or higher. Freshman seminars do not count toward the minor.

#### **Writing Proficiency**

The development of writing proficiency is a vital component of the educational process. Both majors and minors are encouraged to utilize faculty assistance and the resources of the Writing Center to achieve that goal.

#### **Honors Program**

Religion majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in RELI 30003 during their junior year, and RELI 40003 during the fall semester of their senior year. Note: RELI 30003 Junior Honors Seminar substitutes in the major for the required Senior Seminar, RELI 40603.

# **Courses of Instruction**

RELI 10433 Freshman Seminar in Religion. Topics may vary each time it is offered.

RELI 10533 Freshman Seminar in Religion. Topics may vary each time it is offered.

# **Introductory Courses**

**RELI 10003 Understanding Religion: The Bible.** This course considers historical, comparative and methodological issues in the study of religion by focusing on the background and contents of the Hebrew and Christian Bibles and ways these foundational texts inform later Judaism and Christianity.

**RELI 10013 Understanding Religion: The World's Religions.** This course considers historical, comparative and methodological issues in the study of religion by focusing on some foundational texts, figures and ideas in major world religions.

**Group I: Historic Traditions.** Courses in the history and distinctive features of religious traditions.

# A. Christianity and Judaism

1. Biblical Studies

**RELI 20123 New Testament Literature and Life.** An introduction to the writings in the New Testament with special attention to the content of the individual books, together with an understanding of the beginnings of the

Christian faith seen through the study of the Gospels and the initial development of the Christian movement.

**RELI 30113 Jesus and the Gospels.** A careful look at early Christian gospels, including Thomas, and at how scholars construct a historical Jesus from them.

**RELI 30123 Paul and the Early Church.** The developing origins of Christianity, with particular emphasis on Paul and his influence.

**RELI 30133 Religion and the Search for Meaning in the Old Testament.** Study of the biblical books of Psalms, Proverbs, Ecclesiastes and Job within their own socio-historic contexts as a basis for investigating some of the fundamental questions of human religious experience, including the function of worship, the relationship of reason and faith, the problem of evil, and the bases of ethical behavior.

**RELI 30143 Love and Sex in the Biblical World.** Prerequisite: RELI 10003, 10013, or permission of instructor. A study of male-female relationships in Israel's history, literature and religion, with attention to the relevance of biblical values to today's society.

**RELI 30153 How to Read the Bible: Story and Politics.** Prerequisite: RELI 10003, 10013, or permission of instructor. Explores distinctive characteristics of biblical narrative and investigates why readers produce different interpretations of biblical stories. It asks how social structures and value systems, ancient and modern, affect texts and interpreters.

**RELI 30163 The Bible at the Movies.** Prerequisite: RELI 10003, 10013, or permission of instructor. Examines movies based on biblical stories to see how the Bible may be interpreted in words and visual images. Investigates how the Bible's authority is used to promote particular religious, moral, social, and political values in popular culture.

**RELI 40130 Issues in Biblical Interpretation.** Prerequisite: RELI 10003 or permission of instructor. Examination of issues that arise from the interpretation of biblical texts. The particular issues studied will be chosen from areas of current interest or from methodological considerations (such as contemporary hermeneutics, biblical theology and ethics, or critical methodologies). (3-6 sem. hrs.)

**RELI 50130 Seminar in Biblical Studies.** Prerequisite: approval of instructor. A particular topic in Biblical Studies will be selected for detailed study. (3-6 sem. hrs)

#### 2. Historical Studies

**RELI 30303 Christian Ethics.** An introduction (beginning with the Bible) to major perspectives, with particular focus on developments since the Reformation. The student will argue a contemporary issue from a historical perspective.

**RELI 30323 Christian Tradition: Emergence to the Renaissance.** A study of developments in Christian thought, practice, and institutions from the beginnings of the church through the 15th century.

**RELI 30333 Christian Tradition: Reformation To Modernity.** A study of developments in Western Christianity from the 16th century Reformation to the 20th century, with attention to issues of theology, institutions, and practices. Does not include religion in America.

**RELI 30343 Black Religion in U.S..** Explores the relationship between "race" and religion, and surveys African-American religious history in the United States, from the religious commitments of enslaved Africans to contemporary American black people's faiths.

**RELI 40313 The History of Religion in America.** A survey of the major events and developments in religion in the United States, taking into account the development of institutions and thought patterns in terms of their interaction with the American context.

# 3. Contemporary Developments

**RELI 30413 Contemporary Catholicism.** Roman Catholicism in the modern period with particular attention given to the Second Vatican Council and its intellectual and institutional implications. There will be some emphasis on American Catholicism.

**RELI 30433 Christianity and Contemporary Social Issues.** Critical study of the relationship of Christianity to the formation of social values, to participation in national and international ethical discourse, and to participation in popular culture in America

**RELI 30453 Sects and Cults in American Religion.** The categories "sect" and "cult" in religion studies, with illustrations from existing groups, both within and outside the Christian tradition, e.g., Hasidic Judaism, Jehovah's Witnesses, Christian Science, Baha'i, the Amish, and Mormonism.

**RELI 40403 Issues in Contemporary Theology.** Prerequisite: 3 semester hours of Religion or permission of instructor. An examination of contemporary theological issues such as the relation between faith and history, the meaning of language about God, and the impact of religious pluralism. The relevance of such issues for the student's own theological thinking will be stressed.

# **B. Other World Religions**

**RELI 20503 Africa and the African Diaspora: History, Religion, and Culture.** This class examines the origins and impact of African civilization, focusing on the worlds of traditional religions, Islam and Christianity in Africa; colonialism, anti-colonial struggles, independence, and post-colonialism; African studies in Western Scholarship; and issues affecting modern Africa.

**RELI 20513 Africa and the African Diaspora: History, Religion, and Culture.** Building on RELI 20503, this class examines West African religious traditions, the 'involuntary diaspora' to the New World, as well as 'creole' religions and culture within the Caribbean. In concludes with an account of the rise of the African Independent Churches; the place of women in North African Islam; the presence of Rastafari in Ghana, and the continuing clash of traditional African and Western cultures.

RELI 30513 Hindu Religious Perspectives. An exploration of the diverse strands of the Hindu religious tradition

(ritual, philosophical, devotional) from the Vedic period to the modern day.

**RELI 30523 East Asian Religious Perspectives.** The development of diverse religious traditions (Confucianism, Taoism, Buddhism, Shinto) in China and Japan from prehistory to modern manifestations.

**RELI 30533 Buddhism: Thought and Practice.** The development of Buddhism in India, Southeast Asia, Tibet, China, Japan, and North America. Material will range from the Buddha's life to contemporary forms of Buddhism in America.

**RELI 30543 Islam.** The Islamic religious tradition from 7th century Arabia to current resurgence, including social, theological, and mystical dimensions. Topics include Muslim views of Allah, revelation the Qur'an, and the Prophet Muhammad. Islam's encounter with "modernity" will also be addressed.

**RELI 30553 African Religions.** Explores the worldviews, beliefs and practices of African Traditional Religions. Also examines the impact of Christianity and Islam on African Traditional Religions since the colonial period.

**RELI 30563 Judaism.** The course is an introduction to many of the historical forms and manifestations of Judaism. The goal of this course is to examine Judaism conceptually, considering topics such as literature, politics, art, history and ritual, and to provide the student with a conceptual basis that will facilitate the comparison of Judaism with other world religions.

**RELI 30573 Daoism and Chinese Religions.** This course explores the development of the Daoist tradition in the context of Chinese popular religions. We will study early Daoist communities, texts, and practices to advance our understanding of such religious themes as: the body and the cosmos; magical medicine; immortality practice; ritual; scripture and revelation; apocalypticism; and the relationship between "classical" and "popular" religious traditions.

**Group II: Methodological and Constructive Studies**. Courses involving critical methodologies or constructive reflection on religious traditions.

**RELI 30003 Honors Seminar in Religion.** Creative dialogue between religion and other disciplines of learning, or aspects of culture.

**RELI 30633 Philosophy of Religion.** Prerequisite: PHIL 10003 or any religion course. This course is centrally concerned with issues relating to the rationality and justification of religious convictions. There is also an interest in the coherence of religious concepts. Various philosophical models for understanding and evaluating religious convictions and practices are examined and applied.

**RELI 30643 God in Modern Thought.** Prerequisite: 3 semester hours of Religion or Philosophy. An exploration of ideas of God as they have developed in Western theology and philosophy since the 17th century. The relation between these ideas and current models for thinking about God will be stressed.

**RELI 30673 Anthropology and Religion.** Interpretations of myths, symbols and religious beliefs and practices in cross-cultural perspective; comparative functions of religion in society; religion and cultural change. Focus is on non-Western, technologically-primitive people and their religions. (Offered as ANTH 30973 or RELI 30673.)

**RELI 30683 Sociology of Religion.** Prerequisite: SOCI 20213; SOCI 20223 or permission of instructor. An introduction to understanding the role of religion in society and to sociological methods for the study of religion. The course will introduce theories and research pertaining to types of religious experience, conversion and commitment, denominationalism, secularization and fundamentalism. Class, gender, race and ethnicity will also be addressed as they influence religion in society. (Offered as RELI or SOCI credit.)

**RELI 40603 Senior Seminar.** Prerequisite: Senior standing and 12 hours in Religion. Capstone seminar exploring selected issues, themes, or methods in the academic study of religion.

**RELI 40613 Constructive Global Ethics.** A critical study of ethical inquiry in a pluralistic world by focusing on proposals for a global ethic, scholarship on interreligious dialogue and research in comparative religious ethics. Students write proposals for promoting moral consensus on an international issue.

**Group III: Issues, Topics, and Interdisciplinary Studies**. Courses with a sepcific thematic or interdisciplinary focus.

**RELI 20703 Leadership in Ministry.** Prerequisite: Religion major or minor, or departmental permission. Introduces the role of the minister and outlines his/her responsibilities. Special emphasis on preaching, religious education (including youth work) and pastoral care

**RELI 20803 Myth and Ritual on Film.** Through course readings and screenings, students will see how films are created in ways strikingly similar to the ways religious rituals and myths are created. Films screened include The Matrix, The Wizard of Oz, Apocalypse Now, and Before the Rain.

**RELI 30713 Women and Womanhood in Western Religion.** An exploration of the ways Christianity, Judaism, and Islam have helped to shape Western attitudes toward women. The lives of representative women and their influence will be examined in some detail; readings from religious thinkers on the nature of woman will be studied.

**RELI 30723 Religion and Science.** An exploration of the ways of knowing utilized in religion (particularly the Judeo-Christian heritage) and in science, and how these ways of knowing relate.

**RELI 30733 Mysticism.** Prerequisite: RELI 10003, 10013 or permission of instructor. An examination of concepts of mysticism and mystical experience. Examples will be drawn from Christian, Hindu, and Buddhist sources.

**RELI 30743 Religion, Art and Visual Culture.** This course examines interactions between religious practices and the visual arts in cross-cultural settings. Looking at visual art media such as architecture, painting, film, landscape, gardens, and calligraphy, the course will situate these media in specific religious traditions and practices including Hinduism, Buddhism, Judaism, Christianity, and Islam.

**RELI 30773 India: Texts and Traditions.** (ENGL 30773) A consideration of selected classic works of religious and literary imagination in Indian culture. Versions and interpretations of the Hindu epics Mahabharata and Ramayana will be examined in translation.

**RELI 30783 Religion and Environmental Ethics.** Explores the ethical challenge of increased competition for world resources. Examines how changing religious understandings of stewardship, fairness and rights shape moral choice in issues like distribution of goods, care of nature and population shifts.

**RELI 30793 Religion, Sports and U.S. Culture.** Studies sports to explore meaning and definition of religion, and examines role of sports in shaping U.S. faith and life from the seventeenth century to the present.

**RELI 30823 Jesus in Fiction and Film.** Over the past fifty years many creative writers and movie makers have attempted portraits of Jesus and Christ-figures in fiction and film. This course will identify the christological themes in these portraits and examine their importance for the development of contemporary Christian theology.

**RELI 30833 Christianity and Literature.** This course probes the Christian theological themes (the reality of God, the person and work of Jesus Christ, the relationship between good and evil, the life and mission of the Church, and the idea of life after death,) expressed in various works of post-1945 fiction and the Christian theological tradition.

**RELI 30853 Women in American Religion.** Explores the experiences of women in American religion with attention to the interplay between women's religious identities and their roles in the work force, families, and racial, ethnic and/or minority groups. Readings will be drawn from historical, sociological and theological works.

**RELI 30873 Islam in America.** Explores the growth and spread of Islam in America. Introduces students to different Islamic groups and how they relate to each other. Discusses Muslims' responses to different challenges and criticism of Islam and Muslims by the media. Explains the roles of African Americans and women in Islamic institutions in America.

**RELI 30883 Literary Images of God.** Prerequisite: RELI 10003, 10013, or permission of instructor. This course examines the nature and activity of God from a variety of literary perspectives. One focus is a study of God as the protagonist of a classic of world literature, namely, the Hebrew Bible. Another focus is that of God in contemporary novels, short stories, and memoirs.

**RELI 30893 Caribbean Religions.** Beginning with an historical account of the origins and development of religions in the Caribbean, this course views the Neo-African traditions of Vodoun, Shamanism, Santeria, Rastafarianism, and Obeah through the prism of contemporary Caribbean literature.

RELI 30970 Directed Study: Religion. Directed Study in Religion.

**RELI 40003 Senior Honors Research Paper.** To be written under the tutorial leadership of members of the faculty.

**RELI 40700 Religion in Geographical Context.** A seminar dealing with a significant topic such as religion in art, church history, or contemporary issues, conducted in appropriate locations in this country or abroad. Specific topic will be defined as course is scheduled. Admission to course through application by announced deadline. (1-6 sem. hrs.)

**RELI 40733 Church and State Relations in America.** The relationships between religious institutions and civil authority in America. While providing a historic context for the study, the course is primarily issue-oriented, dealing with such topics as prayer and Bible reading in public schools, state aid to parochial schools, conscientious objection to military service, Sunday closing laws, and taxation of churches.

RELI 40900 Projects in Religion. Assigned special problems in religion. (1-3 sem. hrs.)

RELI 50970 Directed Study in Religion. 1 - 6 sem. hrs.

# Sociology

## Courses of Instruction

#### (SOCI)

Available as a major on the B.A. degree and as a minor on the B.A. and B.S. degrees.

**Requirements for the B.A. degree with a Major in Sociology.** Twenty-seven semester hours in Sociology, including SOCI 20213, 30383, and 30833. Students must average a minimum of 2.0 in all Sociology letter-grade courses taken for the major. Associated Requirement: Math 10043 to be taken within the first 9 hours of sociology course work. Any approved field may be selected as a minor.

Requirements for a Minor in Sociology. Eighteen semester hours, including SOCI 20213.

**Requirements for Teacher Certification in Sociology.** Twenty-four semester hours, including SOCI 20213, 30383, and 30833.

**Honors Program.** Sociology majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in SOCI 30003 during their junior year and SOCI 40003 during the fall semester of their senior year.

**Honor Society.** The Department sponsors Lambda Chapter of Alpha Kappa Delta, national honor society in sociology.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Sociology are subject to the pass/no credit policy of their major department.

**CLEP.** The Sociology Department approves the awarding of 3 semester hours of credit for a score of 55 on the CLEP Subject Exam in Introductory Sociology, equivalent to SOCI 20213.

#### **Courses of Instruction**

SOCI 10433 Freshman Seminar in Sociology. Topics may vary each time it is offered.

SOCI 10533 Freshman Seminar in Sociology. Topics may vary each time it is offered.

**SOCI 20073 American Society in Post World War Age: Part I.** A survey of societal trends, patterns, fads, fashions, issues, and significant events that shaped the American scene and the American people from the end of World II to the end of the 1970s. Topics include the role of television and film in making and reflecting human cultures and subcultures, media reported events such as McCarthyism and Watergate, conflicts such as the Korean and Vietnam wars, and popular cultural "crazes" including the British Invasion, Pop art, and Punk music. Emphasis is based on how human beings created and responded to these events and how they influenced an "American Political and Social Point of View." Available only to those in the Honors Program.

**SOCI 20083 American Society in Post World War Age: Part II.** A survey of societal trends, patterns, fads, fashions, issues, and significant events that shaped the American scene and the American people from the end of the 1970s to the twenty-first century. Topics include the role of television and film in making and reflecting human cultures and subcultures, political correctness, media reported events such as the War on Drugs, Iran-Contra, conflicts such as the Gulf War, and popular cultural "crazes" such as MTV, gam, glitter, and grunge rock, and Reality Based TV. Emphasis is based on how human beings created and responded to these events and how they influenced an "American Political and Social Point of View." Available only to those in the Honors Program.

**SOCI 20213 Introductory Sociology.** Differing patterns of human relationships; application of sociological concepts to the understanding of human behavior.

**SOCI 20223 Social Problems.** Utilizing several sociological perspectives, current societal problems are examined. Emphasis on those problems relating to social disorganization, value conflict and deviance.

**SOCI 30003 Honors Seminar in Sociological Ideas.** Open to honor students with 6 semester hours of sociology and/or permission of the students adviser and the instructor. A sociological analysis of the interplay of ideological and social factors in the development and decline of social systems and of present trends in world ideologies and societies, with some possible implications for the future.

**SOCI 30213 Applied Sociology.** This course introduces students to the field of applied sociology and prepares students for internships and career placement. Students develop a better understanding of how sociological concepts, theory, methods, and finds are used in practice, especially in settings related to one's own career interest.

**SOCI 30223 Contemporary Topics in Sociology.** Topics of current interest in the discipline of sociology and society. Illustrative topics likely to be offered during the catalog period include: Sociology of Sex Roles, Political Sociology, The Role of Sociologists in Society. (1-6 sem. hrs.)

**SOCI 30243 Violence in Society.** Prerequisites: SOCI 20213, 20223 or permission of instructor. A survey of the major forms of violence in contemporary society. Examining the extent and distribution of violence and the sociological, anthropological and psychological theories devised to account for violence.

**SOCI 30303 Marriage and the Family.** The social psychology of courtship, marriage, and family relations; the social significance of the family; its origin and development; the family in transition; its organization and disorganization.

SOCI 30313 Criminology. Prerequisite: SOCI 20213, or permission of instructor. An examination of crime in

America, with focus on sociological theories of crime causation, treatment, and prevention. (Offered as CRJU or SOCI credit.)

**SOCI 30343 American Minority Groups.** Prerequisite: SOCI 20213, 20223, or permission of instructor. Demographic, institutional, and social psychological aspects of minority group relations, with emphasis on Blacks, Hispanics, and American Indians.

**SOCI 30383 Research Methods in Sociology.** Prerequisite: MATH 10043. An introduction to sociological research procedures, with emphasis on the collection, analysis and interpretation of both quantitative and qualitative data.

**SOCI 30393 Sociology of Corrections.** The examination of correctional agencies and programs, including the social structure of prisons and its impact on the offender, deterrent and treatment effects of correctional practices, probation and parole, and an examination of various experiments in institutional and community based corrections. (Offered as CRJU or SOCI credit.)

**SOCI 30423 Media, Self and Society.** A critical examination of various media, especially print, film and television, from a sociological point of view. An introduction to various theories of mass media and to current research on the effects of mass media on the human self in particular and society as a whole. The media as an agent of socialization, social control, and social discourse. Examination of videotapes of news, entertainment, sports, advertising and special events, interspersed with lectures and discussions.

**SOCI 30463 Popular Culture.** This course examines how groups of people create alternative and novel forms of cultural expressions (popular culture), and how such expressions eventually are filtered through media, either oral, electronic or print. It also considers how the meaning of popular cultural expressions both influence and are influenced by broader and institutionalized societal arrangements.

**SOCI 30483 Death and Dying: Sociological Viewpoints.** An examination of the process of death from a social psychological perspective. Topics will include the dying process as an interactional event, how survivors cope with loss, the life chances of people to live an extended life before dying, and how death serves as a symbol and metaphor for lived experience. The course will also focus on death as it has an impact on survivors and how survivors learn from the experience of another's death.

**SOCI 30523 Self and Society Through Film.** An examination of social psychological theories of the social self and how social selves are represented in various American films from the 1940s to the present. The course will combine lectures on concepts and processes associated with the presentation of the social self in everyday life with passages from films that provide detail about concepts and processes. Film displays will include processes of impression management and characterizations of social types - ranging from violent/impulsive to rational/strategic selves. Further, lectures and film passages will address the various portrayals of human relationships that involve self-display and self-disclosure.

**SOCI 30563 Deviance and Social Control.** Prerequisites: SOCI 20213, 20223 or permission of instructor. Theoretical and empirical literature on deviance and social control, showing how deviation arises from social interaction. Specific attention to forms of deviance including substance abuse, sexual deviance and violent behavior.

**SOCI 30643 Sociology of Aging.** The sociological and social psychological examination of the impact of aging on individuals and on society. Focus is on such dimensions of aging as health status, work and retirement, family and living arrangements in later life, and death and dying. The course is primarily concerned with aging in Western mass society, especially in the U.S.

**SOCI 30683 Sociology of Religion.** Prerequisite: SOCI 20213; SOCI 20223 or permission of instructor. An introduction to understanding the role of religion in society and to sociological methods for the study of religion. The course will introduce theories and research pertaining to types of religious experience, conversion and commitment, denominationalism, secularization and fundamentalism. Class, gender, race and ethnicity will also be addressed as they influence religion in society. (Offered as RELI or SOCI credit.)

**SOCI 30743 Men, Women and Society.** Critical examination of new ideas, data and theories about the roles of men and women in contemporary society. Focus is on a sociological analysis of gender stratification in our society.

**SOCI 30803 Victimology.** An examination of the major aspects of victimology. Topics include the historical role of victims, the nature of victimization in modern America, the victimization experience, legal aspects of victimization, victimization and the political process, solutions to victimization, and the future of victims rights and victimology. (Offered as CRJU or SOCI credit.)

**SOCI 30833 Sociological Theory.** Prerequisite: SOCI 20213 or permission of instructor. An exploration of the foundations of sociological theory through the works of the classical theorists e.g. Marx, Durkheim, and Weber, assessing the impact of their work on current sociological thinking and practice and on society itself. Attention will be paid to the intellectual heritage of the thinkers, their historical context and their biographical selves.

**SOCI 30903 Law and Society.** An examination of the relationship between legal institutions and social processes. Topics include the nature of law, historical evolution of legal systems, creation and organization of law in modern societies, social functions of law, and the limits of law as an instrument of social control. (Offered as CRJU or SOCI credit.)

**SOCI 40003 Senior Honors Research Paper.** Offered fall only. A supervised research experience culminating in the writing of a research paper typically based on the subject matter studied in SOCI 30003: Honors Seminar in Sociological Ideas. The course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

**SOCI 40373 Social Psychology: Sociological Approaches.** Prerequisite: SOCI 20213, 20223 or permission of instructor. Contribution of sociologists to theory and research in social psychology, including theory of conformity, reference groups, and symbolic interaction.

**SOCI 40443 Media Images of Drug and Alcohol Abuse.** Prerequisite: SOCI 20213 or 20223 or permission of instructor. A critical examination of how the media responds to and helps create images of a particular social problem drug abuse. An introduction to theories and research pertaining to drug abuse, to policies dealing with drug abuse and abusers, and to distinctions between justifications for the legality of some drugs and the illegality of

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others. Examination of various media representations (through photographs, slides, videotapes) of drugs, drug taking, drug abusing, and drug celebrating, interspersed with lectures and discussions.

**SOCI 40463 Juvenile Delinquency.** Prerequisite: SOCI 20213, or permission of instructor. An examination of the causes, treatment, and prevention of delinquency, with particular focus on the relationships between juveniles, clinics, and the court, and the philosophical, historical, and traditional foundations of juvenile law. (Offered as CRJU or SOCI credit.)

**SOCI 40523 Health, Illness and Medicine.** Prerequisite: SOCI 20213, 20223, or permission of instructor. Critique of the changing structure and functioning of the institution of medicine in America and the continuing interand intra-institutional contention for authority. Focus on current issues, problems, and trends such as litigation, governmental financing and regulation, corporate entry into medical care, sexism in medicine, and alternative medicines and practitioners.

SOCI 40610 Directed Study in Sociology. Prerequisite: Permission of instructor. (1-3 sem. hrs.)

**SOCI 40803 Social Inequality.** Prerequisite: SOCI 20213, 20223, or permission of instructor. A survey of the development,

**SOCI 50610 Directed Study in Sociology.** Prerequisite: permission of instructor, and graduate standing. Supervised reading, research and completion of a substantial paper. May be taken for credit ranging from 1-6 semester hours and may be taken more than once.

# Spanish / Latin American Studies

Placement
Secondary Teacher Certification
Latin American Studies
Courses of Instruction

#### (SPAN)

**Requirements for the B.A. degree with a major in Spanish.** The Spanish major consists of 30 credits at the level of 30000 and above. Up to 15 of those credits may be taken at an approved study abroad site. Courses taken pass/no credit and courses in which the student earns below a C will not count toward the major.

Students pursuing the Spanish major must take at least three of the following courses: SPAN 30103 Spanish for Heritage Speakers SPAN 30203 Intensive Grammar SPAN 30303 Conversation SPAN 30503 Composition & Reading SPAN 40103 Analyzing Literary Texts One culture course from this list: 30813, 30833, 30843, 30853.

All students majoring in Spanish must take a Senior Seminar. In exceptional cases, with the written permission of the Chair of the Spanish & Latin American Studies Department, students may substitute two literature classes for the Senior Seminar. Students may take the Senior Seminar beginning the second semester of their junior year. A grade of B or better must be earned in the Senior Seminar in order for the student to graduate with a major in Spanish; with a grade of C, the student may graduate with a minor in Spanish.

**Requirements for a minor in Spanish.** The Spanish minor consists of 18 credits at the level of 20000 and above. Up to 12 of those credits may be taken at an approved study abroad site.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Spanish are subject to the pass/no credit policy of their major department.

#### **Placement**

Students with academic or life experience in a foreign language are urged to enroll at a level appropriate to their skills. In order to encourage students to enroll in a first course appropriate to their ability, TCU offers the following incentive-based placement policy:

Students whose first language class at TCU is beyond the first semester level may earn additional language credit (if credit has not already been awarded for transfer, CLEP, or AP work) as follows:

- $\cdot$  If the first foreign language class is at the second semester level (10203) and a grade of B or higher is earned, as a reward for superior work, three semester hours credit will also be awarded for the first-semester course (10103).
- If the first foreign language class is at the third semester level (20103) and a grade of B or higher is earned, as a reward for superior work, six semester hours credit will also be awarded for the first and second semester courses (10103 and 10203).
- If the first foreign language class is at the fourth semester level (20203) and a grade of B or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the first, second and third semester courses (10103, 10203 and 20103).
- $\cdot$  If the first foreign language class is beyond the fourth semester level (numbered 30000 or above) and a grade of B or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the second, third and fourth semester courses (10203, 20103 and 20203).

If the student takes a foreign language class at a level beyond the first one and earns a C or D, no additional credit will be awarded, but the student will be deemed to have satisfied the foreign language requirement of the UCR consistent with the level of the course passed. For example, if a student's first foreign language class at TCU is at the fourth semester level (20203), and the student earns a C as the final grade, the student will not receive additional credit, but will have satisfied the foreign language requirement at the sophomore level.

To determine proper placement level, students should consult the level descriptions on the department's website, take the computerized CAPE examination, or consult with an advisor in the Department of Spanish & Latin American Studies. Details concerning the CAPE placement exam will be provided to incoming students prior to orientation and registration.

Additional credit may also be earned by means of exams administered by the College Board (AP or CLEP). Please consult the TCU Credit by Exam booklet, available through the Office of Admissions, for details.

Students considering a major in Spanish should bear in mind that 10000 and 20000 level courses do not count toward a major. However, 20000 level courses do count toward a minor. Note: Students entering the program at a certain level may not receive credit for course work taken below that level.

**Credit by AP exam:** AP3, 6 credit hours (10103, 10203); studies begin in 20103 or 20203. AP4, 9 credit hours (10103, 10203, 20103); studies begin in 20063 or above. AP5, 12 credit hours (10103, 10203, 20103, 20203); studies begin in 30433 or above.

**Honors Program.** Spanish majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in SPAN 40623 during the fall semester of their senior year.

**Sigma Delta Pi Honor Society.** The department annually recognizes its outstanding students by inviting them to join Sigma Delta Pi, the national honor society for Spanish scholars.

**Study Abroad.** TCU and the Department of Spanish and Latin American Studies offer a wide range of opportunities for a summer, semester or academic year abroad through prestigious programs and institutions. Among these opportunities is TCU's sister university, the Universidad de las Americas, located in Puebla, Mexico.

# **Secondary Teacher Certification**

Students seeking certification for teaching in Spanish and Latin American Studies at the secondary school level should be advised by the departmental secondary certification advisor.

All individuals seeking Texas teaching certification with an elementary specialization (including bilingual education) or secondary teaching field in Spanish must take the TOPT (Texas Oral Proficiency Test). This test must be taken in addition to the ExCet exams required. Candidates who attain the TOPTs passing standard of advanced oral proficiency or higher will be recommended for certification. Candidates who do not meet the TOPTs passing criteria, but who have met all other coursework and certification requirements, may be recommended for a general elementary certificate or a single secondary teaching field.

Students who plan to earn a teaching certificate requiring a passing score in the TOPT must submit a language assessment from the Department of Spanish and Latin American Studies when applying to the Teacher Education Program of the University.

#### **Latin American Studies**

#### (LAST)

Available as a major on the B.A. degree.

**Requirements for a B.A. degree with a major in Latin American Studies.** At least 30 hours in designated Latin American Studies Program courses, with no more than 15 hours in any single department. At least 18 credit hours must be at the 30000-level or above. At least one course must be in Spanish at the 30000-level or above. Up to 15 credits from an approved study abroad site may be included in the major. Courses taken pass/no credit and courses in which the student earns less below a C will not count toward the major.

**Requirements for a minor in Latin American Studies.** 18 credit hours of courses relating to Latin American Studies, at least 9 of which must be at the 30000-level or above, distributed among at least three different disciplines. Up to 12 of those credits may be taken at an approved study abroad site.

**Latin American Studies program courses:** Courses accepted for the Latin American Studies major and minor will include "Latin America," "Hispanic America," Spanish-Speaking," "Brazil," or a complementary subject in its title or its topic. Examples of such courses include:

HIST 10933 Latin American History: National Period

POSC 30503 Topics in Comparative Politics: Latin American Politics

ANTH 30723 Ethnology of Selected Areas: Civilization of the Andes

ART 30503 Aztec, Maya, Olmec: Indian Arts of Ancient Mesoamerica

SPAN 40303 Masterpieces of Latin American Literature

A list of acceptable courses for the Latin American Studies program is available on the homepage of the Department of Spanish and Latin American Studies. A student may also obtain a list of approved courses from the office of the Department of Spanish and Latin American Studies.

**Pass/No Credit Option.** Students majoring in AddRan College may take up to 9 semester hours of courses on a P/NC basis. No courses applied to a Department's Major or Associated Requirements may be taken on the P/NC basis. Courses applied to the minor may be taken on the P/NC basis. Students minoring in Latin American Studies are subject to the pass/no credit policy of their major department.

# Courses of Instruction

**LAST 40003 Latin American Studies Seminar.** Prerequisites: Senior standing all required core courses for the Latin American Studies major. A critical study of contemporary Latin America from various perspectives within the social sciences, the humanities, and the arts, among others.

**PORT 10103 Portuguese for Beginners.** A beginning course intended for students with no previous knowledge of the language. The skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Portuguese-speaking countries. No. prerequisite. (no credit given to native or heritage speakers.)

**PORT 10203 Portuguese for Beginners 2.** Prerequisite: PORT 10103 or equivalent. Continued study of beginning Portuguese. (No credit given to native or heritage speakers.)

**PORT 20103 Portuguese for Beginners 3.** Prerequisite: PORT 10203 or equivalent. Completion of the beginning-level survey of the Portuguese language. (No credit given to native or heritage speakers.)

**PORT 20203 Intermediate Portuguese.** Prerequisite: PORT 20103 or equivalent. Review, reinforcement, and integration of the skills at the beginning level. This course bridges the beginning level and the next level of intensive study. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

**PORT 30000 Portuguese Study Abroad.** Credits, from 1 to 15, taken at an approved study abroad site. Credits accepted only for graded courses taught in Portuguese.

**PORT 30863 Culture of Brazil.** Prerequisite: PORT 20203 or equivalent. A study of the cultural institutions, both historical and contemporary, that distinguish Brazilian society.

SPAN 10103 Spanish for Beginners. A beginning course intended for students with no previous knowledge of

the language. The skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Spanish-speaking countries. No prerequisite. (No credit given to native or heritage speakers.)

**SPAN 10203 Spanish for Beginners 2.** Prerequisite: SPAN 10103 or equivalent. Continued study of beginning Spanish. (No credit given to native or heritage speakers.)

SPAN 10433 Freshman Seminar in Spanish. Topics may vary each time it is offered.

SPAN 10533 Freshman Seminar in Spanish. Topics may vary each time it is offered.

**SPAN 20103 Spanish for Beginners 3.** Prerequisite: SPAN 10203 or equivalent. Completion of the beginning-level survey of the Spanish language. (No credit given to native or heritage speakers.)

**SPAN 20203 Intermediate Spanish.** Prerequisite: SPAN 20103 or equivalent. Review, reinforcement, and integration of the skills at the beginning level. This course bridges the beginning level and the next level of intensive study. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

**SPAN 30000 Study Abroad.** Credits, from 3 to 15, taken at an approved study abroad site. Credits accepted only for graded courses taught in Spanish.

SPAN 30003 Junior Honors Seminar. Junior honors seminar.

**SPAN 30103 Spanish for Heritage Speakers.** A comprehensive Spanish course for heritage students with proficiency in spoken Spanish but whose formal education has been in English. The course covers all basic language skills, with emphasis on reading and writing taught through literary and cultural readings, compositions, and exams.

**SPAN 30203 Intensive Grammar.** Prerequisites: SPAN 20203 or equivalent. An intensive review of Spanish grammar with emphasis on practical applications of listening comprehension, speaking, reading, and writing.

**SPAN 30303 Conversation.** Prerequisite: SPAN 20203 or equivalent. Development of oral proficiency skills through intensive practice in a wide variety of common situations and topics. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

**SPAN 30401 Conversation Tutorials.** Prerequisite: SPAN 30303 or equivalent. One-credit class; may be repeated for a total of three credits. Small groups reinforce their Spanish speaking skills through talking about everyday topics with a native speaker. Pass/no credit. (No credit given to native or heritage speakers.)

**SPAN 30503 Composition and Reading.** Prerequisites: SPAN 20203 or equivalent. Intensive practice in both writing and reading skills. Includes directed compositions, applications of effective reading techniques and strategies, and a review of grammar. Not recommended for native speakers of Spanish whose education has been in Spanish.

**SPAN 30603 Spanish for the Workplace.** Prerequisites: SPAN 20203 or the equivalent. The vocabulary, grammar, and culture needed in specific professions. Alternating topics, such as Spanish for Business, Spanish for Health Care, Spanish for School Teachers, Spanish for Criminal Justice, etc. May be repeated for credit, as topic changes; maximum of 6 credits.

**SPAN 30803 TCU in Mexico (Language).** Prerequisites: SPAN 20203 or permission. Intensive development of language skills. Taught on site in Mexico. Students should also enroll in SPAN 30813.

**SPAN 30813 TCU in Mexico (Culture).** Prerequisite: SPAN 20203 or by permission. The development of the culture and civilization of Mexico examined through its art, geography, history, customs, music, and politics. Students should also enroll in SPAN 30803. Taught on site in Mexico.

**SPAN 30823 TCU in Spain (Language).** Prerequisite: SPAN 20203 or by permission. Intensive development of language skills. Taught on-site in Spain. Students should also enroll in 30833.

**SPAN 30833 TCU in Spain (Culture).** Prerequisite: SPAN 20203 or by permission. The development of the culture and civilization of Spain examined through its art, geography, history, customs, music, and politics. Taught on site in Spain. Students should also enroll in 30823.

**SPAN 30843 Culture of Spain.** Prerequisite: a 30000-level Spanish language course. A study of the cultural institutions, both historical and contemporary, that distinguish Spanish society.

**SPAN 30853 Culture of Latin America.** Prerequisites: a 30000-level Spanish language course. A study of the cultural institutions, both historical and contemporary, that distinguish the societies of Latin America.

**SPAN 30873 Great Ideas and Events of Spain or Latin America.** The ideas (such as the avant-garde, magical nature, liberation theology, or purity of blood) and events (such as the Spanish Civil War, Islamic Spain, the Conquest of the Americas, or the Spanish-American War) that have changed the outlook of Spanish or Latin American culture. Varying topics. May be repeated for credit, as the topic changes; maximum of 6 credits. May be taught in English or Spanish, depending on the topic.

**SPAN 30903 Seminar on Culture or Language.** Prerequisites: two 30000-level Spanish language classes. Special topics in Hispanic culture or language, such as Religion in Hispanic America, Family in Hispanic America, Dialects of Spanish, or Spanish Pronunciation. May be repeated for credit as the topic changes, up to 6 credits.

**SPAN 40103 Analyzing Literary Texts.** Prerequisites: SPAN 30203 or 30103. Introduction to the techniques of literary analysis, including the learning of analytical vocabulary and concepts, as well as the development of critical thinking skills.

**SPAN 40203 Masterpieces of Spanish Literature.** Prerequisite: SPAN 40103. An introduction to the major works of Spanish literature.

**SPAN 40303 Masterpieces of Latin American Literature.** Prerequisites: SPAN 40103. An introduction to the major works of Latin American literature.

**SPAN 40403 Hispanic Film.** Prerequisite: SPAN 40103. An introduction to major works of Latin American and Spanish film. This course explores the cinematic representations of significant aspects of Hispanic culture while serving as an introduction to film rhetoric, narrative techniques, and terminology.

**SPAN 40503 Many Voices: Seminar.** Prerequisite: SPAN 40103. Special topics in literatures that represent alternatives to the dominant literary currents. Topics may include Hispanic Literature in the US, AfroHispanic Literature, Women Writers, or Contemporary Indigenous Literature. May be repeated for credit as the topic changes, up to 6 credits.

**SPAN 40623 Senior Honors Thesis.** Independent projects in literature or linguistics or cultural studies resulting in a Senior Honors Thesis.

**SPAN 40703 Seminar in Spanish Literature.** Prerequisites: SPAN 40103. Special topics in the literature of Spain such as Moorish Spain, Post-Franco Writers, or Rebels, Lovers, and Madmen. May be repeated for credit as the topic changes, up to 6 credits.

**SPAN 40803 Seminar in Latin American Literature.** Prerequisite: SPAN 40103. Special topics in the literature of Latin America, such as Women Writers, Poetry, Literature of the Mexican Revolution, or Magical Realism.

**SPAN 40970 Directed Research in Spanish.** Prerequisite: permission of department chair. Opportunity for independent study, culminating in a substantial written research project.

**SPAN 40993 Senior Seminar.** Prerequisite: a minimum of two 30000-level Spanish language courses, one course on culture, and two courses on literature. The purpose of this course is to ensure mastery of spoken and written Spanish for students on the verge of graduation. A grade of B or better must be earned in order for the student to graduate with a major in Spanish. With a grade of C, the student may graduate with a minor in Spanish.

**SPAN 50103 Methods of Language Acquisition.** Prerequisite: Junior standing. Current research, theories, and methods for the teaching of language to non-native speakers. This course should be taken prior to the semester of student teaching. Taught in English.

**SPAN 50203 Graduate Study in Hispanic Topics.** Special topics in Hispanic literature, culture, language, or pedagogy. May be repeated for credit, up to 9 credits. Taught in Spanish.

# Women's Studies

## Courses of Instruction

#### Overview

Available as a minor and as an emphasis on B.A. and B.S. degrees.

The minor and the emphasis in Women's Studies are designed to provide students theoretical frameworks for recovering and analyzing women's experience as part of a larger investigation of gender and difference, and to offer opportunities to study disciplines through these frameworks.

Students seeking the minor will complete 18 hours: two required courses (WOST 20003 and WOST 40003) and a choice of four additional courses from an approved list (see below). In choosing these courses, students will take no more than two courses from any single discipline. Students who minor in Women's Studies must choose whether WOST-approved courses in their major discipline will count toward the major OR the minor. No course may count for both.

Students seeking the emphasis in Women's Studies will complete 15 hours: either WOST 20003 or WOST 40003 and a choice of four additional courses from the approved list. Emphasis students may count WOST-approved courses toward both their major and the emphasis, and may also concentrate their WOST electives in a single discipline. Emphasis students in programs requiring a minor MUST complete a minor in another disciplinary field.

**Pass/No Credit Option.** Students minoring in Women's Studies are subject to the pass/no credit policy of their major department.

# **Required Courses:**

WOST 20003 Introduction to Women's Studies: Sex, Gender and the Disciplines.

WOST 40003 Senior Seminar in Women's Studies.

#### **Elective Courses:**

ART 30413 Women and the Visual Arts, 1500-1800

ART 30423 Sex and Modern Art

ENGL 20623 Woman in Literature and Culture

ENGL 30493 Women Poets and Poetic Tradition

ENGL 30613 Women's Lives in Memoir and Fiction

ENGL 30633 Medieval and Early Modern Women Writers

ENGL 30970 Renaissance Witch Literature

ENGL 40533 Seminar in Toni Morrison

HIST 40023 Women's History since 1500

HIST 40033 Witches, Workers and Wives

NURS 30503 Issues in Women's Health

POSC 30103 Topics in American Politic:; Women in Politics

POSC 30403 Topics in Public Law: Gender and Sexual Orientation in Contemporary Law

RELI 30143 Love and Sex in the Biblical World

RELI 30713 Women and Womanhood in Western Religion

RELI 30853 Women in American Religion

RTVF 30983 Women in Film and Television

SOCI 30303 Marriage and Family

SOCI 30743 Men, Women, and Society

See department listings for descriptions.

Approved list of courses is maintained in the AddRan College Office, Reed 107.

Students wishing to have more information are urged to contact one of the members of the advisory committee:

Dr. Claudia Camp (Religion)

Dr. Jean Giles-Sims (Sociology)

Dr. Joanne Green (Political Science)

Dr. Linda Hughes (English)

Dr. Rhonda Keen-Payne (Nursing)

Dr. Nadia Lahutsky (Religion)

Dr. Bonnie Melhart (Computer Science)

Ms. Marcy Paul (Women's Resource Center)

Dr. Priscilla Tate (AddRann, Emeritus)

Dr. Karen Steele (English)

Dr. Mary Volcansek (AddRan)

Dr. Melissa Young (Speech Communication)

## **Courses of Instruction**

WOST 20003 Introduction to Women's Studies: Sex, Gender and the Disciplines. This course will serve as an interdisciplinary introduction to Women's Studies, focusing on major issues, theories, and selected disciplinary applications, for which the idea of gender will provide the unifying theme. Lectures, discussions, and assignments will encourage students to recover and understand the lived experiences of women by studying concepts of gender difference. Readings will facilitate discussion and understanding of differences in age, class, sexual diversity, race, and ethnicity.

**WOST 40003 Senior Seminar in Women Studies.** This is the capstone course for the Women's Studies Minor, and includes classic readings in feminist theory and an independent project. The student pursues the independent project with the guidance usually of one of the faculty members associated with the Women's Studies Program. Other faculty members may participate as approved. These projects can include either 1) a practicum with goals, progress and final reports, or 2) a theory and research project to be agreed to by the faculty member and student.

**WOST 49003 Internship in Women's Studies.** Internships (usually local in Tarrant County) arranged with the consent of the Director of the Women's Studies Program for declared minors, taken on a strictly Pass/No Credit basis. (3 semester hours).

# M.J. Neeley School of Business

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#### Overview

The M.J. Neeley School of Business offers a program of study to prepare its students to contribute to the professional business world and the larger community. The Neeley School emphasizes a unified program of basic studies-humanities, social sciences, natural sciences, mathematics, economics and business. The concept of a balanced curriculum extends to the business studies. Although students may concentrate in a particular field of business, they all study the principles of accounting, ebusiness, finance, entrepreneurial management, information systems and supply and value chain management, and marketing.

A quality curriculum in business fundamentals is of the utmost importance to the Neeley School. The curriculum is developed and implemented by a faculty recognized as scholars and leaders in their respective fields. Regular input is provided by Neeley School corporate partners through advisory groups and frequent classroom visits by executives.

Additionally, the Neeley School seeks to provide its students with the distinctive competencies needed to compete and lead in the business world: effective communication skills, the ability to utilize business technology, an understanding of the global nature of business, and a sense of the value of making ethical business decisions.

The M.J. Neeley School of Business is fully accredited by the American Assembly of Collegiate Schools of Business at both the undergraduate and the graduate levels.

#### Faculty

The men and women on the faculty represent an array of cultural backgrounds and bring to students a rich variety of academic training, teaching experience, research, consulting, scholarly publication, and business and community service. Several faculty members have authored widely-used texts in the field of business.

Teaching is of primary importance; the most senior professors teach at both the undergraduate and graduate levels. Personal contact with students is encouraged through classes of moderate size. Through the use of audio and visual aids, conferences, business case analysis, software applications, and organizational studies, instructional theory is merged with practical and relevant situations.

Research is an important faculty activity. It enables faculty to stay in the forefront of their respective fields. Research activities feed back into the classroom to ensure that today's students will be prepared for the world as it is when they graduate and as it changes over their careers. Faculty research results have been published in many of the leading academic journals.

One of the real strengths of the Neeley School is its relationship with the business community. Numerous local, regional, national, and international organizations make up a vast network of corporate partners that are committed to accomplishing the goals of the Neeley School.

The Neeley School enjoys many benefits as a result of its corporate relationships, including: internship opportunities, part-time and permanent job opportunities, scholarship support, classroom speakers, and mentors.

Perhaps the most visible members of this network are the Neeley School's International Board of Visitors. This distinguished group of executives from across the globe provides valuable feedback and program support and serves as a vital link between the Neeley School and other corporate constituents.

# **International Initiatives**

The globalization of today's business environment dictates that learning experiences can no longer be compartmentalized into "international" and "domestic" arenas. Consistent with this philosophy, the Neeley School incorporates a global perspective throughout the undergraduate curriculum. Whether the students are studying Money & Banking or Sales Management, they will be challenged to consider the topic with an international perspective.

To assist the Neeley School in achieving this end, we have developed several partnerships with universities in Mexico, France, Germany, and Scotland. Through these partnerships, faculty members from each institution are invited to participate in exchange opportunities, serving as guest lecturers in their area of expertise. New Programs are in development that will offer students and faculty short term reciprocal exchanges with partner institutions during the academic year.

We believe that creating globally-minded business leaders goes far beyond mastering the international perspective

of business topics. True appreciation of the global environment requires cultural empathy, knowledge of a variety of languages and political and geographical awareness. To this end, the Neeley School offers the International Emphasis certification program. Through this program, dedicated students can earn a BBA in the major of their choice with an additional "International Emphasis" designation on their transcript. Specific details of the International Emphasis certification may be found on the following pages.

In order for students to think globally, they must become physically global. There is no substitute for experience. The Neeley School supports the many study-abroad opportunities available to TCU students, yet goes one step further. Intensive field seminars such as Summer-In-Germany (4 weeks) and Entrepreneurship in the UK (3 weeks), are coordinated by the Dean's Office. The goal of these partnerships is to expose Neeley School business students to the realities of the corporate environment in other countries. On-site tours and one-on-one interaction with executives from companies are included in these programs. These tours and interactions enable the programs to move beyond traditional "classroom based" exchanges. Students are required to use local transportation and tour historic sites. Hundreds of Neeley School students and dozens of Neeley School faculty have had the opportunity to experience these unique study abroad programs.

#### **Center for Professional Communication**

Through the M. J. Neeley Center for Professional Communication (CPC), the Neeley School offers a unique approach to helping students become proficient in business communication. The Neeley School has been rated consistently by The Princeton Review as one of the best business schools in the country for the development of strong communication skills.

The Center directs activities in the following six programs:

Communication Certification The Certificate is an award of merit presented to students who have participated at a level of excellence in a variety of activities and diagnostics assessed by the CPC.

Neeley School Classroom Support The Center provides assistance to faculty as they incorporate communication skills in their classes. Also, it provides coaching and assistance to students as they develop the business communication skills essential to corporate success.

CPC Technology Initiative The Neeley School encourages students to embrace newer communication technologies in an effort to improve efficiency and effectiveness in their business interactions. To that end, the CPC provides the only video conference center devoted to student use.

CPC Workshops and Clinics The CPC regularly offers noncredit workshops and clinics focusing on specific communication skills such as effective presentations, presentation graphics, dealing with presentation anxiety, collaborative writing, networking, intercultural communication, and many others.

Lifelong Skills Development The Neeley School seeks to develop a commitment to continuous communication skill development. Accordingly, the CPC offers a variety of activities as well as information and referral for other communication resources on campus and in the community.

CPC Communication Culture Initiative A focus on communication is integrated across the curriculum so that assignments within all the functional areas emphasize the communication aspects as well as the content. The Neeley School seeks to model outstanding communication in all its activities.

Communication resources are housed in the M. J. Neeley Center for Professional Communication, located on the first floor of Charles Tandy Hall. Facilities include a modern video conference room. Specialized equipment includes a PictureTel System, a voice-activated camera, cart-mounted document cameras to transmit graphic displays, computers adapted for video transmission, and large-screen monitors. There are five specially equipped videotaping rooms for classroom recording, practice, or private review. The CPC's media station offers specialized graphics software, optical scanning, digital video editing, and hundreds of professional copyright-free business photographs for use in student projects. Selected software training packages are provided by the Center for grammar and style improvement, presentation graphics development, and other computer-assisted instruction.

# **Educational Investment Fund**

The Educational Investment Fund is a once-in-a-lifetime opportunity for students to invest real money while still in college. Approximately 18 students manage over two million dollars in assets of the William C. Conner Foundation. The participants in the Educational Investment Fund do intensive analysis of stocks and bonds and make buy and sell decisions.

The experience gained in the program is comparable to a year's work experience in the eyes of many potential employers and places the TCU graduate in an extremely advantageous job-search position. Hundreds of TCU students have participated in this program over the last 25 years and these ex-members represent a world-wide network of potential contacts for current members.

# Special Scholarships and Awards

For students in accounting, the Accounting Excellence Award of the Texas Society of Certified Public Accountants and the TCU Accounting Department Award for Distinguished Service are granted each spring to outstanding graduating seniors. The Robin Elisa Boyer Memorial Scholarship and the Robert Schumacher Scholarship are awarded annually to seniors entering the Master of Accounting (Mac) Program. Outstanding junior accounting majors may be granted a Petroleum Accountants Society Award, a Deloitte & Touche Award, or the Institute of Management Accountants Award.

The Entrepreneurial Management Department presents three awards annually to outstanding Entrepreneurial Management majors: the Senior Scholar Award based on GPA and leadership contributions, the Outstanding Management Student Award for Leadership and Service sponsored by Texas Industries, Inc. and the Barbara J. Snell Award for Outstanding Leadership sponsored by the North American Mortgage Company.

The E-Business Program makes awards annually to outstanding students majoring in E-Business: the Senior Scholar Award based on GPA and leadership contributions and the Outstanding E-Business Student Award.

The Marketing Department grants eight awards annually to outstanding students: Marketing Senior Scholar Award (highest GPA), Outstanding Marketing Student Award (best overall marketing student), the Hoechst Marion Roussel Sales Management Award, the Earl Dyess Award, the International Marketing Scholar Award, the DSS Research Marketing Research Award (to a student with a strong interest in marketing research), the Marketing Application Project (for student contribution and leadership in the annual class promotional event) and the Marketing Department Excellence Award (student contribution to the field of marketing). Additionally, the TCU chapter of the American Marketing Association sponsors an award for students who demonstrate marketing leadership skills.

The Finance Department recognizes the senior who best exemplifies the ideal of an outstanding finance major with the Achievement Award of The Wall Street Journal. The Fort Worth Mortgage Bankers Association Award is given to a senior pursuing a career in real estate. The Finance Department also awards the "Professor's Award" for excellence in Finance. Additionally, a student is selected from among those participating in the Educational Investment Fund during the past academic year for the Outstanding Educational Investment Fund Student Award.

Awards given by student groups include the Delta Sigma Pi Scholarship Key.

#### **Organizations**

**Alpha Sigma Gamma International Real Estate Society**. The purpose of this society is to recognize and reward superior academic performance in the estate and real estate curricula, to encourage research and teaching in real estate and related fields, and to recognize individuals in real estate and related business areas who exemplify the intelligent and ethical application of real estate knowledge. Student membership is open to undergraduate and graduate students meeting specific academic criteria.

**American Marketing Association.** The TCU Collegiate Chapter of the American Marketing Association is open to all students. The club helps bridge the gap between marketing theory and practice. The club meets every other week, bringing in top companies and recruiters as speakers.

**Beta Alpha Psi.** The purpose of Beta Alpha Psi, national student accounting honor society, is to encourage and foster the ideal of service as basic to the accounting profession; to promote highest ethical standards in the study of accountancy; to develop high moral, scholastic and professional attainments in its members; and to encourage cordial relationships among its members and the accounting profession generally. Students are invited on the basis of scholarship.

**Beta Gamma Sigma.** This national honor society for business students encourages and rewards scholarship and accomplishment among students, promotes education in business, and fosters integrity in the conduct of business operations. Only the top seven percent of juniors and the top ten percent of seniors are invited to join.

**Collegiate Entrepreneurs Club.** CEO! Empowers students through leadership training, professional development, and commitment to the discipline of entrepreneurship. There are on- campus chapter meetings, interesting guest speakers, social gatherings, and a monthly newsletter. Students may attend the national conference and participate in a new business idea competition.

**Delta Sigma Pi.** TCU's chapter of this international fraternity tries to establish closer ties between the business world and the student. Its objectives are to promote a higher standard of business ethics, and to further the civic and commercial welfare of the community. The chapter takes various field trips to industries and sponsors speakers and panels.

**Electronic Business Association.** The mission of the EBA is to further the educational development of undergraduate Electronic Business majors through association with other students, faculty members, potential employers and other influential members of the community, thus cultivating a unified body of students and alumni.

**Financial Management Association.** For students with an interest in finance and related fields, the Financial Management Association provides a means of obtaining career information and access to business executives and faculty.

**Students in Free Enterprise (SIFE).** SIFE is a global, non-profit organization that allows students the opportunity to develop leadership, teamwork and communication skills through learning, practicing and teaching the principles of free enterprise, thereby improving the standard of living for millions in the process. SIFE teaches important concepts through educational outreach projects, including market economics, entrepreneurship, personal and financial success, and business ethics to better themselves, their communities and their countries. Each year, SIFE competitions are held worldwide, drawing together thousands of students and business leaders to pay tribute to these extraordinary educational outreach projects.

**Society for Human Resource Management.** The TCU Student Chapter of the Society for Human Resource Management provides students an opportunity to learn more about the practice of management, and in particular, human resource management. The chapter hosts guest speakers, takes field trips, and attends regional and state professional meetings. The chapter also hosts workshops and panels on a variety of current management topics for the benefit of the entire student body.

#### **Academic Policies**

# **Admission to the Neeley School**

To become a business major, all students must formally apply for admission to the Neeley School. Admission is competitive and is not guaranteed. Students will typically apply in their sophomore year for admission to upper-level courses (most 30000-level or above) in their junior year. All TCU students, or students transferring to TCU who wish to become pre-business students or business majors, must contact the Neeley Student Resource Center regarding admissions policies, procedures, and deadlines.

#### **Academic Review**

The academic records of all pre-business students and business majors are reviewed following submission of grades at the end of the Fall and the Spring semesters. The minimum required TCU cumulative GPA for all pre-business students and business majors is 2.50. Students who do not meet the 2.50 minimum GPA requirement will be subject to the academic review policies of the Neeley Student Resource Center. Please contact the NSRC for additional information.

# **Academic Advising**

Pre-business students in the Neeley School are assigned an academic advisor by the NSRC. Pre-business students who have applied and been accepted as a business major will also be assigned a faculty advisor within their major. The role of the faculty advisor is to provide specific information about the major and career guidance.

The Neeley Student Resource Center is open daily to answer the questions of all prospective and continuing students in the Neeley School. The NSRC coordinates advising, monitors academic progress of students, receives academic appeals, processes all transfer coursework, handles the changing of majors within the Neeley School, works with CLEP Test applications, directs study abroad procedures, and audits intent to graduate forms for graduating business majors. In addition the NSRC coordinates the admission process to the Neeley School of Business.

# Pass/No Credit Option

Pre-business students or business majors may take up to 6 semester hours of courses on a pass/no credit basis. However, upper division business courses (30000-40000 level) may not be taken on a pass/no credit basis and applied to the BBA degree, unless the course is taught only on a pass/no credit basis. Students minoring in business are subject to the pass/no credit option policies of their major department.

## **Course Prerequisites**

Course prerequisites include admission to the Neeley School as a business major, class standing, previous coursework, demonstrated computer skills competency, grades in previous coursework, and/or permission of the instructor. All course prerequisites should be observed and followed when enrolling in a course. The ultimate responsibility for knowing the prerequisite for a course lies with the student and is noted in this Bulletin. Course prerequisites are noted in the Courses of Instruction section of this Bulletin, and are listed on the TCU Registrar's web page <a href="http://www.reg.tcu.edu">http://www.reg.tcu.edu</a>.

#### **Transfer Policies**

#### **Review Process for Transfer Applicants into the Neeley School**

Transfer students must first become pre-business students. Approval is not automatic, and admission to TCU does not guarantee the student admission as a pre-business student. Transfer students should first work with the Neeley Student Resource Center (NSRC) to gain approval to become a pre-business student. Transfer students should also contact the NSRC regarding transfer credits and specific transfer student requirements and guidelines for admission to the Neeley School. Students must apply to become business majors. Admission is competitive and approval is not automatic. Upon acceptance into the Neeley School as a business major, the student may begin taking Upper Division Business courses.

# **Continuing TCU Students Who Want to Transfer Credit From Other Institutions**

Continuing TCU students will sometimes take courses at other universities and then transfer those credits to TCU. TCU requires **prior** written approval of the NSRC to take courses at another school for application to a student's BBA degree. Course credit will not be transferred into the Neeley School if prior approval by the NSRC has not been obtained.

Once a student is in the Neeley School, all business **Lower Division Sequence Requirements** courses, **Upper Division Business Core** and **Major Course Requirements** must be taken at TCU.

# Non-Availability of Evening Programs

Although the Neeley School does offer some courses in the evening, an evening-only program is not available. Students wanting to take only evening courses should be aware that all required courses may not be offered during the evening.

## **Certification for Business Teaching**

The M.J. Neeley School of Business cooperates with the School of Education by offering business courses for the academic specialization requirements for certification of high school business teachers. More information is available through the School of Education.

#### Three-Two Program

Available only to TCU undergraduates in participating TCU colleges and schools, the Three-Two Program allows students to combine a bachelor's degree in a non-business field with the Master of Business Administration (MBA) in only five years.

Students spend their first three years in the AddRan College of Humanities and Social Sciences, College of Science and Engineering, College of Communication, or College of Fine Arts completing the University Curriculum Requirements and the requirements of an approved major. By the end of their third year, Three-Two Program students must complete at least 100 hours in non-business courses, including sufficient coursework in mathematics to satisfy the MBA Program prerequisites. To be considered for admission to the MBA program, Three-Two Program participants must submit the usual MBA application during their third year of study, including scores for the GMAT (Graduate Management Admission Test). Only Three-Two candidates demonstrating superior undergraduate

academic performance and strong GMAT scores will be considered for admission.

If admitted to the MBA Program, the student completes the first 27 semester hours of the MBA program during the fourth year of study. These courses apply to both the undergraduate degree and toward the MBA degree. Candidates should work with their undergraduate academic advisors to determine how the courses will apply to the undergraduate degree (electives, minor requirements, area of emphasis, etc.). At the end of the fourth year, assuming that all other graduation requirements are met, the student earns his or her undergraduate degree. During the fifth year the student completes the remaining 27 semester hours of MBA courses.

# **Academic Appeal Process**

A student seeking an exception from any policy stated in this Bulletin should submit a formal appeal to the director of the NSRC for consideration. The Neeley School regards the appeal to be a professional communication and will review it based on that expectation. Please contact the NSRC for more information regarding the appeal process.

#### **Courses of Instruction**

# Accounting

**ACCT 20153 Principles of Financial Accounting.** 3 hours. Prerequisites: Sophomore standing. A study of the elementary concepts of financial accounting, emphasizing the measurement, recording and reporting of financial information according to generally accepted accounting principles.

**ACCT 20163 Principles of Managerial Accounting.** 3 hours. Prerequisite: ACCT 20153, and sophomore standing. Basic measures, techniques and approaches used by decision makers within both profit-making and not-for-profit organizations. Accounting and economic concepts of cost are studied in relation to performance measurement, planning, and both long- and short-term planning and decision-making, as are the common systems of product costing.

**ACCT 30153 Intermediate Financial Accounting I.** 3 hours. Prerequisites: ACCT 20163 and at least a "C" grade in 20153 and 20163, and must be a Business major or minor. In-depth study of the theory, principles, and procedures of the measurement, recording, and reporting of financial accounting information according to generally accepted accounting procedures. Intermediate I focuses on assets and their related income counterparts.

**ACCT 30163 Cost Accounting.** 3 hours. Prerequisite: ACCT 20163 and at least a "C" grade in 20153 and 20163, and must be a Business major. Cost accounting fundamentals, the use of standard costs and budgets for planning and controlling operations, and use of cost information for special decisions and long-range planning. Spring only.

**ACCT 30253 Intermediate Financial Accounting II.** 3 hours. Prerequisites: ACCT 30153 and at least a "C" grade in ACCT 20153, 20163, and 30153, and must be a Business major. In-depth study of the theory, principles and procedures of the measurement, recording, and reporting of financial accounting information according to generally accepted accounting procedures. Intermediate II focuses on equities and the related asset and income counterparts.

**ACCT 30303 Introduction to Federal Taxation.** 3 hours. Prerequisites: ACCT 20153, and must be a Business major. A technical examination of current federal income tax provisions with primary emphasis given to the taxation of individuals and secondary emphasis afforded the taxation of other entities. Designed to provide accounting majors with the knowledge and skills required to successfully evaluate the specific income tax implications of various fact situations.

**ACCT 40003 Senior Honors Research Paper.** 3 hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation of a research paper in the student's area of concentration in business under the direction of an assigned staff member.

**ACCT 40013 Professional Accounting Internship.** 3 hours. Prerequisites: senior standing and admission to the MAc Program, and must be a Business major. A full-time internship with a public accounting firm, corporation, or governmental agency allowing the student to gain professional experience that will help integrate the theory and practice of accounting.

**ACCT 40153 Advanced Accounting.** 3 hours. Prerequisites: ACCT 30253, at least a "C" grade in ACCT 20153, 20163, 30153, and 30253 and senior standing, and must be a Business major. Intensive study of financial accounting focusing on special entity issues, such as proprietorships, partnerships, not for profit organizations, branch operations, and consolidation procedures, including foreign operations. Fall only.

**ACCT 40223 Information Systems and Control.** 3 hours. Prerequisites: ACCT 30153, INSC 20263. At least a grade of "C" in each prerequisite course, and must be a Business major. Systems analysis methodology and current developments in computer-based management information systems. Special emphasis is placed on subsystems relating to accounting information and the concepts of internal control as they relate to the design and audit of accounting information systems. Fall only.

**ACCT 40970 Special Problems in Accounting.** (1-6 sem. hrs.) This course may be repeated for credit, and must be a Business major.

#### Business

**BUSI 10013 Contemporary Perspectives in Business.** 3 hours. Prerequisite: 54 hours or less. Provides an overview of the theories, principles, practices and institutions that produce the goods and services and create most of the economic activity in modern societies.

**BUSI 10970 Special Topics in Business.** Special Topics in Business. (1-6 semester hours) This course may be repeated for credit.

**BUSI 20153 Ethical Decision Making.** Prerequisites: Sophomore standing, MANA 20153. This course will provide business majors with awareness of ethical issues likely to be encountered in a business context and understanding of the ethical frameworks and tools available to address ethical issues in business. One key focus will be on applying those frameworks to resolve ethical conflicts in business.

**BUSI 20173 Foundations in Business.** 3 hours. Prerequisite: ACCT 20153. This course will provide business majors with key fundamental skills necessary for success in upper division business courses as well as a career in business. Topics to be covered include: career aptitude assessment, job search skills, business research & writing skills, business history, teaming skills and interdependence of business functional areas.

**BUSI 20970 Special Topics in Business.** Special Topics in Business. (1-6 semester hours) This course may be repeated for credit.

**BUSI 30833 Foundations of Leadership.** 3 hours. Prerequisite: BUSI 20153 with grade of "C" or better, and must be a Business major. Changes in the business environment have underscored the vital role that effective leadership plays in not only helping organizations survive, but to be self-determining and prosperous as well. This course is designed to help students learn both about leadership and about how to be more effective as a leader of others.

**BUSI 30843 Interpersonal Leadership Skills.** 3 hours. Prerequisite: BUSI 30833 with a grade of at least "C," and must be a Business major. A developmental approach to building skills essential for effective leadership of individuals in today's organizations. This course will focus on cultivating such skills as self-awareness, stress and time management, empowerment and delegating, communication and listening, performance coaching and counseling, motivation, feedback and discipline, and responding to conflict. Learning through discussion, active application, and experiential exercises will be emphasized.

**BUSI 40013 Business Internship.** 3 hours. Prerequisites: Completion of Neeley School lower division core and permission of instructor. Students gain practical exposure to business through participation in an internship in a business or community organization. Emphasis is placed on the development of applied skills in one or more of the business disciplines. Students learn about organizational realities and work demands.

**BUSI 40833 Team Leadership Skills.** 3 hours. Prerequisites: BUSI 30833 with a grade of at least "C," and must be a Business major. A developmental approach is taken in this course to build critical skills that support effective team leadership in today's organizations. This course will focus on introducing and cultivating skills such as team building, group process facilitation, dialogue, meeting management, and conflict resolution. Learning through active application and experiential exercises will be emphasized.

**BUSI 40843 The Leadership Challenge.** 3 hours. Prerequisites: A business major, and BUSI 30843, and BUSI 40833 with at least a grade of "C" and departmental permission. This course is the capstone for the Leadership Emphasis program. It will cover content associated with what it takes to successfully lead change efforts. As such, it will cover topics such as overcoming complacency, creating and communicating new direction, development support for leadership initiatives, dealing with resistance, among others. In addition, students will be given a "leadership challenge" in an assigned field placement where they will be expected to use what they've learned in leadership courses to lead a project to a successful completion. Class sessions will help students relate their field experience to topic coverage in this course as well as to other courses in the Leadership emphasis program.

BUSI 40970 Directed Study. Directed Study

#### **Finance**

FINA 10433 The Contemporary Investor: Freshman Seminar in Finance. Freshman Seminar in Finance.

**FINA 30153 Financial Management.** 3 hours. Prerequisite: Two semesters of accounting and junior standing, and must be a Business major or minor. Decision making in the financial environment. Emphasis on the acquisition and optimum management of funds. The relationship between financial management and economics, accounting, law and various functional areas of business is stressed. Working capital management, capital budgeting, short- and long-term financing, investment analysis and related topics.

**FINA 30203 Money and Banking.** 3 hours. Prerequisite: ECON 10223 and 10233, and prior or concurrent enrollment in FINA 30153, and must be a declared Business major. Nature, function, and operations of our money and banking system. Modern monetary and banking theory, monetary policy, and their relationship to domestic and international economic and financial problems and issues. Also listed as Economics.

**FINA 30213 Investments I.** 3 hours. Prerequisite: FINA 30153 with a grade of at least "C," and must be a Business major. Investment management from the perspective of the individual investor. Financial analysis of stocks, bonds, and other financial instruments. An examination of the securities markets and the trade-off between risk and return. Attention to contemporary investment problems.

**FINA 30233 Investments II.** 3 hours. Prerequisites: FINA 30153 and FINA 30213 with a grade of at least "C" in each course, and must be a Business major. A survey of the development and economic functions of options and futures and their markets. Includes development of pricing models, trading strategies, and portfolio management considerations.

**FINA 30303 Insurance.** 3 hours. Prerequisite: Must be a Business major. Fundamentals of major types of insurance, including life, fire, accident and health, automobile, worker's compensation, transportation, and fidelity and surety bonds. Designed to acquaint the student with the general principles of insurance and their application to personal and business situations.

**FINA 30313 Real Estate Principles.** 3 hours. Prerequisite: Must be a Business major. Introduction to real estate principles and practices, activities of real estate brokers and operators, transfer of real property and real estate securities, essentials of real estate law, practices incidental to ownership and control of real property.

**FINA 30623 Real Estate Valuation.** 3 hours. Prerequisite: FINA 30313 with a grade of at least "C," and must be a Business major. Theory, methods and principles of valuation; cost, market and income approaches to value; the appraisal process applied both to residential and commercial property.

**FINA 40003 Senior Honors Research Paper.** 3 hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation of a research paper in the student's area of concentration in business under the direction of an assigned staff member.

FINA 40153 Advanced Financial Management. 3 hours. Prerequisite: FINA 30153 and FINA 30203 and credit

for, or concurrent enrollment in FINA 30233, and must be a Business major. An advanced course in the application of the theory of corporate finance to real problems in business. Taught primarily by the case method, topics include financial analysis and planning, forecasting the financial needs of a firm, capital expenditure analysis, capital structure and distribution policies, merger and acquisition analysis, and corporate restructuring. Emphasis is placed on the effects of the firm's financial and operating decisions on the value of the firm's securities in financial markets.

**FINA 40183 Educational Investment Fund.** 3 hours. Prerequisite: FINA 30153 and FINA 30213, and must be a Business major. Admission by approval of the dean of the Neeley School. Participation in the operation of the Educational Investment Fund student-managed investment portfolio.

**FINA 40193 Educational Investment Fund.** 3 hours. Prerequisite: FINA 30153 and FINA 30213, and must be a Business major. Admission by approval of the dean of the Neeley School. Participation in the operation of the Educational Investment Fund student-managed investment portfolio.

**FINA 40313 Management of Financial Institutions.** 3 hours. Prerequisite: FINA 30153 and 30203 with a grade of at least "C" in each course, and must be a Business major, or consent of instructor. Problems of commercial banks and financial institutions, primarily from the perspective of the management of an individual institution, with emphasis on formulating appropriate policies concerning the asset, liability, and capital management of the firm.

**FINA 40603 Real Estate Law.** 3 hours. Prerequisite: MANA 20153 and FINA 30313 with a grade of at least "C" in each course, and must be a Business major, or consent of instructor. Acquisition and transfer of property; rights of adjoining owners; mortgages and liens; abstracts of title; recording; drafting of deeds, leases, mortgages, options. Especially for real estate salesmen and brokers, owners, tenants.

**FINA 40613 Real Estate Finance and Investment Analysis.** 3 hours. Prerequisite: FINA 30153 with a grade of at least "C," and must be a Business major, or consent of instructor. Investment value based on the present value of expected cash flows. Includes computer applications, the current income tax laws for real estate, mortgage law, sources of real estate credit including primary and secondary markets, government programs, and mortgage loan underwriting.

**FINA 40623 International Finance.** 3 hours. Prerequisite: FINA 30153 and FINA 30203 with a grade of at least "C" in each course, and must be a Business major, or consent of instructor. The international monetary system; speculation, hedging and arbitrage in foreign exchange and financial markets; financial management of the multinational firm; Eurocurrency and capital markets; and international banking.

FINA 40970 Special Problems in Finance. (1 - 6 sem. hrs.) This course may be repeated for credit.

**INSC 10013 Business on the Web.** Prerequisites: None. Students who have completed INSC/EBUS 30713 will not be given credit for this class. Through lecture, hands-on, and interactive activities, this course examines the basics, tools, and other important issues surrounding the development of a company on the web. The students will use software to gain knowledge and experience with the Internet and create a web presence.

## **Information Systems and Supply Chain Management**

**INSC 10533 Freshman Seminar in EBusiness.** Prerequisites: Open to entering freshmen only. Topics may vary each time it is offered.

**INSC 20153 Statistical Analysis.** 3 hours. Prerequisite: MATH 10283 or 10524. Basic statistical theory used in analysis and interpretation of numeric data. Topics covered include descriptions of frequency distributions, determination of discrete and continuous probabilities, estimation and tests of hypotheses, time series analysis, and regression and correlation analysis.

**INSC 20263 Information Systems in an eEnterprise.** 3 hours. Prerequisites: Sophomore standing and completion of technology skills assessment for Neeley School. This course focuses on the planning, development and implications of business information systems. Emphasis is on information technology in a network environment.

**INSC 30153 Operations and Supply Chain Management.** 3 hours. Prerequisites: INSC (DESC) 20153 or equivalent and junior standing, or consent of the instructor, and must be a Business major or minor. An introduction to the management of the production operations in the context of supply chains in manufacturing and services. Examines the issues related to produce and process design, production planning and inventory control, quality management and intra- and inter-firm coordination.

**INSC 30313 Concepts in Supply Chain Management.** 3 hours. Prerequisites: Must be a Business major. Grade of 'C' or higher in MARK 30153 or concurrent enrollment. Supply Chain Management (SCM) has grown significantly in recent years, and offers great opportunities to improve business performance. This course provides an overview of the major concepts associated with SCM. Topics include logistics, transportation, procurement, demand forecasting, SC operations, information technology, and global SCM.

**INSC 30353 Regression Analysis.** 3 hours. Prerequisite: INSC (DESC) 20153 or equivalent, and must be a Business major. Simple and multiple linear regression analysis. Applications to business and economics. Additional topics include residual analysis, regression diagnostics, use of dummy variables, analysis of variance, and time series regression. Use of computer statistical packages is stressed.

**INSC 30713 e-Business Programming and Applications.** 3 hours. Prerequisites: INSC (EBUS) 20263 with a grade of "C" or better; INSC (EBUS) 10013 with a grade of "C" or better, or concurrent enrollment. Students will be introduced to various programming languages that are pertinent to the building of web-based information systems. Through a hands-on approach they will apply these eBusiness technologies to solve an eBusiness problems This course may not be taken pass/fail.

**INSC 30723 e-Business Planning.** 3 hours. Prerequisites: INSC (EBUS) 20263 with a grade of "C" or higher; INSC (EBUS) 10013 with a grade of "C" or higher, or concurrent, or by departmental permission. Students will learn how to analyze a business, division, or department for a Web presence. They will investigate how the eBusiness fits into the traditional roles for a business or industry. They will consider how the Internet impacts the business. Students will also apply communication skills (written, face-to-face, and presentation) in this course.

INSC 30823 Data for eBusiness. 3 hours. Prerequisites: INSC (EBUS) 30713 with a grade of "C" or better and

INSC (EBUS) 30723 with a grade of "C" or better. Students will learn database principles. They will also be exposed to eBusiness data management concepts, such as data warehousing, the use of consumer data for marketing, the availability of financial data on the Internet, and data and information reporting.

**INSC 30833 eBusiness Development.** 3 hours. Prerequisites: INSC (EBUS) 30713 with a grade of C or better; INSC (EBUS) 30723 with a grade of C or better. Students will use the results of the eBusiness analysis to design and implement a Web presence. They will learn traditional project management techniques in this process. They should look at several different system development methods possible with eBusiness applications: SDLC, RAD, JAD, etc. Students will use team building, conflict, diversity, conflict resolution and other team applications as appropriate in this course.

**INSC 40003 Senior Honors Research Paper.** 3 hours. Prerequisite: Honors section of MANA 30153, and must be a Business major. Preparation of a research paper in the student's area of concentration in business under the direction of an assigned staff member.

**INSC 40013 eBusiness Professional Internship.** 3 hours. Prerequisites: INSC (EBUS) 30823 with a grade of "C" or better; INSC (EBUS) 30833 with a grade of C or better, and senior standing. A 320-hour internship with a corporation, a non-profit or governmental agency allowing the student to gain professional experience that will help integrate the theory and practice of information systems. Internships are during the summer following the completion of the prerequisites and must be approved by the department chair or another appointed designee.

**INSC 40313 Logistics and Transportation.** 3 credit hours. Prerequisite: Grade of C or better in INSC 30313, and must be a Business major. Logistics can be defined as "the management of products, services and information flows from the original source of raw materials to the final customer in a manner which produces customer satisfaction and value". This course will cover many aspects of business logistics: supply chain management, demand management, customer service, procurement, inventory management, warehousing, global logistics, transportation and information systems. Logistics and Transportation for many companies have become a source of competitive advantage and this course will explore some of the reasons why.

**INSC 40323 Procurement/Supply Management.** 3 credit hours. Prerequisites: Grade of C or better in INSC 30313, and must be a declared Business major. This course focuses on the key issues related to the strategic implications of sourcing of products, the purchasing of goods and services, and the role of purchasing in a supply chain context. It provides students with an understanding of purchasing processes, issues, and best practices. Emphasis areas include supplier quality, relationship management, and global sourcing.

**INSC 40333 Supply Chain Information Technologies.** 3 credit hours. Prerequisites: Grade of 'C' or higher in INSC 30723 and INSC 30313, and must be a declared Business major. Effective supply chain management is heavily dependent on state-of-the-art analytical tools and information technologies. This course will provide an understanding of supply chain models and practical tools for effective decision making and integrated supply chain management. The emphasis will be on exploring analytical tools and off-the-shelf information technology packages that have been proven effective in multiple industries, and on identifying and understanding implementation and utilization requirements associated with effective application of such tools.

**INSC 40343 Supply Chain Planning and Coordination.** 3 credit hours. Prerequisites: Must be a declared Business major; a grade of 'C' or better in INSC 30153, and INSC 40313, 40323, 40333. This course serves as the capstone course for a major in supply and value chain management. It provides an in-depth study of the practice of supply chain management in manufacturing and service industries. Supply chain management is the integration of the activities associated with the flow and transformation of goods from the raw materials stage through to the end user, to achieve a sustainable competitive advantage. This course provides insights into the conceptual foundations of supply chain planning and coordination and provides an integrative experience relating strategic concepts and tools to meeting the challenges in the management of supply chains. Topics include management of operations and logistics networks, material flows and the role of information systems technology.

**INSC 40803 eEnterprise Architecture.** 3 hours. Prerequisites: INSC (EBUS) 30823 with a grade of C or better; INSC (EBUS) 30833 with a grade of C or better. Students will examine the information technology infrastructure necessary to support business functions in organizations. Topics include telecommunications, computer networking, server infrastructure, and staffing requirements.

**INSC 40813 eBusiness Consultancy.** 3 hours. Prerequisites: INSC (EBUS) 40803 with a grade of "C" or better. Using a real company, students will undertake consulting projects. They will start with the consultancy phases and complete the project through implementation. While the students are building and implementing the system they will be learning about the newest tools, topics and trends for use in the rapidly changing Internet environment. A team approach will be used to develop creative ideas and observe the processes and factors crucial to a successful eBusiness.

INSC 40823 E-Business Topics and Trends. 3 hours. Prerequisites: INSC (EBUS) 40013 with a grade of C or better. Provides a more advanced inquiry into Electronic Business. This is a continuation of INSC (EBUS) 40813. 3 hours. This is the second of a two-course sequence INSC (EBUS) 40813 and INSC (EBUS) 40823. Using a real company, the first course, INSC (EBUS) 40813 starts the consultancy phases and the second course, INSC (EBUS) 40423 completes the eBusiness analysis phase. While the students are building and implementing in the second semester they will be learning about the newest tools, topics and trends for use in the rapidly changing Internet environment. This two-semester sequence will allow them the extra time needed to complete the entire process of creating a real corporate Web presence from beginning to end. Students will work in teams that will last the entire two semesters. A team approach will be used to develop creative ideas and observe the processes and factors crucial to a successful eBusiness. The topics and trends section of this course will be constantly changing to reflect the dynamics of the Internet.

**INSC 40970 Special Problems in Information Systems and Supply Chain Management.** Special Problems in Information Systems and Supply Chain Management

# Management

MANA 10533 Interpersonal Influence in Business. Topics may vary each time it is offered.

**MANA 20153 Legal and Social Environment of Business.** 3 hours. Prerequisite: Sophomore standing. Legal and social aspects of business. Legal aspects and social impacts of common business transactions. The course is

designed to assist the future businessman in the design and implementation of policies within the legal and social framework and to create awareness of the government pitfalls which would require professional advice.

MANA 20970 Special Problems in Management. (1-6 sem. hrs.) This course may be repeated for credit.

**MANA 30153 Organizational Management.** 3 hours. Prerequisite: Junior standing, and must be a declared Business major or minor. Tasks of the manager are studied in the context of his/her role as an administrative decision maker. Emphasis placed on understanding the organization as a system where the manager needs to examine a variety of variables in order to arrive at problem solutions. Management processes, system concepts, models for decision making, and behavioral concepts involving motivation, leadership, group activity, conflict and change are covered.

**MANA 30203 Human Resource Management.** 3 hours. Prerequisite: MANA 30153 with a grade of at least "C," and must be a Business major. The philosophy and major questions of policy in human resource management. Specific techniques, including job analysis, recruitment, selection, equal employment opportunity, training, performance appraisals; discipline, compensation, collective bargaining, and industrial relations are introduced to illustrate current practice, and are related directly to questions of policy or objectives.

**MANA 30533 Introduction to Entrepreneurship.** 3 hours. Prerequisites: ACCT 20153, ACCT 20163, MANA 30153 with at least a grade of "C", and MARK 30153; must be a Business major. Offers a broad view of different entrepreneurial efforts from small business to venture capital-backed high growth potential ventures. Particular attention is focused on the generation of ideas for new businesses and establishing their feasibility. This course is a prerequisite for more advanced entrepreneurship studies.

**MANA 40003 Senior Honors Research Paper.** 3 hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation of a research paper in the student's area of concentration in business under the direction of an assigned staff member.

**MANA 40123 Managing the Emerging Venture.** 3 hours. Prerequisites: ACCT 20153, ACCT 20163, MARK 30153, MANA 30153, with a grade of at least a "C" in MANA 30153, and must be a Business major. Includes coverage of aspects involved in operating a small business including accounting, financial controls, management and human resource practices, marketing and customer development, production, service level quality, and legal issues.

**MANA 40143 New Venture Planning.** Prerequisites: MANA 30533 (40133) and FINA 30153 with at least a grade of "C," and must be a Business major. Students will work through the process of developing a business plan for an entrepreneurial venture. The focus is on strategic assessment and preparing plans capable of attracting necessary financing for new entrepreneurial ventures.

**MANA 40153 Strategic Management.** 3 hours. Prerequisite: Senior standing, Business major, MANA 30153, MARK 30153, FINA 30153, and INSC 30153. Students are strongly encouraged to enroll in this class during their final two semesters before graduation. This is the final integrating course for the senior business student. The policies and problems of management with respect to coordination of production, finance, marketing, human resources and accounting in a going concern under conditions of uncertainty.

**MANA 40163 Ventures in Transition.** 3 hours. Prerequisites: A business major and MANA 30533 with at least a grade of "C". This course examines the changes likely to affect an entrepreneurial venture as it matures. The focus of the course is on how to effectively manage the growth of an entrepreneurial venture. Other implications of growth will also be discussed, such as changes in the strategy of the venture, performance downturns, sale or liquidation of the business, acquisition of another business, and initial public stock offerings.

**MANA 40223 Cross-Cultural Management.** 3 hours. Prerequisite: MANA 30153 with a grade of at least "C," and must be a Business major. Cross-cultural management knowledge and skills. Understanding and managing culturally based differences and similarities within and between multinational enterprises in the contemporary world. Topics include culture, legal/political structures, ethics/social responsibility, communication, negotiation, expatriation/repatriation, trade agreements, and workforce leadership.

**MANA 40753 Managing Business Ethics.** 3 hours. Prerequisites: MANA 30153 with a least a grade of "C", and must be a declared business major. This course addresses ethical conduct and social responsibility in organizations. A multi-level approach to ethical decision-making is explored. Students will apply individual, managerial, and organizational analyses to ethical dilemmas faced in the conduct of business.

MANA 40970 Special Problems in Management. (1-6 sem. hrs.) This course may be repeated for credit.

MARK 10533 Freshman Seminar in Business: Interpersonal Influences in Business. 3 hours. Prerequisite: First semester freshman only. Developing interpersonal influence skills for business. Includes coverage of interpersonal skills involved in personal selling, leadership, and management. Specific components include fundamentals of selling, the value of selling, making a sales presentation, leadership styles, building consensus, building commitment, team building, conflict resolution, negotiation, and ethical issues of interpersonal influence.

**MARK 30153 Marketing Management.** 3 hours. Prerequisite: Sophomore standing, and must be a Business major or minor. The processes in our society by which needs and wants of consumers are anticipated and satisfied. An examination of a systems approach to and analysis of the movement of goods from the point of production to the point of consumption.

**MARK 30233 Business Marketing.** 3 hours. Prerequisite: Grade of "C" or higher in MARK 30153, and must be a Business major. Explores the dynamics of business-to-business transactions. The course covers demand estimation, industry sales forecasting, competition analysis, organizational buying and business-to-business marketing strategies.

**MARK 30253 Selling and Sales Management.** 3 hours. Prerequisite: Grade of "C" or higher in MARK 30153, and must be a Business major. An examination of the basic principles involved in personal selling and the administration of this function in the organization. Emphasis is placed on the sales executive's job, the duties and responsibilities, and the various roles played as an important participant in the making of marketing decisions.

**MARK 40003 Senior Honors Research Paper.** 3 hours. Prerequisite: Honors Section of MANA 30153; MARK 30153 with a grade of at least "C," and must be a Business major. Preparation of a research paper in the student's area of concentration in business under the direction of an assigned staff member.

**MARK 40113 Marketing Research.** 3 hours. Prerequisites: Grade of "C" or higher in MARK 30153; INSC 20153, and must be a Business major. Obtaining market information; orientation in use of information gathered; role of management in initiating market studies and in defining problems; types of research; research design; questionnaire construction; sampling; analysis; motivation research; and product research.

**MARK 40123 Marketing Planning.** 3 hours. Prerequisites: Grade of "C" or higher in MARK 30153, MARK 30233, and must be a Business major. An advanced course in the management of the marketing program. Emphasis is placed on marketing planning, implementation and control. Products goods and services, distribution, price and promotion decisions are examined. Decision analysis concepts are applied using examples and application exercises. The course integrates the various activities of an organization that are used to gain competitive advantage by achieving higher levels of customer satisfaction.

MARK 40203 Marketing Strategy. 3 hours. Prerequisites: Grade of "C" or higher in MARK 30153 and successful completion of MARK 30233, MARK 40123 or concurrent enrollment in MARK 40123; senior standing, and must be a Business major. Taught primarily through case analysis, the emphasis is on the analysis, planning, implementation and control of marketing systems, policies, programs and actions in domestic and international settings. (May be taken concurrently with Mark 40123.)

MARK 40213 International Marketing. 3 hours. Prerequisites: Grade of "C" or higher in MARK 30153; MARK 30233 or concurrent enrollment in Mark 30233, and must be a Business major. This course introduces the field of international marketing and provides a broad perspective from which to explore and examine various aspects of what changes when firms compete internationally. Half the course focuses on unique aspects of the international marketing environment; half concentrates on how the marketing mix is affected by the globalization of markets and competitors.

MARK 40223 Services Marketing. 3 hours. Prerequisite: Grade of "C" or higher in MARK 30153; senior standing, and must be a Business major. The primary objective of this course is to prepare students to be successful marketers in an increasingly service-oriented economy. The course is designed to help students understand the unique characteristics of services, the marketing challenges created by these characteristics, and effective ways to address these challenges. Examines marketing strategies unique to public and private, for-profit and not-for-profit services marketing organizations.

**MARK 40303 Principles of Retailing.** 3 hours. Prerequisite: Grade of "C" or higher in MARK 30153, and must be a Business major. Operation of retail stores with particular attention to store location, arrangement, merchandise classification, store organization, personnel, buying, selling, and controlling stock, operating activities, expense control, budgeting, and problems of general policy.

**MARK 40700 Marketing Study Abroad.** 3 hours. Prerequisite: MARK 30153 and permission of instructor, and must be a Business major. An intensive, on-site study of marketing practices abroad. Sites include Europe and Mexico. This course may be repeated for credit.

**MARK 40970 Special Problems in Marketing.** 1-3 hours. Prerequisites: Grade of "C" or higher in MARK 30153; overall and major GPA of 2.5 or higher; permission of instructor and chairperson, and must be a Business major. This course may be repeated for credit.

# Bachelor of Business Administration Degree Program

# University Curriculum Requirements

#### Overview

**Admission to the Neeley School.** To become a business major, all students must formally apply for admission to the Neeley School. Admission is competitive and is not guaranteed. Students will typically apply in their sophomore year for admission to upper-level courses (most 3000-level or above) in their junior year. All TCU students, or students transferring to TCU who wish to become pre-business students or business majors, must contact the Neeley Student Resource Center regarding admissions policies, procedures, and deadlines.

- 1. **Declaring Pre-Business.** All students wishing to become business majors should first declare themselves "pre-business students". Students remain pre-business students until being formally admitted to the Neeley School. Before taking upper-division (most 30000-level or above) business courses, all pre-business students must:
  - a. complete the Lower Division Sequence Requirements (see below),
  - b. have a TCU cumulative GPA of at least 2.50,
  - c. have a cumulative GPA of at least 2.50 in those courses designated as Lower Division Requirements (LDRs),
  - d. demonstrate computer skills competency based on Neeley School guidelines,
  - e. go through professional interview
  - f. be formally admitted to the Neeley School. Contact the Neeley Student Resource Center regarding admissions policies, procedures and deadlines.
- 2. **Declaring a Business Major.** After being admitted, students become "business" majors and may then select one of the functional area majors: Accounting, E-Business, Entrepreneurial Management, Finance (or Finance with a Real Estate Concentration), Marketing, or Supply and Value Chain Management. Contact the Neeley Student Resource Center for policies and procedures regarding declaration of major.
- 3. **Declaring an Emphasis.** Business students may complement their major in Accounting, E-Business, Entrepreneurial Management, Finance, (Finance with Real Estate Emphasis), Marketing or Supply and Value Chain Management, by designating an International Emphasis or Leadership Emphasis. Students must satisfy the goals and requirements of the emphasis. Each program provides a structure to recognize students who have achieved a unique combination of experience and academic coursework. A special designation will be placed on the transcript of those students successfully completing the requirements of one of the emphasis programs. Students may also complement their major by pursuing certification in Supply and Value Chain Management.
- 4. **Changing Your Major to Business.** Current TCU students who wish to change their major to business are expected to meet all degree requirements and must first become a pre-business student. Upon completion of the pre-business student requirements (described above), students may then formally apply for admission to the Neeley School to become a business major. Contact the Neeley Student Resource Center regarding admissions policies, procedures, and deadlines.
- 5. **Transfer Students.** Transfer students must first become pre-business students. Approval is not automatic, and admission to TCU does not guarantee the student admission as a pre-business student. Transfer students should first work with the Neeley Student Resource Center (NSRC) to gain approval to become a pre-business student. Transfer students should also contact the NSRC regarding transfer credits and specific transfer student requirements and guidelines for admission to the Neeley School. Students must apply to be business majors. Admission is competitive and approval is not automatic. Transfer students are expected to meet all degree requirements. Please see the Transfer Policies section listed under Academic Policies.
- 6. **TCU Cumulative GPA of 2.50 Required for Admission and Graduation.** A TCU cumulative GPA of at least 2.50 is required, but does not guarantee admission to the Neeley School. Furthermore, a 2.50 TCU cumulative GPA is required for graduation with a BBA degree. Any business major whose GPA falls below 2.50, must appeal to the Senior Associate Dean of the Neeley School to graduate.
- 7. **Demonstrated Computer Skills.** To become a business major in the Neeley School, all pre-business students must demonstrate computer skills competency based on Neeley School guidelines. For information about the specific requirements, please contact the Neeley Student Resource Center.

# **ALL TCU BUSINESS / PRE-BUSINESS STUDENTS**

# Entering Freshmen

- Declare Pre-Business
- Begin taking Lower Division Sequence Requirements

Suggested Sequence of Courses: Applies to all pre-business majors. Students considering a special emphasis program should discuss course sequencing with an academic advisor.

Freshman Year	Freshman Year
Fall	Spring

ENGL 10803 Introductory Composition	INSC 20153 Statistical Analysis
MATH 10283 Intro. Applied Calculus	ECON 10233 Intro. Macroeconomics
ECON 10223 Intro. Microeconomics	MANA 20153 Legal Environment of Business
UCR Requirements (3 credits)	UCR Requirements (3 credits)
UCR Requirements (3 credits)	UCR Requirements (3 credits)
Total Credits 15	Total Credits 15

# Sophomores

- Continue taking Lower Division Sequence Requirements.
- Suggested Sequences of Courses:

Sophomore Year Fall	Sophomore Year Spring
ENGL 20803 Intermediate Composition	ACCT 20163 Principles of Managerial Accounting
ACCT 20153 Principles of Financial Accounting	BUSI 20173 Foundations in Business
INSC 20263 Information Systems in an eEnterprise	BUSI 20153 Ethical Decision Making
UCR Requirement (3 credits)	UCR Requirement (3 credits)
UCR Requirement (3 credits)	UCR Requirement (3 credits)
Total Credits 15	Total Credits 15

- Formally apply for admission to the Neeley School by submitting the on-line application to the Neeley Student Resource Center. To qualify students must:
  - have at least a 2.50 cumulative TCU GPA
  - o have at least a 2.50 LDR cumulative GPA
  - o demonstrate computer skills competency based on Neeley School guidelines

See the Neeley Student Resource Center for other requirements and deadlines.

# Juniors/Formally Admitted to the Neeley School

- Declare one or more major(s) in Accounting, E-Business, Entrepreneurial Management, Finance (or Finance with a Real Estate Concentration), Marketing or Supply and Value Chain Management.
- Begin Upper Division Business Core Courses.
- Contact the Neeley Student Resource Center for Suggested Sequence of Courses by Major.

#### Seniors

- Complete Upper Division Business Core
- Complete Major Course Requirements
- Strategic Management (MANA 40153) must be taken after completion of all the upper division core
  requirements. (Students may enroll in MANA 40153 concurrently with only one other upper division core
  course by permission of the Management Department.) Recommended to be taken in the last 2

semesters.

• Contact the Neeley Student Resource Center for Suggested Sequence of Courses by Major.

Students must have a 2.50 minimum cumulative (TCU) GPA to graduate with a business degree.

## Transfer Students

- Declare Pre-Business
- Begin taking Lower Division Sequence Requirements
- Contact the Neeley Student Resource Center regarding formal application to the Neeley School of Business. To qualify students must:
  - have at least a 2.50 cumulative TCU GPA
  - o have at least a 2.50 LDR cumulative GPA
  - o demonstrate computer skills competency based on Neeley School guidelines

Transfer students who have been officially admitted to the Neeley School may:

- declare a Major in Accounting, E-Business, Entrepreneurial Management, Finance (or Finance with a Real Estate Concentration), Marketing or Supply and Value Chain Management
- Begin Upper Division Business Core Courses
- Contact the Neeley Student Resource Center for Suggested Sequence of Courses by Major.

Progression Through Neeley School Requirements Bachelor of Business Administration Degree

Declare Pre-Business Major (Freshman/Sophomores/Transfer Students)

**Complete Lower Division Sequence Requirements (LDRs)** 

Apply to Neeley School of Business

Declare a Major in Accounting, E-Business, Entrepreneurial Management, Finance (Or Finance with a Real Esate Concentration),

Marketing or Supply and Value Chain Management

(usually Junior)

Complete 30000-Level Business Core and Major Course Requirements (Junior/Senior)

Complete MANA 40153 after completion of all the upper division core requirements. (Students may enroll in MANA 40153 concurrently with only one other upper division core course by permission of the Management Department.)

**University Curriculum Requirements** 

**Components of the BBA Degree** 

The BBA program in the Neeley School of Business is composed of four blocks of coursework. (see insert below)

TCU Requirements for Bachelor of Business Administration

# University Core Curriculum (UCR) 47 hours Business Core Curriculum 36 hours Major Course Requirements 18-24 hours Free Elective Courses Hours will vary depending upon Major(s)

Of the four blocks of coursework, the University Core and the Business Core are required of all business students regardless of their major. The Major Course Requirements and the number of Free Elective hours vary, depending on choice of major(s).

**A. University Curriculum Requirements** (47 semester hours) Students seeking a Bachelor of Business Administration degree must fulfill all of the University Curriculum Requirements listed below:

- I. Foundations: 9 semester hours.
- a. Writing: 6 hours (ENGL 10803, 20803)
- b. Mathematics: 3 hours (MATH 10283 or 10524)\*
- \*Credit is not allowed for both MATH 10283 and MATH 10524

II.Explorations: 36 semester hours. For Explorations a. through e. below, students may only earn a maximum of 6 hours from any one department. (i.e. 6 hrs. BIOL, POSC, HIST, SPAN, etc.) No more than 3 hours of optional courses from any one section may be selected.

- a. Physical and Life Sciences: minimum of 6 hours, 6 hours must be in laboratory courses
- b. Social Sciences: minimum of 6 hours to include macroeconomics and microeconomics
- c. Cultural Heritage: minimum of 12 hours
  - 1. Religion Studies: minimum of 3 hours
  - 2. Historical Studies: minimum of 3 hours
  - 3. Critical Inquiry: minimum of 3 hours
  - 4. Fine Arts: minimum of 3 hours
- d. Language and Literature: minimum of 6 hours (Foreign Language or Oral Communication)
  - 1. Foreign Language: minimum of 6 hours, or
  - 2. Oral Communication and Literature: minimum of 6 hours

(Oral Communication: minimum of 3 hours)

(Literature: minimum of 3 hours)

- e. Exploration Options: minimum of 6 hours. Students must take 2 courses from the following 4 areas. Both courses cannot be from the same area.
  - 1. Physical Science or a different Physical Science with Lab
  - 2. Social Science other than an ECON
  - 3. Religion, Historical Studies, Critical Inquiry, Fine Arts, or U.S. Historical Studies
  - 4. Oral Communication, a different Foreign Language, or Literature

Please recall, that for Explorations, students may only earn a maximum of 6 hours from any one department. So, for example, in 1. through 4. above, a student who has already taken 6 hours of biology for their physical/life science requirements, may not take another biology course to fulfill their exploration options requirement.

- III. Physical Education Requirements: 2 semester hours.
- a. One (1), 1 semester hour PE Activity and one (1), 1 semester hour PE Health Concepts, or
- b. Two (2), 1 semester hour PE Health Concepts

With the exception of the Lower Division Sequence Requirements, students are not expected to complete one entire group or block of courses prior to proceeding to the next block. Instead, the courses are woven together into an integrated sequence of learning steps.

B. Lower Division Sequence Requirements (36 semester hours) Lower Division Sequence Requirements must be completed the semester in which the student submits his/her application for admission to the Neeley School and before beginning Upper Division Business Core courses (30000-level or above, except MARK 30153).

# Lower Division Sequence Requirements:

- 1) Successful completion of the 12 required courses (13 required courses effective for students entering TCU fall 05):
  - ENGL 10803 Introductory Composition
  - ENGL 20803 Intermediate Composition
  - BUSINESS MATH (effective for students entering TCU fall 05)
  - MATH 10283 Introductory Applied Calculus (UCR)
     \* or Math 10524 Calculus 1 (UCR)
  - ECON 10223 Introductory Microeconomics (UCR)
  - ECON 10233 Introductory Macroeconomics (UCR)
  - \*\* INSC 20263 Information Systems in an eEnterprise (Business Core)
  - MANA 20153 Legal Environment of Business (Business Core)
  - ACCT 20153 Principles of Financial Accounting (Business Core)
  - ACCT 20163 Principles of Managerial Accounting (Business Core)
  - INSC 20153 Statistical Analysis (Business Core)
  - BUSI 20173 Foundations of Business (Business Core)
  - BUSI 20153 Ethical Decision Making (Business Core)
- \* Credit will not be awarded for both MATH 10283 and MATH 10524.
- \*\* COSC 10203 is not a substitute for EBUS 20263 and can only be used for free elective credit toward a BBA degree.
- 2) Attainment of a minimum grade point average of 2.50 in the Lower Division Sequence Requirements courses, with at least a "C" average in two English composition courses.
- 3) Attainment of a TCU cumulative GPA of at least 2.50 at the end of the sophomore year, defined by the University as the semester or term in which the 53rd semester hour is completed.

### C. Upper Division Business Core Courses.

The Upper Division Business Core Courses (30000-level or above except MARK 30153) are interwoven with the major courses throughout the student's junior and senior years. Business students complete MANA 40153 during the last two semesters.

## **Upper Division Business Sequence Requirements**

- MANA 30153 Organizational Management
- MARK 30153 Marketing Management
- FINA 30153 Financial Management
- INSC 30153 Operations and Supply Chain Management
- MANA 40153 Strategic Management- Must be taken after completion of all other upper division core courses. (Students may enroll in MANA 40153 concurrently with only one other upper division core course by permission of the Management Department.)
- \*\* Students must complete a tentative plan for graduation to be filed with appropriate forms in the Neeley Student Resource Center, preferably by the second semester Junior year.

- D. Major Course Requirements (18-24 semester hours)
  - 1. Each major, Accounting, E-Business, Entrepreneurial Management, Finance (Finance with a Real Estate Concentration), and Marketing or Supply and Value Chain Management, has a different set of major course requirements. These are described in detail in the Neeley School Major Programs section. 2. Students must take 6 hours of Writing Emphasis courses in their major, with the exception of the Finance majors which require 9 hours. Writing Emphasis courses are designated in the Neeley School of Business Major Programs section.

E. Free Electives (credits hours will vary depending on major(s), usually 17-23 credit hours.) Each major has different free elective requirements. For example, Accounting majors have 17 hours of free electives while Marketing majors have 23 hours of free electives. Please refer to the Neeley School Major Programs section for the free elective requirements for each major. Please see an academic advisor in the Neeley Student Resource Center for more information, particularly if selecting more than one major or a major and an emphasis.

# Accounting

#### Overview

Accounting has been called "the language of business." In fact, it is much more. Managers of nearly all organizations, whether business, not-for-profit, or governmental, require accounting information to operate successfully. Financial statements prepared by accountants are used by individuals outside of these organizations to evaluate the performance of management and to make investing, lending, regulatory, and other decisions. Accounting majors are well versed in the preparation, use, and limitations of accounting information and understand business at a very fundamental level. Moreover, they offer knowledge and skills that most organizations require.

A major objective of the BBA program is to provide basic conceptual accounting and business knowledge as a foundation for accounting and business career development. Candidates for the Uniform CPA Examination in Texas must fulfill additional educational requirements. The Master of Accountancy (MAc) degree offered by the Neeley School meets those requirements and is designed for students planning for careers in public accounting or other professional accounting careers.

## Major Course Requirements (24 semester hours)

Specific course requirements (18 semester hours)

ACCT 30153 Intermediate Financial Accounting I

ACCT 30163 Cost Accounting

ACCT 30253 Intermediate Financial Accounting II

ACCT 30303 Introduction to Federal Taxation

ACCT 40153 Advanced Accounting

ACCT 40223 Information Systems and Control

In addition, the student must complete 3 semester hours from the following:

ECON 30223 Intermediate Microeconomics

ECON 30233 Intermediate Macroeconomics

ECON 40153 Economics of Financial Markets

FINA 30203 Money and Banking

FINA 40153 Advanced Financial Management

and Select a 3 semester hour upper level business course.

**Free Electives:** 17 semester hours of elective courses to equal 124 total hours for the BBA; at least 3 hours must be upper division unless upper division courses are taken in the University Curriculum; at least 9 hours must be non-business courses.

# Accounting majors may double major in Finance by taking three additional courses:

FINA 30213 Investments I

FINA 30233 Investments II

FINA 40153 Advanced Financial Management

FINA 30203, Money and Banking, must be taken to fulfill an elective requirement imposed by Accounting. ACCT 30303, Introduction to Federal Taxation, must also be taken to fulfill the one course elective requirement for Finance.

**Texas law** requires CPA candidates to complete 150 credit hours of academic work including 36 credit hours of accounting. In response to this change, the Neeley School has developed the Master of Accountancy (MAc) degree, which can be completed in one year. Undergraduate accounting majors interested in professional certification are encouraged to apply for admission to this program at the end of their junior year. For more information, visit the MAc website at www.mac.tcu.edu.

# **Electronic Business**

## Overview

The effective and efficient use of information technology is an important element in achieving competitive advantages for business organizations and excellence in services for government and non-profit organizations. The globalization of trade, the emergence of information economies and the growth of the Internet and other global communication networks have recast the role of information systems in business and management. Companies can use information technology to design global business organizations linking factories, offices, and mobile sales forces around the world and around the clock.

Electronic Business students will develop the ability to design, implement and manage an infrastructure of information technology, data and organization-wide systems. They will also have the skills to manage, analyze and develop applications dealing with electronic business. They will be able to assist in incorporating information technology into the strategy, planning, and practices of organizations.

# Major Course Requirements (24 semester hours)

Specific Course Requirements

INSC 10013 Business on the Web

INSC 30713 eBusiness Programming and Applications

INSC 30723 eBusiness Planning

INSC 30823 Data for eBusiness

INSC 30833 eBusiness Development

INSC 40013 eBusiness Professional Internship (Writing Emphasis)

INSC 40803 eEnterprise Architecture

INSC 40813 eBusiness Consultancy I

**Free Electives:** 17 semester hours of elective courses to equal 124 total hours for the BBA; at least 6 hours must be upper division unless upper division courses are taken in the University Curriculum; at least 9 hours must be in non-business courses.

# Entrepreneurial Management

# Overview

The Entrepreneurial Management major offers a unique combination of specialization and generalization in the study of management. Nearly all forms of activity in profit and non-profit organizations involve some form of management. Whether it be managing people, money, information systems, raw materials or finished products, managers are required to make a multitude of decisions on a daily basis. The Entrepreneurial Management major explores the people aspect of business and the range of skills employed by today's managers and entrepreneurs, including strategic planning, communication and conflict resolution, team building, creative problem solving, leadership, entrepreneurship, business plan development and implementation, managing small business growth, human resource management, law, and business ethics. Career opportunities for management are among the most diverse because virtually every non-profit and business organization requires management skills and understanding.

# Major Course Requirements (18 semester hours)

Specific course requirements

MANA 30203 Human Resource Management (Writing Emphasis) MANA 30533 Introduction to Entrepreneurship (Writing Emphasis) MANA 40223 Cross-Cultural Management

**In addition,** the student must complete 9 semester hours from the following elective courses in Entrepreneurial Management:

MANA 40123 Managing the Emerging Venture MANA 40143 New Venture Planning MANA 40163 Ventures in Transition MANA 40753 Managing Business Ethics MANA 40970 Special Problems in Management BUSI 30833 Foundations of Leadership BUSI 30843 Interpersonal Leadership Skills BUSI 40833 Team Leadership Skills

**Free Electives:** 23 semester hours of elective courses to equal 124 total hours for the BBA; at least 9 hours of which must be upper-division unless upper-division courses are taken in the University Curriculum; at least 9 hours must be in non-business courses.

# Finance

#### Overview

A finance major concentrates on the management of financial resources for the firm or for the investment portfolio. The field of finance integrates concepts from economics, accounting, and a number of other areas. The central focus of finance is the relationship of risk and return.

Financial managers attempt to achieve wealth maximization through daily activities such as credit and inventory management and through longer-term decisions related to raising funds and allocating capital. Investment specialists evaluate and select securities, manage investment portfolios, and raise capital to finance business, government, and private needs.

TCU students can apply for a position on the Educational Investment Fund and, if selected, can gain valuable investment experience working with approximately 18 fellow students to manage a stock and bond portfolio of appproximately \$2 million.

The trend toward the securitization of financial assets and real estate, international financial transactions, and derivative products such as options and futures continues to generate new job opportunities in finance.

Finance careers include corporate financial management, commercial banking, investment brokerage, portfolio management, investment banking, and insurance to name a few.

#### Finance Major Course Requirements (At least 21 semester hours)

Specific Course Requirements (18 semester hours)

FINA 30203 Money and Banking (Writing Emphasis)

FINA 30213 Investments I (Writing Emphasis)

FINA 30233 Investments II

FINA 40153 Advanced Financial Management

ACCT 30153 Intermediate Financial Accounting I

ACCT 30253 Intermediate Financial Accounting II

In addition, the student must complete 3 semester hours from the following:

FINA 30303 Insurance

FINA 30313 Real Estate Principles

FINA 30623 Real Estate Valuation

FINA 40183 Educational Investment Fund

FINA 40193 Educational Investment Fund

FINA 40313 Management of Financial Institutions

FINA 40613 Real Estate Finance and Investment Analysis

FINA 40623 International Finance

FINA 40633 Investment Practicum

ACCT 30303 Introduction to Federal Taxation

**Free Electives**: 20 semester hours of elective courses to equal 124 total hours for the BBA; at least 6 hours must be upper division unless an upper division course is taken in the University Curriculum; at least 9 must be in non-business courses.

## Finance Major (With a Real Estate Concentration)

Students may also major in Finance with a Real Estate concentration. Career opportunities exist in banking, mortgage lending, real estate development, asset management, appraisal, real estate management, and brokerage.

## Major Course Requirements (24 semester hours)

Specific course requirements (24 semester hours)

FINA 30203 Money and Banking (Writing Emphasis)

FINA 30213 Investments I (Writing Emphasis)

FINA 30233 Investments II

FINA 40153 Advanced Financial Management

FINA 30313 Real Estate Principles

FINA 30623 Real Estate Valuation

FINA 40613 Real Estate Finance and Investment Analysis

ACCT 30153 Intermediate Financial Accounting I

**Free Electives:** 17 semester hours of elective courses to equal 124 total hours for the BBA; at least 3 hours must be upper-division unless upper-division courses are taken in the University Curriculum; at least 9 must be in non-business courses.

# Finance majors may double major in Accounting by taking three additional courses:

ACCT 30163 Cost Accounting

ACCT 40153 Advanced Accounting (Writing Emphasis)

ACCT 40223 Information Systems and Control

 $ACCT\ 30303$ , Introduction to Federal Taxation must also be taken to fulfill the one course elective requirement for Finance.

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# Marketing

## Overview

Today, diverse corporations in the telecommunications, financial, food service, and manufacturing industries all have at least one thing in common. These sellers want to exchange their goods, services, or ideas for something of value from buyers. Marketing begins at the moment that an organization perceives an unmet need, and progresses through product development, promotion, distribution and pricing. Marketing research suggests that one-half the cost of most products and services can be attributed to marketing.

## Major Course Requirements (18 semester hours)

Specific course requirements (15 semester hours)

MARK 30233 Business Marketing (Writing Emphasis)

MARK 30253 Selling and Sales Management

MARK 40113 Marketing Research

MARK 40123 Marketing Planning

MARK 40203 Marketing Strategy (Writing Emphasis)

In addition, the student must complete 3 semester hours of marketing electives from the following:

MARK 40213 International Marketing

MARK 40223 Services Marketing

MARK 40303 Principles of Retailing

MARK 40700 Marketing Study Abroad MARK 40970 Special Problems in Marketing

Free Electives: 23 semester hours of elective courses to equal 124 total hours for the BBA; at least 9 hours must be upper-division unless upper-division courses are taken in the University Curriculum; at least 9 hours must be in non-business courses.

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# Supply and Value Chain Management

## Overview

Supply and value chain management is cross-disciplinary and encompasses interrelated elements of marketing, logistics, purchasing, operations management, and information technology. In today's highly competitive environment, the multiple firms in a supply chain must be able to collectively respond to rapidly changing customer requirements. To do this efficiently and effectively requires working together across functions within the firm and beyond the boundaries of the firm to understand and respond to changing customer requirements and to match supply to customer demand. This program is designed to give students the skills and capabilities needed for supply chain positions in companies facing such challenges.

# Major Course Requirements (21 semester hours)

Specific course requirements (21 semester hours)

INSC 30313 Supply Chain Concepts

INSC 30723 eBusiness Planning

INSC 40313 Logistics and Transportation

INSC 40323 Procurement/Supply Management

INSC 40333 Supply Chain Information Technologies

INSC 40343 Supply Chain Planning and Coordination

MARK 30233 Business Marketing

**Free Electives:** 20 semester hours of elective courses to equal 124 total hours for the BBA; at least 6 hours must be upper-division unless upper-division courses are taken in the University Curriculum; at least 9 hours must be in non-business courses.

# A BBA with Special Emphases

A BBA with International Emphasis

A BBA with an Emphasis in Leadership Studies

#### A BBA with International Emphasis

Business students may complement their major in Accounting, eBusiness, Entrepreneurial Management, Finance, (Finance with Real Estate Emphasis), Marketing and Supply and Value Chain Management by designating an **International Emphasis** and satisfying the goals and requirements of the International Emphasis program. The program provides a structure to recognize students who have achieved a unique combination of experience, academic coursework, and international skills resulting in a cross-cultural competency. A special designation will be placed on the transcript of those students successfully completing the requirements of the program. The international emphasis may not be added to majors outside of the Neeley School.

Part I: Neeley School Courses (at least 6 semester hours)

Required: 6 hours from the following courses (3 hours must be in your major.) For Accounting and E-Business majors choose 2 of the classes that will best support your academic interests.

FINA 40623 International Finance

MANA 40223 Cross-Cultural Management

MARK 40213 International Marketing

Part II: International Awareness Courses (at least 9 semester hours)

A minimum of 3 semester hours from sections a, b, and c.

- a. Economics either ECON 50123, ECON 50133, or ECON 50443
- b. Geography either GEOG 10003 or GEOG 30503
- c. At least 1 course from the following:

Political Science - POSC 20303, POSC 30303, or POSC 30503 Journalism - JOUR 40543

Part III: Language Proficiency

- 1. The student must be proficient in at least one language other than English. For students whose primary language is English, proficiency in a second language must be demonstrated through successful completion of 18 semester hours of coursework in one language or the maximum hours offered in one language or equivalent proficiency as approved by their department chair.
- 2. For students whose second language is other than those taught at TCU, students should work with their department chair to determine a method of demonstrating proficiency.
- 3. For students whose primary language is not English, proficiency in both their primary and secondary languages must be demonstrated. Students should work with their department chair to determine a method of demonstrating proficiency in their primary language. Completion of the English courses required in the UCR or their equivalents will be sufficient to demonstrate proficiency in their secondary language of English.

Part IV: Experiential Component

- 1. Students working toward an international emphasis will be required to obtain significant experience in a foreign culture. A combination of study, work, or living abroad may be used to satisfy the requirement. While there is no specific time requirement, students must demonstrate to the major department chair or designated faculty advisory committee focused involvement in a foreign culture.
- 2. The experiential component may be waived for foreign students.

# A BBA with an Emphasis in Leadership Studies

Business students may complement their major in any business discipline by earning the designation for an **Emphasis in Leadership Studies**. This program is designed to give students an understanding of the theory and practice of leadership, and provide them with skills that will help them become more confident and effective leaders.

The Leadership Studies Emphasis consists of four leadership courses, preceded by the required Ethics course, that help students learn more about leadership and about themselves as leaders. The Foundations of Leadership course is focused on leading oneself. It is grounded in a principle-centered model of leadership, and underscores the impact that quality of character has on our ability to earn followers. Individual Leadership Skills focuses on critical leadership capabilities - on those leadership skills that are foundational for people in formal and informal leadership positions. Team Leadership Skills focuses on specific skill sets that help increase our effectiveness when working collaboratively with others. The Leadership Challenge is a capstone leadership course, and focuses on bringing together leadership concepts associated with leading change with students' leadership experiences from a required field placement that will demand that they exercise their growing leadership knowledge and competencies. The experiences from that placement will be discussed in class, as they relate to the material for that class session. In this way, students will bring together leadership concept and practice, and have the opportunity to learn from their experience in leadership settings. In addition to course work, the leadership program will offer students a variety of

co-curricular opportunities to meet and learn from leaders from all walks of life.

**The Leadership Studies Emphasis** has two phases. Phase I reflects coursework that any Neeley School student can choose to take, whether or not they are formally accepted to the **Leadership Studies Emphasis** program. Phase II specifically involves enrollment in The Leadership Challenge course. Entrance into The Leadership Challenge course, and consequently the completion of the Leadership Studies Emphasis requirements, is limited and highly competitive. Entrance is based on superior performance in coursework, experiences that reflect high standards of leadership and recommendations of TCU faculty. Entrance decisions will be made by a Neeley School Committee in the Spring of each year.

Students who successfully complete both Phases I and II will be awarded the Leadership Studies Emphasis designation, which will appear on their final transcript.

## Phase I:

Students will take the following courses in sequence

BUSI 20153 Ethical Decision Making

BUSI 30833 Foundations of Leadership

Students can take the following courses in any order, after completing BUSI 30833.

BUSI 30843 Interpersonal Leadership Skills

BUSI 40833 Team Leadership Skills

#### Part II:

Students wishing to earn the designation of Leadership Studies Emphasis will need to successful complete *The Leadership Challenge*. This course is open only to those who have completed Phase I and who are given permission to enroll. Students should apply for admission to *The Leadership Challenge* no earlier than the spring of their Junior year. Application materials are available in the Neeley Student Resource Center and on the Neeley School website.

BUSI 40843 The Leadership Challenge

# Minors And Double Majors In Business

#### Overview

#### Minors Outside of the Neeley School

Business students are not required to have a minor but may obtain one outside the M.J. Neeley School of Business by completing the requirements outlined by the department in which the minor is offered. Students should check with the Neeley Student Resource Center to see if any additional paperwork is required.

## Minors And Double Majors In Business For Business Majors

## **Minor in Accounting**

Students majoring in business may pursue an accounting minor. The goal of the minor is to provide a secondary area of expertise for students majoring in E-Business, Entrepreneurial Management, Finance, (Finance with Real Estate Emphasis), Marketing, or Supply and Value Chain Management. By combining one of these majors with a minor in accounting, the student is prepared for a greater number of career opportunities and gains more flexibility. In addition, students majoring in other areas of business sometimes take electives in accounting. The designation of an accounting minor provides such students with additional evidence of subject matter expertise. The minor in accounting requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the accounting minor must be completed at TCU.

Required Courses (18 semester hours)

ACCT 20153 Principles of Financial Accounting ACCT 20163 Principles of Managerial Accounting ACCT 30153 Intermediate Financial Accounting I ACCT 30163 Cost Accounting ACCT 30253 Intermediate Financial Accounting II ACCT 30303 Introduction to Federal Taxation

Minimum GPA: To graduate with a minor in accounting, students must obtain a minimum GPA of 2.50 in courses making up the minor.

## **Minor in Finance**

Students majoring in business may pursue a finance minor. The goal of the minor is to provide a secondary area of expertise for students majoring in Accounting, E-Business, Entrepreneurial Management, Marketing, or Supply and Value Chain Management. By combining one of these majors with a minor in finance, the student is prepared for a greater number of career opportunities and gains more flexibility. In addition, students majoring in other area of business sometimes take electives in finance. The designation of a finance minor provides such students with additional evidence of subject matter expertise.

The minor in finance requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the finance minor must be completed at TCU.

Required Courses (18 semester hours)

FINA 30153 Financial Management FINA 30203 Money and Banking FINA 30213 Investments I ACCT 30153 Intermediate Financial Accounting I

In addition, the student must complete 6 semester hours of finance electives from the following:

FINA 40153 Advanced Financial Management FINA 30233 Investments II FINA 40183 Educational Investment Fund FINA 40193 Educational Investment Fund FINA 40623 International Finance FINA 40613 Real Estate Finance and Investment Analysis

**Minimum GPA:** To graduate with a minor in Finance, students must obtain a minimum GPA of 2.50 in courses making up the minor.

# **Double Majors**

**Accounting majors** may double major in Finance by taking three additional courses:

FINA 30213 Investments I FINA 30233 Investments II FINA 40153 Advanced Financial Management

They must elect FINA 30203, Money and Banking, to fulfill an elective requirement imposed by Accounting. ACCT 30303, Introduction to Federal Taxation, must also be taken to fulfill the one course elective requirement for Finance.

Finance majors may double major in Accounting by taking three additional courses:

ACCT 30163 Cost Accounting ACCT 40153 Advanced Accounting (Writing Emphasis) ACCT 40223 Information Systems and Control

They must take ACCT 30303, Introduction to Federal Taxation, to fulfill the one course elective requirement for Finance.

**A business student** may earn an additional Bachelor's degree in a field outside of the Neeley School by completing the requirements outlined by the University under "Additional Bachelor's Degree" in the Bachelor's Degree section of this Bulletin.

# General Business Minor For Non-Business Majors

## Overview

Students completing majors outside of the Neeley School may pursue a General Business minor. The goal of the General Business minor is to provide students in other disciplines with a broad base of knowledge about the business world by giving them an understanding and appreciation of business and its social and ethical environment. In addition, through introductory courses in the functional areas of business, the students are introduced to the rudimentary tools used in business settings to analyze problems and make decisions.

The General Business minor requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the General Business minor must be completed at TCU.

# Required Courses (18 semester hours)

ACCT 20153 Principles of Financial Accounting ACCT 20163 Principles of Managerial Accounting MANA 20153 Legal Environment of Business FINA 30153 Financial Management MANA 30153 Organizational Management MARK 30153 Marketing Management

## **Recommended Courses:**

BUSI 10013 Contemporary Perspectives in Business INSC 20263 Information Systems in an eEnterprise

## **Minimum GPA**

To graduate with a general business minor, students must obtain a minimum GPA of 2.50 in courses making up the minor and demonstrate computer skills competency based on Neeley School guidelines. For information about the Computer Skills Assessment, please contact the Neeley Student Resource Center.

# College of Communication

# 3/2 B.A., B.S./MBA Program in Business

#### Overview

As we venture into the 21st Century, the role of communication continues to be a vital and integral part of the university's educational mission. Today, more than 800 students concentrate their studies within the three departments that are part of the new configuration of the University: The College of Communication. Degree programs are available in Journalism, Communication Studies, and Radio-TV-Film. The academic programs of the college exact an appropriate balance between professional training and liberal arts studies. Personal counseling and relatively small classes allow the faculty to give attention to the work of each student.

### **Degrees Offered**

Bachelor of Arts degree with a major in Journalism, Radio-Television-Film, or Communication Studies.

**FOREIGN LANGUAGE REQUIREMENT**. All students pursuing the Bachelor of Arts degree in the College of Communication must demonstrate competency in a foreign language equivalent to the completion of one of the following:

French FREN 20063 Fourth Semester College French German GERM 20063 Fourth Semester College German Greek GREE 20063 Fourth Semester College Greek (Hellenistic) Italian ITAL 20063 Fourth Semester College Italian Japanese JAPN 20063 Fourth Semester College Japanese Spanish SPAN 20203 Intermediate Spanish

This requirement may be satisfied by either satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (i.e., AP, CLEP or SAT II). Required scores on standardized tests may be found in the Credit by Exam booklet available from the Office of Admissions. For languages not currently taught at TCU, six semester hours at the sophomore-level, transferred to TCU from another accredited institution, may be used to satisfy this requirement. Students may also provide evidence of competency in the non-English language by successfully completing one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

Bachelor of Science degree with a major in Communication Studies, Radio-Television-Film, or Journalism.

## 3/2 B.A., B.S./MBA Program in Business

The College of Communication and M.J. Neeley School of Business offer a combined degree in Journalism, Radio-TV-Film, or Communication Studies and a master's degree in Business Administration (MBA). The Three-Two Program, as it is called, takes five years to complete.

Students interested in the program spend the first three years in the College of Communication completing the University Curriculum Requirements (including MATH 10283) and meeting the requirements of their major field. During the third year of study, application is made to the MBA program. To be considered for admission, applicants must have completed, or anticipate completing by the end of the third year, a minimum of 100 hours in non-business courses and finished all major requirements and core requirements. Applicants must submit the usual application materials, including scores from the Graduate Management Admission Test (GMAT), and must present above-average academic records.

If admitted, a student enters the MBA phase of the Three-Two program in the fourth year of study at TCU. The first year of the MBA, comprising of 24 credit hours, meets the minor requirements of the undergraduate degree. After successful completion of the first year of the MBA program, the student may petition the Dean of the College of Communication to be awarded the undergraduate degree.

# **Multiple Majors**

The following applies to all students majoring in the College of Communication with the exception of Journalism. Students who wish to pursue an additional major in the college must satisfy all degree requirements of the additional major, including courses specified in the UCR as particular to that degree and major.

Students who wish to pursue an additional degree in another college, if additional majors are permitted in that college, must complete all degree requirements for each major, including courses specified in the UCR as particular to each degree and major.

Students outside the College of Communication whose home college permits an additional major in the College of Communication must complete all degree requirements for the additional major, including courses specified in the UCR for that particular degree and major.

Journalism majors must consult with the department as to acceptable additional majors administered in or outside of the College of Communication.

# **Departments**

# **Department of Journalism**

News Editorial

(<u>Photojournalism emphasis</u>). (<u>Newspaper/Magazine emphasis</u>) (<u>Periodical design emphasis</u>).

Public Relations/Advertising

Broadcast Journalism

International Communication

## **Department of Radio-TV-Film**

Production
Criticism/History
Sports Broadcasting
Industry

# **Department of Communication Studies**

Leadership and Organizational Communication
Interpersonal and Group Communication
Communication Skills
Business and Professional Speaking
Public Speaking
Persuasive Speaking
Communication Theory and Research

# **Organization and Program**

The College is organized into three departments offering nine major fields of concentration. The departments provide professional training in vocational fields for students planning careers and serious advocational training for those who wish to attain artistic ability without professional intent.

## **Requirements for Graduation**

Students should request a degree plan from the Office of the Dean at the end of the sophomore or the beginning of the junior year. The "Intent to Graduate" form, available from the Office of the Dean, should be completed no later than a semester preceding expected graduation.

Approval of the department chairman is required in contract form for all non-traditional courses, i.e., special problems, independent study, research problems, etc.

Beyond the studies specified for each major, the bachelor's degree is built on the 47-semester-hour University Curriculum Requirements that apply to all University graduates.

# The University Curriculum Requirements (UCR)

# I. Foundations: 9 credit hours

- A. The Writing Requirement: 6 credit hours and the Writing Emphasis Experience
  - Writing Workshop: 6 credit hours
     Writing Emphasis Experience
- B. Mathematics: 3 credit hours

## II. Explorations: 36 credit hours

- A. Physical and Life Sciences: 6 credit hours minimum, 9 hours maximum
- B. Social Sciences: 6 credit hours minimum, 9 hours maximum
- C. Cultural Heritage: 12 credit hours minimum, 15 hours maximum
  - 1. Religion Studies: 3 credit hours minimum
  - 2. Historical Studies: 3 credit hour minimum must be met by a 3 credit hour course in U.S. Historical Studies
  - 3. Critical Inquiry: 3 credit hours minimum
  - 4. Fine Arts: 3 credit hours minimum
- D. Language and Literature: 6 credit hours minimum, 9 hours maximum
  - 1. Foreign Language: 6 credit hours minimum
  - 2. Oral Communication and Literature: 6 credit hours minimum
    - a. Oral Communication: 3 credit hours minimum
    - b. Literature: 3 credit hours minimum

Note: No more than 6 hours may be taken in a given department.

# III. Physical Education: 2 credit hours

Note: At least one credit hour must be a Health Concepts Course

**Transfer Credit.** Students wishing to take courses at another institution, following their admission to Texas Christian University, must secure approval through the Office of the Dean of the College of Communication before enrolling in them.

**Pass/No Credit Policy.** Students majoring in the College of Communication may take up to 9 hours as Pass/No Credit to apply towards the degree. Courses taken for the major or minor in the College of Communication MUST be taken for a letter grade.

# Dual Degree Program with the Universidad de Las Americas (Puebla, Mexico)

The purpose of this program is to allow students from UDLA in Puebla Mexico and students from TCU in Fort Worth to earn dual degrees through a shared program of both institutes. Students enrolled in these universities will take courses at both the home and host institutions to fulfill the requirements toward a Bachelor of Arts or a Bachelor of Science degree, which will be awarded concurrently from both institutions. The B.S./B.A. degree from TCU is awarded in the following degree plans: Radio-Television-Film, International Communication (Journalism) and Communication Studies. The B.A. in Communication Science is the degree awarded by UDLA upon completion of the program. Approval from the Office of the Dean of Communication is required before enrolling into this program.

#### Requirements:

#### TCU Students

BA or BS in Int'l Comm, RTVF, or SPCO from TCU and BA in Comm Science from UDLA2.5 GPA (must maintain a 2.5 to complete program) Good Standing Language Proficiency (Brigham Young written/Oral Screening)

#### **UDLA Students**

Licenciatura from UDLA in Communication Sciences and a BA or BS in Int'l Comm, RTVF, or SPCO from TCU. (May pursue a minor in Journalism from TCU.) UDLA students are NOT eligible for BA from UDLA: admissions: 8.5 GPA, good standing, and language proficiency (TOEFL 550/Oral Screening)

#### **General Requirements (All Students)**

- 1.Students are advised to spend the  $3^{rd}$   $6^{th}$  semester at host institution. The last 2 semesters must be taken at home campus.
- 2.All TCU students must fulfill TCU's UCR and UDLA students must complete UDLA's general studies requirement. These requirements may be satisfied at either institution.
- 3. Visiting students at TCU must complete a minimum of 60 hours

### 20 COURSES

- . These courses must be taken in the major (with grade of C or better), minor, or UCR/Gen Studies for dual degree.
- 4.124 semester hours at TCU is equal to 248 unidades at UDLA.
- 5.As required by the home institution, UDLA students earning the Licenciature, must complete community service and write a thesis. TCU students earning a BA from UDLA are not required to do community service or write a thesis.
- 6.Students are eligible for Honors as stipulated at host institution.

# TCU Students

1. For BA in Communication Science from UDLA,TCU students must pass the minimum number of hours required by UDLA for appropriate degree.

## **UDLA Students**

- 1. Must take 60 semester hours at TCU in major, minor, or UCR
- 2.Upon completion of program at UDLA, students will satisfy minimum number of semester hours required by BA or BS at TCU.
- $3. Students \ must \ satisfy \ requirements \ stipulated \ by \ degree \ plan \ chosen.$

# Student Organizations

## Fraternities and Sororities

Kappa Tau Alpha (Journalism Honor Society)

## Clubs

Speech Honor Society

# **Professional Organizations**

Society of Professional Journalists Women in Communications, Inc. American Advertising Federation Public Relations Student Society of America National Association of Black Journalists

# Journalism

Majors in Journalism
Minors in Journalism
Requirements for Changing Major to Journalism
Teacher Certification
Accreditation and Professional Organizations
Internships
Honors Program
3-2 M.B.A. Program
Graduate Studies offered by the Department
Courses of Instruction

#### (JOUR)

The Department of Journalism offers majors in advertising/public relations, broadcast journalism, international communication, and news-editorial journalism. Minors are available in advertising/public relations, broadcast journalism, and news-editorial journalism. Degrees offered through the department include the B.A., the B.S., and the M.S.

The mission of the department is to educate journalism and mass communication students to think and act as responsible professionals and ethical citizens in a global community; to help students develop competencies necessary to prepare them for professional employment and advanced studies; and to develop skilled professional communicators who understand their social, legal, and ethical responsibilities and their career opportunities in a technological society. Each degree program in the department prepares students to communicate in a democracy to its diverse audiences through critical thinking and analytical writing skills.

All programs require professional quality and performance. TCU's Journalism Department is one of about 15 programs at private universities in the nation accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). About 10 percent of the journalism programs at public and private universities in the country are accredited by the council. The department fully subscribes to the ACEJMC guidelines that 80 semester hours of the student's coursework be taken outside Journalism and/or mass communications classes, to ensure a broad liberal arts education. Of the 80 hours, 65 must be in traditional liberal arts. Forty-four hours may be taken in Journalism or other mass communication courses, including Radio-TV-Film courses. Majors in all sequences must conform to this restriction on the number of hours in mass communication study.

Students in all sequences must pass the Grammar-Spelling-Punctuation examination, which is administered each semester. Students may declare journalism as a major when they enter TCU. However, no students, majors or minors, will be able to take skills courses in journalism without having passed the GSP. Students may take the GSP exam only three times. A GSP study guide is available. Students must maintain contact with the Journalism office to determine the exact days and times the examinations will be administered. Successful completion of the Grammar-Spelling-Punctuation examination is necessary to enroll in the first writing course: Journalism 10113, Media Writing and Editing I, which must be passed with a grade of "C" or better before students can take any course for which Journalism 10113 is a prerequisite. Journalism majors and minors must make a "C" or better in any course that is a prerequisite for another journalism course before enrolling in the course for which the prerequisite is required. All skills courses must be taken sequentially.

Courses in the Journalism majors or minors must be taken for a letter grade. Journalism courses taken in the major and minor sequences must be passed with a grade of "C" or better to fulfill prequisite requirements for any journalism course and graduation requirements.

# **Majors in Journalism**

- **B.A.** Degree with a Major in Journalism, News-Editorial sequence (Newspaper or Magazine emphasis): 124 hours with 37 hours in Journalism, including 10103, 10113, 20103, 30203, 30343, 40463, 40493, 40101, 40523, 40613 and nine hours of Journalism electives. A second major in a complementary field is strongly recommended; students should consult with their adviser for suggestions.
- **B.A. Degree with a Major in Journalism, News-Editorial sequence (Photojournalism emphasis):** 124 hours with 34 hours in Journalism and 9 hours in the Department of Art. Required courses include: JOUR 10103, 10113, 20103, 30203, 30233, 30453, 40101, 40523, 40613,40463 or 40643, and six hours of Journalism electives. Art courses required are ART 20743, 30710, 30730 or 30743.
- **B.A. Degree with a Major in Journalism, News-Editorial sequence (Periodical Design emphasis**): 124 hours with 34 hours in Journalism and 9 hours in the Department of Art. Required courses include: 10103, 10113, 20103, 30203, 30343, 30443, 30453, 40101, 40523, 40613, and six hours of Journalism electives. Art courses required are ART 10123, 20323, and 20333.
- **B.S. Degree with a Major in Journalism, News-Editorial sequence (Newspaper or Magazine emphasis):** 124 hours with 37 hours in Journalism, including 10103, 10113, 20103, 30203, 30343, 40463, 40493 or 40643, 40101, 40523, 40613, and nine hours of Journalism electives. A statistics course in the Mathematics Department or School of Business is required, plus Computer Science 10203 or 10403. A second major or a minor is strongly recommended but is not required; students should consult with their adviser for suggestions.
- **B.S. Degree with a Major in Journalism, News-Editorial sequence (Periodical Design emphasis):** 124 hours with 34 hours in Journalism and 9 hours in the Department of Art. Required courses include: 10103, 10113, 20103, 30203, 30343, 30443, 30453, 40101, 40523, 40613, and six hours of Journalism electives. Art courses required are ART 10123, 20323, and 20333. A statistics course in the Mathematics Department or School of Business is required, plus Computer Science 10203 or 10403.
- **B.S. Degree with a Major in Journalism, News-Editorial sequence (Photojournalism emphasis**): 124 hours with 34 hours in Journalism and 9 hours in the Department of Art. Required courses include: 10103, 10113,

20103, 30203, 30233, 30453, 40101, 40523, 40613,40463 or 40643 and six hours of Journalism electives. Art courses required are ART 20743, 30710, 30730 or 30743. A statistics course in the Mathematics Department or School of Business is required, plus Computer Science 10203 or 10403.

- **B.S. Degree with a Major in Journalism, Public Relations/Advertising sequence**: 124 hours with 39 hours in Journalism, including 10103, 10113, 20103, 30313, 30403, 30413, 30453, 30803, 40513, 40523, 40903, and six hours of Journalism electives. A statistics course taken in either the Mathematics Department or School of Business is required. An Area of Emphasis consisting of 18 hours in a discipline selected by the student and approved by a Journalism adviser must be completed. Students may also choose to complete the requirements for a major or minor in the selected discipline. If this option is selected, students must fulfill the requirements as prescribed by the department in which the minor or second major is taken.
- **B.S. Degree with a Major in Journalism, Broadcast Journalism sequence:** 124 hours with 32 hours of Journalism courses. A minor is not required. Required courses in Journalism include 10103, 10113, 20103, 20203, 30203, 30543, 40523, 40451, 40101, 40553, six hours of Journalism electives, plus Computer Science 10203 or 10403.
- **B.A. Degree with a Major in Journalism, International Communication sequence (News-Editorial or Global Advertising/Public Relations specialization):** 124 hours with 39 hours in Journalism for the Global Advertising/Public Relations specialization and 37 hours for the News-Editorial specialization. One semester of study or internship abroad, a minor in a foreign language and an area of emphasis in International Studies (12 hours) are required. Both specializations require Journalism 10103, 10113, 20103, 40523 and 40543. In addition, the News-Editorial specialization requires 30203, 30543, 40101, 40463, 40963, and nine (9) hours of News-Editorial electives for a total of 37 hours. The Global-Advertising/Public Relations specialization includes 30313, 30403, 30413, 30453, 30803, 40903 and six hours of Journalism electives. Recommended Journalism electives for the Global Advertising/Public Relations specialization are JOUR 40403, 40451, 40603, and 50153.

Students should consult with their adviser for suggestions about courses for the International area of Emphasis (12 hours) and News-Editorial electives.

#### **Minors in Journalism**

News-Editorial Emphasis: 18 hours in Journalism, including 10103, 10113, 20103, 30203, 40523, and three other hours approved by the Department of Journalism chairman. Broadcast Emphasis: 18 hours in Journalism, including 10103, 10113, 20103, 20203, 30203, and 30543. Public Relations/Advertising Emphasis: 18 hours in Journalism: 10103, 10113, 20103, 30313, 30403, and 40523. Students minoring in Journalism may not enroll in 40451 (Internship).

# Requirements for Changing Major to Journalism

Current TCU students of sophomore standing or above who wish to change their major to one of the sequences in the department must have achieved a TCU cumulative GPA of 2.5 before they can declare a major inside the department.

# **Teacher Certification**

Requirements for Journalism Teaching Certification: 24 hours in Journalism: 10103, 10113, 20103, 30203, 30313, 30233, 30453, 30853, and 40523.

# **Accreditation and Professional Organizations**

The Department is accredited by the ACEJMC. Four professional organizations have chapters affiliated with the Department: The Society of Professional Journalists; American Advertising Federation; the Public Relations Student Society of America; and the National Association of Black Journalists. The Department also has a chapter of Kappa Tau Alpha, the National Honorary Society for Journalism Students.

## **Internships**

Students are encouraged to serve in internships with newspapers, magazines, radio or television stations, public relations or advertising agencies or departments. The Department cooperates closely with the Texas Daily Newspaper Association, Public Relations Society of America, Texas Public Relations Association, and Advertising Clubs in Fort Worth and Dallas in their internship programs. Internship credit can be given only to Journalism majors. Minors or students majoring in other disciplines cannot receive Journalism credit for internships. The Department will make every effort to help students find internship positions in their junior or senior year in the United States or abroad.

# **Student Publications**

The department sponsors two student publications, the TCU Daily Skiff and Image, a general interest magazine, which provide opportunities for students to gain practical, hands-on experience in every phase of newspaper and magazine publishing. Broadcast journalism students can also work with SkiffTV, which airs student broadcast packages worldwide through the Internet.

# **Honors Program**

Candidates for Departmental Honors should take 30003 their junior year and 40003 the fall semester of their senior year.

# 3-2 M.B.A. Program

The department offers a 3-2 program that allows students to complete the Master of Business Administration degree in five years. The M.B.A. is offered in cooperation with the M.J. Neeley School of Business.

# **Graduate Studies offered by the Department**

The Department of Journalism offers two graduate degrees, the Master of Science in Journalism and the Master of

Science in Advertising/Public Relations. Graduate courses at the 5000 level are listed here in the undergraduate catalog. For courses at the 6000 and 7000 level, consult the University's graduate catalog.

The following is a complete list of courses offered by this department. Go to Class Search on Registrar's Page to see which courses are being taught this semester.

#### **Courses of Instruction**

#### Journalism Core

**JOUR 10103 Communication in Society.** Open to students in all departments. Nature of communication in American society in a historical/cultural perspective. Intellectual understanding of media history, current functions and future of media technology. Media as agents of cultural norms, values and mythologies. Principles, politics and economics of mass media. Critical analysis of media's influence on individuals and institutions.

**JOUR 10113 Media Writing and Editing I.** Prerequisite: Freshman-level Writing Workshop plus passing score on grammar-spelling-punctuation examination. Open to students in all departments. Introduction to basic writing skills of journalism, advertising, and public relations. Style and story structure for the print and electronic media.

**JOUR 20103 Media Writing and Editing II.** Prerequisite: JOUR 10113. Continuation of Media Writing and Editing I, emphasizing longer and more complex stories and writing for Ad/PR and electronic media. Introduction to newsgathering.

**JOUR 40523 Media Law and Ethics.** Prerequisite: JOUR 10113. Open to majors and minors only. Ethical and legal responsibilities, rights, and restrictions. Survey of Constitutional guarantees, libel, contempt of court, invasion of privacy, privilege, copyright, obscenity, and federal agencies.

## **Advertising/Public Relations**

**JOUR 30313 Advertising Principles.** Prerequisite: Open to advertising-public relations and marketing majors or minors or permission of instructor. Overview of advertising in marketing and society. Emphasis upon the realistic approach of managing advertising in corporate and agency operations. Focuses on the swift pace, short deadlines and quick decision factors necessary to succeed in advertising in modern business. Global aspects of advertising stressed.

**JOUR 30403 Public Relations Principles.** Public relations in modern society, business, and communications. Influencing opinion through acceptable performance and two-way communication. Recommended for students in many fields.

**JOUR 30413 Advertising and Public Relations Copy and Production.** Prerequisites: JOUR 10113, 30313, and 30453. Planning, creating, and producing print and broadcast materials for advertising and public relations.

**JOUR 30523 Media Marketing and Promotions.** Prerequisites: RTVF 10113 (for RTVF majors) or JOUR 30313 (for Journalism majors) or permission of instructor. Principles and techniques of developing successful marketing and promotions campaigns in the media industries. Course focuses on issues of market research, advertising strategies, identity and image development, and creative execution. (Offered as RTVF or JOUR credit.)

**JOUR 30803 Writing for Public Relations and Advertising.** Prerequisites: JOUR 10113, 20103, 30313, 30403, and 30453. Instructional and writing practice to develop the professional-level writing skills required in public relations and advertising, emphasizing the different approaches required for different audiences and media.

**JOUR 40403 Public Relations and Advertising Cases and Problems.** Prerequisites: JOUR 30313 and 30403. Application of principles to a variety of cases and problems. Study of current public relations and advertising problems and potential problems.

**JOUR 40451 Internship.** Prerequisite: Minimum of 75 total semester hours with 2.5 GPA plus minimum of 9 semester hours in journalism skills courses. A 2.5 GPA required in the major and approval of department chairman. Practical experience with media or in public relations/advertising situations. Must work a minimum of 100 hours in approved practical experience situation. Course may be taken up to three times. One hour class per week the first time the course is taken. Open only to majors.

**JOUR 40513 Media Analysis, Planning and Management.** Prerequisite: JOUR 10113, 30313, 30403. Evaluation and use of measurements and data concerning mass media and markets. Principles of mass media and markets. Principles of media selection, scheduling, costs. Cases and problems.

**JOUR 40703 Campaigns.** Prerequisites: JOUR 30313, 30403, and 40403, and permission of instructor. Conceiving, researching, planning, creating, executing, and evaluating campaigns for print and broadcast media.

**JOUR 50133 Management of Public Relations and Advertising Departments/Firms or Agencies.** The course will examine management techniques, tactics, concerns and issues in handling public relations and advertising departments within organizations, corporate and nonprofit, and agencies or firms, from small independent operations to subsidiaries of larger entities.

**JOUR 50163 Issues and Crises in Public Communication.** The course covers the way issues of public concern are detected by news media and by public relations and advertising strategists as the issues develop, and it examines how communication of government policies as well as corporate and non-profit organization's concerns affect perceptions and subsequently public opinion.

## **Broadcast Journalism**

**JOUR 20203 Radio/TV Newswriting.** Prerequisite: JOUR 10113. Newswriting for the electronic media with emphasis on mastery of professional abilities required of news writers for radio and television. Writing for the oncamera performer will be stressed. Required of majors.

**JOUR 30543 Broadcast Reporting.** Prerequisite: JOUR 30203. Principles and practices of news gathering, writing and editing for radio and television.

JOUR 40451 Internship. Prerequisite: Minimum of 75 total semester hours with 2.5 GPA plus minimum of 9

semester hours in journalism skills courses. A 2.5 GPA required in the major and approval of department chairman. Practical experience with media or in public relations/advertising situations. Must work a minimum of 100 hours in approved practical experience situation. Course may be taken up to three times. One hour class per week the first time the course is taken. Open only to majors.

**JOUR 40553 Issues in Broadcast News.** Analysis of broadcast news, techniques of investigative reporting, newsroom decision making, political coverage, election coverage and polling, crisis coverage, and other topics. Study of the daily operation of the broadcast news profession.

## **International Communication**

**JOUR 40543 International and Intercultural Communication.** Factors influencing cross-cultural images through mass media, news flow. Political, social and cultural aspects of mass communication across national boundaries, communication structures, technology and content.

**JOUR 40603 Global Advertising/Public Relations in Theory and Practice.** Prerequisite: JOUR 30313 and 30403 or permission of instructor. Course focuses on the underlying theories and principles governing advertising and public relations in market economies and democratic societies and explores the practice of these disciplines in a global economy/society. Cultural/legal obstacles and marketing/communication opportunities will be explored as future practitioners work across borders.

**JOUR 40963 Topics in International and Ethnic Media.** Investigation of the cultural, technological and historical developments of a selected national or ethnic media group, including the examination of culture, images and identity, politics and economics. Topics may vary and will include: Latin American and Hispanic Media, British and European Media, and Asian and African Media.

**JOUR 50153 Cultural Imperatives in International Communication.** Critical study of international discourse within a cultural context. Dependency theory, political and socio-economic factors affecting communication and relations in the context of world affairs. Questions of media imperialism, ideology, monopoly of knowledge, cultural narratives and post-colonial opinion.

#### **News-Editorial Journalism**

**JOUR 30203 Reporting.** Prerequisites: JOUR 10113, 20103. Applying the principles of good writing to journalism practice. Development of skills in evaluating the news, interviewing, gathering information, and objective reporting for the print media. Faculty supervised laboratory training provides practical experience on the University newspaper under typical newsroom conditions.

**JOUR 30233 Photojournalism.** Prerequisite: JOUR 20103, and ART 20743. Fundamentals of photography in modern mass communication; instruction in taking, processing, and editing pictures. (Requires materials fee.)

**JOUR 30343 Copyediting.** Prerequisite: JOUR 10113, 20103, 30203. The evaluation of copy written for mass audiences, including consideration of grammar, style, precision, clarity, conciseness and implications of libel.

**JOUR 30443 Periodical Design.** Prerequisite: JOUR 20103, 30453. An overview of periodical design: fundamental concepts used in planning pages for periodicals such as newspapers, magazines, and corporate newsletters/house organs; includes an introduction to basic typography, layout, composition, illustration, photography, production and printing.

**JOUR 40451 Internship.** Prerequisite: Minimum of 75 total semester hours with 2.5 GPA plus minimum of 9 semester hours in journalism skills courses. A 2.5 GPA required in the major and approval of department chairman. Practical experience with media or in public relations/advertising situations. Must work a minimum of 100 hours in approved practical experience situation. Course may be taken up to three times. One hour class per week the first time the course is taken. Open only to majors.

**JOUR 40463 Public Affairs Reporting.** Prerequisite: JOUR 30203. Study of community news sources such as city, county, state and federal governmental agencies, courts. Depth reporting of significant and complex news, with emphasis on fact-finding and investigation.

**JOUR 40473 Specialized Reporting and Writing.** Prerequisite: JOUR 30203. To develop skills in writing for the mass media on specialized, technical subject matter, based on mastery of advanced writing skills, knowledge of communication research findings, and thorough understanding of the subject matter. Specifically, to prepare students to be competent reporters and writers in such specialized areas as science, business, energy, the environment, health, medicine, gender, race and ethnicity.

**JOUR 40483 Sports Reporting and Writing.** Prerequisite: JOUR 10113, 20103, and 30203. Gathering and writing the news on a sports beat. Development of skills in information-gathering, interviewing, and writing for print media sports reporters. Faculty-supervised laboratory training provides practical experience on the TCU Daily Skiff writing under newsroom conditions.

**JOUR 40493 Opinion Writing.** Prerequisite: JOUR 30203. Editorial and interpretive writing about public affairs and the arts. Style and research for editorials, columns, and critical reviews. The policies, problems, responsibilities, and comment functions of the press.

**JOUR 40643 Feature and Magazine Writing.** Prerequisite: JOUR 30203. Newspaper feature and magazine nonfiction writing, research, and free-lance marketing procedures; emphasis on writing for publication.

**JOUR 50173 International Reporting.** The course will critically analyze the coverage of international affairs in U.S. print and broadcast media. It will help the student develop competency in international journalism through the theory and practice of journalism and mass communication as they relate to international development, East-West discourses, and the flow of news and information.

**JOUR 50183 Media Management and Leadership.** Dramatic changes in technology and in the media's role in converging technologies require new management and leadership techniques and paradigms. Students will discuss existing case studies examining these changes. This course will give students a survey of some of the latest management and leadership theories, including a new sense of social responsibility. They will apply these theories to a number of different competitive, structural, motivational, strategic, and organizational problems of the media,

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primarily by solving problems in existing case studies and by writing original case studies.

**JOUR 50193 Economics and Finance of the Media.** The course will examine the economic environment and financial practices of the mass media, including the World Wide Web. The course will also examine how the media are affected by advertisers, competition, financial markets, and other economic forces. Understanding and structuring debt and equity, valuing media companies, and writing a business plan are included in the course work.

# **General Courses**

**JOUR 30003 Junior Honors in Journalism.** Studies, reports and discussions of literature of journalism and mass communication and of significant trends. This is generally offered to juniors in journalism on a tutorial basis. Specific topic is determined jointly by the student and the journalism instructor. JOUR 30003 and 40003 cannot be taken simultaneously.

**JOUR 30453 Information Graphics.** Prerequisite: JOUR 10113 or permission of instructor. Introduction to computer hardware and software for use in desktop publishing and periodical design and web page design.

**JOUR 30853 Historical Development of Mass Media.** Development of American journalism. Political, social and economic interaction of the media and society

**JOUR 40003 Senior Honors in Journalism.** A major research study involving a substantial topic or project under the supervision of a three-member faculty committee. The sequence of JOUR 30003 and 40003 must be planned so that 40003 is taken prior to the student's final semester of undergraduate work.

**JOUR 40101 Computer-Assisted Information Gathering.** Using computers to gather and analyze information for news stories. Includes on-line search techniques and database analysis.

**JOUR 40503 Integrated Marketing Communications.** Prerequisites: JOUR 30403 and JOUR 30313, or MARK 30103. This course provides an introduction to the principles and practices of integrated marketing communications (IMC). Students will learn how the various communication functions - advertising, public relations, direct response, personal sales, sales promotion, and supportive communication - can be integrated for maximum effectiveness in a variety of settings. Course design consists of lectures, readings, guest speakers, and a course project for a real client.

**JOUR 40613 Media Ethics.** This course will introduce the study of ethical issues in the media. Students will look critically at current media practices and develop an understanding of prominent ethics questions, as well as the ability to analyze the important ethical issues faced by the mass media industry.

**JOUR 40803 Public Opinion and Persuasion.** A study of the effects of persuasion in the formation of public opinion.

**JOUR 40903 Research and Evaluation.** Basic procedures of survey research with emphasis on techniques used in media and advertising/public relations research.

**JOUR 40970 Special Topics.** Prerequisite: Permission of department chair. Variable credit. Special problem areas requiring independent or small group research and study within a related area of journalism/mass communications.

**JOUR 40993 Mass Media and Society.** A capstone seminar course designed to pull together for senior students all of the relationships of the mass media - both among various aspects of the media and between media and society.

**JOUR 50123 Proseminar in Journalism and Mass Communication.** Seminar devoted to the analysis and discussion of significant issues in journalism and mass communication with a focus on related literature, research areas and policy developments.

**JOUR 50143 Social and Cultural History of the Media.** Seminar designed to explore the history of mass media. Issues discussed in this class will improve historical knowledge about the mass media and give a foundation for understanding the professional development of journalism and mass communication.

# Radio TV Film

B.A. Degree with a Major in Radio-TV-Film
B.S. Degree with a Major in Radio-TV-Film
Departmental Requirements
Minor in Radio-TV-Film
Admission of Transfer students
Professional Affiliations and Accreditation
Internships
Honors Program
Courses of Instruction

#### (RTVF)

Available on the Bachelor of Arts and Bachelor of Science degree with a major in Radio-TV-Film.

The Department of Radio-TV-Film functions within the context of a liberal arts university and seeks to produce well rounded, highly-skilled students who are adaptable to the changing complexities of today's media industries.

The department requires a core of courses that provides a strong background for both the liberal arts and preprofessional student. These courses incorporate an overall view of the history of broadcasting and film, production, and aesthetics. Subsequent courses build on this orientation, while also encouraging students to specialize in a chosen area of interest.

#### **Facilities and Resources**

The department occupies the south ground floor of the Moudy Building, a modern, spacious facility. RTVF is well equipped to serve students in all media-related areas. This includes a surround-sound theatre, a multi-format FM radio station, film production equipment, and two digital sound stages and post-production suites. The department is the only Avid-Certified Training Center in Texas and surrounding states.

The department also houses a permanent collection of over 12,000 film and television titles in the Gwendolyn P. Tandy Memorial Film Library. The collection, used by faculty in RTVF courses, offers unusual depth and breadth for students interested in film and television production, history, and analysis.

# B.A. Degree with a Major in Radio-TV-Film

A total of 124 semester hours is required: University Curriculum Requirements (UCR)-47 semester hours to include 6 credit hours in one foreign language at the 20000 level or above and Survey of Art, Dance, Music, or Theatre for the Fine Arts requirement (RTVF 10053 cannot be used to fulfill major or minor requirements). RTVF requires 37 hours within the major, 18 hours in an appropriate minor (chosen in consultation with the department adviser), and 22 hours of electives. \*REMINDER: 12 credit hours in the major must be at the 30000-level or above.

# B.S. Degree with a Major in Radio-TV-Film

Students pursuing the B.S. must complete all of the departmental requirements for the B.A. (including an approved minor) with the exception of the foreign language requirement.

All potential RTVF majors will complete the following core courses:

10113 History of Broadcasting 10123 History of Film 10143 Introduction to Film and Television Aesthetics

All RTVF majors will also complete 40901 Senior Seminar in the last semester of their senior year.

## **Proceeding in the Major**

Students who have completed the core RTVF courses may apply to proceed in the Radio-TV-Film major.

Minimum requirements to proceed:

- --Minimum GPA of 2.5 for the required core classes
- --"C" or better in each of the core classes
- --Overall TCU GPA of 2.5
- --Application which meets with faculty approval. The application consists of:
- --Letter of application
- -- Current transcript
- --Writing sample

# All RTVF majors will take two courses in each of three areas:

I. Production-RTVF 20203, or RTVF 20213, or RTVF 20223 and any other RTVF Production course (except Production Electives-see below)

II. Analysis-RTVF 20583 and any other RTVF Analysis course

III. Industry-RTVF 20523 and any other RTVF Industry course

Each student will then choose one of these areas of specialization. The student must take three additional courses in that area.

# **Departmental Requirements**

Majors in Radio-Television-Film must achieve the following minimum academic requirements as a prerequisite to enroll in junior and senior level Radio-Television-Film courses:

- 1. Overall TCU GPA of 2.5;
- 2. Minimum cumulative GPA of 2.5 for all courses taken within the Department of Radio-Television-Film:
- 3."C" or better in all courses taken in the Department of Radio-Television-Film.

Students whose overall or departmental grade point average falls below 2.5 cannot enroll in a junior or senior level RTVF course until the 2.5 GPA is achieved.

The ultimate responsibility for knowing the pre-requisites for a course lies with the student and is noted in this catalog. Students who wish to apply for "permission of instructor" or "permission of department" to take a class must submit a request in writing to the RTVF Department prior to registration. The Department does not guarantee that all who wish to enroll in these classes will be accepted.

#### I. Production

Production integrates the varied techniques of audio, television, and motion picture production with the development of effective communication and writing skills. The curriculum orients students to industry technical practice, production planning, scripting, visualization, producing, directing, and editing.

```
20203 Audio Production I
20213 Video I
20223 Cinematography I
20243 Lighting and Design
20510 FM Station Operations
30203 Audio Production II
30213 Video II
30223 Cinematography II
30243 Directing
30353 Acting for Television
30393 Theory and Practice of Digital Media
40113 Sports Broadcasting
40153 Dramatic Writing
40213 Video III
40333 Post Production
40383 Documentary Production
```

Production Electives (May be taken in addition to the three courses for Production emphasis): 30510 Advanced FM Station Operations

40353 On-Camera Acting

# II. Analysis

Analysis offers the student a foundation in the critical and historical perspectives of radio, television, and film. These courses focus upon the cultural, social, and technological influences of the media and how those influences shape our world. NOTE: RTVF majors with an emphasis in Analysis must take 40683.

```
20583 Media Analysis
30153 Style and Structure in Dramatic Writing
30363 Analysis of Screen Performance
30410 Film Genres
30433 American Cinema
30593 Television, Culture, and Society
30663 Film in a Global Society
30983 Women in Television and Film
40003 Senior Honors Research Paper
40440 Topics in Film
40570 Topics in Television
40623 Topics in National Cinemas
40683 Film Theory and Criticism
50400 Advanced Studies in RTVF
50403 New Technologies
```

## III. Industry

Industry is structured to produce ethical leaders for the highly competitive entertainment field. Focus is placed on understanding industry practices and analysis of the interrelated nature of various industry segments. Development of effective communication and leadership skills is also a component of these courses.

```
20523 Business of Media
30513 Audience Research
30523 Media Marketing & Promotion
30573 Broadcast & Cable Programming
40503 Media Industry Law & Regulation
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- 40513 Topics In Media Industries Studies
- 40523 Management for Broadcast, Cable, and Film
- 40653 Popular Music and the Recording Industry
- 50443 Studies in International Broadcasting

#### IV. Sports Broadcasting

Sports Broadcasting provides the opportunity to acquire specialized skills to succeed in sports-related media industries.

Students who have completed the core RTVF courses may apply to proceed in the Radio-Television-Film Major: at this time, students interested in Sports Broadcasting should specify in their letter of application that they intend to pursue this area of emphasis.

Required Courses for this emphasis indclude:

I. Production

20203 Audio I

20213 Video I

#### II. Industry

20523 Business of Media and another Industry course (chosen in consultation with the student's designated RTVF advisor)

## III. Analysis

20583 Media Analysis

40580 Topics in Sports Media (May be taken more than once as course content changes in consultation with the student's designated RTVF advisor)

And three from the following:

- 30713 Remote Sports Production
- 30723 Producing the Live Sports Event
- 30733 Audio Production for Sports Television and Radio
- 40113 Sports Broadcasting
- 40713 Global Sports Media

## Minor in Radio-TV-Film

The minor in Radio-Television-Film requires 18 hours, including: 10113 (History of Broadcasting), 10123 (History of Film), 10143 (Introduction to Film and Television Aesthetics), and 20583 (Media Analysis). RTVF 10053 cannot be used to fulfill minor requirements. The six remaining hours may be selected from:

30353 Acting for Television

- 30433 American Cinema
- 30593 Television, Culture, and Society
- 30643 British Cinema and European Culture
- 30663 Film in a Global Society
- 30983 Women in Television and Film
- 40353 On-Camera Acting
- 40623 Topics in National Cinemas
- 40683 Film Theory and Criticism

Minors in Radio-Television-Film must achieve the following minimum academic requirements as a prerequisite **to enroll in junior and senior level Radio-Television-Film courses:** 

- 1. Minimum GPA of 2.5 for the three RTVF core courses;
- 2. Minimum cumulative GPA of 2.5 for all courses taken within the Department of Radio-Television-Film;
- 3. "C" or better in all courses taken in the Department of Radio-Television-Film.

## **Admission of Transfer students**

Transfer students admitted to TCU are not guaranteed admission to the Radio-TV-Film major. All potential RTVF majors-including transfer students-must complete the three core courses (10113, 10123, 10143) and then follow the procedures to proceed in the major. Transfer students must submit a written request for the Department of Radio-TV-Film to consider accepting any substitutes for the RTVF 10113, 10123, or 10143. Each such request will be considered on an individual basis.

## **Professional Affiliations and Accreditation**

The Department of Radio-TV-Film holds institutional memberships in the Broadcast Education Association, the National Association of Broadcasters, Texas Association of Broadcast Educators, the International Communication Association, the International Television Association, and the University Film and Video Association.

# Internships

The Department has an active supervised internship program that places students in radio stations, television studios, film production companies, audience research companies, and corporate/industrial media centers. Most interns work in the Dallas/Fort Worth Metroplex, but in many interns are placed in their hometowns or in major media markets such as Los Angeles, New York, and London. Juniors and seniors with 18 hours completed in the major with a grade point of 3.0 or above may apply for an internship.

# **Honors Program**

Radio-TV-Film majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in RTVF 30003 during their junior year and RTVF 40003 during the fall semester of their senior year.

#### **Courses of Instruction**

**RTVF 10053 Survey of Film.** Lecture and viewing sessions. Includes examination of the development of film structure and aesthetics within appropriate social and cultural contexts. Viewing of significant films in cinema history. Designed for non-majors. RTVF majors may not use this course to fulfill major requirements or Fine Arts UCR requirement.

**RTVF 10053 Survey of Film.** Lecture and viewing sessions. Includes examination of the development of film structure and aesthetics within appropriate social and cultural contexts. Viewing of significant films in cinema history. Designed for non-majors. RTVF majors may not use this course to fulfill major requirements or Fine Arts UCR requirement.

**RTVF 10113 History of Broadcasting.** Lecture and viewing sessions. An intensive overview of the history of radio, television and related electronic media from 1900 to the present. Topics include the rise of the network system, programming and the evolution of broadcast technology. This course is designed for majors and minors; the minimum acceptable grade is a C.

**RTVF 10123 History of Film.** Lecture and viewing sessions. An intensive history of film from 1890 to the present. Includes examination of the development of film structure within social and cultural contexts, the Hollywood studio system, and selected international cinema systems. This course is designed for majors and minors; the minimum acceptable grade is a C. RTVF 10053 may not substitute for this course.

**RTVF 10143 Introduction to Film and Television Aesthetics.** An overview of how motion pictures and television programs can be "read" and analyzed as complex aesthetics texts. The course is designed to complement and provide a framework for all other RTVF courses. Class combines lecture, discussion and viewing sessions. This course is open to majors and minors only.

RTVF 10433 Freshman Seminar in Radio-TV-Film. Topics may vary each time it is offered.

RTVF 10533 Freshman Seminar in Radio-TV-Film. Topics may vary each time it is offered.

**RTVF 20203 Audio Production I.** Prerequisites: RTVF 10113, 10123, and 10143; RTVF majors only. Fundamentals of audio production. Lecture and laboratory projects designed to acquaint students with audio production requirements and responsibilities.

**RTVF 20213 Video I.** Prerequisites: RTVF 10113, 10123, and 10143. RTVF majors only. Lecture and laboratory. Fundamentals of video preproduction, production, and direction. Functions and responsibilities of the production crew and equipment utilization.

**RTVF 20223 Cinematography I.** Prerequisites: RTVF 10113, 10123, and 10143. RTVF majors only. Lecture and Laboratory. Principles and practices of 16mm and electronic cinematography, lighting, sound, and editing. Individual exercises and group projects.

**RTVF 20243 Lighting and Design.** Prerequisite: RTVF 20213. Lecture and laboratory. Theory and practice of lighting and production design for film and video.

**RTVF 20510 FM Station Operations.** Prerequisites: RTVF 10143 and permission of department. Open to RTVF and JOUR majors only. Practicum in various phases of station operation. Students serve in different staff capacities at KTCU-FM. (1-3 semester hours; 3 hours maximum per semester.)

**RTVF 20523 Business of Media.** Prerequisites: RTVF 10113, 10123 and 10143. This course provides an intensive overview of radio, TV, and film business practices, including the structure of media companies; how media conceptualize and measure their audience; strategies (i.e., promotion, advertising) media companies use to attract an audience, and regulatory structures that govern the radio, TV, and film industries.

**RTVF 20583 Media Analysis.** Prerequisites: RTVF 10113, 10123, and 10143; ENGL 10803. Students in this course will develop a critical perspective on broadcasting and film. Intensive practice in analyzing and writing about broadcast programs and motion pictures.

**RTVF 30003 Honors Tutorial.** Prerequisites: Junior standing and membership in the Honors Program. This course is offered only as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment.

**RTVF 30153 Style and Structure in Dramatic Writing.** Prerequisite: RTVF 20583. Open to RTVF Majors and Minors only. Analysis of dramatic writing styles for stage and screen.

**RTVF 30203 Audio Production II.** Prerequisite: RTVF 20203. Lecture and laboratory. Practicum in advanced radio, audio and music production, program direction, and multi track recording for advertising and music. Basic principles of radio programming.

**RTVF 30213 Video II.** Prerequisites: RTVF 20213, and 20243. Lecture and laboratory. Intermediate level production and direction of studio and non-studio video.

**RTVF 30223 Cinematography II.** Prerequisite: RTVF 20223. Practicum in advanced cinematography. Advanced study of lighting and film exposure techniques. The course culminates with an advanced 16mm film project.

**RTVF 30243 Directing.** Prerequisite: RTVF 30213. Lecture and laboratory. An exploration of the role of the director in film and video production. Includes examination of case studies as well as practical exercises.

**RTVF 30353 Acting for Television.** Prerequisites: RTVF 10113, 10123, and 10143. Non-RTVF majors/minors may apply for permission of instructor. An exploration of the theories and techniques of on-camera performance. Students act in student-directed video projects and critique their work in class. Projects and assignments focus on improving performance skills as well as developing strategies to work with talent in a production setting.

**RTVF 30363 Analysis of Screen Performance.** Prerequisites: RTVF majors/minors: RTVF 20583. Non-RTVF majors/minors may apply for permission of instructor. An intermediate level course that explores screen acting from a historical and critical perspective. Students learn to formulate and express critical opinions, applying film theories and methodologies to the specific area of screen performance.

**RTVF 30393 Theory and Practice of Digital Media.** Prerequisites: RTVF majors only. RTVF 20203 and either 20213 or 20223. This course provides students with the aesthetic skills and technical knowledge needed to develop and implement Web design and Interactive Media as well as titles and graphics, process shots, and special effects for film and video.

**RTVF 30410 Film Genres.** Prerequisites: RTVF 20523, and 20583, or permission of instructor. Historical and critical overview of various film genres, with viewing and analysis of representative films.

**RTVF 30433 American Cinema.** Lecture and viewing sessions. An overview of the history of American cinema from 1895 to the present. Includes examination of the development of American film from a cultural and historical perspective. Topics include Hollywood system, Independent cinema, Ethnic cinema, and Minority cinema. Open to non-majors.

**RTVF 30510 Advanced FM Station Operations/Management.** Prerequisites: RTVF 20510 and permission of instructor. Open to RTVF majors only. Practicum in operations and management of FM radio stations. Students serve as managers and mentors in station operations. Students may be assigned to KTCU-FM in areas such as programming, operations, music formats, sports, and news. (1-3 semester hours; 3 hours maximum per semester.)

**RTVF 30513 Audience Research.** Prerequisites: RTVF 20523; Math 10043 recommended. Introduction to qualitative and quantitative research methodologies used to measure audiences in the media industries.

**RTVF 30523 Media Marketing and Promotions.** Prerequisites: RTVF 10113 (for RTVF majors) or JOUR 30313 (for Journalism majors) or permission of instructor. Principles and techniques of developing successful marketing and promotions campaigns in the media industries. Course focuses on issues of market research, advertising strategies, identity and image development, and creative execution. (Offered as RTVF or JOUR credit.)

**RTVF 30573 Broadcast and Cable Programming.** Prerequisite: RTVF 20523. Historical overview of broadcast programming trends. Current program practices and strategies in radio, television, cable and other electronic media.

**RTVF 30593 Television, Culture and Society.** Prerequisite: RTVF 20583. Issues in the relationships among television, culture, and society. Emphasis on understanding the role television has played in the development of mass culture and the influence of television on contemporary society.

**RTVF 30643 British Cinema and European Culture.** Prerequisite: RTVF 10123, or permission of instructor. Using a cultural/historical perspective, this course focuses upon postcolonial, social, economic, and political factors that create the visual image in British cinema. Investigates the representation of Britain's identity in European culture. Examined through a series of seminars, guest lectures, and on-site visits to studios and museums in London.

**RTVF 30663 Film in a Global Society.** Prerequisites: RTVF 10123, and 20523, or permission of instructor. Examines the increasingly global nature of the film and broadcasting industries, and explores the impact of US films abroad, using the British market as a specific subject of analysis. Includes a series of seminars, guest lectures, and on-site visits to studios and museums in London.

**RTVF 30713 Remote Sports Production.** Prerequisites: RTVF 20203 and 20213. This course gives the student practical hands-on experience producing 'live' sporting events such as: football, baseball, basketball, soccer, tennis and other sports. Students will be responsible for all aspects of the production from director to camera operator.

**RTVF 30723 Producing the Live Sports Event.** Prerequisites: RTVF 20203, 20213, and 30713. This course will prepare students as producers, associate producers, and production managers for sports production. Combining lecture and lab students will learn all of the necessary skills to be able to produce 'live' sporting event broadcasts. Students enrolled in this course will produce TCU sporting events.

**RTVF 30733 Audio Production for Sports: Television and Radio.** Prerequisites: Must be a RTVF major, and RTVF 20203. Audio techniques, theory, and application for sports broadcasting. The application of techniques for live sports television and radio. Includes microphone choice and placement, mixing techniques, IFB, and replay video monitor deployment. Labs include actual on-site broadcasts of sporting events (live to tape). This is not a play-by-play announcing course.

**RTVF 30860 Internship in Radio-TV-Film.** Prerequisites: RTVF majors only. Permission of department is required. At the time of application for an internship, students must have a GPA of 3.0 or better in RTVF courses, completed 18 hours of RTVF courses including 10113, 10123, 10143 and 20523. Supervised study, experience, and on-the-job training in a media-related organization. This course may only be taken on a pass-no credit basis. This course may not be used to fulfill requirements for a major or minor in RTVF; it is an RTVF elective only. (1-6 semester hours, 3 hours maximum per semester.)

**RTVF 30983 Women in Television and Film.** Prerequisite: RTVF 20583 or permission of instructor. This course examines the relationship between women and the electronic media. Specific issues include the social construction of gender and gender roles, the influence of media stereotypes, and the critical evaluation of artistic works created by female writers, producers, and directors.

**RTVF 40003 Senior Honors Research Paper.** Prerequisites: RTVF 30003. Senior standing and membership in the Honors Program. A supervised research experience and a thesis that is usually based on the subject matter studied in 30003. This course is offered only as a tutorial; arrangements must be made with an instructor prior to enrollment.

**RTVF 40113 Sports Broadcasting.** Prerequisites: RTVF 20203 or 20213. Overview and analysis of sports broadcasting. This course teaches the fundamentals of both on-air talent and behind-the-scenes production of both television and radio sports production.

RTVF 40153 Dramatic Writing. Prerequisites: RTVF 30153. Non-RTVF majors/minors may apply for permission

of instructor. Principles and techniques of writing fiction for the screen. Conducted as a workshop.

**RTVF 40213 Video III.** Prerequisite: RTVF 30213. Advanced problems in video production. A variable topic lecture/laboratory course.

**RTVF 40333 Post-Production.** Prerequisites: RTVF 20213. This course examines the principles and techniques of non-linear editing. Students will log time on the department's Avid system.

**RTVF 40353 On-Camera Acting.** (Also Theatre 40353) Prerequisite: Theatre students: THEA 30303 or permission of instructor; RTVF students: RTVF 10113, 10123, and 10143. Non RTVF majors/minors may apply for permission of instructor. An advanced course in acting designed to acquaint the student with changes in technique that are necessary for performance before the film or television camera.

**RTVF 40383 Documentary Production.** Prerequisites: RTVF majors only. RTVF 20213 and 40333. In this course, students will examine a variety of documentary styles and will apply their production skills to the practice of documentary filmmaking.

**RTVF 40440 Topics in Film.** Prerequisites: RTVF 20523, and 20583, or permission of instructor. Using a variety of theoretical and critical approaches, students will examine selected topics and/or issues within the film industry. (6 hours maximum; 3 hours per semester).

**RTVF 40503 Media Industry Law and Regulation.** Prerequisite: RTVF 20523. Structural and content regulation of the media industries. Court cases bearing on media industries. Introduction to legal research and writing.

**RTVF 40513 Topics in Media Industry Studies.** Prerequisite: RTVF 20523. An in-depth examination of selected issues relating to media industry business practices.

**RTVF 40523 Management for Broadcast, Cable and Film.** Prerequisite: RTVF 20523. The organization and administration of broadcast, cable and film operations. Management techniques and strategies, including forecasting, planning, statistical and financial analysis, and interpersonal communication.

**RTVF 40570 Topics in Television.** Prerequisites: RTVF 20523, and 20583, or permission of instructor. An indepth analysis or selected television genres and industry practices from a variety of critical and theoretical perspectives. (6 semester hours maximum; 3 hours per semester)

**RTVF 40580 Topics in Sports Media.** Prerequisites: RTVF 20523 and 20583, or permission of instructor. Using a variety of theoretical and critical approaches, this course will examine coverage of sporting events in the broadcast media as well as depictions of athletes and athletic events in fiction film and television programming.

**RTVF 40623 Topics in National Cinemas.** Prerequisite: RTVF 20583 or permission of instructor. Investigation of the historical and cultural developments of a selected national cinema including the examination of film structure and aesthetics in a selected cultural setting. Topics will include the national cinemas of Japan, India, Germany, Italy, etc. 6 semester hours maximum; 3 hours per semester

**RTVF 40653 Popular Music and the Recording Industry.** Prerequisites: RTVF 20523 and 20583. This course explores how popular music functions as a significant media industry and source of culture in contemporary society. Key concepts in the critical study of popular music are covered, including genre formation, fan cultures, and recording industry business practices.

**RTVF 40683 Film Theory and Criticism.** Prerequisite: RTVF 20583. Survey of classical and contemporary film theories. Required for those RTVF majors taking Analysis emphasis.

**RTVF 40713 Global Sports Media.** Prerequisites: RTVF 20203, 20213, and 30723. This course provides students with the knowledge and skills needed to produce sports events internationally such as: The Olympics, World Cup Soccer, Skiing, Sailing, and Golf. This course will examine legal issues, rights fees, and problems associated with producing an event overseas.

**RTVF 40853 Managing a Performance Career.** (Also Theatre.) Prerequisite: THEA/RTVF 40353 or permission of instructor. Business practices related to performance talent in the television and film industry including agencies, unions, auditions, etc.

**RTVF 40900 Special Problems in Radio, Television and Film.** Prerequisite: Junior standing. A conference course designed to give an individual student opportunities for additional specialized work in his or her area of concentration. 1-6 semester hours

**RTVF 40901 Senior Seminar in Radio-TV-Film.** Prerequisite: Students must be in last semester of senior year. A review and synthesis of material covered in the RTVF major. This course is required for RTVF majors; the minimum acceptable grade is a "C." (1 semester hour.)

**RTVF 50400 Advanced Studies in Radio, Television, and Film.** Prerequisites: RTVF 10113, 10123, and 10143; senior or graduate standing. Seminar in radio, television, and film. 3-6 semester hours; maximum 3 semesters hours per semester.

**RTVF 50403 New Technologies.** Prerequisites: RTVF 20523, and 20583, senior or graduate standing; permission of instructor. Overview of developments of media technologies and analysis of relationships between technology and culture.

**RTVF 50443 Studies in International Broadcasting.** Prerequisites: RTVF 10113, 10123, 10143, and 20523. This seminar course takes a comparative approach to the study of broadcasting. Examines the structure of broadcast media outside the U.S., including production, programming, regulation, finance, and the social effects of broadcasting.

**RTVF 50901 Senior Seminar in Radio-TV-Film.** Prerequisite: Students must be in last semester of senior year. A review and synthesis of material covered in the RTVF major. This course is required for RTVF major; the minimum acceptable grade is a "C." (1 semester hour.)

**RTVF 50970 Special Problems in Radio, Television, and Film.** Prerequisite: Senior or graduate standing. A conference course designed to give an individual student opportunities for additional specialized work in his or her

area of concentration. (1-6 semester hours)

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# Communication Studies

Bachelor of Science Degree
Bachelor of Arts Degree
Minor in Communication Studies
Combined Masters/Bachelors 3/2 Program
Honors Program
Courses of Instruction

## (COMM)

Available as a major on the B. S. degree with a coursework emphasis in either Communication in Human Relations or in Communication Studies. A major in Communication Studies is also available on the B. A. degree.

A degree in Communication Studies can serve the academic and career objectives of a variety of students. An essential component of a liberal arts education, competence in oral communication is a requirement for most positions in modern business and industry. The Communication in Human Relations emphasis provides majors with the opportunity to develop proficiency in spoken communication in an academic program providing flexibility and adaptability to a variety of professional contexts. The Communication Studies emphasis provides majors with the understanding of interpersonal and public communication processes needed for careers in teaching, research, and for further professional or academic study.

Students may declare a major in Communication Studies in one of two ways: as incoming freshmen or after having completed at least 30 hours of coursework including a grade of "C" or better in either COMM 10123 (Basic Speech Communication), COMM 20113 (Interpersonal Communication), or COMM 20223 (Exploring Human Communication) and an overall GPA of at least 2.25.

Majors taking classes counting toward departmental degree requirements must take them for graded credit. Any courses completed in department receiving a pass under the TCU Pass/No Credit Policy before declaring Speech Communication as a major, will count as university electives, but will not count toward the hour requirement to satisfy the major.

## **Bachelor of Science Degree**

**B. S. Degree with a major in Communication Studies** consists of a total of 124 semester hours: Communication Studies-36 semester hours; University Curriculum Requirements-47 semester hours; Additional-may consist of 1) minor of 18 hours plus 23 hours elective; 2) second major of 27 hours plus 14 hours elective; 3) two minors of 18 hours plus 5 hours elective; or 4) 41 hours elective. Minor(s) or second major must be approved by the chair of the Department of Communication Studies and must be consistent with the requirements of the major and minor department.

**Communication in Human Relations Emphasis.** Coursework in this area stresses oral communication performance and applied communication. The student must complete COMM 10123 and 18 semester hours of coursework in the sequence, selected from Communication in Human Relations courses. The remaining 15 semester hours are selected from other courses in the department with consent of an academic advisor.

**Communication Studies Emphasis.** Coursework in this area stresses an understanding of communication processes and contexts. The student must complete COMM 10123 and 18 semester hours of coursework in the sequence, selected from Communication Studies courses. The remaining 15 semester hours are selected from other courses in the department with consent of an academic advisor.

# Suggested Courses for the Freshman Year

# FALL

SPCO 10123 Writing Workshop Laboratory Science Social Science Religion	3 3 3 3
PEAC	1
Total	16
SPRING	
SPCO 20103 or SPCO 20193	3
Laboratory Science	3
	5
Social Science	3
History	3
Fine Arts	3
PE-H	1
Total	16
10 tai	10

# **Bachelor of Arts Degree**

**B. A. degree with a major in Communication Studies** consists of a total of 124 semester hours: Communication Studies -27 semester hours, including COMM 10123 and COMM 20223; University Curriculum Requirements-47 semester hours; Additional-may consist of 1) second major of 27 semester hours plus 23 hours elective, or 2) minor of 18 semester hours plus 32 hours elective. An internship may not be counted as part of the

27 semester hour requirement in the major. Minor(s) or second major must be approved by the chair of the Department of Communication Studies and must be consistent with the requirements of the major and minor department. B. A. students must complete at least six hours in modern language beyond the freshman level.

#### **Minor in Communication Studies**

A minor requires 18 semester hours, including COMM 10123 and a sequence of courses as approved by the Chair of the Department. A minimum of 6 hours must be at the 30000 level or above.

Minors taking classes counting toward departmental requirements must take them for graded credit. Any courses completed in the department receiving a pass under TCU Pass/No Credit Policy before declaring speech communication as a minor, will count as university electives, but not toward the hour requirement to satisfy the minor.

# Combined Masters/Bachelors 3/2 Program

TCU Communication Studies majors may earn both a Bachelor of Arts or Science degree and a Master of Science degree in five years. Students may apply for the progam after completing at least 106 semester hours and satisfying UCR and other degree requirements with the exception of 18 hours of elective courses. Students will complete 18 hours of graduate level courses during their fourth and fifth years of study satisfying the requirements for the Bachelor and Masters degrees.

To be eligible for the 3/2 program, students must formally apply for admission to the Communication Studies graduate program and meet the general requirements for admission to graduate study including, outstanding grade point average, letters of recommendation, and acceptable scores on the Graduate Record Examination's Verbal and Quantitative sections. Prospective 3/2 students must contact their advisor in the Department of Communication Studies or the Director of Graduate Studies for preliminary advisement early in their undergraduate program.

## **Honors Program**

Communication Studies majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in COMM 30003 during their junior year and COMM 40003 during their senior year. Honors students should consult with the Chair of the Communication Studies Department concerning additional guidelines.

#### **Courses of Instruction**

# **Communication in Human Relations (Applied Communication)**

**COMM 10123 Basic Speech Communication.** Surveys fundamental communication concepts with emphasis on developing public speaking skills.

**COMM 20103 Business and Professional Speaking.** The role of Speech Communication in the modern organization with special focus on the development of communication skills particular to business and the professions.

**COMM 20113 Interpersonal Communication.** Consideration of effective speech communication strategies in interpersonal situations. Practice in the development of appropriate communication skills in face-to-face interactions.

**COMM 20133 Instructional Communication.** Emphasizes lecturing and discussion leadership in instructional settings. Recommended for students seeking teacher certification in any area as well as those interested in professional and non-professional teaching in such areas as religious education, employee training, management and community activities.

**COMM 20193 Listening.** Introduction to the reception and processing of information. Provides diagnosis of listening abilities and personal improvement in several areas of information processing related to daily communication.

**COMM 30103 Argumentation and Debate.** Prerequisite: SPCO 10123 or 20103 or permission of instructor. Training in clear, logical, and persuasive communication; analysis, exposition, reasoning, and use of evidence; practice in effective delivery; classroom participation in debates.

**COMM 30133 Group Discussion.** Participation in decision-making groups to develop skills related to effective group communication. Factors affecting group interactions are considered.

**COMM 30153 Interviewing.** Applies dyadic communication principles to specialized interviewing situations. Skills development is stressed.

**COMM 30163 Organizational Communication.** Communication channels and networks in organizations; analysis of barriers to effective communication; solving practical communication problems; communication and dynamics in work groups.

**COMM 30173 Advanced Public Speaking.** Prerequisite: SPCO 10123 or 20103 or permission of instructor. Training in speech performance and speech evaluation skills. Theory and practical experience related to the formulation, presentation, and evaluation of informative and persuasive public speeches.

**COMM 40103 Communication in Business and the Professions.** Prerequisite: SPCO 10123, and SPCO 30163 or permission of instructor. Explores topics relevant to successful oral and written communication in today's dynamic business climate. Expressing ideas through discussion and written assignments will be emphasized.

**COMM 40123 Internship.** Prerequisite: Complete 15 hours in Speech Communication, including 9 hours in Communication in Human Relations emphasis courses; junior or senior standing; departmental approval. Participation in professional internship experience approved by course instructor. Weekly meeting in classroom setting allows discussion and analysis of professional issues. Open to majors only.

#### **Communication Studies**

**COMM 20223 Exploring Human Communication.** Applies communication theory and practice to a broad range of communication phenomena in intrapersonal, interpersonal and public communication settings.

**COMM 30213 Special Issues in Interpersonal Communication.** Prerequisite: SPCO 20113. Explores interpersonal communication within special contexts. Includes theoretical concepts applicable to gender, aging, and health.

**COMM 30223 Power and Influence in Interpersonal Communication.** Prerequisite: SPCO 10123 and SPCO 20113, or permission of the instructor. Explores theory and research related to social influence in relationships and communication processes.

**COMM 30243 Communication in Lasting Relationships.** Prerequisite: SPCO 10123, 20223, or permission of instructor. Examination of useful theory and research findings on the role of interpersonal communication in the initiation, maintenance and possible dissolution of lasting relationships.

**COMM 40213 Perspectives on Ethics in Speech Communication.** Prerequisite: SPCO 10123. Examination of contrasting models and standards of communication ethics. Students apply standards to specific problem situations in politics, advertising, writing, and interpersonal communication in making reasoned and informed personal judgments concerning the ethics of public and private communication.

**COMM 40233 Communication in Group Leadership.** Prerequisite: SPCO 10123 and 30163 or permission of instructor. Understanding the role of speech communication in the leadership process. Development of practical leadership communication skills and consideration of communication behavior demonstrated by leaders.

**COMM 50223 Nonverbal Communication.** Prerequisite: Majors only, senior or graduate standing. Review and critical analysis of theory and research applied to social, vocational and educational settings.

#### **General Courses**

**COMM 10433 Freshman Seminar in Speech Communication Freshman Seminar in Speech Communication.** Prerequisite: Freshman seminar. Examination of contrasting models and standards of communication ethics. Students apply standards to specific problem situations in politics, advertising, interpersonal communication, and writing in making reasoned and informed personal judgments concerning the ethics of public and private communication.

**COMM 30003 Honors Seminar: Current Developments in Speech.** Offered as an honors tutorial and to selected majors who are not honors candidates. Study of current issues in Speech Communication and related fields with opportunity for development of an area of specialization.

**COMM 30253 Communicating Interculturally.** Prerequisite: SPCO 20113. This survey course examines the influence of culture on our communicative interactions with others. Emphasis is placed on identifying the relationship between communication and culture, developing intercultural communication competence, and understanding the elements that constitute and separate cultures.

**COMM 30970 Independent Study.** Prerequisite: Permission of instructor. Independent work in specially designed projects not covered by regular course offerings. (1-6 semester hours, 3 hours maximum per semester.)

**COMM 40003 Honors Research Paper.** A research paper developing from the student's specialization in the Honor's Seminar.

**COMM 40113 Conflict Management.** Prerequisites: SPCO 10123, and 20113. Seminar designed to acquaint students with the factors affecting interpersonal conflict and to provide students with appropriate communication skills necessary for successful conflict resolution and negotiation in a variety of contexts, both personal and professional. Emphasis is on exploring practical, theoretical and critical analyses of conflict and negotiation in an active learning environment.

**COMM 40143 Communication and Career Success.** Prerequisite: SPCO 10123. Explores communication skills critical to career success. Understanding, assessment, and improvement planning are stressed with a strong emphasis upon application of theory and research in pragmatic career development and organizational contexts.

**COMM 50233 Measurement of Communication.** 1.) Prerequisite: Senior or graduate standing. A study of principles of measurement theory, tactics for measuring communication variables, techniques of analysis and presentation of data, instruments and apparatus, and classic research studies in measuring communication behavior. 2.) Study of principles of measurement theory, tactics for measuring communication variables, techniques for analysis and presentation of data, instruments and apparatus and classic research studies in measuring communication behavior.

**COMM 50970 Special Problems in Speech Communication.** Prerequisite: Senior or graduate standing. Specialized work in student's area of concentration. 1-6 semester hours, 3 hours maximum per semester.

# The School of Education

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Transfer Student Admission
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#### Overview

The mission of the School of Education at TCU is to develop effective, ethical educators with a passion for learning. As professionals and active citizens in our community, we strive to create a humane and just society in which all individuals can develop their full potential. We are governed by an ethical code that documents our obligations to students, colleagues, and the community, which includes rationality and objectivity in our professional judgments and actions, civility and caring in our interactions with others, and encouragement of diverse views on issues of significance to society.

Consistent with the above values, our core beliefs connect a strong foundational knowledge base with professional practice. Professionals in education study and expand the knowledge base of effective practice and ground their practice in theory and research and acquire expertise through activities in diverse, field-based settings which are exemplars of practice. They also promote high student achievement and a passion for learning by mastering content knowledge and effective pedagogical skills, using multiple strategies, resources, and technologies to plan, implement, and assess instruction and to document effectiveness with students, and synthesizing knowledge from relevant, academically diverse perspectives and a variety of theoretical orientations and approaches. In addition, educational professionals provide service and leadership in diverse settings, ranging from local to global communities, seek to improve professional settings and society, and collaborate with representatives from various groups within and outside the educational community.

The School of Education offers studies culminating in the Bachelor of Science degree, as well as studies leading to teacher certification. The school offers majors in Early Childhood Education (EC-4th grades), Middle School Education (4th-8th grades), and Secondary Education (8th-12th grades). In addition, students can earn certification in Special Education supplemental. Courses are also offered for those students wishing to prepare for teaching English as a Second Language (ESL).

# **Program Changes**

Programs listed in this bulletin reflect current State Board of Educator Certification (SBEC) standards. Minor changes may be made in these programs to meet additional certification standards adopted by SBEC.

# Title II

Teacher preparation programs at institutions of higher learning are required to report the pass rates of their program graduates on the exams that qualify them for certification in their state. The U.S. Congress through amendments to the Higher Education Act in October 1998 enacted these new teacher preparation accountability measures. The most recent, complete Institutional Report for TITLE II is available on the School of Education web site.

## **Admission to the Teacher Education Program**

Students who plan to declare a major or minor in education or who plan to earn a teaching certificate must formally apply for admission to the Teacher Education Program of the university. To be eligible for admission, students must meet, or will meet during the semester in which they apply, the following minimum criteria; meeting only the minimum criteria, however, does not ensure admission to the Teacher Education Program.

- 1. Complete a minimum of 54 semester hours of course work.
- 2. Attain a minimum of overall GPA of 2.5 on a minimum of 12 semester hours of course work at TCU.
- 3. Complete a course in each of the following areas of study, Speech Communication (OC), and Education 20003 (CI) with a grade of C or better.
- 4. Grant permission for a school district to complete a criminal record check.
- Submit proof of educational liability insurance for protection when assigned to work in schools with students.
- 6. Attain required scores on one of the following tests of basic skills: THEA (TASP), ACT, or SAT.
- 7. The following score levels must be met on one of the tests of basic skills to qualify for admission to the Teacher Education Program

TASP Reading - 260 Math - 230 Writing - 220 SAT Composite - 1070 Math - 500 Verbal - 500

ACT Composite - 23 Math - 19 English - 19 Students who wish to apply for admission to the Teacher Education Program should do so by March 1 for Fall admission and by October 1 for Spring admission. **Eligibility to apply does not ensure admission to the Teacher Education Program.** All recommendations for admission will be contingent upon fulfillment of the established criteria and available space in the program. If a student's GPA falls below the minimum overall requirement of 2.5 or the student fails to meet other criteria, such as passing THEA scores, the student will be denied admission. Any student who is denied admission may reapply later if the criteria for admission are met.

#### **Transfer Student Admission**

To be eligible to apply for admission, in addition to meeting the minimum criteria, students transferring from another institution must complete a minimum of 12 hours of course work at TCU with at least a 2.5 grade point average.

#### **Criminal Record Search**

In accordance with Article 6252-13c, Texas Civil Statutes, the Commissioner of Education may suspend or revoke a teaching certificate for a person who has been convicted of a felony or misdemeanor for a crime which directly relates to the duties and responsibilities of the teaching profession. The State Board of Educator Certification and TCU (at the request of SBEC) have begun a regular procedure for criminal record search of all certificate applicants.

TCU requires a criminal record search prior to placing students in field experiences. This requirement applies to prestudent teaching field experiences as well as to student teaching when required by a school district.

#### **Liability Insurance**

As students enter public and private schools for observations, tutoring, after school programs and student teaching, it is important to be covered by liability insurance. Under Texas law both the student intern and teacher can be held responsible for a child's injury. For this reason, we strongly suggest TCU students be covered with liability insurance. This insurance is offered at low cost to teachers-in-training who belong to a teacher organization. Here at TCU, we have a School of Education organization that covers liability insurance, costs of defending claims, and provides the cost of an attorney. The TCU chapter of The Texas Student Education Association (TSTA-NEA) offers the coverage with student membership. Other teacher organizations in the state such as ATPE, UEA, and AFT offer similar coverage.

## **Retention in the Teacher Education Program**

Students must maintain high standards of academic performance(a minimum 2.5 GPA), professional behavior, and other criteria in order to advance in the program and to student teaching. The School of Education is dedicated to identifying and intervening to assist students who demonstrate difficulties maintaining those standards.

Any faculty member who has a concern with a student's potential for success may initiate the process using the School of Education form, "Benchmark of Academic Performance and Professionalism." The concern may be academic or relate to a student's professional attitudes, demeanor, abilities, or preparation. The process operates as follows:

- 1. The faculty member fills out and signs the "Benchmark" form (available from the Director of Teacher Certification) describing the situation or concern in as much detail as possible, indicating what steps have been taken with the student to resolve the problem, and detailing recommendations for resolution.
- 2. A conference between the student and the faculty member is required at the time the form is completed.
- 3. The completed form is submitted to the Associate Dean, the student, and the faculty of the program in which the student is enrolled.
- 4. The Associate Dean and a faculty member from the student's program (other than the faculty who signed the form) then meet with the student to discuss the student's understanding of the circumstances, generate lists of potential solutions, and encourage the student to select a strategy or solution s/he thinks will work. A contract is drawn up specifying the desired action.
- 5. Any student receiving three or more notices through this process may be considered for dismissal from the program.
- 6. Except in an unusually severe or critical situation, no one notice will result in a student being dismissed from the program.
- 7. These notices do not become part of a student's permanent record.

## **Admission to Student Teaching**

Any student who wishes to be considered for admission to student teaching must have met the following requirements:

- 1. Completion of at least 90 hours of course work.
- 2. A minimum overall grade point average (TCU) of 2.5 and a grade point average of at least 2.5 in education courses and teaching field with no grade lower than a C. A student who makes grades lower than C in an area of teaching responsibility or in an education course during the semester immediately preceding student teaching may be permitted to enroll for student teaching if the student's overall grade point average is at least 2.5. Although the student may be recommended for graduation, she or he must repeat the courses and attain a grade of C or better before being recommended for certification as a teacher.
- ${\tt 3.}$  Completion of at least two-thirds of the course work in teaching field.
- 4. Completion of Senior Seminar EDEC/EDMS/EDSE 30001: Professional Practice Seminar.

5. Submit application for student teaching by mid-term of the semester preceding enrollment in student teaching.

Any exception to these admission and retention standards must be approved by the Dean, School of Education, and/or designee.

**Pass/No Credit Option.** No education course may be taken pass/no credit by anyone who intends to apply the course toward teacher certification. Student teaching and the professional practice seminar will be taken pass/no credit. This policy does not affect pass/no credit options related to other courses outside the School of Education.

**Texas Higher Education Assessment (THEA).** Students must attain required scores on the Texas Higher Education Assessment (THEA) examination prior to admission to the Teacher Education Program. The test consists of three sections, reading, writing, and mathematics, which may be taken together or at separate test administrations. Students are encouraged to take the THEA as early as possible, preferably during their freshman year. Copies of the test registration bulletin may be obtained in the School of Education.

Exceptions to the THEA are a combined score of 1070 or higher with at least 500 on verbal and math on the SAT or 23 on the ACT with English and math part scores equal to or greater than 19, if taken within 5 years.

**Texas Examination of Educator Standards (TEXES).** All Teacher Education Program candidates applying for Texas certification after graduation must pass proficiency tests (TEXES) in their respective field of certification or supplemental area and must pass a professional development test at the appropriate level-EC-4, middle school, secondary school, or EC-12. Students who fail to take the appropriate TEXES within three years of program completion must present documentation of completion of TEXES review prior to receiving a barcode.

**Texas Oral Proficiency Test (TOPT).** All individuals seeking Texas teaching certification with a major in bilingual education or Spanish or French must take the TOPT. This test must be taken in addition to the TEXES exams required. Candidates who attain the TOPT's passing standard of advanced oral proficiency or higher will be recommended for certification.

## Starpoint and KinderFrogs Schools

Starpoint and KinderFrogs Schools, located on the Texas Christian University campus, are laboratory schools for students with learning differences and preschoolers with developmental delays. Starpoint provides a quality educational program for a small number of students with learning differences in grades 1-6 and the KinderFrog School serves young children with Down syndrome ages 18 months to six years.

The mission of both schools is to serve as on campus training sites for TCU students preparing to become educators as well as a setting for educational research opportunities for faculty and staff. Both laboratory schools are members of the National Association of Laboratory Schools that delineates the functions of a laboratory school as research, experimentation, clinical teaching experience, curriculum development and staff development. Both Starpoint and KinderFrogs provide a variety of convenient volunteer, practicum and internship/student teaching opportunities to TCU students. The Starpoint School is accredited by the Southern Association of Colleges and Schools.

# **Honors Program**

Education majors who plan to pursue departmental honors must be members of the Honors Program and should enroll in EDUC 30003 during their junior year and EDUC 40003 during the fall semester of their senior year.

## Reading Improvement Services

EDUC 10113 is a freshman level course designed to assist students with fundamental study skills. It is aimed primarily at incoming freshmen or transfer students who have had difficulty in previous college classes. Criteria for enrollment in the course are as follows:

- 1. Incoming Freshmen who score lower than 500 on SAT Verbal (17 on ACT English) and whose high school GPA is less than 2.5 will be permitted to enroll.
- $\hbox{2. Entering transfer students will be permitted to enroll only by permission of the instructor.}\\$
- 3. Students with fewer than 36 hours of TCU course work will be permitted to enroll only if they have posted an overall TCU grade point average (GPA) below 2.25 the previous semester.
- 4. Students with 36 hours or more of TCU course work will be permitted to enroll only by permission of the instructor.
- 5. All other students who do not meet the above criteria and wish to be admitted to the course may do so only with permission of the Associate Dean.

# **School of Education Career Services Center**

The Career Services Center maintains contact with public and private schools seeking teachers, school counselors, administrators, and other types of educational personnel. Registration with the Center entitles students to file a summary of their academic records, together with requested recommendations from teachers and others acquainted with their qualifications. Former students may use the Center in seeking positions. The Center provides on-campus interviews with school districts in Texas, as well as outside the state. Over 90 school districts conduct interviews on campus each year.

# **Student Organizations**

Within the School of Education, student organizations have been established for the purposes of promoting

professional goals and interests, as well as providing recreation and fellowship among members. An international honor society in education, Kappa Delta Pi, an honor society, invites to membership those junior, senior and graduate students or teachers who possess high scholarship ability. TCU's chapter of the Texas Student Education Association provides students with associate membership in the National Education Association and the Texas State Teachers Association. TSEA provides students with the opportunity to meet and discuss professional concerns and goals with experienced teachers in the profession. The Student Council for Exceptional Children is an organization that is open to all interested in special education.

## **Core Curriculum Requirements**

For majors in the School of Education seeking teacher certification

#### **Foundations**

- 1. English 10803, English 20803 Six semester hours.
- 2. Writing Emphasis Six semester hours of upper division courses designated as "writing emphasis" in University Curriculum Requirements (UCR).
- 3. Mathematics Three semester hours from MATH 10033, 10043, 10283, 10524, 20524, 20063.

# **Explorations**

- 1. Physical and Life Sciences Six semester hours of laboratory sciences designated 'as approved for the UCR'. Middle School Education and Secondary School Education majors are required to take an additional 3 semester hours of nonlab science.
- 2. Social Sciences Political Science 10133, and three semester hours of social sciences as approved for the UCR.
- Cultural Heritage Fifteen semester hours to include: three semester hours in Religion Studies; six semester hours in U. S. History (HIST 10603, 10613); three semester hours in Critical Inquiry (EDUC 20003); three semester hours in Fine Arts in courses as approved by the UCR.
- Language and Literature A minimum of nine semester hours to be distributed as follows: SPCO 10123, 20103 or 20133 and six hours of English literature in courses designated UCR.

# **Physical Education**

Two semester hours designated UCR: one semester hour of health and one hour of kinesiology activity or two semester hours of health.

# Majors and Certifications

Bachelor of Science in Education (Early Childhood Option).
Bachelor of Science in Education (Middle School Option).
Bachelor of Science in Education (Secondary School Option).
All-Level Teacher Certification
Three-Two Option for TCU Students
English as a Second Language Supplemental

#### Overview

The School of Education offers a Bachelor of Science degree in Education with majors in:

## Generalist EC-4

Generalist EC-4 with ESL Option Generalist EC-4 with Special Education Option Bilingal Generalist EC-4 Option

Majors in Middle School Education (Grades 4-8):
Middle School English/Language Arts and Reading
Middle School Math
Middle School Math/Science
Middle School Science
Middle School Science
Middle School Social Studies

Majors in Secondary Education (Grades 8-12):
Secondary School English/Language Arts and Reading
Secondary School Life Science
Secondary School Physical Science
Secondary School Science
Secondary School Science
Secondary School Social Studies

After the successful completion of these studies, the candidate is eligible to apply for a Texas teaching certificate. The department also offers a sequence of professional development courses leading to all-level and secondary education certification.

In addition to the prescribed course work within the selected fields of study, students seeking teacher certification must (1) be admitted to the Teacher Educator Program (see admission guidelines); (2) maintain a 2.5 GPA; (3) complete prescribed field experiences in area schools; and (4) pass approriate state certification exams.

All students are required to take the Professional Practice Seminar and receive a grade of 80% or higher on specified practice tests in order to be considered a program completer. A student who fails to achieve a score of 80% on the practice tests,throughout the course of the semester, will receive a NC (no credit) for the course. The student would be permitted to student teach and to graduate, but would not be bar-coded for the TEXES.

# **Bachelor of Science in Education (Early Childhood Option)**

The Early Childhood major is designed for students who plan to teach in early childhood settings (EC through grade 4). Students focus on developmentally appropriate pedagogy for young children. Field-based course work provides prospective teachers with significant experiences in urban schools. Students interested in this major may select one of the following options:

**Generalist EC-4 with ESL Option**: This option is designed for students who will teach in diverse early childhood settings including English as a Second Language classrooms. Students must pass required state examinations in order to be awarded a Generalist EC-4 Teaching Certificate with English as a Second Language qualifications.

**Generalist EC-4 with Special Education Option**: This option is designed to prepare teachers for students with disabilities in general and special education settings. This undergraduate program offers special education at the EC-4 level. Students must pass state examinations in the Generalist EC-4 area as well as the Special Education Supplemental area.

**Bilingual Generalist EC-4 Option**: This option is designed for students who will teach in bilingual (Spanish) early childhood settings. Students wishing to pursue this degree option must demonstrate their proficiency in Spanish as a condition for admission to the School of Education. The Department of Spanish and Latin American Studies conducts the Spanish language assessment. Students must pass required state examinations, including the Texas Oral Proficiency Test (TOPT), in order to be awarded a Bilingual Generalist EC-4 Teaching Certificate. Candidates who do not meet the passing criteria for the TOPT, but meet all other course work and certification requirements, will be eligible for a Generalist EC-4 teaching certificate with English as a Second Language qualifications.

## **Course Requirements**

- A. Major in Early Childhood Education: Generalist EC-4 with ESL Option
- 1. University Core: 47 hours
- 2. Major: 70 hours

EDUC 30143 Child Development

EDEC 30103 Introduction to Early Childhood Education

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JUNIOR I BLOCK (FALL ONLY)
EDUC 30123 Educational Psychology
EDSP 30603 Study of Exceptional Children
Concurrent enrollment in:
EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs.)
EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs.)
EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity: Play and Creativity (3 hrs.)
JUNIOR II BLOCK (SPRING ONLY)
EDEC 30203 Mathematics in the Elementary School
EDEC 30234 Developmentally Appropriate Social Studies (4 hrs.)
Concurrent enrollment in:
EDEC 30213 Promoting Language and Literacy: Early Literacy/Literature (3 hrs.)
EDEC 30223 Promoting Language and Literacy: Elementary Language Arts/Literature (3 hrs.)
EDEC 30233 Promoting Language and Literacy: ESL (3 hrs.)
SENIOR I BLOCK (FALL ONLY)
EDEC 30001 Professional Practice Seminar (1 hr.)
Concurrent enrollment in:
EDEC 41103 Learner-Centered Teaching: Assessment (3 hrs.)
EDEC 41113 Learner-Centered Teaching: Foundations (3 hrs.)
EDEC 41123 Learner-Centered Teaching: Families (3 hrs.)
EDEC 41143 Learner-Centered Teaching: Management(3 hrs.)
EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs.)
SENIOR II BLOCK (SPRING ONLY)
EDEC 30001 Professional Practice Seminar (1 hr.)
concurrent enrollment in:
EDEC 42213 Professional Induction: Curriculum (3 hrs.)
EDEC 42223 Professional Induction: ESL (3 hrs.)
EDEC 42233 Professional Induction: Diverse Learners (3 hrs.)
EDEC 42236 Professional Induction: Internship (6 hrs.)
Associated Requirements: 9 hours
EDUC 30113 Introduction to Educational Technology
SPAN 10103 Spanish for Beginners
SPAN 10203 Spanish for Beginners Two
Total Semester Hours: 126 hours
B. Major in Early Childhood Education: Generalist with Special Education Option
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EDUC 30143 Child Development
EDEC 30103 Introduction to Early Childhood Education
JUNIOR 1 BLOCK (FALL ONLY)
EDUC 30123 Educational Psychology
EDSP 30603 Study of Exceptional Children
Concurrent enrollment in:
EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs.)
EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs.)
EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity: Play and Creativity (3 hrs.)
JUNIOR II BLOCK (SPRING ONLY)
EDEC 30203 Mathematics in the Elementary School
EDEC 30234 Developmentally Appropriate Social Studies (4 hrs.)
Concurrent enrollment in:
EDEC 30213 Promoting Language and Literacy: Early Literacy/Literature (3 hrs.)
EDEC 30223 Promoting Language and Literacy: Elementary Language Arts/Literature (3 hrs.)
EDSP 30243 Promoting Adcademic Success in
Special Education (3 hrs.)
SENIOR I BLOCK (FALL ONLY)
EDEC 30001 Professional Practice Seminar (1 hr.)
Concurrent enrollment in:
EDEC 41103 Learner-Centered Teaching: Assessment (3 hrs.)
EDEC 41113 Learner-Centered Teaching: Foundations (3 hrs.)
EDSP 41123 Learner-Centered Teaching: Families (3 hrs.)
EDSP 41143 Learner-Centered Teaching: Management(3 hrs.)
EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs.)
SENIOR II BLOCK (SPRING ONLY)
EDEC 30001 Professional Practice Seminar (1 hr.)
concurrent enrollment in:
EDEC 42213 Professional Induction: Curriculum (3 hrs.)
EDSP 40243 Professional Induction: Application of Special Education Processes and Programs (3 hrs.)
EDSP 42233 Professional Induction: Diverse Learners (3 hrs.)
EDEC 42236 Professional Induction: Internship (6 hrs.)
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# Associated Requirements: 9 hours

EDUC 30113 Introduction to Educational Technology SPAN 10103 Spanish for Beginners

## SPAN 10203 Spanish for Beginners Two

#### Total Semester Hours: 126 hours

## C. Major in Early Childhood Education: Bilingual Generalist EC-4 Option

#### 1. University Core: 47 hours

## 2. Major: 76 hours

EDUC 30143 Child Development

EDEC 30103 Introduction to Early Childhood Education

JUNIOR 1 BLOCK (FALL ONLY)

EDUC 30123 Educational Psychology

EDSP 30603 Study of Exceptional Children

concurrent enrollment in:

EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs.)

EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs.)

EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity: Play and Creativity (3 hrs.)

## JUNIOR II BLOCK (SPRING ONLY)

EDEC 30203 Mathematics in the Elementary School (3 hrs.)

EDEC 40234 Developmentally Appropriate Pedagogy for Social Studies (4 hrs.)

concurrent enrollment in:

EDEC 30213 Promoting Language and Literacy: Early Literacy/Literature (3 hrs.)

EDEC 30223 Promoting Language and Literacy: Elementary Language Arts/Literature (3 hrs.)

EDEC 30233 Promoting Language and Literacy: ESL (3 hrs.)

# SENIOR I BLOCK (FALL ONLY)

EDEC 30001 Professional Practice Seminar (1 hr.)

concurrent enrollment in:

EDEC 41103 Learner-Centered Teaching: Assessment (3 hrs.)

EDEC 41113 Learner-Centered Teaching: Foundations (3 hrs.)

EDEC 41123 Learner-Centered Teaching: Families (3 hrs.)

EDEC 41143 Learner-Centered Teaching: Management(3 hrs.)

EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs.)

# SENIOR II BLOCK (SPRING ONLY)

EDEC 30001 Professional Practice Seminar (1 hr.)

concurrent enrollment in:

EDEC 42213 Professional Induction: Curriculum (3 hrs.)

EDEC 42223 Professional Induction: ESL(3 hrs.)

EDEC 42233 Professional Induction: Diverse Learners (3 hrs.)

EDEC 42236 Professional Induction: Internship (6 hrs.)

# 3. Associated Requirements: 3 hours

EDUC 30113 Introduction to Educational Technology

EDEL 50213 Teaching in Bilingual/Crosscultural Schools

SPAN 50433 Teaching of Second and Foreign Languages

**Total Semester Hours: 126 hours** 

## Bachelor of Science in Education (Middle School Option)

## **Total Semester Hours Required for Degree: 124-128**

# 1. University Core: 50 hours

# 2. Middle School Pedagogy and Professional Responsibilities: 22 hours

EDUC 30143 Child and Adolescent Development

EDUC 30123 Educational Psychology

EDSP 30603 Study of Exceptional Students

EDMS 30013 Professional Roles and Responsibilities

EDMS 50023 Effective Teaching and Classroom Implementation

EDMS 30001 Professional Practice Seminar\*

EDMS 40980 Student Teaching

\*This seminar must be taken the semester prior to student teaching.

# 3. Associated Requirements: 9 hours

EDUC 30113 Introduction to Educational Technology

EDMS 40213 Promoting Literacy in the Content

EDSP 50663 Motivating and Managing Students in the Classroom

# Majors:

Students who are seeking middle school certification may select one of the following majors:

## MIDDLE SCHOOL ENGLISH/LANGUAGE ARTS AND READING

ENGL 10803 Introductory Composition, Writing from Sources ENGL 20803 Intermediate Composition, Writing within Communities

ENGL 30133 American Literature to 1900

ENGL 30143 American Literature since 1900

ENGL 30113 British Literature to 1800

ENGL 30123 British Literature since 1800

ENGL 20643 Fable and Fantasy

or ENGL 20733 Science Fiction

ENGL 30283 Cyberliteracy

ENGL 30263 Style and Usage

**ENGL 30253 Rhetorical Traditions** 

or ENGL 30243 Rhetoric in Social Interaction

ENGL 50243 Teaching of Writing

SPCO 10123 Basic Speech Communication

or SPCO 20133 Instructional Communication

SPCO 20113 Interpersonal Communication

or SPCO 30133 Group Discussion

JOUR 10103 Communication in Society

EDMS 40213 Promoting Literacy in the Content Subjects

EDMS 50613 Analysis of Literacy Problems

EDMS 50153 Literature for Adolescents

EDMS 50223 Practicum in Reading

EDUC 50503 Developing Communication Competencies of Linguistically and Culturally Diverse Students

#### **MIDDLE SCHOOL MATH**

MATH 10033 Topics in Mathematics

MATH 10043 Elementary Statistics

MATH 10524 Calculus I

MATH 20053 Fundamentals of Modern Mathematics

MATH 20524 Calculus II

MATH 20063 Topics in Modern Mathematics

MATH 50073 History of Mathematics

MATH 50303 Geometry-Topology

or MATH 40970 Undergraduate Higher Geometry

Select ONE course from the following:

MATH 30224 Linear Algebra

MATH 30803 Probability and Statistics I

# MIDDLE SCHOOL MATH/SCIENCE

BIOL 10003 Contemporary Issues in Biology

BIOL 30613 Natural History of North America

BIOL 30403 Ecology

PHYS 20053 Physics of Music and Speech

PHYS 20073 Introductory Astronomy PHYS 10151 General Physics I Lab

PHYS 10153 General Physics I

CHEM 10163 General Chemistry for Non-Majors

GEOL 10113 Understanding the Earth

GEOL 10143 Earth Resources and the Environment

GEOL 30113 Weather and Climate

MATH 10524 Calculus I

MATH 10033 Topics in Mathematics

MATH 10043 Elementary Statistics

MATH 20053 Fundamentals of Modern Mathematics

MATH 20524 Calculus II

MATH 20063 Topics in Modern Mathematics

MATH 50303 Geometry-Topology

or MATH 40970 Undergraduate Higher Geometry

## MIDDLE SCHOOL SCIENCE

BIOL 10003 Contemporary Issues in Biology

BIOL 10504 Principles of Life Sciences

BIOL 10514 Principles of Life Sciences

BIOL 30613 Natural History of North America

PHYS 20053 Physics of Music and Speech

PHYS 20073 Introductory Astronomy

PHYS 20083 Introductory Astronomy

PHYS 10151 General Physics I Lab

PHYS 10153 General Physics I

CHEM 10163 General Chemistry for Non-Majors

GEOL 10113 Understanding the Earth

GEOL 10143 Earth Resources and the Environment

GEOL 30113 Weather and Climate

Select ONE course from the following:

MATH 10283 Applied Calculus

#### MATH 10524 Calculus

#### MIDDLE SCHOOL SOCIAL STUDIES

HIST 10603 United States History: A Survey to 1877 HIST 10613 United States History: A Survey since 1877 HIST 10003 History of Civilization: A Survey to 1500 HIST 10013 History of Civilization: A Survey 1500 to Present or HIST 20933 Latin American Civilization and Culture or HIST 10953 Asian Civilization since 1500 HIST 40743 History of Texas POSC 10133 American and Texas Government POSC 30503 Topics in Comparative Politics ECON 10223 Introductory Microeconomics ECON 10233 Introductory Macroeconomics ECON 40970 United States Economic History to 1866 or ECON 40970 United States Economic History since 1866 GEOG 10003 World Regional Geography GEOG 30513 United States Geography SOCI 20213 Introductory Sociology SOCI 30343 American Minority Groups PSYC 10213 General Psychology

#### Bachelor of Science in Education (Secondary School Option)

#### **Total Semester Hours Required for Degree: 124-128**

1. University Core: 50 hours

# 2. Secondary School Pedagogy and Professional Responsibilities: 22 hours

EDUC 30143 Child and Adolescent Development
EDUC 30123 Educational Psychology
EDSP 30603 Study of Exceptional Students
EDSE 30013 Professional Roles and Responsibilities
EDSE 50023 Effective Teaching and Classroom Implementation
EDSE 30001 Professional Practice Seminar\*
EDSE 40980 Student Teaching

## 3.Associated Requirements: 9 hours

EDUC 30113 Introduction to Educational Technology EDSE 40213 Promoting Literacy in the Content EDSP 50663 Motivating and Managing Students in the Classroom

# Majors:

Students who are seeking certification in secondary school education may select one of the following majors:

EDUC 50503 Developing Communication Competencies of Linguistically and Culturally Diverse Students

## SECONDARY SCHOOL ENGLISH/LANGUAGE ARTS AND READING

ENGL 10803 Introductory Composition, Writing from Sources ENGL 20803 Intermediate Composition, Writing within Communities ENGL 30133 American Literature to 1900 ENGL 30143 American Literature since 1900 ENGL 30113 British Literature to 1800 ENGL 30123 British Literature since 1800 ENGL 30103 Introduction to Literary Theory ENGL 30223 Technical Writing and Documentary Design or ENGL 30273 Argument and Persuasion or ENGL 40243 Professional Writing and Editing ENGL 30283 Cyberliteracy ENGL 30263 Style and Usage **ENGL 30253 Rhetorical Traditions** or ENGL 30243 Rhetoric in Social Interaction ENGL 50243 Teaching Writing SPCO 10123 Basic Speech Communication or SPCO 20133 Instructional Communication SPCO 20113 Interpersonal Communication or SPCO 30133 Group Discussion JOUR 10103 Communication in Society EDSE 40213 Promoting Literacy in the Content Subjects EDSE 50613 Analysis of Literacy Problems EDSE 50153 Literature for Adolescents

## SECONDARY SCHOOL LIFE SCIENCE

EDSE 50223 Practicum in Reading

BIOL 10003 Contemporary Issues in Biology BIOL 10504 Principles of Life Sciences

<sup>\*</sup>This seminar must be taken the semester prior to student teaching.

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BIOL 10514 Principles of Life Sciences
BIOL 30003 Biological Issues in Public Health
BIOL 30403 Ecology
BIOL 30603 Cellular, Molecular, and Developmental Biology
BIOL 30303 Microbiology
BIOL 30504 Plant Biology
BIOL 30613 Natural History of North America
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Select TWO courses from the following:

BIOL 30104 Comparative Invertebrate Zoology BIOL 30124 Biology of the Vertebrates BIOL 30404 Comparative Vertebrate Anatomy BIOL 30323 Marine Science BIOL 30233 Economic Botany

BIOL 30233 Economic Bottany

MATH 10283 Applied Calculus CHEM 10113-10123 General Chemistry and CHEM 10122 General Chemistry lab or CHEM 10114-10124 General Chemistry Honors

#### SECONDARY SCHOOL PHYSICAL SCIENCE

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CHEM 10113-10123 General Chemistry and CHEM 10122 General Chemistry Laboratory or CHEM 10114-10124 General Chemistry Honors
CHEM 20104 Quantitative Analysis
CHEM 30123 Organic Chemistry
PHYS 10151-10153, 10161-10163 General Physics I and II
Physics 20053 Physics of Music and Sound
PHYS 20073-20083 Introductory Astronomy
PHYS 30113 Intermediate Astronony
PHYS 30014 Materials Science
PHYS 30111 Experimental
MATH 10524 Calculus
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# SECONDARY SCHOOL SCIENCE

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BIOL 10003 Contemporary Issues in Biology
BIOL 10504 Principles of Life Science
BIOL 10514 Principles of Life Science
BIOL 30403 Ecology
BIOL 30603 Cellular, Molecular, and Developmental Biology
PHYS 10151-10153 General Physics I
PHYS 10161-10163 General Physics II
PHYS 20073-20083 Introductory Astronomy
CHEM 10113-10123 General Chemistry and CHEM 10122 General Chemistry Laboratory
or CHEM 10114-10124 General Chemistry Honors
CHEM 30122-30123 Organic Chemistry
GEOL 10113 Understanding the Earth
GEOL 10143 Earth Resources and the Environment
MATH 10283 Applied Calculus
or MATH 10524 Calculus
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# **SECONDARY SCHOOL SOCIAL STUDIES**

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HIST 10603 United States History: A Survey to 1877
HIST 10613 United States History: A Survey since 1877
HIST 10003 History of Civilization: A Survey to 1500
HIST 10013 History of Civilization: A Survey from 1500 to present
or HIST 20933 Latin American Civilization and Culture
or HIST 10953 Asian Civilization since 1500
HIST 40743 History of Texas
POSC 10133 American and Texas Government
POSC 20203 Introduction to Political Theory
POSC 30103 Topics in American Politics
ECON 10223 Introductory Microeconomics
ECON 10233 Introductory Macroeconomics
ECON 40970 United States Economic History to 1866
ECON 40970 United States Economic History since 1866
GEOG 10003 World Regional Geography
GEOG 30513 United States Geography
SOCI 20213 Introductory Sociology
SOCI 30343 American Minority Groups
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Select ONE upper division course from Economics, History, or Political Science.

# MINOR IN EDUCATIONAL STUDIES

Students who major in a content area outside the School of Education may obtain a minor in Educational Studies by completing 18 hours of the required professional development courses if approved by the college in the content major.

The professional development courses that constitute the 18-hour minor include:

EDUC 30143 Child and Adolescent Development

EDUC 30123 Educational Psychology

EDSP 30603 Study of Exceptional Students

EDSE 30013 Professional Roles and Responsibilities

EDSE 40213 Promoting Literacy in the Content Subjects EDSE 50023 Effective Teaching and Classroom Implementation

Completion of the minor in Educational Studies is not adequate to meet the requirements for teaching certification.

Student teaching and the professional practice seminar are also required for teacher certification. The professional practice seminar must be taken the semester prior to student teaching.

Students should contact the certification officer in the School of Education for admission to the Teacher Education Program of the university.

#### **All-Level Teacher Certification**

All-Level certification enables students to teach in grades EC-12. Majors include Art, Music, Physical Education and Habilitation of the Deaf. All-Level certification students follow the same sequence of education courses as secondary certification students with the exception of student teaching. All-Level certification students do student teaching in both the elementary and secondary schools. The student should contact the certification officer in the School of Education to be admitted to the Teacher Education Program of the university.

The professional development courses that must be taken in education are as follows:

EDUC 30143 Child and Adolescent Development

EDUC 30123 Educational Psychology

EDSP 30603 Study of Exceptional Students

EDSE 30013 Professional Roles and Responsibilities

EDRE 40113 Literacy Education in the Elementary School

or EDSE 40213 Promoting Literacy in the Content Subjects

EDSE 50023 Effective Teaching and Classroom Implementation

EDSE 30001 Professional Practice Seminar\*

EDUC 40970 Directed Study in Education: All-Level Student Teaching

#### **Three-Two Option for TCU Students**

Available only to TCU undergraduates, the Three-Two Option allows outstanding students to combine a bachelor's degree with the Master of Education (M.Ed.) in only five years.

By the end of their third year, Three-Two Option students must complete the specified 90 hours. To be considered for admission to the Three-Two Option students must submit a Three-Two application during the semester they complete 90 hours. Only Three-Two Option candidates demonstrating superior undergraduate academic performance and strong recommendation will be considered for admission.

If admitted to the Three-Two Option, the student may complete up to 12 semester hours of the M.Ed. program during the fourth year of undergraduate study. Candidates should work with their undergraduate advisor to determine how the courses will apply to the undergraduate degree. At the end of the fourth year, assuming that all other graduation requirements are met, the student earns his or her Baccalaureate degree. During their fifth year, the student completes the remaining semester hours toward the M.Ed. degree.

## **English as a Second Language Supplemental**

English as Second Language (ESL) is designed for students who intend to teach learners for whom English is a second language. The ESL supplemental certificate may be added to a valid Texas teacher certificate, special education certificate, or a vocational education certificate.

The coursework consists of 12 semester hours:

SPAN 50103 Methods of Language Acquisition

EDUC 50503 Developing Communication Competencies of Linguistically and Culturally Diverse Students

EDUC 50513 Curriculum and Instruction in the Second Language Learning Classroom

EDUC 50003 Diversity in American Education

In addition to the above course work, students are required to complete a student teaching experience in an approved ESL classroom. One year of successful classroom teaching experience in an approved ESL or bilingual education program may be substituted for student teaching.

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<sup>\*</sup>This seminar must be taken the semester prior to student teaching.

# Non-major Certifications

Certification for students in majors outside of the School of Education Areas of Specialization for All Level Certification

#### Certification for students in majors outside of the School of Education

Secondary school majors who plan to become certified in one of the following areas must major in their chosen content area outside the School of Education, meeting the requirements for graduation in the chosen major. In addition, they are required to complete a minor in Educational Studies is not adequate to meet the requirements for teaching certification. Student teaching and the professional practice seminar are also required for teacher certification. The student should contact the certification officer in the School of Education to be admitted to the Teacher Education Program of the university.

#### Art (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### **Business Administration (Secondary)**

For details concerning the required coursework in this major, refer to the current catalog.

#### **Computer Science (Secondary)**

For details concerning the required coursework in this major, refer to the current catalog.

#### Health (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### History (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### Journalism (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### Mathematics (secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### Spanish (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### **Speech Communications (Secondary)**

For details concerning the required coursework in this major, refer to the current catalog.

#### Theatre (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### Dance (Secondary)

For details concerning the required coursework in this major, refer to the current catalog.

#### Music (Secondary): Students select either Choral or Instrumental concentration

For details concerning the required coursework in this major, refer to the current catalog.

#### Areas of Specialization for All Level Certification

All-Level certification is designed for students who wish to teach either in an elementary or secondary school setting or both. Students are certified to teach at all levels in one of these chosen subjects: art, music, physical education, or hearing impaired. All-Level students must major in the chosen content area outside the School of Education, meeting the requirements for graduation in the chosen major and the requirements for teacher certification in the School of Education. The student should contact the certification officer in the School of Education to be admitted to the Teacher Education Program of the university.

#### Art

For details concerning the required coursework in this major, refer to the current catalog.

#### Music: Students select either Choral or Instrumental concentration

For details concerning the required coursework in this major, refer to the current catalog.

### **Physical Education**

For details concerning the required coursework in this major, refer to the current catalog.

### **Hearing Impaired**

For details concerning the required coursework in this major, refer to the current catalog.

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# Courses of Instruction

Courses of Instruction

#### **Courses of Instruction**

#### **Education in Early Childhood**

**EDEC 30001 Professional Practice Seminar.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Issues in professional and legal responsibilities, certification standards, teacher portfolio development, finding employment, and professional associations are topics that will be considered. Two semesters of EDEC 30001 are required for Early Children Education majors. This course is available only for Pass/Fail grades. (Offered as EDEC or EDMS or EDSE credit.)

EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science. Prerequisites: Admission to the Teacher Education Program or written permission of the dean, School of Education. Concurrent enrollment in EDEC 30014, EDEC 30023, EDEC 30033. This block is designed to prepare students for the challenges of teaching in a child-centered environment that supports creative development and scientific and mathematical learning through play. Students will meet at an elementary school where they will observe and teach in classrooms at different grade levels, as well as participate in class lectures and activities. Block components: EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs) EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs) EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity (3 hrs).

EDEC 30023 Science and Mathematical Thinking through Play and Creativity: Math. Prerequisites: Admission to the Teacher Education Program or written permission of the dean, School of Education. Concurrent enrollment in EDEC 30014, EDEC 30023, EDEC 30033. This block is designed to prepare students for the challenges of teaching in a child-centered environment that supports creative development and scientific and mathematical learning through play. Students will meet at an elementary school where they will observe and teach in classrooms at different grade levels, as well as participate in class lectures and activities. Block components: EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs) EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs) EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity (3 hrs).

EDEC 30033 Science and Mathematical Thinking through Play and Creativity: Play and Creativity.

Prerequisites: Admission to the Teacher Education Program or written permission of the dean, School of Education.

Concurrent enrollment in EDEC 30014, EDEC 30023, EDEC 30033. This block is designed to prepare students for the challenges of teaching in a child-centered environment that supports creative development and scientific and mathematical learning through play. Students will meet at an elementary school where they will observe and teach in classrooms at different grade levels, as well as participate in class lectures and activities. Block components: EDEC 30014 Scientific and Mathematical Thinking through Play and Creativity: Science (4 hrs) EDEC 30023 Scientific and Mathematical Thinking through Play and Creativity: Math (3 hrs) EDEC 30033 Scientific and Mathematical Thinking through Play and Creativity (3 hrs).

**EDEC 30103 Introduction to Early Childhood Education.** Prerequisite for all 40000 and 50000 courses in Education of Young Children. Directed toward affecting prospective early childhood teachers' insights with regard to classroom behavior in teaching; dealing with the factors of child learning; and examining children's development. Classroom practicum is required.

**EDEC 30203 Mathematics in the Elementary School.** Prerequisites: Admission to Teacher Education or written permission of the Dean, School of Education. Methods of teaching mathematical concepts, skills, and problem-solving techniques appropriate for the elementary school.

**EDEC 30213 Promoting Language and Literacy: Early Literacy.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 30213, EDEC 30223, EDEC 30233. Block focuses on the study of the nature of literacy and second language learning processes and the relationship among these processes, young children, teachers, curriculum, and instruction. Emphasis is given to the guidance of young children as they progress through the continuum of language and literacy abilities from preschool through grade four. Block components: EDEC 30213 Promoting Language and Literacy: Early Literacy, EDEC 30223 Promoting Language and Literacy: ESL.

**EDEC 30223 Promoting Language and Literacy: Elementary.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 30213, EDEC 30223, EDEC 30223. Block focuses on the study of the nature of literacy and second language learning processes and the relationship among these processes, young children, teachers, curriculum, and instruction. Emphasis is given to the guidance of young children as they progress through the continuum of language and literacy abilities from preschool through grade four. Block components: EDEC 30213 Promoting Language and Literacy: Early Literacy, EDEC 30223 Promoting Language and Literacy: Elementary, EDEC 30233 Promoting Language and Literacy: ESL.

**EDEC 30233 Promoting Language and Literacy: ESL.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 30213, EDEC 30223, EDEC 30233. Block focuses on the study of the nature of literacy and second language learning processes and the relationship among these processes, young children, teachers, curriculum, and instruction. Emphasis is given to the guidance of young children as they progress through the continuum of language and literacy abilities from preschool through grade four. Block components: EDEC 30213 Promoting Language and Literacy: Early Literacy, EDEC 30223 Promoting Language and Literacy: ESL.

**EDEC 30234 Developmentally Appropriate Social Studies.** Prerequisite: Admission to Teacher Education or written permission of the Dean, School of Education. Examines the rationale for the inclusion of the social studies within the early elementary curriculum, and reviews selected fundamental concepts and methods of inquiry

associated with the social sciences. Emphasis will also be placed on the development of curricular materials.

**EDEC 41103 Learner-Centered Teaching: Assessment.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDEC 41113 Learner-Centered Teaching: Foundations.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDEC 41123 Learner-Centered Teaching: Families.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDEC 41143 Learner-Centered Teaching: Management.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDEC 41153 Learner-Centered Teaching: Practicum.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDEC 42213 Professional Induction: Curriculum.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 42213, EDEC 42223, EDEC 42233, EDEC 42236. During this semester, students will fulfill the State's requirements for student teaching. In addition, they will receive instruction in developing and implementing currricula that meet the developmental, cultural and linguistic needs of all learners. Block components: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDEC 42233 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs).

**EDEC 4223 Professional Induction: ESL.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 42213, EDEC 42223, EDEC 42233, EDEC 42236. During this semester, students will fulfill the State's requirements for student teaching. In addition, they will receive instruction in developing and implementing currricula that meet the developmental, cultural and linguistic needs of all learners. Block components: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDEC 42223 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs).

**EDEC 42233 Professional Induction: Diverse Learners.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. For students following Early Childhood with ESL Option: Concurrent enrollment in EDEC 42213, EDEC 42233, EDEC 42233, EDEC 42236. For students following Early Childhood with Special Education Option: Concurrent enrollment in EDEC 42213, EDSP 42233, EDEC 42236, and EDSP 40243. During this semester, students will fulfill the State's requirements for student teaching. In addition, they will receive instruction in developing and implementing curricula that meet the developmental, cultural and linguistic needs of all learners. Block components for ESL option: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDEC 42223 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs). Block components for Special Education option: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDSP 42233 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs), and EDSP 40243 Professional Induction: Application of Special Education Processes and Programs.

**EDEC 42236 Professional Induction: Internship.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 42213, EDEC 42223, EDEC 42233, EDEC 42236. During this semester, students will fulfill the State's requirements for student teaching. In addition, they will receive instruction in developing and implementing currricula that meet the developmental, cultural

and linguistic needs of all learners. Block components: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDEC 42223 Professional Induction: ESL Curriculum (3 hrs), EDEC 42233 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs).

**EDEC 50143 Early Childhood Curriculum.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. The study of basic principles underlying curriculum construction and instructional practices in early childhood and primary education.

#### **Education in Middle School**

**EDMS 30001 Professional Practice Seminar.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Issues in professional and legal responsibilities, certification standards, teacher portfolio development, finding employment, and professional associations are topics that will be considered. Two semesters of EDEC 30001 are required for Early Children Education majors. This course is available only for Pass/Fail grades. (Offered as EDEC or EDMS or EDSE credit.)

**EDMS 30013 Professional Roles and Responsibilities.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. The focus of this course will be on philosophical and historical foundations of (U.S.) education with an emphasis on the moral and ethical responsibilities of the school educator. The evolution of assessment and the call (and need) for literacy, from the educator role and responsibility perspective, will also be examined. (Offered as EDMS or EDSE credit.)

**EDMS 40213 Promoting Literacy in the Content Areas.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. A course designed to acquaint the preservice teachers with strategies which facilitate middle and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum. (Offered as EDMS or EDSE credit.)

**EDMS 40433 Senior Seminar in Middle/Secondary Education: Mathematics.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary math education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDMS 40533 Senior Seminar in Middle/Secondary School Education: Science.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary science education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDMS 40633 Senior Seminar in Middle School Education: Social Studies.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary social studies education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDMS 40980 Student Teaching in the Secondary School.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. All day observation and supervised teaching for a semester long period of time in the public schools. Accompanying weekly seminars for the purpose of developing competencies and professional growth will be required. (3-6 sem. hours). (Offered as EDMS or EDSE credit.)

**EDMS 50023 Effective Teaching and Classroom Implementation.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. As a part of the effective teacher model, this course will focus on instructional design and implementation, motivation of students to promote and enhance learning in the classroom; management issues pertinent to student behavior and learning outcomes; and preparation of a variety of formal and informal assessment strategies. (Offered as EDMS or EDSE credit.)

**EDMS 50153 Literature for Adolescents.** Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Survey of reading interests of secondary school youth. Wide reading of classical and contemporary books for adolescents in the several teaching fields with specific attention to principles of selection and use in the middle school and high school.

**EDMS 50223 Practicum in Reading.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Clinical techniques and procedures of remedial and diagnostic teaching of reading.

**EDMS 50613 Analysis of Literacy Problems.** Prerequisites: EDUC 60053, 60153, or 50313 and Admission to the Teacher Education Program or written permission of the Dean, School of Education. Theory and techniques for using a variety of assessment strategies related to literacy development. Discussion and practice will be a based on the interpretation of elementary and secondary students' performance on a variety of literacy tasks.

#### **Education in Reading**

**EDRE 40213 Promoting Literacy in the Content Subjects.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. A course designed to acquaint preservice teachers with strategies which facilitate elementary and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum.

#### **Education Secondary**

**EDSE 30001 Professional Practice Seminar.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Issues in professional and legal responsibilities, certification standards, teacher portfolio development, finding employment, and professional associations are topics that will be considered. Two semesters of EDEC 30001 are required for Early Children Education majors. This course is available only for Pass/Fail grades. (Offered as EDEC or EDMS or EDSE credit.)

**EDSE 30013 Professional Roles and Responsibilities.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. The focus of this course will be on philosophical

and historical foundations of (U.S.) education with an emphasis on the moral and ethical responsibilities of the school educator. The evolution of assessment and the call (and need) for literacy, from the educator role and responsibility perspective, will also be examined. (Offered as EDMS or EDSE credit.)

**EDSE 40123 Senior Seminar in Secondary Education.** Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education and permission of instructor. Trends and problems in secondary education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation.

**EDSE 40213 Promoting Literacy in the Content Areas.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. A course designed to acquaint the preservice teachers with strategies which facilitate middle and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum. (Offered as EDMS or EDSE credit.)

**EDSE 40433 Senior Seminar in Middle/Secondary Education: Mathematics.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary math education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDSE 40533 Senior Seminar in Middle/Secondary School Education: Science.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary science education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDSE 40633 Senior Seminar in Middle School Education: Social Studies.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Trends and problems in middle school and secondary social studies education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

**EDSE 40980 Student Teaching in the Secondary School.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. All day observation and supervised teaching for a semester long period of time in the public schools. Accompanying weekly seminars for the purpose of developing competencies and professional growth will be required. (3-6 sem. hours). (Offered as EDMS or EDSE credit.)

**EDSE 50023 Effective Teaching and Classroom Implementation.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. As a part of the effective teacher model, this course will focus on instructional design and implementation, motivation of students to promote and enhance learning in the classroom; management issues pertinent to student behavior and learning outcomes; and preparation of a variety of formal and informal assessment strategies. (Offered as EDMS or EDSE credit.)

**EDSE 50153 Literature for Adolescents.** Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Survey of reading interests of secondary school youth. Wide reading of classical and contemporary books for adolescents in the several teaching fields with specific attention to principles of selection and use in the middle school and high school.

**EDSE 50213 Teaching in Bilingual Classrooms.** Methods and strategies in teaching the bilingual child; including English as a second language and Spanish as a first language. Observation and participation in bilingual classes required.

**EDSE 50223 Practicum in Reading.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Clinical techniques and procedures of remedial and diagnostic teaching of reading.

**EDSE 50613 Analysis of Literacy Problems.** Prerequisites: EDUC 60053, 60153, or 50313 and Admission to the Teacher Education Program or written permission of the Dean, School of Education. Theory and techniques for using a variety of assessment strategies related to literacy development. Discussion and practice will be a based on the interpretation of elementary and secondary students' performance on a variety of literacy tasks.

#### **Education Special**

**EDSP 30243 Academic Success in Special Education.** Prerequisite: Admission to the Teacher Education Program or written permission of the dean, School of Education. Students enrolled in EC-4/Special Education Program must be concurrently enrolled in EDEC 30213 and EDEC 30223. This course focuses on procedures and processes for assessing and teaching basic academic skills including oral language, reading, written language and math skills to students with disabilities. Individual education program planning and monitoring also will be addressed.

**EDSP 30603 Study of Exceptional Students.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. A survey of programs for school-aged students with mental, physical and emotional deviations.

EDSP 40243 Professional Induction: Application of Special Education Processes and Programs.

Prerequisite: EDSP 30603 and Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 42213, EDSP 42233, EDEC 42236, and EDSP 40243. Programs, strategies and techniques for teaching special populations will be examined, implemented and evaluated. Appropriate standardized and informal tests will be administered. Block components for Special Education option: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDSP 42233 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs), and EDSP 40243 Professional Induction: Application of Special Education Processes and Programs.

**EDSP 40663 Classroom Management.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. An examination of behavior problems of handicapped students with emphasis on developing alternative strategies for dealing with behavior problems.

EDSP 41123 Learner-Centered Teaching: Families. Prerequisite: Admission to the Teacher Education Program

or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41123, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs),

**EDSP 41143 Learner-Centered Teaching: Management.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Concurrent enrollment in EDEC 41103, EDEC 41113, EDEC 41123, EDEC 41143, EDEC 41153. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and SOE faculty, SOE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Foundations (3 hrs), EDEC 41113 Learner-Centered Teaching: Families (3 hrs), EDEC 41123 Learner-Centered Teaching: Assessment (3 hrs), EDEC 41143 Learner-Centered Teaching: Management (3 hrs), EDEC 41153 Learner-Centered Teaching: Practicum (3 hrs).

**EDSP 42233 Professional Induction: Diverse Learners.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. For students following Early Childhood with ESL Option: Concurrent enrollment in EDEC 42213, EDEC 42223, EDEC 42233, EDEC 42236. For students following Early Childhood with Special Education Option: Concurrent enrollment in EDEC 42213, EDSP 42233, EDEC 42236, and EDSP 40243. During this semester, students will fulfill the State's requirements for student teaching. In addition, they will receive instruction in developing and implementing curricula that meet the developmental, cultural and linguistic needs of all learners. Block components for ESL option: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDEC 42223 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs). Block components for Special Education option: EDEC 42213 Professional Induction: Early Childhood Curriculum (3 hrs), EDSP 42233 Professional Induction: Diverse Learners (3 hrs), EDEC 42236 Professional Induction: Internship (6 hrs), and EDSP 40243 Professional Induction: Application of Special Education Processes and Programs.

**EDSP 50013 Methods for Educating Students in Inclusive Settings.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. How to adapt methods, techniques and classroom environments to help children with disabilities to be more successful in regular and special education classrooms.

**EDSP 50663 Motivating and Managing Students in the Classroom.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Research-based methods for creating positive classroom and school climates, organizing and managing classrooms, improving instruction, dealing with classroom discipline problems, and developing prosocial behaviors in children and youth.

#### **Education - General**

**EDUC 10113 College Reading Techniques.** Prerequisites: 1. Incoming freshmen who score lower than 500 on the SAT Verbal (17 on ACT English) and whose high school GPA is less than 2.5 will be permitted to enroll. 2. Entering transfer students will be permitted to enroll only by permission of the instructor. 3. Students with fewer than 36 hours of TCU course work will be permitted to enroll only if they have posted an overall TCU grade point (GPA) below 2.25 the previous semester. 4. Students with 36 hours or more of TCU course work will be permitted to enroll only by permission of the instructor. 5. All other students who do not meet the above criteria and wish to be admitted to the course may do so only with the permission of the chair of the Curriculum and Instruction Department. A course designed to improve the reading and study skills of freshmen and sophomores with a GPA below 2.25. May not be counted for teaching certificate.

EDUC 10533 Freshman Seminar in Education. Topics may vary each time it is offered.

**EDUC 20003 Critical Investigation: Teaching and Learning.** This course will provide a careful and systematic exploration of teaching in public schools and a better understanding of the variety of student learning demands that teachers face. Moreover, class members will be expected to assess the quality and appropriateness of schooling processes for children at all levels from pre-school through high-school. These judgments will be made based on extended field experiences in public schools, as well as study of materials regarding best practices in schools.

**EDUC 30003 Honors Tutorial.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. An examination of a major issue in education. This course is only offered as a tutorial and the topic is determined in consultation with an instructor. Arrangements for this course must be made prior to enrollment.

**EDUC 30113 Introduction to Educational Technology.** An introduction to using educational technology for professional productivity and instructional purposes. Includes familiarity and operational skills with word processing, spreadsheets, databases, graphics, desktop publishing, telecommunications, instructional software and multimedia authoring programs.

**EDUC 30123 Educational Psychology.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Psychological bases of the education process; theories of learning; individual differences. Includes observations of children and adolescents in informal settings.

**EDUC 30143 Child and Adolescent Development.** Introduction to theories of child and adolescent development emphasizing ages 5-18. Physical, cognitive, emotional and social aspects of development will be considered. Includes observations of children and adolescents in informal settings.

**EDUC 40003 Honors Research Paper.** Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, School of Education. An independent project on a major issue in education resulting in the Senior Honors Thesis.

EDUC 40970 Directed Study in Education. Directed Study

**EDUC 50003 Diversity in American Education.** Prerequisite: Admission to Teacher Education Program or written permission of the Dean, School of Education. This course will equip educators with the necessary skills for multiethnic school environments. It focuses on developing an awareness of how education is connected to wider structures of social, cultural, economic life and encourages not only critical examination, but also discussion of alternatives to the present reality.

**EDUC 50043 Seminar in Children's Literature.** Advanced study of literature for children with special attention to principles of selection and use in the elementary school curriculum.

**EDUC 50063 Seminar in Teaching Gifted and Talented Children.** Advanced study of methods to identify, assess and teach exceptionally capable students. Major emphasis is on developing skills and teaching methods. Other aspects cover guidance counseling process, social/emotional needs, working with parents, and model school-district programs.

**EDUC 50143 Theories of Human Development.** Selected theories of human behavioral, social, and emotional development.

**EDUC 50203 Programs in Bilingual Education.** The rationale for bilingual-bicultural education including a survey of current programs. Includes lab experiences in public school classes.

**EDUC 50213 Seminar in Bilingual Education.** Methods and strategies in teaching the bilingual child; including English as a second language and Spanish as a first language. Observation and participation in bilingual classes required.

**EDUC 50253 Technology Applications in Education.** An introduction to using educational technology for professional productivity and instructional purposes. Includes familiarity and operational skills with word processing, spreadsheets, databases, graphics, desktop publishing, telecommunications, instructional software and multimedia authoring programs.

**EDUC 50313 Foundations of Literacy.** Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. The study of the theoretical bases for literacy instruction. Research from linguistics, cognitive psychology, and sociology will be studied as related to recommendations for practices in literacy instruction.

**EDUC 50503 Developing Communication Competencies of Linguistically and Culturally Diverse Students.** Prerequisites: Admission to Teacher Education Program or written permission of the Dean, School of Education; SPAN 50033 (cross-listed under GERM 50033, FREN 50033), or concurrent enrollment, or permission of instructor. Principles and practices of first and second language acquisition as they relate to the development of communication skills. Emphasis is placed on the interrelatedness of language processing (reading, writing, speaking and listening) to facilitate the learner's ability to construct meaning. Strategies to enhance social-communicative and cognitive-academic language competence, and self-directed learning are addressed. Assessment procedures appropriate to second-language learners are introduced. (Offered as EDEL or EDSE credit.)

**EDUC 50513 Curriculum and Instruction in the Second Language Learning Classroom.** Curricular and instructional principles and practices to meet the academic development needs of first and second language learners in the classroom. Emphasis on strategies for providing content-area instruction and establishing learner-centered environments within various ESL settings. Texas requirements for second language learners are addressed. (Offered as EDEL or EDSE credit.)

**EDUC 50643 Reading in the Secondary School.** Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Materials and methods for developing reading skills of the secondary school student in the various curriculum areas.

 $\textbf{EDUC 50870 Directed Study in Education.} \ \textbf{Study of specialized topics in Education}$ 

 $\textbf{EDUC 50970 Directed Study in Education.} \ \textit{Prerequisite: Approval of advisor and course instructor.}$ 

# College of Fine Arts

<u>Degrees Offered</u> Requirements for Graduation Student Organizations

#### Overview

Since the founding of TCU more than a century ago, Fine Arts studies have been a vital and integral part of the University's educational program. Today, some 500 students concentrate their studies within the three departments and one school that comprise The College of Fine Arts. Degree programs are available in Art and Art History, Ballet and Modern Dance, Music, and Theatre Arts. The academic programs of the college exact an appropriate balance between professional training and liberal arts studies. Personal counseling and relatively small classes allow the faculty to give attention to the work of each student.

Our faculty are dedicated teachers who combine strong academic training with years of professional experience in their disciplines. They pride themselves on their ability to convey to their students the knowledge necessary for successful lives and careers in the 21st century. We also have visiting faculty, guest artists, and performers who interact with students throughout the year enriching their learning experiences.

Resources available to students include numerous computer labs, lighting and sound systems, specialized libraries and equipment, galleries, art and dance studios, theaters, and performance halls. Our new Walsh Center for the Performing Arts was opened in 1999. Importantly, our programs enjoy close working relationships with the Kimbell Art Museum, The Fort Worth Symphony, Casa Mañana Theatre and the other visual and performing institutions in the Dallas/Fort Worth Metroplex.

#### **Organization and Program**

The College of Fine Arts is organized into three departments and one school offering 24 major fields of concentration. The departments provide professional training in vocational fields for students planning careers and serious avocational training and for those who wish to attain artistic ability without professional intent.

#### **Schools**

#### School of Music

Performance
Piano, Organ, Voice, Band and Orchestral Instruments
Piano Pedagogy
Theory and Composition
Music Education
Church Music
Opera

#### **Departments**

#### Department of Art and Art History

Drawing, Design and Painting Photography Printmaking Sculpture Graphic Design Art Education Art History

### Department of Ballet and Modern Dance

Classical and Contemporary Ballet Modern Dance Character, Jazz, Choreography History of Dance

#### **Department of Theatre**

Acting
Musical Theatre
Directing
Scenic Design
Costume Design
Lighting Design
Make-up and Hair
Stagecraft
Costume Construction

#### **Degrees Offered**

**Bachelor of Fine Arts** degree with a major in graphic design, studio art, or art education; ballet or modern dance; theatre.

**Bachelor of Arts** degree with a major in art history, music, or theatre. (The Bachelor of Arts degree requires completion of sophomore-level foreign language.)

Bachelor of Music degree with a major in performance, piano pedagogy, theory/composition, or church music.

Bachelor of Music Education degree.

#### 3/2 B.A., B.S./MBA Program in Business

The College of Fine Arts and M.J. Neeley School of Business offer a combined degree in Art History, Music, or Theatre and a master's degree in Business Administration (MBA). The Three-Two Program, as it is called, takes five years to complete.

Students interested in the program spend the first three years in the College of Fine Arts completing the University Curriculum Requirements (including MATH 10283 and ECON 20103 and 20113) and meeting the requirements of their major field. During the third year of study, application is made to the MBA program. To be considered for admission, applicants must have completed, or anticipate completing by the end of the third year, a minimum of 100 hours in non-business courses and finished all major requirements and core requirements. Applicants must submit the usual application materials, including scores from the Graduate Management Admission Test (GMAT), and must present above-average academic records.

If admitted, a student enters the MBA phase of the Three-Two program in the fourth year of study at TCU. The first year of the MBA, comprising 24 hours of course work, meets the minor requirements of the undergraduate degree. After successful completion of the first year of the MBA program, the student may petition the Dean of the College of Fine Arts to be awarded the undergraduate degree.

#### **Multiple Majors**

The following applies to all students majoring in the College of Fine Arts. Students who wish to pursue an additional major in the college must satisfy all degree requirements of the additional major, including courses specified in the UCR as particular to that degree and major.

Students who wish to pursue an additional degree in another college, if additional majors are permitted in that college, must complete all degree requirements for each major, including courses specified in the UCR as particular to each degree and major.

Students outside the College of Fine Arts whose home college permits an additional major in the College of Fine Arts must complete all degree requirements for the additional major, including courses specified in the UCR for that particular degree and major.

**Special Programs.** The Performance Certificate and the Artist Diploma are available for pianists with exceptional performance ability. See School of Music section for details.

#### **Requirements for Graduation**

Students must <u>request a degree plan from the Office of the Dean when they have completed 54 semester hours</u> (usually at the end of the sophomore or the beginning of the junior year). The **"Intent to Graduate"** form, available from the Office of the Dean, must be completed <u>no later</u> than a semester preceding expected graduation.

Approval of the department chairman is required for all nontraditional courses, i.e., special problems, independent study, research problems, etc.

Beyond the studies specified for each major, the bachelor's degree is built on the 47-semester-hour University Curriculum Requirements that apply to all University graduates.

#### The University Curriculum Requirements (UCR)

#### I. FOUNDATIONS: 9 credit hours

A. The Writing Requirement: 6 credit hours plus the Writing Emphasis Experience

1. Writing Workshop: 6 credit hours

2. Writing Emphasis Experience: 6 credit hours

B. Mathematics: 3 credit hours

#### II. EXPLORATIONS: 36 credit hours

A. Physical and Life Sciences: 6 credit hours minimum (lab required), 9 hours maximum

B. Social Sciences: 6 credit hours minimum, 9 hours maximum

C. Cultural Heritage: 12 credit hours minimum, 15 hours maximum

1. Religion Studies: 3 credit hours minimum

2. U.S. Historical Studies: 3 credit hour minimum

3. Critical Inquiry: 3 credit hours minimum

4. Fine Arts: 3 credit hours minimum

D. Language and Literature: 6 credit hours minimum, 9 hours maximum

1. Foreign Language: 6 credit hours minimum

2. Oral Communication and Literature: 6 credit hours minimum

a. Oral Communication: 3 credit hours minimum

b. Literature: 3 credit hours minimum

Note: No more than 6 hours may be taken in a given department.

#### **III. PHYSICAL EDUCATION REQUIREMENTS:**

Physical Education: 2 credit hours

Note: At least 1 credit hour must be a Health Concepts course.

**Transfer Credit.** Students wishing to take courses at another institution, following their admission to Texas Christian University, must secure approval through the Office of the Dean of the College of Fine Arts before enrolling in them.

**Pass/No Credit Policy.** Courses applied toward any major in the College of Fine Arts may not be taken on the P/ NC basis.

#### **Student Organizations**

#### **Fraternities and Sororities**

Alpha Psi Omega (Theatre)

Chi Tau Epsilon (Dance)

Mu Phi Epsilon (Music)

Phi Mu Alpha (Music)

Kappa Kappa Psi (Band)

Tau Beta Sigma (Band)

Pi Kappa Lambda (Music Honor Society)

#### Clubs

ASTA (American String Teachers Association)

IAJE (International Association of JazzEducators)

MEO (Music Education Organization)

Lending Our Voices and Ears

TCU Honor Society of Artists and Designers

#### **Musical Organizations**

Horned Frog Band (Marching)

Symphonic Band

Wind Ensemble

Chamber Winds

Jazz Ensemble

University Orchestra

String and Wind Ensembles

Collegium Musicum

Choral Union

Concert Chorale

Chapel Choir

### **Professional Organizations**

American Advertising Federation

Texas Art Education Association

United States Institute of Theatre Technology (USITT) Student Chapter

# School of Music

School Requirements Degree Plans Studio Instruction Music Ensembles Courses of Instruction

#### (MUSI)

Available on the Bachelor of Music degree, with majors in Performance, Piano Pedagogy, Theory/Composition, Music History or Church Music; on the Bachelor of Music Education degree with a concentration in Vocal or Instrumental Music in preparation for all-level certification, and as a major or minor on the Bachelor of Arts degree.

Admission. Acceptance into the School of Music requires an audition in the primary performance and scholarly area prior to admission to TCU. Applicants unable to visit the campus may submit a tape recording or copies of original scores and papers. Additional requirements for admission into the School of Music include separate letters of recommendation attesting to the candidate's musical accomplishments and ability, and essay dealing with music, and a complete resumé. Detailed information is available from the School of Music. Students studying as premajors must complete all application steps, including a successful audition for the faculty before being admitted for study as a music major.

School Facilities. The School of Music is housed in TCU's Ed Landreth Hall and the Mary D. and F. Howard Walsh Center for Performing Arts. The Ed Landreth building includes teaching, practice and rehearsal facilities, and a 1200seat auditorium with superb acoustics. Numerous pianos, many of them grands; four pipe organs; two harpsichords; a clavichord; a collection of authentic Baroque instruments; the Upchurch Studio for Electro-Acoustic Music; the John Large Vocal Arts Laboratory; and other instrumental collections serve the school. A practice room wing is housed in the basement of Waits dormatory, and a music annex serves the opera program, as well as protions of the percussion program.

The Mary D. and F. Howard Walsh Center for Performing Arts houses a 325-seat recital hall of unprecedented acoustic design, an instrumental rehearsal hall, a choral rehearsal hall, and a piano wing furnished exclusively with Steinway pianos. The piano wing includes: five teaching studios, eight practice rooms, and an electronic piano laboratory.

A large, comprehensive music library complete with recordings, reference books, texts, scores, and listening rooms is housed in the Mary Couts Burnett Library.

#### **School Requirements**

Keyboard Skills. All music majors, unless exempted by testing, register for Music 11030, Class Piano, in the first semester, and must continue in classes until they pass the keyboard skills test. This requirement must be met by the end of the sophomore year. Students will not be allowed to register for courses in the junior year until this requirement is met. Piano and Organ majors will meet this requirement by taking MUSI 20071 and 20081, Functional Piano.

Recitals. All music majors appear in school and studio recitals. Students majoring in performance participate in a half recital during the junior year and present a full recital during the senior year. Students majoring in music education present a recital, typically before student teaching.

Juries. A jury examination is held each semester for majors and minors in performance courses and annually for theory/composition majors beginning the sophomore year. At the end of the sophomore year this examination determines whether the student is permitted to enroll in upper division performance and composition lessons. The junior jury and/or recital determine admission to senior standing for performance majors.

Recital/Concert Attendance. Music majors are required to register in MUSI 11000 each semester. This is a pass/ no pass, zero-credit course. Music majors are required to attend a minimum of 15 concerts each semester, with the exception of the student-teaching semester for BME students. Six (6) of these concerts must be from the weekly School of Music Recital Hour Series. The remaining nine (9) may be chosen from faculty and guest artist recitals, TCU and guest ensemble concerts, and student recitals. Students will submit to the School of Music Office original printed concert programs signed by a TCU School of Music faculty member in attendance. Deadline for submission of programs is 12:00 pm the last day of classes.

All music courses taken in the major or minor sequences must be passed with a grade of "C" or better to fulfill graduation requirements.

#### **Degree Plans**

#### B.M. Degree with a Major in Performance-Piano

University Curriculum Requirements 47 include II.A. (PHYS 20053) include II.C.4. (MUSI 30613, 30623) General elective

#### Music Requirements:

- -- Ensemble (1/2 hours each semester)
- -- Choral Ensemble -- 1 semester (MUSI 10030, 10040, or 10130/10140)

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Piano	Accompanying 4	semesters	(MUSI 10170)
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<sup>--</sup> Piano Accompanying -- 4 semesters (MUSI 10170)
-- Chamber Music -- 3 semesters (MUSI 10080) (In exceptional cases, a student may substitute 4 MUSI 10080 for MUSI 10170, but not more than 2 semesters - only by petition of the piano faculty)

Studio Performance Lessons:	
Lower Division	12
Upper Division	12
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	25
30232, 50203)	
Music History (20613, 50433)**	6
Performance Pedagogy (30052, 30062)	4
Functional Piano (20071, 20081)	2
Conducting (20512)	2
Recital I (30991)	1
Recital II (40991)	1
Music electives*	5
Total	124

<sup>\*</sup>Must include 3 semester hours advanced theory or 3 semester hours advanced history.

### B.M. Degree with a Major in Performance -Organ

	University Curriculum Requirements	
	include II.A. (PHYS 20053)	47
į	include II.C.4. (MUSI 30613, 30623)	
(	General elective	3
1	Music Requirements:	
	Ensemble (1/2 hour each semester)	
-	Choral Ensemble (MUSI 10030, 10040, or 10130/10140)	2
	Chamber Music (10080) or Accompanying (10170)	2
	Studio Performance Lessons	
	Lower Division	12
	Upper Division	12
	Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	25
	30232, 50203)	
	Music History (20613, 50433)**	6
	Performance Pedagogy (30052, 30062)	4
	Functional Piano (20071, 20081)	2
	Conducting (20512)	2
	Recital I (30991)	1
	Recital II (40991)	1
	Music Electives*	5
	Total	124

<sup>\*</sup>Must include 3 semester hours advanced theory or 3 semester hours advanced history.

### B.M. Degree with a Major in Piano Pedagogy

University Curriculum Requirements	4/
include II.A. (PSYC 10514, 10524, PHYS 20053)	
include II.C.4. (MUSI 30613, 30623)	
Music Requirements:	
Ensemble (1/2 hours each semester)**	4
Studio Performance Lessons	
Lower Division	8
Upper Division	10
Functional Piano (20071, 20081)	2
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	25
30232, 50203)	
Conducting (20512)	2
Music History (20613, 50433)***	6
Performance Pedagogy (30052, 30062, 40052, 40062)	8
Recital I (30991)	1
RecitalII (40991)	1
Music Electives*	7
Education (30123, 30143)	6
Total	127

<sup>\*</sup>Must include 3 semester hours advanced theory or 3 semester hours advanced history.

Piano Accompanying -- 4 semester (MUSI 10170)
Chamber Music- 3 semester (MUSI 10080) (In exceptional cases, a student may substitute MUSI 10080 for MUSI 10170, but not more than 2 semesters - only by petition of the piano faculty).

#### B.M. Degree with a Major in Performance Band Instruments

University Curriculum Requirements include II.A. (PHYS 20053)

47

<sup>\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

<sup>\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

<sup>\*\*</sup>Choral Ensemble -- 1 semester (MUSI 10030, 10040, or 10130/10140)

<sup>\*\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

Music Requirements:         Ensemble (1/2 hours each semester)**       4         Studio Performance Lessons       12         Lower Division       12         Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222, 25       25         30232, 50203)       8         Music History (20613 plus 3 hours 50000 level)***       6         Conducting (20512, 30522)       4         Instrumental Performance Pedagogy (40033)       3         Recital I (30991)       1         Recital II (40991)       1         Music electives*       6         Total       124	include II.C.4 (MUSI 30613, 30623) General elective	3
Studio Performance Lessons       12         Lower Division       12         Upper Division       12         Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222, 25       25         30232, 50203)       6         Music History (20613 plus 3 hours 50000 level)***       6         Conducting (20512, 30522)       4         Instrumental Performance Pedagogy (40033)       3         Recital I (30991)       1         Recital II (40991)       1         Music electives*       6	,	
Lower Division 12 Upper Division 12 Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222, 25 30232, 50203) Music History (20613 plus 3 hours 50000 level)*** 6 Conducting (20512, 30522) 4 Instrumental Performance Pedagogy (40033) 3 Recital I (30991) 1 Recital II (40991) 1 Music electives* 6		4
Upper Division 12  Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222, 25 30232, 50203)  Music History (20613 plus 3 hours 50000 level)*** 6  Conducting (20512, 30522) 4  Instrumental Performance Pedagogy (40033) 3  Recital I (30991) 1  Recital II (40991) 1  Music electives* 6		
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222, 30232, 50203)  Music History (20613 plus 3 hours 50000 level)***  Conducting (20512, 30522)  Instrumental Performance Pedagogy (40033)  Recital I (30991)  Recital I (40991)  Music electives*  6	=- · · · · · · · · · · · · · · · · · · ·	
30232, 50203)  Music History (20613 plus 3 hours 50000 level)***  Conducting (20512, 30522)  Instrumental Performance Pedagogy (40033)  Recital I (30991)  Recital II (40991)  Music electives*  6		
Music History (20613 plus 3 hours 50000 level)***       6         Conducting (20512, 30522)       4         Instrumental Performance Pedagogy (40033)       3         Recital I (30991)       1         Recital II (40991)       1         Music electives*       6		25
Conducting (20512, 30522) 4 Instrumental Performance Pedagogy (40033) 3 Recital I (30991) 1 Recital II (40991) 1 Music electives* 6		_
Instrumental Performance Pedagogy (40033)  Recital I (30991)  Recital II (40991)  Music electives*  3  Recital II (40991)  6	, ,	-
Recital I (30991) 1 Recital II (40991) 1 Music electives* 6		-
Recital II (40991) 1 Music electives* 6	5 57 ( )	3
Music electives* 6		1
		1
10fal 124		-
121	lotal	124

<sup>\*</sup>Must include 3 hours advanced theory or 3 hours advanced history.

#### B.M. Degree with a Major in Performance- String Instruments

	Jniversity Curriculum Requirements	
	nclude IÍ.A. (PHYS 20053)	47
i	nclude II.C.4 (MUSI 30613, 30623)	
(	General electives	3
1	Music Requirements:	
-	Ensemble (0.5 hours each semester Symphony Orchestra, 10120)	4
(	Chamber Music (10080)	2
	Studio Performance Lessons	
	Lower Division	12
	Upper Division	12
-	Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	25
	30232, 50203)	
	Music History (20613 plus 3 hours 50000 level)**	6
(	Conducting (20512, 30522)	4
]	instrumental Performance Pedagogy (40033)	3
-	Recital I (30991)	1
	Recital II (40991)	1
- 1	Music electives*	6
-	Total	126

<sup>\*</sup>Must include 3 semester hours advanced theory or 3 semester hours advanced history.

#### B.M. Degree with a Major in Performance Voice

University Curriculum Requirements include II.A. (PHYS 20053)	47
include II.C.4 (MUSI 30613, 30623)	
include II.D.1 (French, German, or Italian 20053, 20063)	
General elective	3
Music Requirements:	
Ensemble (1/2 hours each semester.)**	4
Studio Performance Lessons	
Lower Division	8
Upper Division	12
Diction (10171, 10181)	2
Vocal Pedagogy (40063)	3
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	23
50203)	
Music History (20613 plus 3 hours 50000 level)***	6
Conducting (20512, 30512)	4
Recital I (30991)	1
Recital II(40991)	1
Music electives*	10
Total	124

<sup>\*</sup>Must include 3 hours advanced theory or 3 hours advanced history.

#### B.M. Degree with a Major in Music Theory/Composition

University Curriculum Requirements 47 include II.A. (PHYS 20053) include II.C.4 (MUSI 30613, 30623) include II.D.1 (German 20053, 20063)

<sup>\*\*8</sup> semesters of Wind Symphony (MUSI 10210), Symphonic Band (MUSI 10110), or Marching Band (MUSI 10010). Jazz ensemble (MUSI 10190 may count for a maximum of 2 semesters).

<sup>\*\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

<sup>\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

<sup>\*\*</sup>Must include 2 hours of Opera Studio (10100).

<sup>\*\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

General elective	3
Music Requirements:  Ensemble (1/2 hours each semester - any ensemble)	4
Studio Performance Lessons	
Lower Division	4
Upper Division	4
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222,	32
30232, 30312, 30322, 30343, 50203)	
Music Composition (20412, 20422, 30420)*	12
Music History (20613 plus 3 hours 50000 level)***	6
Instrumental Technique (10051, 10071, 30151,30161)	4
Conducting (20512 and 30512 or 30522)	4
Recital II (40991)****	1
Music electives**	3
Total	124

<sup>\*</sup>Majors with a theory emphasis may fulfill 30420 requirement with theory electives or electives in combination with lessons.

#### B.M. Degree with a Major in Church Music

Hairanaita Caminalana Banaitana anta

University Curriculum Requirements	47
include II.A. (PHYS 20053)	
include II.C (MUSI 30613, 3623; RELI 10003)	_
Religion Requirements: Church History (30323 or 30333) or Religion and Learning (20703 or	3
30653)	2
Religion in the Arts (30743)	3
General Electives	3
Music Requirements: Ensemble (1/2 hours each semester)*	4
Studio Performance Lessons (Organ or Voice)	_
Lower Division	8
Upper Division	8
Studio Performance Lessons Secondary Instrument (Organ, Voice, or Piano)	4
Music Theory (10201, 10203, 10211, 10213, 20201,20203, 20211, 20213, 30202, 30222,	22
30232)	2
Music History (20613)**	3
Conducting (20512, 30512)	4
Service Playing and Repertory (30713)	3
Hymnology (30723)	3
Choral Literature (50423)	3
Recital I (30991)	1
Recital II (40991)	1
Music electives	124
Total	124

<sup>\*6</sup> semesters of Choir, 2 semesters of any ensemble

Music History (20613)

Music Education (20311, 30313, 30812, 30822)

Class Voice (20051)

**Bachelor of Music Education** 47 University Curriculum Requirements Option I include II.A. (PHYS 20053) include II.C.4 (MUSI 30613, 30623) include II.D.1 (SPCO 10123 or 20103) AND 3 hours English Literature OR Option II include II.A. (PHYS 20053) include II.C.4 (MUSI 30613, 30623) include II.D.1 (SPCO 10123 or 20103) Taken as an Explorations elective include II.D.2 (6 hours Foreign Language) \* In either option, SPCO 10123 or 20103 is required. In Option II it may be applied to the degree plan as a II.D elective INSTRUMENTAL CONCENTRATION Music Requirements: Ensemble (1/2 hours each semester.)\*\* 4 Studio Performance Lessons -- Lower Division 8 -- Upper Division

Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30312)

Instrumental Techniques (10051, 10061, 10071, 30151, 30161, 30171, 30181)\*

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<sup>\*\*</sup>Composers must continue lessons for elective credit.

<sup>\*\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

<sup>\*\*\*\*\*</sup>Composers present a recital of their works. Theorists present a paper or a lecture recital.

<sup>\*\*</sup>MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

Conducting (20512, 30522) Recital I (30991) Music Electives Education Requirements: EDSE 30013, 30123, or 30163, 30143 or 30153 EDSP 30603 EDSE 40213, 50023 EDEL 40980 EDSE 40990	4 1 3 25
EDSE 30001 Total	138

#### **VOCAL CONCENTRATION** Music Requirements:

Ensemble (1/2 hours each semester.)** Studio Performance Lessons*	4
Lower Division Upper Division Diction (10171, 10181) Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30312)	8 6 2 20
Music History (20613) Class Guitar(10021) Functional Instrumental Technique (10081) Music Education (20311, 20511, 30313, 30912, 30922) Conducting (20512, 30512) Recital I (30991)	3 1 1 9 4 1
Music Electives Education Requirements: EDSE 30013, 30123, or 30163, 30143 or 30153 EDSP 30603 EDSE 40213, 50023 EDEL 40980 EDSE 40990 EDSE 30001	align=right>3 25
Total	131

<sup>\*</sup>Minimum of 4 hours of voice (class and/or studio) required if area of performance concentration is not voice.

\*\*8 semesters of Concert Chorale (MUSI 10040) Women's or Men's Choir (MUSI 10130/10140). Opera Studio (MUSI 10010) may count for a maximum of 2 of the 8 semesters.

#### **Bachelor of Arts**

University Curriculum Requirements	47
include II.C.4 (MUSI 30613, 30623)	
include II.D.1 (6 hours sophomore language)	
Minor	18
General electives	15
Studio Performance Lessons - Lower Division	8
Studio Performance Lesson s- Upper Division	4
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213)	16
Music History (20613 plus 6 hours 50000-level music history)*	9
Conducting 20512	2
Music Elective (30000 level or above)	3
Ensembles (4 semesters - any ensemble)	2
Total	124
**************************************	1 1 1 .

\*MUSI 30613 and 30623 are also required Music History courses. These courses are credited, under the degree plan, as counting toward the 47 credit UCR.

## Suggested Courses for the Freshman Year: BM, BME, and BA

FALL	
Music Theory 10201	1
Music Theory 10203	3
Lower Division Studio Lessons:	
Music History, Music Theory/Composition (1) or, Vocal Performance, Music Education	3
(2) or, Keyboard and Instrumental Performance majors (3)	
Class Piano 11030	0
Writing Workshop (I.A.1)	3
Laboratory Science (II.A.1)	3
Physical Education (III)	1
Ensemble	0.5
Total	13.5 or 14.5
	or 15.5
SPRING	
Music Theory 10211	1
Music Theory 10213	3
Lower Division Studio Lessons:	

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<sup>\*</sup> Students not required to take technique course in primary instrument.

\*\* Band Concentration: 8 semesters of Wind Symphony (MUSI 10010), Symphonic Band (MUSI 10210), or Marching Band (MUSI 10110). Jazz Ensemble (MUSI 10190) may count for a maximum of 2 semesters. Orchestra Concentration: 8 semesters of Symphony Orchestra (MUSI 10120)

Minor in Music	
	or 15.5
Total	13.5 or 14.5
Ensemble	0.5
Physical Education (III)	1
Writing Workshop(I.A.1)	3
Religion (II.C.1)	3
Class Piano 11040	0
Music History, Music Theory/Composition (1) or, Vocal Performance, Music Education (2) or, Keyboard and Instrumental Performance majors (3)	3

#### Minor in Music

4**
8
9
21

<sup>\*</sup>MUSI 30613 and 30623 may be taken as II.C.4 in the University Curriculum Requirements.

#### **Special Programs**

#### The Performer's Certificate in Piano

The Performer's Certificate is a special course of study designed for those undergraduate students with outstanding musical and performance ability who show the promise of becoming concert artists and who do not choose to include the academic component of the Bachelor of Music curriculum. The program is designed to allow the student maximum time and flexibility to develop his/her performing ability while completing the essential studies for a solid musical background.

To be considered, candidates must have a high school diploma or equivalent and must demonstrate, through an audition for the piano faculty, the promise of becoming a concert performer. Admission to the program is allowed only upon the recommendation of the piano faculty and the approval of the Director of the School of Music.

International students must demonstrate proficiency in English by scoring at least 550 on the Test of English as a Foreign Language (TOEFL) or by otherwise meeting the TCU English requirement, with no section score less than 55

The Performer's Certificate is a three-year program.

#### The Artist Diploma in Piano

The Artist Diploma is a program for the most advanced and gifted young performers who, by their performance and credentials, demonstrate that they have serious potential to become concert artists. The program is designed to provide intensive study and performance opportunities under the guidance of master teachers in preparation for a concert career.

An audition for the piano faculty is required. Admission to the program is allowed only upon the recommendation of the piano faculty and the approval of the Director of the School of Music.

The Artist Diploma is a three-year program available in both a pre-baccalaureate and a post-baccalaureate track. A minimum cumulative GPA of 3.0 is required to maintain satisfactory academic progress in this program.

#### Performer's Certificate in Piano

Ensemble	2
Studio Performance Lessons (Piano) Upper Division	24
Music Theory (10201, 10203, 10211, 10213, 20201, 20203, 20211, 20213, 30202, 30222)	20
Music History (20613, 30613, 30623, 50433)	12
Accompanying (10271, 10281)	2
Piano Chamber Music (20082, 20182)	4
Piano Repertoire and Performance (MUSI 20212, 40212)	4
Conducting (30522)	2
Music Electives	6
Recitals (30991, 40981, 40991)	3
Total	79

#### Artist Diploma in Piano (pre-baccalaureate)

Studio Performance Lessons (Piano) Upper Division	26
Recitals (30991, 40971, 40981, 40991)	4
Collaborative Piano(MUSI 21081)	3
Total	33

#### Honors Program. Music majors who plan to pursue

Departmental Honors must be members of the Honors Program and should enroll in the Honors sections of MUSI 30613 and 30623 prior to their senior year, and MUSI 40003 during the fall semester of their senior year.

#### **Studio Instruction**

**Keyboard Performance** majors register for 3 credit hours each semester of Lower and Upper Division study. **Piano Pedagogy** majors register for 2 credit hours each semester of Lower and Upper Division study until the senior year, when they register for 3 credit hours each semester.

Band and Orchestral Instrument majors register for 3 credit hours each semester of Lower and Upper Division

<sup>\*\*</sup>Requires four semesters of successful jury examinations designated to fulfill music minor requirements

Voice Performance majors register for 2 credit hours each semester of Lower Division study and 3 credit hours each semester of Upper Division study.

Secondary Voice for the non-major or for the music major whose principal instrument is other than voice. Requirements in repertoire differ from Principal Voice in difficulty rather than kind. The standard of achievement in vocal technique will be appropriate for the secondary student. Repertoire assignments will be made from the standard art song and operatic aria literature. Non-majors register for 1 or 2 credit hours.

Music Education majors register for 2 credit hours each semester of Lower and Upper Division study.

Music History and Music Theory/Composition majors register for 1 credit hour each semester of Lower and Upper Division study.

Music Performance Elective Credit. To register for private lessons, students must audition and obtain permission of the instructor.

Lower Division Studio Lessons Variable credit. \*1-4 semester hours

#### **Vocal Studies**

20110 Voice

21100 Secondary Voice

## **Keyboard Studies**

20210 Piano

20220 Organ

20230 Jazz Piano

20240 Harpsichord

### **Band/Orchestral Instrument Studies**

20310 Violin

20320 Viola

20330 Violoncello

20340 Double Bass

20350 Viola da Gamba

20360 Jazz Bass

20410 Flute

20420 Oboe

20430 Clarinet

20440 Saxophone

20450 Bassoon

20510 French Horn

20520 Trumpet (Cornet)

20530 Trombone

20550 Tuba

20560 Euphonium

20610 Percussion

20620 Jazz Drumset

20710 Harp

20810 Guitar

20910 Jazz Guitar

# **Upper Division Studio Lessons**Variable credit. \*1-6 semester hours.

#### **Vocal Studies**

40110 Voice

#### **Keyboard Studies**

40210 Piano

40220 Organ

40230 Jazz Piano

40240 Harpsichord

#### **Band/Orchestral Instrument Studies**

40310 Violin

40320 Viola

40330 Violoncello

40340 Double Bass

40360 Jazz Bass

40350 Viola da Gamba

40410 Flute

40420 Oboe

40430 Clarinet

40440 Saxophone

40450 Bassoon

40510 French Horn

40520 Trumpet (Cornet)

40530 Trombone

40550 Tuba

40560 Euphonium

40610 Percussion

40620 Jazz Drumset

40710 Harp

40810 Guitar

40910 Jazz Guitar

#### **Recital Courses**

30991 RECITAL I. Prerequisite: Junior standing and permission of instructor.

40971 PIANO RECITAL. Prerequisite: 30991.

40981 PIANO RECITAL. Prerequisite: 40971.

40991 RECITAL II. Prerequisite: Senior standing and permission of instructor. Students giving a recital must have successfully completed 30991, RECITAL I.

<sup>\*</sup>Taking more than 3 hours of applied music requires permission from the Director of the School of Music.

#### Music Ensembles

All majors and minors in Performance will participate in at least one ensemble organization each semester. Usually this will be directly allied to the subject of Performance study. There may be exceptions where a student is qualified to participate in more than one type of organization.

Each of the following courses earn 1/2 semester hour.

10010 WIND SYMPHONY

10020 PERCUSSION ENSEMBLE

10030 CHORAL UNION

10040 CONCERT CHORALE

10050 CHAPEL CHOIR

10060 CHAMBER SINGERS

10070 VOCAL JAZZ ENSEMBLE

10080 CHAMBER MUSIC

10090 WOODWIND ENSEMBLE

10100 OPERA STUDIO

10110 MARCHING BAND

10120 SYMPHONY ORCHESTRA

10150 NEW MUSIC ENSEMBLE

10160 BRASS ENSEMBLE

10170 PIANO ACCOMPANYING

10180 COLLEGIUM MUSICUM

10190 JAZZ ENSEMBLE

10210 SYMPHONIC BAND

10220 CONCERT BAND

#### **Courses of Instruction**

**FNRT 30900 Fine Art Interdisciplinary Course.** This course offers students direct experience of the major aspects of contemporary culture in a location abroad. The faculty has structured a variety of field trips to facilitate the investigation of the arts in theatres, museums, galleries, concert halls, and studios and other arts allied spaces. Students will also be able to interview a number of the people who are responsible for the abundance of the arts in the city now.

#### FNRT 30903 Art and Music in Hungary.

**MUSI 10003 Music Theory for Non-Majors.** Rudiments of music including notation, intervals, scales, harmony, and form. Not available to music majors and minors for degree credit.

MUSI 10010 Wind Symphony. Wind Symphony.

MUSI 10020 Percussion Ensemble. Percussion Ensemble.

MUSI 10021 Class Guitar. Elementary techniques of playing and teaching quitar for music education majors.

MUSI 10030 Choral Union. Choral Union.

**MUSI 10033 Survey of Jazz and Popular Music.** The study of the evolution of Jazz as an American art form, including the study of American popular music. Not available to music majors and minors for degree credit.

MUSI 10040 Concert Chorale. Concert Chorale.

**MUSI 10051 String Instrument Technique I.** Elementary techniques of playing and teaching violin, viola, cello, and bass for music education and composition majors.

**MUSI 10053 Survey of Music.** An introduction to musical ideas and compositions, intended to give an understanding of the major developments in the music of western civilization. Not available to music majors or minors for degree credit.

**MUSI 10053 Survey of Music.** An introduction to musical ideas and compositions, intended to give an understanding of the major developments in the music of western civilization. Not available to music majors or minors for degree credit.

MUSI 10060 Chamber Singers. Chamber Singers.

**MUSI 10061 String Technique II.** Prerequisite: MUSI 10051 or demonstrated proficiency on a string instrument as approved by the instructor. Continuation of elementary techniques of playing and teaching violin, viola, cello, and bass for music education and composition majors.

**MUSI 10063 World Music.** The examination of a wide variety of music from diverse cultures and various theories concerning the cultural function of music. Not available to music majors or minors for degree credit.

**MUSI 10063 World Music.** The examination of a wide variety of music from diverse cultures and various theories concerning the cultural function of music. Not available to music majors or minors for degree credit.

MUSI 10070 Vocal Jazz Ensemble. Vocal Jazz Ensemble.

**MUSI 10071 Percussion Technique.** Elementary techniques of playing and teaching percussion instruments for music education majors.

**MUSI 10073 From Rock to Bach.** A survey of current popular and classical musical styles and genres in the U.S. Topics include rock, folk, jazz, blues, gospel, country and western, musical theatre, film music, music of and beyond the Americas, and Western European classical music. Emphasis is placed on the sequential development of substantive listening and descriptive skills. Not available to music majors for degree credit.

MUSI 10080 Chamber Music. Chamber Music.

**MUSI 10081 Functional Instrumental Technique.** Introduction to string, brass, woodwind and percussion instructional techniques for vocal concentration music education majors.

MUSI 10090 Woodwind Ensemble. Woodwind Ensemble.

MUSI 10100 Opera Studio. Opera Studio.

MUSI 10110 Marching Band. Marching Band.

MUSI 10120 Symphony Orchestra. Symphony Orchestra.

**MUSI 10130 Women's Choir.** Prerequisite: Audition or permission of instructor. The TCU Women's Choir is an ensemble dedicated to performance of quality treble repertoire. Majors and non-majors are encouraged to participate. The ensemble performs a minimum of two concerts per semester.

**MUSI 10140 Men's Choir.** Prerequisite: audition or permission of instructor. The TCU Men's Choir is an ensemble dedicated to performance of quality male repertoire. Majors and non-majors are encouraged to participate. The ensemble performs a minimum of two concerts per semester.

**MUSI 10150 New Music Ensemble.** The ensemble performs mixed chamber music primarily composed during the past 25 years.

MUSI 10160 Brass Ensemble. Brass Ensemble.

MUSI 10170 Piano Accompanying. Piano Accompanying.

**MUSI 10171 Diction for Singers.** Introduction to the International Phonetic Alphabet and its application to the study of Liturgical Latin, Italian, and English lyric diction.

MUSI 10180 Collegium Musicum. Collegium Musicum.

**MUSI 10181 Diction for Singers.** Prerequisite: MUSI 10171 or permission of instructor. Application of International Phonetic Alphabet to the study of German and French lyric diction.

MUSI 10190 Jazz Ensemble. Jazz Ensemble.

**MUSI 10191 Jazz Improvisation.** A study of the techniques of jazz improvisation through performance. May be repeated for maximum of 4 hours credit.

MUSI 10201 Elementary Ear Training. Melodic, harmonic, and rhythmic dictation; sight-singing.

**MUSI 10203 Elementary Theory.** Musical notation and definitions, intervals, scales and keys. Emphasis on writing four-voice exercises in major and minor keys using triads and dominant sevenths. Harmonic analysis. Keyboard harmony.

MUSI 10210 Symphonic Band. Symphonic Band.

MUSI 10211 Elementary Ear Training. Prerequisite: MUSI 10201. Continuation of MUSI 10201.

**MUSI 10213 Elementary Theory.** Prerequisite: MUSI 10203. Continuation of MUSI 10203, including study of suspensions and other non-chord tones, the remaining diatonic seventh chords and secondary functions. Harmonic analysis, as well as study of cadences, phrases and periods. Keyboard harmony.

**MUSI 10220 Concert Band.** The Concert Band provides students from all academic disciplines with a creative and positive music-making environment with a limited rehearsal schedule. A wide range of musical styles is offered, and opportunities are provided for music majors to develop on their secondary instruments.

**MUSI 10223 Basic Music.** Fundamentals of music performance, composition and listening. Appropriate for elementary education majors. Not open to music majors and minors.

**MUSI 10271 Piano Accompanying I.** Practical, comprehensive introduction to all aspects of accompanying a wide variety of vocal and instrumental music. Main topics include development of sight reading and ensemble skills, techniques for rehearsing and working with others in performance, and general concepts of the philosophy of performance.

MUSI 10281 Piano Accompanying II. Prerequisite: MUSI 10271. Continuation of MUSI 10271.

MUSI 10433 Freshman Seminar in Music. Topics may vary each time it is offered.

**MUSI 11000 Recital/Concert Attendance.** Music majors are required to attend a minimum of 15 concerts and recitals each semester, with the exception of the student-teaching semester for BM ed. students. Six (6) of these concerts must be from the weekly School of Music Recital Hour Series. The remainder may be chosen from faculty and guest artist recitals, TCU and guest ensemble concerts, and student recitals. Students will submit original printed concert programs signed by a TCU School of Music faculty member in attendance. This course activity is an important element in the development of critical listening skills.

**MUSI 11030 Class Piano.** Beginning piano for non-keyboard music majors who are preparing to pass the basic piano requirement.

MUSI 11040 Class Piano. Prerequisite: MUSI 11030. Continuation of MUSI 11030.

MUSI 20051 Class Voice. Class instruction designed to train students in vocal technique and literature.

**MUSI 20071 Functional Piano.** Prerequisite: Keyboard, Piano Pedagogy and MUED piano concentration majors only; MUSI 10201, 10203, 10211, 10213 and two semesters 20201. Functional keyboard skills for keyboard majors, including transposition, harmonization, score-reduction, improvisation

MUSI 20081 Functional Piano. Prerequisite: MUSI 20071. Continuation of MUSI 20071.

**MUSI 20082 Piano Chamber Music Performance I.** Prerequisite: Sophomore standing in music or permission of instructor. Intensive study of selected works of chamber music with piano. Emphasis on developing the musical and interactive skills needed for chamber music through rehearsal and performance. Weekly coaching with faculty.

MUSI 20182 Piano Chamber Music Performance II. Prerequisite: MUSI 20082 or permission of instructor.

**MUSI 20201 Advanced Ear Training.** Prerequisite: MUSI 10211. Increasingly difficult melodic and rhythmic dictation. Harmonic dictation including seventh chords and modulations. Sight-singing of single line, two-voice, and four-voice music.

**MUSI 20203 Advanced Theory.** Prerequisite: MUSI 10213. Modulatory techniques, simple binary and ternary forms, modal mixture, and chromatic chords. Harmonic analysis and compositional exercises. Keyboard harmony.

MUSI 20211 Advanced Ear Training. Prerequisite: MUSI 20201. Continuation of MUSI 20201.

**MUSI 20212 Piano Repertoire and Performance I.** Prerequisite: Sophomore standing in music or permission of instructor. A workshop class for pianists in which selected works of the piano literature are performed, analyzed and discussed. Special focus is on the etude and its development. Class members perform assigned works and present individual reports on topics relating to the music.

**MUSI 20213 Advanced Theory.** Prerequisite: MUSI 20203. Continuation of MUSI 20203, including tonal harmony in the late 19th century and an introduction to 20th century practice. Harmonic analysis and compositional exercises. Keyboard harmony.

**MUSI 20311 Field Experience in Music.** Observation of and interaction with music students of elementary and middle school age and study of the characteristics of successful teachers.

**MUSI 20412 Composition I.** Prerequisite: MUSI 10203, 10213 and declared major or minor in theory/ composition. Beginning compositional exercises in tonal genres with emphasis on basic chromatic usage in short keyboard, vocal, and rondo forms.

**MUSI 20422 Composition II.** Prerequisite: MUSI 20203 and declared major or minor in theory/composition. Continuation of MUSI 20412. Compositional exercises in tonal genres with emphasis on advanced chromatic usage in short keyboard and vocal forms as well as in small chamber ensembles.

**MUSI 20511 Analytical Listening for Vocal Conductors.** Auditory skills course for choral music education majors. Skills: analysis of vocal tone quality, detection of discrepancies in pitch and rhythm, analysis and solutions of problems in intonation, blend, and balance. Lab required.

**MUSI 20512 Introduction to Conducting.** Prerequisite: Sophomore standing, music major or permission of instructor. Conducting patterns, preparation, cues, release, and technical and expressive movements applicable to vocal and instrumental conductors.

**MUSI 20613 History Of Music: Ancient, Medieval, Renaissance.** Prerequisite: Sophomore standing in music or permission of instructor. Development of significant styles to about 1600; contributions of outstanding composers, with emphasis on cultural and historical background.

MUSI 21030 Class Piano. Prerequisite: MUSI 11040. Continuation of MUSI 11040.

MUSI 21040 Class Piano. Prerequisite: MUSI 21030. Continuation of MUSI 21030.

**MUSI 21081 Collaborative Piano.** Prerequisite: Enrollment in the Artist Diploma Program. Study and performance of advanced repertoire for the collaborative pianist, including accompaniment and chamber music. Emphasis on developing the musical and interactive skills needed for collaborative playing through rehearsal, coaching, and performance.

MUSI 30003 History Of Music (Hon). History of Music (Hon)

**MUSI 30052 Beginning Piano Pedagogy.** Prerequisite: Junior standing in music and in piano. Introduction to methods, materials and techniques employed in the teaching of beginning piano students. Establishing and managing a piano studio public relations, equipment and layout, professional memberships, budget and tax information, studio policy and teacher-student-parent roles. Lecture and observation.

**MUSI 30062 Intermediate Piano Pedagogy.** Prerequisite: MUSI 30052. Examines materials for the intermediate piano student method books, standard piano repertoire, theory and technique, jazz and ensemble works. Also focuses on practice motivation, recital preparation, and auditions, festivals and contests. Also deals with teaching preschool and adult beginners. Lecture and observation.

**MUSI 30151 Woodwind Technique I.** Elementary techniques of playing and teaching clarinet for music education majors.

**MUSI 30161 Brass Technique I.** Elementary techniques of playing and teaching trumpet for music education majors.

**MUSI 30171 Woodwind Technique II.** Prerequisite: MUSI 30151 or clarinet proficiency. Elementary techniques of playing and teaching woodwind instruments for music education majors.

**MUSI 30181 Brass Technique II.** Prerequisite: MUSI 30161 or trumpet proficiency. Elementary techniques of playing and teaching brass instruments for music education majors.

**MUSI 30202 Form and Analysis.** Prerequisites: MUSI 20211, 20213. Structural analysis of simple and compound part forms, rondo, sonata and fugue. Emphasis on the standard designs found in instrumental music from Bach on.

MUSI 30222 Modal Counterpoint. Prerequisite: MUSI 20213. Counterpoint in the style of the 16th century

including ecclesiastical modes, melodic structure, two-part exercises, three-part textures, cadences, paraphrase technique and canon.

**MUSI 30232 Counterpoint.** Prerequisite: MUSI 20213. Counterpoint in the style of the 18th century including melodic structure, two-part texture, chromaticism, invertible counterpoint, two-part invention, three-part texture, imitation, three-part invention, the trio sonata, fugue, chorale and contrapuntal variation forms.

**MUSI 30312 Orchestration.** Prerequisites: MUSI 20211, 20213. Practical consideration of techniques, capabilities and effective uses of orchestral and band instruments in various combinations. Arranging and scoring.

**MUSI 30313 Elementary Music.** Vocal and instrumental expression, rhythmic activities, critical listening, creative experience, and music reading. Course appropriate for pedagogy students.

MUSI 30322 Orchestration. Prerequisite: MUSI 30312. Continuation of MUSI 30312.

**MUSI 30332 Marching Band Arranging.** Prerequisites: MUSI 20203/20213, 30312, or permission of instructor. Study in technique of scoring for the contemporary marching band.

**MUSI 30342 Jazz Arranging.** Prerequisites: MUSI 20203/ 20213, 30312, or permission of instructor. Study in technique of scoring for the modern jazz orchestra.

**MUSI 30343 Electro-Acoustic Music.** Prerequisite: MUSI 20211, 20213 and/or permission of instructor. An investigation of basic acoustic and electronic principles, psycho-acoustics, function and operation of basic electronic music studio equipment filters, microphones, tape recorders, synthesizers, mixers and MIDI devices with an introduction to synthesis techniques utilizing synthesizers and computers.

**MUSI 30420 Composition.** Prerequisite: MUSI 20412 or permission of instructor. Advanced private study in composition. Primarily intended for composition majors. 1-10 semester hours.

**MUSI 30512 Choral Conducting.** Prerequisite: MUSI 20512. Technique of the baton, score reading, tone production, rehearsal routines, vocal materials, organization problems, supervised practice in conducting chorus. Meets choral conducting requirements for secondary school teachers.

**MUSI 30522 Instrumental Conducting.** Prerequisite: MUSI 20512. Instrumental conducting technique, score reading and analysis, supervised practice conducting ensembles. Meets instrumental conducting requirements for secondary school teachers. Lab required.

**MUSI 30613 History of Music: Baroque and Classic.** Prerequisite: MUSI 20613 or permission of instructor. Continuation of 20613, covering developments from G. Gabrieli through Beethoven. Satisfies UCR I.A.2. and II. C. 4.

**MUSI 30613 History of Music: Baroque and Classic.** Prerequisite: MUSI 20613 or permission of instructor. Continuation of 20613, covering developments from G. Gabrieli through Beethoven. Satisfies UCR I.A.2. and II. C.

**MUSI 30623 History of Music: Romantic and Twentieth Century.** Prerequisite: MUSI 30613. Continuation of MUSI 30613, covering developments from Schubert to the present time. Satisfies UCR I.A.2. and II C.4.

**MUSI 30623 History of Music: Romantic and Twentieth Century.** Prerequisite: MUSI 30613. Continuation of MUSI 30613, covering developments from Schubert to the present time. Satisfies UCR I.A.2. and II C.4.

**MUSI 30713 Service Playing and Repertory.** Prerequisite: Permission of instructor. Organ and choral works in the church music program. Practical performance of anthems, motets, small cantatas. Modulation and transposition. Sacred wedding music. Accompanying and sight reading. Directing from the console.

**MUSI 30723 Hymnology.** Prerequisite: Permission of the instructor. The history of the congregational song from the Old Testament to the present. Emphasis on understanding the historical development with practical application for worship in the decade of the 1990s. No musical training is necessary for non-music majors.

**MUSI 30812 Instrumental Organization and Administration.** Prerequisite: Junior standing. Development and administration of instrumental music organizations in the secondary school with emphasis on musical aptitudes, teaching comprehensive musicianship, rehearsal techniques and administration of the beginning middle school band and marching band. Lab required.

**MUSI 30822 Instrumental Organization and Administration.** Prerequisite: MUSI 30812. Development and administration of instrumental music organizations in the secondary school with emphasis on administration, advanced band, orchestra and jazz band. Lab required.

**MUSI 30912 Choral Organization and Administration.** Prerequisite: Junior standing. Study of secondary choral curriculum. Includes vocal and choral techniques, audiation, music reading, choral literature, style and history related to choral music, planning and appraisal and information about UIL and other realities of secondary teaching. Lab required.

MUSI 30922 Choral Organization and Administration. See course under Music Education.

**MUSI 30970 Directed Study in Music.** Prerequisite: Permission of instructor. Specialized work in student's area of concentration. 1-6 Hours

**MUSI 40003 Senior Honors Research Project.** Prerequisites: Senior standing and MUSI 30613, 30623 Honors. Under the guidance of a faculty committee, the student will present an Honors Project, e.g., Lecture/Recital, Composition, Research Paper.

**MUSI 40033 Instrumental Performance Pedagogy.** Prerequisite: Junior or senior standing as an instrumental performance major. The study and analysis of teaching music literature; teaching concepts and the practical application of these concepts; the comparisons of the schools of performance/teaching methods.

**MUSI 40052 Group Piano Pedagogy.** Prerequisites: Senior standing in music and piano; MUSI 30052, 30062. Explores group piano instruction at all levels pre-K through gr. 12, adult non-credit, college non-music majors and

music majors. Texts, supplementary materials, electronic instruments; teaching techniques and group dynamics. Lecture, observation and supervised teaching.

**MUSI 40062 Piano Teaching Internship.** Prerequisites: MUSI 40052. Each student will teach two piano pupils for the semester, culminating in an evaluation and recital. Weekly classes serve as a forum for discussion of problems and exchange of ideas, as well as the examination of current trends and research in piano pedagogy. Lecture, observation and supervised teaching.

**MUSI 40063 Voice Pedagogy.** Prerequisite: Upper division standing in vocal performance or vocal concentration. Methods and materials for teaching voice. Lecture, demonstration and observation.

**MUSI 40212 Piano Repertoire and Performance II.** Prerequisite: Senior standing in music or permission of instructor. A workshop class for pianists in which the piano works of a major composer are performed, analyzed and discussed. Class members perform assigned works and present individual reports on topics relating to the music.

**MUSI 50053 Introduction to Voice Pedagogy.** Prerequisite: Appropriate undergraduate degree in Music or Music Education or permission of instructor. Introduction to science, methods, and materials of voice pedagogy. Acoustics, breathing, attack, registration, resonance, vowels, articulation, and coordination of singing.

**MUSI 50063 Comparative Voice Pedagogy.** Prerequisite: MUSI 50053 or equivalent and permission of instructor. Comparisons of research results and concepts of voice pedagogy across national styles, bel canto treatises, 19th century sources, contemporary methods, and artist statements. Students are encouraged to develop their own practical studio procedures in harmony with the common ideals of Western artistic voice culture.

**MUSI 50203 Musical Structure and Style.** Study of musical style and structure through the analysis of music; organized chronologically from 1750 to the present.

**MUSI 50212 Choral Conducting.** Prerequisites: Senior or graduate standing, MUSI 30512 or 30522, keyboard facility or permission of instructor. Materials and techniques for the experienced choral director.

**MUSI 50222 Instrumental Conducting.** Prerequisite: MUSI 30522; keyboard facility; or permission of instructor. Baton technique and its application to selected works of symphonic and operatic literature.

**MUSI 50303 History of Sacred Music.** Prerequisite: Junior or Senior standing or permission of instructor. A historical survey of sacred music from ancient times to the twentieth century.

**MUSI 50403 Symphonic Literature.** Prerequisite: Senior or graduate standing. Selected works for orchestra and band, illustrating development of the symphony.

**MUSI 50413 Operatic Literature.** Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. Operatic masterpieces from 1600 to the present with emphasis on selected works of Mozart, Verdi, Wagner, Puccini, Britten and others.

**MUSI 50423 Choral Literature.** Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. The various forms in the field of choral literature with detailed examination of representative works.

**MUSI 50433 Keyboard Music.** Prerequisite: Senior or graduate standing. History of development of organ from earliest evidence, harpsichord, clavichord, forte-piano, the piano as well as development of music for these instruments. Keyboard forms and styles with emphasis on earliest developments.

**MUSI 50443 Ethnomusicology.** Prerequisite: Senior or graduate standing. The study of various theories concerning the cultural function of music, exposure to the analytical methods of ethnomusicologists, and the examination of examples from diverse musical cultures.

**MUSI 50453 Music Criticism.** Prerequisite: Senior or graduate standing. Study of selected writings on music criticism and aesthetics from antiquity to the present.

**MUSI 50463 Music in the Twentieth Century.** Prerequisite: Senior or graduate standing. Study of the main trends from the time of Ravel to the present.

**MUSI 50473 Song Literature.** Prerequisite: Senior or graduate standing. An examination of the repertoire for solo voice from 1750 to the present, with emphasis on the works of German,

**MUSI 50483 Chamber Music Literature.** Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. Consent of instructor. The study of the development of chamber music from its beginnings to the present.

**MUSI 50493 Music in the United States.** Prerequisite: Senior or graduate standing. An examination of both cultivated and vernacular music in the United States from the Colonial Era to the present.

**MUSI 50503 History of Sacred Music.** Prerequisites: Senior or graduate standing or permission of instructor. An historical survey of sacred music from ancient times to the twentieth century.

**MUSI 50523 Linear Analysis.** Prerequisite: Graduate standing or approved seniors. Development of structural learning through graphic analysis. Readings on Schenkerian concepts as applied to tonal music.

**MUSI 50970 Special Problems.** Prerequisite: Permission of instructor. Specialized work in student's area of concentration. 1-6 hours.

MUSP 20110 Voice. Voice

MUSP 20210 Piano. Piano

MUSP 20220 Organ. Organ

MUSP 20230 Jazz Piano. Jazz Piano

MUSP 20240 Harpsichord. Harpsichord

MUSP 20310 Violin. Violin

MUSP 20320 Viola. Viola

MUSP 20330 Violoncello. Violoncello

MUSP 20340 Double Bass. Double Bass

MUSP 20350 Viola da Gamba. Viola da Gamba

MUSP 20360 Jazz Bass. Jazz Bass

MUSP 20410 Flute. Flute

MUSP 20420 Oboe. Oboe

MUSP 20430 Clarinet. Clarinet

MUSP 20440 Saxophone. Saxophone

MUSP 20450 Bassoon. Bassoon

MUSP 20510 French Horn. French Horn

MUSP 20520 Trumpet. Trumpet

MUSP 20530 Trombone. Trombone

MUSP 20550 Tuba. Tuba

MUSP 20560 Euphonium. Euphonium

MUSP 20610 Percussion. Percussion

MUSP 20620 Jazz Drumset. Jazz Drumset

MUSP 20710 Harp. Harp

MUSP 20810 Guitar. Guitar

MUSP 20910 Jazz Guitar. Jazz Guitar

MUSP 21100 Secondary Voice. Secondary Voice. (for 1 or 2 hours credit.)

MUSP 30991 Recital I. Recital I

MUSP 40110 Voice. Voice

MUSP 40210 Piano. Piano

MUSP 40220 Organ. Organ

MUSP 40230 Jazz Piano. Jazz Piano

MUSP 40240 Harpsichord. Harpsichord

MUSP 40310 Violin. Violin

MUSP 40320 Viola. Viola

MUSP 40330 Violoncello. Violoncello

MUSP 40340 Double Bass. Double Bass

MUSP 40350 Viola da Gamba. Viola da Gamba

MUSP 40360 Jazz Bass. Jazz Bass

MUSP 40410 Flute. Flute

MUSP 40420 Oboe. Oboe

MUSP 40430 Clarinet. Clarinet

MUSP 40440 Saxophone. Saxophone

MUSP 40450 Bassoon. Bassoon

MUSP 40510 French Horn. French Horn

MUSP 40520 Trumpet. Trumpet

MUSP 40530 Trombone. Trombone

MUSP 40550 Tuba. Tuba

MUSP 40560 Euphonium. Euphonium

MUSP 40610 Percussion. Percussion

MUSP 40620 Jazz Drumset. Jazz Drumset

MUSP 40710 Harp. Harp

MUSP 40810 Guitar. Guitar

MUSP 40910 Jazz Guitar. Jazz Guitar

MUSP 40971 Piano Recital. Piano Recital

MUSP 40981 Piano Recital. Piano Recital

MUSP 40991 Recital II. Recital II

**MUSP 50210 Artist Diploma Piano Lessons.** Prerequisites: Acceptance to Artist Diploma program, baccalaureate degree.

**MUSP 50961 Artist Diploma Recital I.** Prerequisites: Acceptance to Artist Diploma Program, baccalaureate degree. First recital in a sequence of four required for the Artist Diploma program in the School of Music.

**MUSP 50971 Artist Diploma Recital II.** Prerequisites: Acceptance to Artist Diploma Program, baccalaureate degree. Second recital in a sequence of four required for the Artist Diploma program in the School of Music.

**MUSP 50981 Artist Diploma Recital III.** Prerequisites: MUSP 50971. Third recital in a sequence of four required for the Artist Diploma program in the School of Music.

**MUSP 50991 Artist Diploma Recital IV.** Prerequisites: MUSP 50971. Fourth recital in a sequence of four required for the Artist Diploma program in the School of Music.

**MUSP 51081 Collaborative Piano.** Prerequisites: Acceptance to Artist Diploma Program, baccalaureate degree. Collaborative Piano course for the Artist Diploma Program in the School of Music.

# Art and Art History

B.F.A. Degree with a Major in Studio Art (Painting, Photography, Printmaking, or Sculpture)

B.F.A. Degree with a Major in Graphic Design

B.F.A. Degree with a Major in Art Education

Bachelor of Arts

**Departmental Requirements** 

Transfer Students

Declaration of a Major

Student Exhibitions

Suggested Courses for the Freshman Year

Courses of Instruction

#### (ART)

Health

Available on the Bachelor of Fine Arts degree with a major in Studio Art, Art Education and Graphic Design.

Available on the Bachelor of Arts degree with a major in Art History.

All art courses taken in the major or minor sequences must be passed with a grade of "C" or better to fulfill graduation requirements.

Bachelor of Fine Arts. The B.F.A. degree is available in Studio Art with concentration in Painting, Photography, Printmaking, or Sculpture; Graphic Design; and Art Education. The degree requires a minimum of 124 hours inclusive of the 47 semester hours of general University requirements. A minimum of 60 semester hours in Art is required except for Art Education majors who must complete a minimum of 54 semester hours of Art. The various degree plans are outlined below.

#### B.F.A. Degree with a Major in Studio Art (Painting, Photography, Printmaking, or Sculpture)

University Curriculum Requirements (Includes ARHI 10043 and one 20000-level Art History

Course)	47
Art Requirements:	
Drawing (10103, 10113, 20100) Design (10123, 10133) Painting (20143) Printmaking (20163/20173/20183) Sculpture (20243) Photography (20743) Art History Studio Area Concentration Senior Exhibition (40991) Art Professions (30903) Art Elective Electives Total	9 6 3 3 3 6 17 1 3 20 124
B.F.A. Degree with a Major in Graphic Design	
University Curriculum Requirements (includes ARHI 10043 and one approved 20000-level art history course)	47
Art Requirements:	
Drawing (10103, 10113) Design (10123, 10133) Approved Studio Art Elective Photography (20743, 30753) Art History (20833) Graphic Design (20323, 20333, 20453, 30323, 30400, 30423, 30433, 30443, 30453, 30473 30523, 40410, 40412, 40991) Electives Total	6 6 3 6 3 3, 39 14 124
B.F.A. Degree with a Major in Art Education	
University Curriculum Requirements: Writing Workshop Mathematics Lab Science Social Science Religion History (10603, 10613, 10903, or 10913) Critical Inquiry Survey of Art History (10043 and any 20000-level Art History course) Speech (10123, 20103, or 20133) Literature	47 6 3 6-8 6 3 3 3 6 3

Health or PE-Activity Explorations Elective Art Requirements:	1 3 51
Drawing (10103, 10113) Design (10123, 10133) Painting (20143) Printmaking (20163/20173/20183) Ceramics (20213) Photography (20743) Approaches to Studio Art (30013) Art History (Upper Division) Elementary Art Ed (10803, 30803) Secondary Art Ed (40803) Art electives (Upper Level) Electives Education Requirements:	6 6 3 3 3 3 3 6 3 12 2 25
*EDUC 30123 Educational Psychology  *EDUC 30143 Child/Adolescent Dev.  EDSE 30001 Prof. Practice Seminar  EDUC 30013 Prof. Roles & Responsibilities  EDSP 30603 Exceptional Students  EDSE 50023 Effective Teaching & Classroom Implementation  EDRE 40213 Promoting Literacy  EDSE 40980 Student Teaching/Secondary  EDEL 40990 Student Teaching/Elementary  Total  *If planning to teach only in the middle or high school, substitute 30153 and 30163	3 3 1 3 3 3 3 3 3 125

#### **Bachelor of Arts**

A major or a minor in Art History may be taken on the B.A. degree. The Art History program provides a broad undergraduate foundation in the humanities and the preparation necessary for professional careers in art. Potential careers open to Art History majors include teaching, research, art administration, art writing/criticism and museum and gallery professions.

The requirements for the major are Art 10043, one 20000-level Art History course, plus 21 semester hours of additional Art History courses, including a minimum of 12 advanced hours. Additionally, 6 hours are required in studio courses (10103, 10113, 10123, 10133 or other courses approved by the department.) Majors are expected to enroll in a broad range of courses, including both pre-modern (pre-1800) and modern (post-1800).

Art History majors should pay particular attention to the language requirement - 6 semester hours at the 20000 level, or demonstrated proficiency. Those students intending to continue work at the graduate level should develop a proficiency in a second language-German, French, Italian or Spanish are recommended.

### Suggested Courses for the Freshman Year

#### Art History Major

#### FALL

Art 10043 Modern Language Writing Workshop UCR course Laboratory Science P.E. Total	3 3 or 4 3 3 3 1 16 or 17
SPRING 20000-level Art History course Modern Language UCR course UCR course Laboratory Science P.E. Total	3 3 or 4 3 3 3 1 16 or 17

**Requirements for a Minor in Art History.** Art 10043, one 20000-level Art History course, plus 15 semester hours of Art History courses to be determined by the student and approved by an Art History adviser.

**Requirements for a Minor in Art.** Art 10043, **or** one 20000-level Art History course, plus 15 semester hours of approved Art electives including a minimum of 6 advanced hours. Art minors seeking teacher certification must complete 24 hours (12 advanced) and include in their program 3 semester hours of Painting, 3 of Life Studies, 3 of Approaches to Studio Art, 3 of Secondary Art Curriculum, 6 of Art History and 6 of Ceramics and/or Printmaking and/or Sculpture and/or Photography.

**Field Trips.** Field trips may be required by instructors as a part of the content of any course. Every effort will be made to ensure that these trips do not conflict with other portions of the student's schedule.

**Honors Program.** Art and Art History majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in ART 30003 during their junior year and ART 40003 during the fall semester of

3

their senior year.

#### **Departmental Requirements**

A minimum 2.5 cumulative GPA in art is a required prerequisite to junior and senior level studio art, graphic design and art education courses. After entrance into upper division courses, a minimum 2.5 GPA must be maintained as a prerequisite to further advanced enrollment. An annual qualifying portfolio review is required for all students wishing to continue in the Graphic Design program, whether they are Graphic Design majors or not; the student may be required to repeat courses or be removed from the Graphic Design program.

#### **Transfer Students**

Transfer students must have a 2.5 minimum GPA in art and must present a portfolio or photographs or slides of their work for evaluation by the Art Department at least one week prior to registration or at time of advisement in order to determine level of competency.

#### **Declaration of a Major**

The department requires students to declare a major during or before the second semester of their sophomore year. Students majoring in Studio Art must also declare a concentration in Painting, Photography, Printmaking, or Sculpture. Students planning to major in Studio Art or Art Education must submit a portfolio of work to department faculty. A portfolio that meets with faculty approval is required before permission will be given to register in upper division classes. Students who do not meet departmental standards may enroll for Art 20970, Intermediate Studio, for up to 6 semester hours of credit to improve both grade point average and portfolio before making another submission to the faculty. Once a concentration is declared, a faculty adviser from that area will be assigned, and a sequence of courses to be taken will be formulated.

#### **Student Exhibitions**

Both graduate and undergraduate student exhibitions take place at various times during the year in the University Art Gallery-TCU. No work may be removed from exhibitions without departmental approval. Students must claim their work at the end of each exhibition. The Department cannot accept responsibility for the care, storage, or distribution of student work.

#### Suggested Courses for the Freshman Year

#### Art Education Major

Drawing 10103

|--|

Design 10123 or 10133 Writing Workshop Historical Studies Laboratory Science P.E. Total	3 3 3 1 16
SPRING	
Drawing 10113 Three Dimensional Design 10133 Religion Historical Studies Laboratory Science P.E Total	3 3 3 3 3 1 16
Studio Art Majors	
EALL	

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Drawing 10103	3
Design 10123 or 10133	3
Art History 10043	3
Writing Workshop	3
Laboratory Science	3
P.E.	1
Total	16
SPRING	

Drawing 10113	3
Design 10123 or 10133	3
Religion	3
Art History 20000 level	3
Laboratory Science	3
P.E.	1
Total	16

#### Graphic Design Majors

semester hours

**FALL** 

Art History 10043 Drawing 10103 Design 10123 or 10133 Writing Workshop Laboratory Science P.E. Total	3 3 3 3 1 16
SPRING	
Art History 20000 level Drawing 10113 Design 10123 or 10133 Religion Laboratory Science P.E Total	3 3 3 3 1 16

#### \*\*NOTE

ART 10043 replaces ART 10053 and ART 10063. ART 10043 is the prerequisite for any course that requires one or both of those courses.

#### **Courses of Instruction**

#### Studio Art

**ART 10103 Drawing I.** Drawing as a primary art form offers a thorough exploration of the art elements: shape, value, line and texture and the spatial relationship of these art elements. Analytic drawing, perspective drawing as well as expressive approaches are employed. The keeping of a sketchbook is required.

**ART 10113 Drawing II.** Prerequisite: ART 10103. Creative drawing based on visual experience and imagination. Assigned problems and experiments with a wide range of drawing materials, the use of mark-making tools and inventive exploration of media.

ART 10123 Design and Color. Study and application of basic principles of creative design.

**ART 10133 Three Dimensional Design.** Emphasis on use of three dimensional media, exploration of materials and introduction to some of the most widely used technical processes relative to contemporary 3-D artists.

**ART 20100 Life Studies.** Prerequisites: ART 10103, 10113, or permission of instructor. Drawing, painting, figure or portrait modeling from the live model. 1-6 hours.

**ART 20143 Painting.** Prerequisites: ART 10103, 10113. Basic painting procedures in oil and/or acrylic mediums. Introduction to techniques and material use.

**ART 20163 Printmaking (Etching).** Introduction to traditional and contemporary intaglio and relief materials as applied to metal plate etching, single and multi-plate color, collograph and photomechanical processes.

**ART 20173 Printmaking (Lithography).** Traditional and contemporary drawing materials used as an introduction to black and white lithographic printing from stones to plates. Emphasis on conceptual and expressionistic aspects of work.

**ART 20183 Printmaking (Screenprinting).** Introduction to basic applied and photomechanical stencil techniques. Emphasis on conceptual and expressionistic aspects of work.

ART 20213 Ceramics. Introduction to materials, methods and firing techniques. Wheel thrown and hand-built

**ART 20243 Sculpture.** Prerequisite: ART 10133. Basic introduction to concept and creation of sculpture with emphasis on welded steel, ceramics, plaster and wood.

**ART 20743 Photography.** Basic introduction to equipment, materials and processes of photography. Emphasis on creative use of materials and visual imagination.

**ART 20970 Intermediate Studio.** Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

ART 30003 Junior Honors Seminar. Directed readings in art and art history.

ART 30100 Life Studies. Prerequisite: ART 20100 or permission of instructor. Continuation of 20100. 1-6 hours.

**ART 30140 Painting.** Prerequisite: ART 20143. Advanced problems in painting with emphasis on individual direction. 1-15 hours.

**ART 30150 Artists' Books.** Prerequisites: Any 20000 level Art or Art History course or permission of instructor. Examination of the historical development of Artist Books. It will include hands-on application of visual/verbal statements and present a mixed media alternative for artist from concept through execution. 3-6 hours, 3 hours maximum per semester.

**ART 30160 Printmaking (Etching).** Etching. Prerequisites: ART 20163/20173/20183, or permission of instructor. Intaglio and relief techniques used with emphasis on individual development of conceptual and experimental concerns through printmaking as a medium. 1-6 hours.

ART 30170 Adv Printmaking (Lithography). Lithography. Prerequisites: ART 20163/20173/20183, or

permission of instructor. Stone and plate lithographic technique employed with emphasis on individual development of expression. 1-6 hours.

**ART 30180 Advanced Printmaking (Screenprinting).** Screenprinting. Prerequisites: ART 20163/20173/20183, or permission of instructor. Applied and photomechanical stencil techniques used with emphasis on individual development of expression. 1-6 hours.

**ART 30210 Ceramics.** Prerequisite: ART 20213 or permission of instructor. Advanced ceramic technique; clay bodies, glazes, kiln operation, raku. (3 hours or less credit per class. May be repeated to accumulate 12 hours.)

**ART 30220 Ceramic Sculpture.** Prerequisite: ART 20213 and/or permission of instructor. Use of ceramic materials as sculptural media. (3 hours or less credit per class. May be repeated to accumulate 12 hours.)

**ART 30240 Advanced Sculpture.** Prerequisites: ART 10133 and 20243. Sculptural concepts, technical processes and translation of ideas into three dimensional situations. (Three hours or less credit per class. May be repeated to accumulate 12 hours.)

**ART 30710 Color Photography.** Prerequisite: ART 20743, or JOUR 30233, or permission of instructor. Color photographic principles, theory, processes and practice. 1-6 hours

**ART 30720 Landscape Photography.** Prerequisite: ART 20743 or permission of instructor. Techniques, methods for producing photographs under outdoor and "field" conditions. Emphasis on history and practice of landscape photography, its role in the history of the American West and its position in contemporary American Art Photography. (1-6 hours)

**ART 30730 Zone System Photography.** Prerequisite: ART 20743 or permission of instructor. Use of sensitometry to produce negatives using the zone system. Production of materials using non-silver as well as photo silver processes. 1-6 hours

**ART 30743 The Photographic Portrait.** Prerequisite: ART 20743 or permission of instructor. Portrait photography fundamentals including lighting, equipment, social and psychological aspects of human representation, and business aspects of professional photography.

**ART 30753 Photographic Illustration.** Prerequisite: ART 20743 or permission of instructor. Taking, printing, layout and presentation of photographic materials related to projects in commercial art.

ART 40003 Senior Honors Research. Directed research projects in art and art history.

**ART 40970 Special Problems.** Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. 1-18 hours

**ART 40991 Senior Exhibition.** All majors are required to exhibit selected work from their concentration. The successful completion of this requirement is a prerequisite for graduation.

#### **Critical Studies**

**ART 30903 Seminar in Art Professions.** Prerequisite: Junior standing in Art. The seminar will address specific professional issues such as photography of fine art, compiling slide portfolios, resume formats, exhibition preparation, exhibition venues, the role of museums and galleries, financial concerns and graduate school.

#### **Graphic Design**

**ART 20323 Typography I.** Prerequisites: ART 10103, 10123. Basic techniques and applications of standard graphic design methods.

ART 20333 Typography II. Prerequisite: ART 20323. Advanced processes and design problems in graphic design.

**ART 20403 Introduction to Visual Culture.** An introduction to modes of critical inquiry in art history through the study of major works of art.

**ART 20453 Introduction to Computer Graphics.** Prerequisites: ART 20323 and permission of instructor. An introduction to and overview of the use of computers in graphic design. Emphasis on skills, including understanding and using the Macintosh Operating System and current graphic design software. This includes page-layout, vector-based drawing, scanning and image enhancement/manipulation.

**ART 20970 Intermediate Studio.** Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

**ART 30323 Typography III.** Prerequisites: ART 20323, 20333 or permission of instructor. Continued exploration of design process with emphasis on visual perception and communication of information.

**ART 30400 Illustration.** Prerequisites: ART 10103 and 10113 or permission of instructor. Introduction to and exploration of current, creative illustration techniques and media. 3-15 hours, 3 hours maximum per semester.

**ART 30423 Publication Design.** Prerequisites: ART 20323/20333 or permission of instructor. Complete range of design, layout, illustration, art preparation for book, magazine, news media publication.

**ART 30433 Package Design.** Prerequisite: ART 30323. Exploration of package design, packaging graphics and on-site promotion.

**ART 30443 Corporate Identity.** Prerequisites: ART 30323 and permission of instructor. An exploration of the theory and practice of corporate identity. This includes logosymbol and logotype design, and their application to various media which may include: stationery systems, signage, website, display and packaging.

**ART 30453 Computer Applications to Graphic Design.** Prerequisite: ART 20323, 20333. A practical study of the most current applications of electronic technology in the field of graphic design that will provide the technical skills necessary to master the computer as an art and communication medium.

**ART 30473 Advanced Computer Applications to Graphic Design.** Prerequisite: ART 30453 or permission of instructor. Aesthetic exploration of advanced design and rendering software.

**ART 30523 Advertising Design.** Prerequisite: ART 20333 or permission of instructor. Creative communication within the limitations of specific media.

**ART 30533 Advanced Advertising Design.** Prerequisite: ART 30523. Exploration of agency procedures with emphasis on problems involving design of print ads and campaigns.

**ART 40300 Problems in Graphic Design.** Prerequisites: Advanced standing in the major and permission of instructor. Special problems in communication graphics. 1-6 hours

**ART 40410 Graphic Design Internship.** Prerequisite: Senior standing and 3.0 GPA in major. On-the-job training in agencies, design studios, in-house departments, etc., which can provide students with valid educational opportunity to extend classroom experience. 3-6 hours

**ART 40412 Portfolio and Market.** Prerequisite: Senior standing in graphic design. Assembly of portfolio; presentation techniques; competencies; the state of the market and preparation for employment opportunities.

**ART 40970 Special Problems.** Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. 1-18 hours

**ART 40991 Senior Exhibition.** All majors are required to exhibit selected work from their concentration. The successful completion of this requirement is a prerequisite for graduation.

#### History of Art

**ART 10043 Introduction to Art History.** A survey of the history of visual arts, with emphasis on (but not limited to) art of the Western tradition. Students are introduced to key monuments, artists, artistic styles and movements, and art historical issues of different periods, as well as with significant relationships between art and its historical and societal contexts. The course also exposes students to different art historical skills, approaches, and methodologies.

**ART 20003 Classical Tradition in Art.** Focusing on the visual arts of ancient Greece and Rome, this course surveys the impact, importance and influence of classicism on art from Antiquity to Postmodernism.

**ART 20013 Egyptian Art.** A survey of Egyptian art and architecture from the Pre-Dynastic period through the Roman Domination.

**ART 20063 Medieval Art.** A survey of major Medieval works - architecture, painting, sculpture, religious objects, and illuminated manuscripts - dating from the 3rd century through the 14th century.

ART 20073 British Art: Medieval-Modern. A survey of British Art from the Middle Ages through the Modern era.

**ART 20083 American Indian Art.** This course surveys the indigenous arts and architecture of the three major culture areas of the New World: the Pre-Columbian archaeological traditions of the central Andes (primarily Peru) and Mesoamerica (primarily Mexico and Guatemala) as well as both archaeological and historic traditions of North America. Among the cultures discussed are the Inka, Aztec, Maya, Hopi, Lakota, and Tlingit. All major media are covered.

**ART 20103 17th and 18th Century European Art.** Survey of European art during the 17th and 18th centuries with emphasis on major stylistic and thematic developments in painting, sculpture and architecture. Artists studied include Caravaggio, Poussin, Bernini, Rubens, Rembrandt, Velasquez, Vermeer and Watteau.

**ART 20113 A New World: Survey of American Art.** Survey of American art from its colonial beginnings to the present day. Emphasis is placed on analyzing works of art critically and examining them in light of their historical and social contexts.

**ART 20303 19th and 20th Century Art.** A survey of the traditions and significant changes that characterized the visual arts during this fertile period in the history of art.

**ART 20403 Introduction to Visual Culture.** An introduction to modes of critical inquiry in art history through the study of major works of art.

**ART 20503 Survey Topics in Art History.** Occasional courses offering broad surveys of topics, such as the history of landscape painting, portraiture, and public sculpture. Courses may relate to and take advantage of special museum exhibitions.

**ART 20603 Art History On Site.** This travel course surveys the visual arts from ancient times to the present by examining actual works of art and architecture on site.

**ART 20833 History of Visual Communication.** This course surveys the rich history of visual communication, with particular focus on two-dimensional work and visual communication of the twentieth century.

ART 30003 Junior Honors Seminar. Directed readings in art and art history.

**ART 30073 Modern British Art.** Prerequisites: ART 10043 or one 20000-level course, or permission of instructor. An examination of the visual arts of Britain, focusing on development of modernism in the nineteenth and twentieth centuries.

**ART 30113 American Art to 1913.** Prerequisite: ART 10043, or one 20000 level course, or permission of instructor. A study of the visual arts from the colonial period to the advent of modernism with the Armory Show.

**ART 30123 American Art, 1913 to the Present.** Prerequisite: ART 30113 and one 20000 level course, or permission of instructor. A study of 20th-century visual arts in the United States.

**ART 30143 Inka and Their Predecessors: Ancient South American Art.** Prerequisites: ART 10043, or one 20000-level course, or permission of instructor. The course surveys the art and architecture of the major cultures of the Pre-Columbian central Andes (Peru, Bolivia, Ecuador, and Chile).

**ART 30153 The Aztec, Maya, Olmec.** This course surveys the art and architecture of the major cultures of Pre-Columbian Mesoamerica (Mexico, Guatemala, Belize, Honduras), ranging from the Olmec, whose great tradition in stone sculpture emerged in about 1200 B.C., to the Triple Alliance of the Mexica Aztec, which the Spaniards conquered in the mid-sixteenth century. All major media are covered.

**ART 30173 Early Italian Renaissance Art.** Prerequisites: ART 10043 or one 20000 level course, or permission of instructor. Painting, sculpture, and architecture in 14th and 15th century Italy. Emphasis on Giotto, Masaccio, Donatello, Ghiberti, and Brunelleschi. Creative abilities of the Renaissance artist of the 14th and 15th centuries.

**ART 30183 High and Late Italian Renaissance Art.** Prerequisites: ART 10043 or one 20000 level course or permission of instructor. 16th century art and architecture in Italy. Special attention to Michelangelo, Leonardo, Raphael, and Titian, with consideration of the changing role of the artist in Italian society.

**ART 30193 Northern Renaissance Painting: Van Eyck - Bruegel.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Painting and printmaking in Germany and the Netherlands from the 14th through the 16th centuries. Artists studied include Jan van Eyck, Rogier van der Weyden, Breugel, Holbein, and Durer.

**ART 30203 17th Century Italian and Spanish Art.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Examination of stylistic, cultural, historical aspects of painting, sculpture and architecture of Italy and Spain in the 17th century. Artists studied include Caravaggio, the Carracci, Bernini, Borromini, and Velasquez.

**ART 30213 Old Master Drawings.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. This history and technique of drawings from the 15th through 18th centuries. Emphasis on Raphael, Michelangelo, Rubens and Rembrandt. The class will be scheduled to coincide with traveling exhibitions of drawings at the Kimbell Art Museum.

**ART 30333 Modern Art I: Romantic Classicism to Impressionism.** Prerequisites: ART 10043 or one 20000 level course or permission of instructor. Movements in European art from 1750 to the 1880's.

**ART 30343 Van Gogh to Dali: Modern Art II.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. European art movements from the 1880s to the 1940s.

**ART 30353 Picasso: Artist of the Century.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Examination of the art, life and influence of Pablo Picasso, who altered the course of the visual arts in our century.

**ART 30363 17th Century Flemish-Dutch Painting.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. A study of Netherlandish painting during the Golden Age of Rembrandt and Rubens.

**ART 30413 Women and the Visual Arts, 1500-1800.** Prerequisites: ART 10043 or one one 20000 level course, or permission of the instructor. This class will examine the evolving roles of women as artists, patrons, and subjects in the visual arts in Europe during 1500-1800, with emphasis on the social, economic, and political context that shaped attitudes towards gender.

**ART 30500 Special Topics in Art History.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Independent studies and occasional courses are offered. Such courses may include: Indigenous Arts of the Americas, British Painting, American Architecture, History of Art Criticism, and European Study. 1-6 hours

**ART 30600 Art Study Abroad.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. An intensive, on-site study of art and architecture in foreign lands. Sites have included Europe, the former Soviet Union, Greece, Egypt, China and the South Seas. Includes pre-travel lectures with slides. (1-12 hours) Note: Art history and art studio majors should consult with their advisors before enrolling, since credit hours applicable to their degrees may be limited.

**ART 30603 Art Since 1945.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Aspects of recent styles in relation to historic origins.

**ART 30613 Modern Architecture: 1750 to the Present.** Prerequisite: ART 10043 or one 20000 level course or permission of instructor. Architectural styles, movements, and personalities from 1750 to the present.

**ART 30623 History of the Print.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Examination of historical development of the graphic arts from earliest phases to modern prints.

**ART 30633 Art in the Metroplex.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. Focus on exhibitions and collections in the Metroplex galleries and museums.

**ART 30823 History of Photography.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. History of photography with emphasis on its development.

**ART 30833 History of Graphic Design.** Prerequisite: ART 10043 or one 20000 level course, or permission of instructor. History of graphic design with emphasis on 19th and 20th centuries.

ART 40003 Senior Honors Research. Directed research projects in art and art history.

**ART 40970 Special Problems.** Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. 1-18 hours

**ART 40980 Directed Study in Art History.** Prerequisites: Permission of instructor. Study under faculty supervision which will emphasize writing and be applicable to the UCR Writing Emphasis requirement. Weekly meetings with instructor. (3-6 sem. hrs., maximum 3 hrs. per semester.)

**ART 40993 Art Professions Internship.** Prerequisites: Junior or senior art history majors and minors, with permission of the instructor. The objective of the internship is to provide the student with the practical experience of working with professionals in an art museum, gallery, or other art-related venue.

#### Art Education

**ART 10803 Basics in Art.** Basic experiments with variety of materials and techniques for the elementary classroom. Fundamental aesthetic and expressive characteristics of visual arts. (6 hours per week; studio art supplies required).

**ART 20970 Intermediate Studio.** Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

**ART 30013 Approaches to Studio Art.** Basic craft techniques as a foundation for advanced study and as applicable to the classroom situation.

**ART 30803 The Child and Visual Arts.** Prerequisites: Junior standing in art, and permission of instructor. Theory and practice in techniques and methods for elementary school art program.

**ART 40803 Essentials of Visual Arts.** Prerequisites: Junior standing in art, and permission of instructor. Theory and practice with techniques and methods for secondary school art program.

**ART 40970 Special Problems.** Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. 1-18 hours

#### **Other Courses**

ART 10433 Freshman Seminar in Art. Topics may vary each time it is offered.

ART 10533 Freshman Seminar in Art. Topics may vary each time it is offered.

**FNRT 30900 Fine Art Interdisciplinary Course.** This course offers students direct experience of the major aspects of contemporary culture in a location abroad. The faculty has structured a variety of field trips to facilitate the investigation of the arts in theatres, museums, galleries, concert halls, and studios and other arts allied spaces. Students will also be able to interview a number of the people who are responsible for the abundance of the arts in the city now.

FNRT 30903 Art and Music in Hungary.

# Ballet and Modern Dance

Departmental Policies
Courses of Instruction

#### (BALL), (MODA)

Available on the Bachelor of Fine Arts degree with a major in Ballet, Modern Dance, or Ballet and Modern Dance. The department has the following mission:

The Department of Ballet & Modern Dance provides superior training in technique, performance and choreography and facilitates the development of educated dance artists who understand and integrate dance in broader contexts.

**B.F.A.** Degree with a Major in Ballet or Modern Dance. Students may major in ballet, modern dance, or a combined major in ballet and modern dance. Students who want to pursue a double major in both Ballet and Modern Dance must have the approval of the faculty. Students who double major will complete 146 hours of coursework. An audition is required for entrance to and placement in the program for all incoming dance students. Contact the Ballet & Modern Dance Department for audition information.

**Teacher Certification Program in Dance.** This certification qualifies students to teach dance in secondary education (grades 6-12) in Texas. The program targets TCU Ballet and Modern Dance majors, but students with previous dance training who are majoring in other fields may also qualify. An intermediate level proficiency in technique is required for entrance. The program aims to produce qualified dance teachers who are technically proficient and theoretically informed. (See School of Education: Teaching Fields for Secondary Education.)

#### **Departmental Policies**

- 1. All majors are required to participate in any major production in which they are cast or given a crew assignment. Performance and production experiences are a vital part of a dancer's training, and all dancers qualified to take part in productions will be given the opportunity to do so. Non-departmental performance activities are subject to the chair's approval.
- 2. Students majoring in ballet and/or modern dance are accepted for a one-year trial period, during which their potential and progress are evaluated by the dance faculty to ascertain the feasibility of their continuing toward a dance degree. With faculty approval, this trial period may be extended for one additional year.
- 3. In addition to specifically designated course requirements, a minimum 2.5 cumulative GPA and a minimum of 2.5 GPA in the major are required as prerequisites to junior and senior level dance courses. Students whose grade point average has fallen below this level may not enroll in junior or senior level courses until the 2.5 average has been achieved. After enrollment in upper division courses, a minimum 2.5 GPA must be maintained as a prerequisite to further advanced enrollment.
- 4. A dance major is expected to maintain an appropriate dance physique for his/her particular skeletal frame and height, and to maintain an appropriate level of health and physical fitness required for full participation in all areas of dance study.
- 5. Regulation practice clothes will be required of all students. Tights and shoes for classes and performance must be provided by the student.
- 6. Men are occasionally provided with specific and separate classes that may substitute for their required daily technique class. Placement in these classes will be according to proficiency.
- 7. Capstone experiences for the dance major occur in choreography, dance history, dance aesthetics and teaching methods courses.
- 8. The Department of Ballet & Modern Dance welcomes non-majors to audition for placement in techniques classes for majors. Enrollment is limited by class size; dance majors have priority. Non-majors must have departmental permission to enroll.
- 9. The Department of Ballet & Modern Dance encourages qualified students to enroll in the Honors Program, Directed Studies courses in dance and to apply for such awards as the McNair Scholarship. It must be understood, however, that availability of such one-on-one learning opportunities is determined by faculty teaching responsibilities.
- 10. It is acceptable for dance majors to pursue two majors or two degrees at TCU. Students wishing to degree in ballet or modern dance while simultaneously working toward a second major in the College of Fine Arts, or a second degree in another college within TCI, should expect to spend more than four years to complete the second degree.
- 11. Talented beginners and students with technical deficiencies may be required to enroll in extra classes.

Requirements for a Major in Ballet. Required are 130 semester hours consisting of the following courses:

University Curriculum Req. (UCR)	46
Includes BALT 10053, 40173 and MODA 10241 and two semesters of a foreign language	
*Ballet Technique	24
Modern Dance Technique	9
Additional Ballet Courses	22
Additional Modern Dance Courses	12
Music 10003	3
Kinesiology 10603/Biology 20204	3/4
Theatre 10603	3
Theatre 10603	3

Approved Dance Elective Electives	3 4/5	
*Majors in levels I and II are required to register concurrently for 0.5 credit of pointe each s	semester.	
Suggested Courses for the Freshman Year		
FALL		
BALT 10011, 10103, 10110, 10322 MODA 10203, 10241 UCR Total	6.5 4 6 16.5	
SPRING		
BALT 10120, 10053, 10113 MODA 10213, 10422 UCR Total	6.5 5 6 17.5	
<b>Requirements for a Major in Modern Dance.</b> Required are 130 semester hours consisting courses:	g of the following	
University Curriculum Req. (UCR) Includes BALT 10053, 40173 and MODA 10241 and two semesters of a foreign language Modern Dance Technique Ballet Technique Additional Modern Dance Courses Additional Ballet Courses Music 10003 Kinesiology 10603/Biology 20204 Theatre 10603 Approved Dance Elective Electives	46 24 9 18 14 3 3/4 3 6/7	
Suggested Courses for the Freshman Year		
FALL		
MODA 10203, 10241 BALT 10011, 10103, 10322 UCR Total	4 6 6 16	
SPRING		
MODA 10213, 10422 BALT 10053, 10113 UCR Total SPRING	5 6 6 17	
MODA 10213, 10422 BALT 10053, 10113 UCR Total	5 6 6 17	
<b>Requirements for a Double Major in Ballet &amp; Modern Dance.</b> Required are up to 146 set of the following courses:	mester hours cons	isting
University Curriculum Req. (UCR) Includes BALT 10053, 40173 and MODA 10241 and two semesters of a foreign language *Ballet Technique Modern Dance Technique Additional Ballet Courses Additional Modern Dance Courses Music 10003 Kinesiology 10603/Biology 20204 Theatre 10603 **Majors in levels I and II are required to register concurrently for 0.5 credit of pointe each semester.	46 24 24 22 21 3 3/4	
Suggested Courses for the Freshman Year		
FALL		
BALT 10011, 10103, 10110, 10322 MODA 10203, 10241 UCR Total	6.5 4 6 16.5	
SPRING		

2 of 5

BALT 10120, 10053, 10113 6.5
MODA 10213, 10422 5
UCR 6
Total 17.5
SPRING

#### **Courses of Instruction**

#### Studies in Ballet

**BALT 10001 Music for Dancers.** Prerequisite: MUSI 10003. This course provides particular experiences in the aural identification of those elements in music pertinent to the dancer, including rhythm, meter, texture, historical period identification and the recognition of theme and form.

**BALT 10011 Topics in Dance.** Prerequisite: Dance majors only. This course will introduce freshman dance majors to specific information relevant to their development as students, dancers and artists. Topics covered include careers in dance, ballet terminology, resume formatting, dance technology, audition practices, stage make-up, nutrition, and resource building.

**BALT 10053 Survey of Dance.** Historical and critical examination of the literature and art of dance designed to develop an understanding and appreciation of the various forms of dance.

**BALT 10101 Classical Ballet Vocabulary.** An introduction to the French terminology used in the language of classical ballet.

BALT 10103 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

**BALT 10110 Pointe I.** Prerequisite: Concurrent enrollment in Ballet technique level I. This course develops the strength, technique and skill specific to pointe work at the beginning level of technique. (Credit: 1/2 s.h.)

BALT 10113 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

**BALT 10120 Pointe II.** Prerequisite: Concurrent enrollment in Ballet technique level I. Continuation of BALT 10110. (Credit: 1/2 s.h.)

**BALT 10322 Ensemble and Performance I.** Ensemble and performance training for the dancer, including work in groups of two and three and introducing the accompanying partnering skills. Required of all Ballet and Modern majors. Open to others enrolled in technique courses and with permission of instructor.

**BALT 10333 Ballet Technique for Non-Majors.** Prerequisites: Placement audition and permission of instructor required. Study and practice of classical ballet technique.

**BALT 10433 Freshman Seminar in Ballet.** Topics may vary each time it is offered.

**BALT 10443 Ballet Technique for Non-Majors.** Prerequisites: Placement audition and permission of instructor required. Study and practice of classical ballet technique.

**BALT 10553 Ballet Technique for Non-Majors.** Prerequisites: Placement audition and permission of instructor required. Study and practice of classical ballet technique.

**BALT 10663 Ballet Technique for Non-Majors.** Prerequisites: Placement audition and permission of instructor required. Study and practice of classical ballet technique.

BALT 20103 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

**BALT 20110 Pointe III.** Prerequisite: Concurrent enrollment in Ballet technique level II. This course develops the strength, technique and skill specific to pointe work at the intermediate level of technique. (Credit: 1/2 s.h.)

BALT 20113 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

**BALT 20120 Pointe IV.** Prerequisite: Concurrent enrollment in Ballet technique level II. Continuation of BALT 20110. (Credit: 1/2 s.h.)

BALT 20130 Special Problems in Ballet. Independent project supervised by faculty. 1-8 semester hours.

**BALT 20142 Jazz.** Study of Jazz techniques. Classes include warm-up, strengthening exercises and progressions. Course encompasses work in lyrical, contemporary musical theatre and hip-hop styles.

**BALT 20152 Jazz.** Prerequisite: Dance majors or audition and permission of instructor. Study of Jazz dance techniques. Classes include warm-up, strengthening exercises and progressions. Course encompasses work in lyrical, contemporary musical theatre and hip-hop styles.

**BALT 20161 International Dance Forms.** This course combines theory and practice of world dances. Students examine specific dances historically, aesthetically, critically, and in performance. (1-3 sem. hrs.)

**BALT 20601 Dance Kinesiology.** Prerequisite: Dance majors or permission of instructor; KINE 10603 or BIOL 20204. This course presents the various scientific tools of movement analysis that support and facilitate the work of the dancer and choreographer. Particular emphasis will be put upon the qualitative differences in dance performance and the relationship between scientific and aesthetic aspects of movement.

**BALT 30003 Junior Honors Seminar.** A supervised research experience in Ballet Studies. The topic will be determined in consultation with the supervising professor. Topics may be focused on, but are not limited to, aspects of performance, choreography, history, education or aesthetics.

BALT 30103 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

BALT 30113 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

**BALT 30162 Ballet Variations.** Prerequisite: Dance majors only. Practice and performance of ballet variations from the Romantic, Classical and Neo-Classical repertoire.

**BALT 30172 Ballet Variations and Repertory.** Prerequisite: Dance majors only; BALT 30162 or permission of instructor. Continuation of BALT 30162 with practice and performance of more complex ballet variations from the Romantic, Classical and Neo-Classical Repertoire.

**BALT 30180 Supported Adagio I.** Prerequisite: Women, BALT 30162; Men, 10322. Emphasis on supported adagio from classical ballet to more contemporary forms. (1-6 sem hrs).

**BALT 40003 Senior Honors Seminar.** A supervised research experience with a thesis that is usually based on work completed in BALT 30003. Performance may be an aspect of the course. Arrangements for the course, which offered only as a tutorial, must be made with an instructor prior to enrollment.

BALT 40103 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

BALT 40113 Ballet Technique. Prerequisite: Dance Majors only. Study and practice of classical ballet technique.

BALT 40120 Special Problems in Ballet. Independent project supervised by faculty. 1-6 semester hours.

**BALT 40173 Dance History.** Prerequisite: BALT 10053 or permission of instructor. This course examines the history of dance from primitive cultures through the classical cultures, the Middle Ages, the Renaissance, the birth of Ballet and its Romantic and Classical periods to the flowering of the Russian Ballet under Petipa at the close of the 19th century.

**BALT 40183 Twentieth Century Dance.** Prerequisite: BALT 40173 or permission of instructor. A continuation of BALT 40173, this course examines Classical and Contemporary developments through the 20th century.

BALT 50100 Ballet Technique. Theory and practice of ballet. 3-6 sem. hrs.; 3 hrs. maximum per semester.

**BALT 50130 Teaching Methods.** Prerequisite: Must be a dance major with junior, senior or graduate standing. Theory, methods of teaching dance with specific focus on ballet (3-9 semester hrs., 3 hrs. maximum per semester)

**BALT 50150 Choreography.** Prerequisite: Senior or graduate standing. Creating original works and directing aspects of their productions. 3-12 semester hours.

**BALT 50160 History of the Dance.** Primitive to Renaissance; Renaissance to Modern. In-depth study and research project on a historical topic relevant to the individual program of study. 3 hrs. minimum.

**BALT 50180 Supported Adagio II.** Prerequisite: Senior or graduate standing. Advanced level of BALT 30180. Practice and/or performance of supported adagio roles. (1-4 sem. hrs.)

**BALT 50320 Advanced Ensemble and Performance.** Prerequisite: Senior or graduate standing and permission of instructor. Technique and ensemble training. May be taken in place of upper level technique classes. (3-9 semester hours, 3 hours maximum per semester.)

#### **Studies in Fine Arts**

**FNRT 30900 Fine Art Interdisciplinary Course.** This course offers students direct experience of the major aspects of contemporary culture in a location abroad. The faculty has structured a variety of field trips to facilitate the investigation of the arts in theatres, museums, galleries, concert halls, and studios and other arts allied spaces. Students will also be able to interview a number of the people who are responsible for the abundance of the arts in the city now.

FNRT 30903 Art and Music in Hungary.

#### Studies in Modern Dance

**MODA 10203 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 10213 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 10241 The Working Body.** Approaches to healthful and efficient movement through topics including structure, alignment and conditioning particularly appropriate to the aspiring professional dancer.

**MODA 10333 Modern Dance Technique for Non-Majors.** Prerequisite: Audition and departmental permission. This is a course number used to enroll non-majors in a major technique class. Non-major enrollment will be limited by the number of majors enrolled.

**MODA 10422 Ensemble and Performance II.** Prerequisite: BALT 10322 or permission of instructor. Continued ensemble and performance training for the dancer with special emphasis in improvisatory skills and group sensitivity. Required of all Ballet and Modern Dance majors.

**MODA 10443 Modern Dance Technique for Non-Majors.** Prerequisite: Audition and departmental permission. This is a course number used to enroll non-majors in a major technique class. Non-major enrollment will be limited by the number of majors enrolled.

**MODA 10553 Modern Dance Technique for Non-Majors.** Prerequisite: Audition and departmental permission. This is a course number used to enroll non-majors in a major technique class. Non-major enrollment will be limited by the number of majors enrolled.

**MODA 10663 Modern Dance Technique for Non-Majors.** Prerequisite: Audition and departmental permission. This is a course number used to enroll non-majors in a major technique class. Non-major enrollment will be limited by the number of majors enrolled.

MODA 20203 Modern Dance Technique. Prerequisites: Dance majors only or permission of the instructor.

Theory and practice of Modern Dance.

**MODA 20213 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

MODA 20230 Special Problems in Modern Dance. Independent project supervised by faculty (1-8 sem. hrs.)

**MODA 30003 Junior Honors Seminar.** A supervised research experience in Modern Studies. The topic will be determined in consultation with the supervising professor. Topics may be focused on, but are not limited to, aspects of performance, choreography, history, education or aesthetics.

**MODA 30203 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 30211 Frameworks for Action.** This seminar course is an exploration of dance-related topics providing frameworks for professional success in the field.

**MODA 30213 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 30242 Modern Dance Laboratory.** Concurrent enrollment in Modern Dance technique class, completion of MODA 10422 and 30253, or permission of the instructor. Continuation of MODA 30253 providing students with the opportunity to further their skills with regard to the craft of choreography. Focus centers on developing content, defining structure and learning to manipulate choreographic devices. Creativity and critical analysis are essential components of coursework.

**MODA 30253 Elements of Dance Composition.** Prerequisite: MODA 10422, and concurrent enrollment in a Ballet and/or Modern Dance technique class, or permission of the instructor. Introduction to the craft of choreography. Students are introduced to the elements of dance movement and basic compositional theories, create choreographic studies and engage in critical analysis.

MODA 30262 Modern Dance Performing and Repertory. Prerequisite: concurrent enrollment in Modern Dance technique class, MODA 10422, 30253, or permission of the instructor. Study of the elements of performing through addressing particular skills and/or specific repertory. Dancers are presented with challenges that will enhance performance abilities as well as teach them how to more effectively contribute as a company member in a professional setting.

**MODA 40003 Senior Honors Seminar.** A supervised research experience with a thesis that is usually based on work completed in MODA 30003. Arrangements for the course, which is offered only as a tutorial, must be made with an instructor prior to enrollment.

**MODA 40203 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 40213 Modern Dance Technique.** Prerequisites: Dance majors only or permission of the instructor. Theory and practice of Modern Dance.

**MODA 40220 Special Problems in Modern Dance.** Independent project supervised by faculty. Individual assignments in technique, teaching, performing, or research. Preparation of dance works choreography, costumes, lighting and production for public performance. Related areas include history of modern dance, dance literature, notation and dance careers. 1-6 semester hours

**MODA 40243 Contemporary Choreography.** Prerequisite: MODA 30253. An investigation of contemporary forms in choreography and the use of those forms in the creating of original works.

**MODA 40262 Senior Project.** Prerequisite: MODA 40243 or permission of instructor. A capstone course giving the BFA candidate an opportunity to thoroughly explore, develop, edit and produce a project that demonstrates choreographic crafting informed by artistic judgments and personal values.

**MODA 40272 Modern Dance Performing and Repertory.** Prerequisite: MODA 30262. Continuation of MODA 30262.

**MODA 50150 Choreography.** Prerequisite: Senior or graduate standing. Create original works and directing aspects of their production. (3-12 semester hours.)

**MODA 50160 History of the Dance.** Prerequisite: Senior or graduate standing. Research in the areas of dance history. (3-6 semester hours.)

**MODA 50200 Modern Dance Technique.** Prerequisite: Senior or graduate standing. Theory and practice of modern dance. 3-6 semester hours, 3 hours maximum per semester.

**MODA 50230 Teaching Methods.** Theory, methods and materials of teaching dance with specific focus on modern dance. (3-9 semester hours; 3 hours maximum per semester.)

**MODA 50320 Advanced Ensemble and Performance.** Technique and ensemble training. (3-9 sem. hrs.; 3 hrs. maximum per semester.)

**MODA 50400 Aesthetics of Dance.** Discussion and reading concerning performance, choreography, pedagogy, criticism and/or research. 1-3 sem. hrs.

# Theatre

Departmental Facilities <u>Departmental Requirements</u> B.F.A. Degree with a Major in Theatre B.A. Degree with a Major in Theatre Minor in Theatre Professional Internship Program Teacher Certification Honors Program Theatre Courses for the Freshman Year Courses of Instruction

#### (THEA)

Two degrees are offered in theatre: 1) a Bachelor of Fine Arts (BFA) with a major in theatre, and an emphasis chosen from this list: acting, design, film & TV, musical theatre, production, or no emphasis; and 2) a Bachelor of Arts (BA) with a major in theatre, that permits the student to choose a minor in another academic field of study.

The Department of Theatre functions within the context of a liberal arts university, and sincerely believes that the student experience should include areas of investigation beyond the narrowly focused instruction that characterizes most non-university affiliated professional training programs.

The department requires a core of courses in all aspects of the theatre. These courses provide an overall view of the discipline including acting, directing, history and dramatic literature, design and technical production. The core provides a strong background for both the liberal arts and pre-professional student.

#### **Departmental Facilities**

The Department of Theatre is housed in Ed Landreth Hall and the Hays Theatre Complex at TCU. Facilities include the 220 seat proscenium arch University Theatre and the 220 seat Spencer and Marlene Hays Theatre, with a thrust stage. A Studio Theatre is in constant use by students involved in producing shows to test the skills they are developing in the classroom. All theatre spaces have state of the art equipment for teaching theatre technology. Theatre productions are supported by a large Scenic Studio in the Hays complex with a counterweighted paint frame and spray booth for painting scenery and stage properties. A fully equipped Costume Studio for theatre is located in the Ballet Building. A computer lab is available for students' use and for teaching various software programs specific to the theatre. Additional classrooms for theatre graphics, acting, and history are located in Ed Landreth Hall.

## **Departmental Requirements**

The Department requires majors and minors to participate in departmental productions. Participation in both performance and production broadens the student's background and prepares him/her for advanced study. The student on academic probation will not be permitted to perform in public productions. Additional department policies are explained in a departmental student handbook. All majors and minors are responsible for securing and reading this Handbook. Courses in the theatre major or minor must be taken for a letter grade, and must be completed with a grade of "C" or better to fulfill graduation requirements.

## B.F.A. Degree with a Major in Theatre

Required are 124 semester hours consisting of the UCR, and the following hours in theatre:

THEA 10103: Art of the Theatre THEA 10603: Stagecraft THEA 10613: Theatre Graphics THEA 10703: Makeup THEA 20103: Script Analysis THEA 20333: Acting I THEA 20503: Introduction to Lighting

THEA 20713: Practical Costuming THEA 30103: Theatre History I THEA 30113: Theatre History II THEA 30403: Directing

THEA 40133: History of Costume

8 semesters of THEA 10601: Theatre Production, or

THEA 30601: Advanced Theatre Production, are also required.

Those receiving an emphasis in acting must also take:

THEA 20303: Voice & Articulation THEA 20323: Movement for Actors

THEA 20343: Acting II THEA 20343: Acting II THEA 30313: Voice & Text

THEA 30333: Advanced Movement for Actors

THEA 40303: Acting IV

THEA 40853: Managing a Performance Career

Those receiving an **emphasis in design** must also take:

ART 10103: Drawing I

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THEA 20603: Rendering
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THEA 30513: Computer Graphics for Theatre THEA 30600: Design/Technical Workshop

THEA 30623: Scene Painting THEA 30630: Scene Design THEA 30720: Costume Design THEA 40543: Advanced Lighting

## Those receiving an emphasis in film and television must also take:

RTVF 10113: History of Broadcasting

RTVF 10123: History of Film RTVF 10143: Aesthetics THEA 20303: Voice & Articulation THEA 20343: Acting II

THEA 40503: On-Camera Acting

6 more hours chosen from RTVF 20523, 20583, 30353, 30433, 30593, 30643, 30663, 30983, 40623, 40683.

#### Those receiving an **emphasis in musical theatre** must also take:

THEA 20303: Voice & Articulation THEA 20323: Movement for Actors THEA 20343: Acting II

THEA 30303: Acting III

THEA 40203: Musical Theatre Performance

THEA 40213: Advanced Musical Theatre Performance THEA 40853: Managing a Performance Career

3 hours of MUSP 20110/40110, and 3 hours of dance, chosen from BALT 10333,20142/20152, MODA 10333, or PEAC 10531/10591.

## Those receiving an **emphasis in production** must also take:

ART 10103: Drawing

THEA 20613: Stage Management & Sound Design THEA 30513: Computer Graphics for Theatre THEA 30600: Design/Technical Workshop THEA 30623: Scene Painting THEA 30713: Pattern Drafting & Draping THEA 40543: Advanced Lighting THEA 40603: Advanced Stagecraft

## Those receiving a BFA in Theatre with **no emphasis area** must also take:

THEA 20303: Voice & Articulation THEA 20323: Movement for Actors

THEA 20343: Acting II THEA 20603: Rendering

THEA 20613: Stage Management & Sound Design THEA 30513: Computer Graphics for Theatre

THEA 30630: Scene Design THEA 30720: Costume Design

## B.A. Degree with a Major in Theatre

Required are 124 semester hours consisting of the UCR, and the following hours in Theatre:

THEA 10103: Art of the Theatre THEA 10603: Stagecraft THEA 10613: Theatre Graphics THEA 20103: Script Analysis THEA 20333: Acting I

THEA 20503: Introduction to Lighting THEA 20713: Practical Costuming THEA 30103: Theatre History I THEA 30113: Theatre History II THEA 30403: Directing

4 semesters of THEA 10301: Theatre Production, or THEA 30601: Advance Theatre Production, are also required.

A minor of at least 18 semester hours is required on the B.A. degree. 6 hours in the same foreign language at the 20000 level or above are also required for the B.A. degree.

#### **Minor in Theatre**

The following 18 hours in Theatre are required:

THEA 10103: Art of the Theatre THEA 10603: Stagecraft THEA 20103: Script Analysis THEA 20333: Acting I

THEA 30103: Theatre History I, or THEA 30113: Theatre History II

2 of 6

3 hours of THEA 10601: Theatre Production

A student seeking a minor in Theatre must have an advisor in the Theatre Department.

#### **Professional Internship Program**

With departmental approval, majors may take up to 12 hours of elective credit in Theatre Internship courses for experience working with professional programs at area theatres and theatres around the country.

#### **Teacher Certification**

Teacher Certification on the secondary level is available under the B.A. degree program. No second teaching field is required. 31 semesters hours in Education including:

EDUC 20003 Critical Investigation of Teaching (Counts as CI for UCR)

EDUC 30113 Intro to Educational Technology

EDSE 30153 Adolescent Development

EDSE 30163 Secondary Ed Psych

EDSP 30603 Study of Exceptional Children

EDSE 30013 Professional Roles & Responsibilities

EDSE 40213 Promoting Literacy in the Content Subjects

EDSE 50023 Effective Teaching and Classroom Implementation

EDSE 30001 Professional Practice Seminar

EDSE 40980 Student Teaching (6 semester hrs.)

#### **Honors Program**

Theatre majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in the Honors section of THEA 10053 in their freshman year, THEA 30003 in their junior year and THEA 40003 during the fall semester of their senior year.

## Theatre Courses for the Freshman Year

For students working toward the BFA in Theatre, emphasis in acting, musical theatre, or no emphasis:

#### **FALL**

THEA 10103: Art of the Theatre THEA 10601: Theatre Production THEA 20323: Movement for Actors THEA 10603: Stagecraft, **OR** THEA 10613: Theatre Graphics

Plus UCR courses

## **SPRING**

THEA 10601: Theatre Production

THEA 20333: Acting I

THEA 10603: Stagecraft, **OR** THEA 10613: Theatre Graphics

Plus UCR courses

For students working toward the BFA in Theatre, emphasis in design:

## FALL

THEA 10103: Art of the Theatre THEA 10601: Theatre Production THEA 10603: Stagecraft THEA 10613: Theatre Graphics

Plus UCR Courses

#### **SPRING**

THEA 10601: Theatre Production

THEA 20333: Acting I ART 10103: Drawing I Plus UCR courses

For students working toward the BFA in Theatre, emphasis in film & TV:

## **FALL**

THEA 10103: Art of the Theatre
THEA 10601: Theatre Production
RTVF 10113: History of Broadcasting
THEA 10603: Stagecraft, **OR**THEA 10613: Theatre Graphics

Plus UCR Courses

## SPRING

THEA 10601: Theatre Production THEA 20333: Acting I THEA 10603: Stagecraft, **OR** THEA 10613: Theatre Graphics

THEA 10613: Theatre Graphics

#### Plus UCR Courses

For students working toward the BFA in Theatre, emphasis in production:

#### **FALL**

THEA 10103: Art of the Theatre THEA 10601: Theatre Production THEA 10603: Stagecraft THEA 10613: Theatre Graphics Plus UCR Courses

#### **SPRING**

THEA 10601: Theatre Production THEA 20333: Acting I THEA 20713: Practical Costuming Plus UCR Courses

#### **Courses of Instruction**

**FNRT 30900 Fine Art Interdisciplinary Course.** This course offers students direct experience of the major aspects of contemporary culture in a location abroad. The faculty has structured a variety of field trips to facilitate the investigation of the arts in theatres, museums, galleries, concert halls, and studios and other arts allied spaces. Students will also be able to interview a number of the people who are responsible for the abundance of the arts in the city now.

## FNRT 30903 Art and Music in Hungary.

**THEA 10001 Theatre Symposium and Production.** An introductory course for theatre majors and minors exploring the various facets of theatre including production procedures and discipline through class discussion. This class culminates in a realized studio production utilizing all class members.

**THEA 10053 Survey of Theatre Arts I.** An introductory course covering all aspects of the art of theatre concentrating on the history of Western drama through examination of production and performance techniques and the form and structure of drama.

**THEA 10053 Survey of Theatre Arts I.** An introductory course covering all aspects of the art of theatre concentrating on the history of Western drama through examination of production and performance techniques and the form and structure of drama.

**THEA 10103 Art of the Theatre.** An introductory course for theatre majors and minor exploring the various components of theatre, including production and theory, through lectures and class discussion.

**THEA 10203 Survey of Musical Theatre.** Introduction to and examination of the important lyricists, librettists, choreographers and directors of the American Musical Theatre. Lecture and film promote an understanding of the collaborative process that integrates the elements of theatre, music and dance.

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**THEA 10301 Theatre Performance.** Prerequisite: Permission of the instructor. Practical experience in acting, for freshmen and sophomores, related directly to major roles in TCU stage productions. May be repeated for credit for 1 - 8 hours.

THEA 10433 Freshman Seminar in Theatre. Topics may vary each time it is offered.

THEA 10533 Freshman Seminar in Theatre. Topics may vary each time it is offered.

**THEA 10601 Theatre Production.** Practical experience in all facets of theatre production, related directly to major stage presentations. 1-8 hours.

**THEA 10603 Stagecraft.** An introduction to technical theatre. Includes basic technical information and practical experience in scenic construction, rigging, handling and painting of scenery for the stage.

**THEA 10613 Theatre Graphics.** Students will learn to read and produce the various graphic work necessary to communication in the theatre. The course covers such elements as ground plans, elevations, section drawings, light plots, figure drawing, perspective drawing and rendering techniques.

**THEA 10703 Stage Makeup.** (Open to majors and minors only.) A laboratory course in modeling with theatrical makeup materials designed to acquaint the student with the basic techniques of makeup for the stage.

**THEA 20103 Script Analysis.** The examination and analysis of the structure and content of scripts for interpretation and conceptualization for theatre directors, designers, actors, and technicians.

**THEA 20303 Voice and Articulation.** Prerequisite: Theatre major or permission of instructor. Laboratory course to analyze and develop vocal awareness of skills needed for stage performance.

**THEA 20323 Movement for Actors.** Prerequisite: Theatre major or permission of instructor. Laboratory course to analyze and develop physical performance skills needed for stage performance.

**THEA 20333 Acting I.** Introduction to acting focusing on freeing inhibitions, developing a working understanding of basic acting techniques and the pursuit of dramatic action.

THEA 20343 Acting II. Prerequisite: THEA 20333 or permission of instructor. Continuation of 20333 focusing on

character development and relationships through exercises and scene work.

**THEA 20603 Rendering.** Prerequisites: THEA 10613. A course in creating and presenting scenery and costume designs for the theatre, including various rendering theories and procedures covered in lectures, demonstrations and in-class lab assignments.

**THEA 20613 Stage Management and Sound Design.** Prerequisite: THEA 10603. A course in the theory and practice of stage management and sound design in the theatre, including research, preparation and practice.

**THEA 20713 Practical Costuming.** Introduction to fundamentals of costume studio management, theatrical sewing techniques, theatrical supplies and fabrics, painting and dyeing, costume properties and accessories, personnel and the process of developing costumes for theatrical productions.

**THEA 30003 Junior Honors Seminar.** Directed readings in the works of a major playwright or in the writings of a major period of theatre history. Students with unusual creative ability may be permitted to direct, choreograph, design a production, or perform a demanding role. Analytical papers will be required.

**THEA 30103 Theatre History I.** History of theatre from its origins in ancient Greek Civilization to the Renaissance.

THEA 30113 Theatre History II. Theatre history and dramatic literature from the Restoration to the present.

**THEA 30123 The London Theatre.** This is a London based course. It is designed primarily to take advantage of what this great theatre-going city has to offer. The plays and performances in the city's repertory during the semester will determine part of its content. One point should be noted: this course entails a good deal of reading of both plays and criticism and is dependent on it. Four or more plays will be studied in depth, but students taking this course will be expected to acquaint themselves with at least four others.

**THEA 30133 Playwriting.** Laboratory studio course in the study and practice in the art of writing plays for the theatre, including dramatic structure, dialogue, and characterization. Students will complete a variety of writing assignments, including a one-act play.

**THEA 30301 Advanced Theatre Performance.** Prerequisite: Permission of the instructor. Practical experience in acting, for juniors and seniors, related directly to major roles in TCU stage productions. May be repeated for credit, for 1 - 8 hours.

**THEA 30303 Acting III.** Prerequisite: THEA 20343 or permission of instructor. A student actor's introduction to classical acting techniques. A laboratory class exploring approaches to language based classical text ( both verse and prose), designed to develop skills applicable to a variety of period performance styles.

**THEA 30313 Voice and Text.** Prerequisite: THEA 20303, theatre major and permission of instructor. Laboratory course designed to further expand vocal skills through their application to a variety of texts, and the mastery of the tools of phrasing, stressing, and inflection for clear communication.

**THEA 30323 Stage Combat.** Prerequisite: THEA 20323 or permission of instructor. A performance course to analyze and develop the physical performance skill of stage combat in the areas of Unarmed Combat, Quarterstaff, and Rapier and Dagger sword work.

**THEA 30333 Advanced Movement for Actors.** Prerequisites: THEA 20323. Advanced physical training for stage actors, including work on body alignment, space and picturization, and conditioning and breathing techniques.

**THEA 30403 Directing.** Prerequisite: THEA 20343 or permission of instructor. Laboratory course exploring the fundamentals of directing for the stage, emphasizing application of script analysis, composition, picturization, movement, stage business, focus and rhythm through a realized project.

**THEA 30503 Introduction to Stage Lighting.** Basic lighting design and implementation for theatrical production with emphasis on the technical aspects of lighting.

**THEA 30513 Computer Graphics for Theatre.** Prerequisite: THEA 10613. Study and practice in computer technology related to design in the theatre.

**THEA 30600 Design/Technical Workshop.** An individual study course designed to allow students to develop their skills by working through the design process in assigned theatre projects. 1-3 hours.

**THEA 30601 Advanced Theatre Production.** Prerequisites: THEA 10601 and/or permission of instructor. Practical experience in theatre production leadership, directly related to major stage presentations. Development of organizational and personnel supervision skills.

**THEA 30623 Scene Painting.** Prerequisite: THEA 10603. Practicum in the techniques of painting scenery for the stage.

**THEA 30630 Scene Design.** Prerequisite: THEA 10613 or permission of instructor. Basic principles and techniques of scene design explored through rendering and model building. 3-12 s.h., 3 hrs. max. per sem.

**THEA 30713 Pattern Drafting and Draping.** Prerequisite: THEA 20713 or permission of instructor. Laboratory techniques in drafting patterns for historical costumes.

**THEA 30720 Costume Design.** Prerequisite: THEA 10613 or permission of instructor. Basic principles of costume design explored through the study of fabric and rendering. 3-12 s.h., 3 hrs. max. per sem.

THEA 30800 Theatre Internship. Theatre Internship.

**THEA 40003 Senior Honors Seminar.** Students with outstanding talent may use the design or directing of a production or the performance of a demanding role as material for an analytical paper.

**THEA 40123 History of Scene Design.** An examination of the evolution of scenic art from the Renaissance to the present through the use of slides and lecture with special attention given to the similarities in easel painting and architectural movements as they influenced the scenic art.

**THEA 40133 History of Costume.** A lecture/discussion course covering the major historical periods of Western dress in which students learn to research and develop specific projects.

**THEA 40143 Modern Trends in Theatre.** This course, usually taught in London, illumines the complex process of making theatre. Through an examination of contemporary artists and institutions, the course examines: Whose theatre is it actor, playwright, director, producer, or audience/critic?

**THEA 40203 Musical Theatre Performance.** Prerequisite: THEA 20343. Music laboratory course exploring and refining techniques necessary for musical performance. Emphasis on integration of acting, singing and dancing through performance.

**THEA 40213 Advanced Musical Theatre Performance.** Prerequisites: THEA 20343, 40203. Advanced music laboratory course exploring and refining techniques necessary for musical performance. Emphasis on integration of acting, singing and dancing through performance.

**THEA 40303 Acting IV.** Prerequisite: THEA 30303 or permission of instructor. An advanced laboratory course exploring styles of acting; including absurdism and non-traditional acting approaches to classical literature.

**THEA 40353 On-Camera Acting.** Also RTVF Prerequisite: THEA 30303 or permission. An advanced course in acting designed to acquaint the student with changes in technique that are necessary for performance before the film or television camera.

**THEA 40423 Advanced Directing.** Prerequisite: THEA 30403 or permission of instructor. Continuation of 30403 with greater emphasis on the fundamentals of directing through an extensive realized directing project developed by the student.

**THEA 40543 Advanced Stage Lighting.** Prerequisite: THEA 30503 or permission of instructor. Course of study in the aesthetics of stage lighting and special effects.

**THEA 40553 Dance Lighting.** Prerequisite: THEA 30503 or permission of instructor. A lecture/lab course in the development of dance lighting design and implementation with a study of various designers and their techniques.

**THEA 40603 Advanced Stagecraft.** Prerequisite: THEA 10603. An advanced course in technical theatre, including advanced study and practical work in scenic construction, rigging, handling and painting of scenery for the stage.

**THEA 40800 Individual Study in Theatre.** Independent research or studio/ performance projects in any facet of theatre study. 3-6 hours.

**THEA 40853 Managing a Performance Career.** (Also RTVF) Prerequisite: Theatre major or permission of instructor. A study of business practices designed to help the graduating student locate and secure employment in the performing arts, musical theatre, theatre commercials, television and film.

THEA 40970 TCU in London. Directed Study.

**THEA 50300 Problems in Acting.** Prerequisite: Permission of instructor. Projects in acting utilizing scenes or roles for study and performance. 1-6 semester hours.

**THEA 50400 Problems in Directing.** Prerequisite: Permission of instructor. Individual projects for the advanced study of directing. 3-6 semester hours.

THEA 50600 Problems in Scenography. 3-6 sem. hrs.)

**THEA 50623 Advanced Stage Lighting.** The functions of stage lighting. Lighting theory through the twentieth century. Lighting control from the simplest forms to the state-of-the-art controls. Includes practical application of color theory, design and distribution.

**THEA 50700 Problems in Costuming and Makeup.** Individual or class projects in one area: costume design, costume research, makeup prosthetics/mask construction, wig making, rendering techniques, plastics and celastic; jewelry making. 3-6 hours.

**THEA 50733 Advanced Pattern Drafting.** Techniques in drafting complex period and other costume patterns for the stage.

**THEA 50743 Advanced Costume Design.** Prerequisite: THEA 50733. Practicum in the techniques of design and rendering.

THEA 50800 Theatre Internship.

**THEA 50803 Theatre Management.** The administrative and fiscal techniques of managing performing arts groups.

# College of Health and Human Sciences

Mission Degrees and Majors Curriculum Programs

#### Overview

TCU has a long history of offering courses and degrees that contribute to the health and well-being of the community. The College of Health and Human Sciences enhances that tradition by uniting the Harris School of Nursing with the departments of Communication Sciences and Disorders, Kinesiology, and Social Work in an integrated unit. The degree programs offered by the College build on an excellent liberal arts foundation and prepare graduates to practice in complex and varied professional settings. Many of the courses offered in the College allow the courses offered in the College allow practitioners, and clients. In both classroom and practice environments students acquire technology skills essential to finding information and solving problems.

By integrating clinical practice, professional and community service, and research activities, College faculty demonstrate their commitment to academic excellence and leadership. They create an atmosphere where learning is a part of the lives of all members of the College community. Faculty are committed to providing individual attention to students in order for them to achieve and grow. Faculty are actively involved in teaching, working closely with students in laboratory and clinical experiences at both undergraduate and graduate levels. Faculty also serve as academic advisors providing career and professional guidance.

#### Mission

The College is dedicated to advancing knowledge and understanding of physical and mental health and development. The College is further committed to integrating research and ethical practice to prepare graduates who promote all aspects of good health and enhance the human condition. Faculty fulfill this mission by offering a dynamic curriculum that is responsive to the local and global communities. Students are prepared for a variety of professional roles, including clinical and generalist practice, teaching, or further study in graduate programs. Faculty provide exemplary education in the context of the highest standards, preparing students to enter careers that will benefit society.

#### **Degrees and Majors**

The College of Health and Human Sciences offers the following degreees and majors:

- Bachelor of Science in Nursing (BSN)
- · Bachelor of Science in Social Work (BSSW)
- Bachelor of Science (BS) with majors in:

Habilitation of the Deaf and Hard of Hearing Speech-Language Pathology Athletic Training Health and Fitness Movement Science Physical Education Psychosocial Kinesiology

#### Minors

The College of Health and Human Sciences offers the following minors:

- Deaf and Hard of Hearing (COSD)
- Health (KINE)
- Movement Science (KINE)
- Social Work (SOWO)
- Speech-Language Pathology (COSD)

#### Curriculum

Students seeking a Bachelor of Science degree must fulfill all University degree requirements described in detail earlier in the Bulletin. This includes completion of the minimum number of credit hours, typically 124, specified by their majors in the following categories:

- I. University Curriculum Requirements 47 credit hours
  - A. Foundations 9 credit hours
  - B. Explorations 36 credit hours
  - C. Physical Education 2 credit hours
- II. Curriculum Requirements of the Major variable credit hours

## Pass/No Credit Option

The department of the major controls approval of P/NC grading options. Departments typically do not allow P/NC grading in courses in the major except in courses specifically graded P/NC.

## **Multiple Majors**

Students with a first major in the College may declare an additional major on the B.S. degree. Approval by the department and college of both majors is necessary. The degree awarded will be that of the first major. All degree requirements for each major must be satisfied, including all University Curriculum Requirements associated with any major.

## **Transfer Credit**

Students must receive approval of courses they wish to take at another college or university following their admission to Texas Christian University. Students should gain specific course recommendations from department advisors, then seek approval from the office of the Dean of the College. Students may not interrupt their last thirty hours with coursework at another institution. Students may not attend a junior/community college to seek credit after completing 66 credit hours at TCU.

## Degree Plan and Notification of Intent to Graduate

Students must request a degree plan in the Office of the Dean typically after completing 60 hours. After a degree is awarded, no further work may be applied to the degree. Students must also file an Intent to Graduate in the Office of the Dean at the beginning of the last year of course work.

#### **Academic Advisement**

Students are responsible for meeting degree requirements of the major. It is essential that students understand their degree plans and maintain communication with their departments. Students are strongly encouraged to meet with a departmental advisor on a regular basis, reviewing progress toward the degree.

## **Programs**

Harris School of Nursing
Department of Communication Sciences and Disorders
Department of Kinesiology
Department of Social Work

# Harris School of Nursing

Program Goals
Accreditation and Licensure
Enrollment in the Nursing Major
Accelerated BSN Track for Non-Nurse College Graduates
Progression in the Nursing Major
General Information
Courses of Instruction

#### (NURS)

Available on the bachelor of science in nursing (B.S.N.) degree.

#### Overview

#### Mission

Harris School of Nursing endorses the Mission and Vision of Texas Christian University. The mission of the School of Nursing is to prepare professional nurses to identify and respond with competence to multiple, complex human health-care needs. Graduates serve society through professional nursing roles and provide ethical leadership in practice, administration, teaching, and scholarship. The School is dedicated to professional nursing education based on a foundation of liberal arts, sciences, and humanities and to the promotion of an environment that encourages lifelong learning. The School further affirms a commitment to professional competence and civic and professional responsibilities in a global society. The Nursing program is designed to meet the needs of those interested in obtaining the Bachelor of Science in Nursing degree.

#### **Philosophy**

The faculty of Harris School of Nursing, an academic unit of Texas Christian University, affirms that individuals are holistic beings who possess inherent worth. The faculty believes that the education of the professional nurse should prepare a graduate who exhibits qualities of mind and character that are necessary to live a fulfilling life, act in the public interest locally and globally, and promote health and the nursing profession. The teaching / learning process is multidimensional and interactive, involving affective, cognitive, and psychomotor changes. A liberal educational foundation assists persons to think critically and to seek improvement in themselves, the profession, and society. A liberal education provides the basis for the development of core competencies and knowledge of professional nursing. The Harris School of Nursing faculty embraces the professional values of altruism, autonomy, human dignity, integrity, and social justice. Nursing practice, conduct, and relationships are guided by professional standards and the ANA Code of Ethics for Nurses. Sound clinical judgments characterize the practice of the professional nurse in providing safe, humanistic care of individuals, families, and groups in and across diverse environments.

Portions of the above are based on the *Essentials of Baccalaureate Education for Professional Nursing Practice*, published by the American Association of Colleges of Nursing (1998), Washington, DC.

## **Program Goals**

The program goals of Harris School of Nursing are as follows:

- 1. Support the University's Mission, Vision, Core Values, and Goals.
- 2. Prepare graduates who are competent to meet the unique, multiple, and complex human health needs of a global society.
- 3. Promote values and behaviors that encourage respect for diversity, acknowledge human worth and dignity, and support professional nursing practice.
- 4. Foster an appreciation for the necessity of learning, thinking critically, and continuing to grow personally and professionally.
- 5. Contribute to the nursing profession and to society by engaging in scholarship, leadership, and service.

#### **Accreditation and Licensure**

The School, enabled by a trust fund established by the late Dr. Charles Houston Harris, was organized as an academic unit of TCU in 1946. Harris School of Nursing is accredited by the Board of Nurse Examiners for the State of Texas (BNE), P. O. Box 430, Austin, TX, 78767-0430, 512-305-7400. Graduates are eligible to sit for the examination for licensure as a registered nurse (R.N.) in Texas or any other state in the United States. Successful completion of the National Council Licensure Examination in one state qualifies graduates to apply for licensure in any other state. Harris School of Nursing first achieved national accreditation in 1952 and has remained accredited since that time. In addition to the BNE, the School is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC, 20036-1120, 202-887-6791.

In compliance with the policy of the Board of Nurse Examiners for the State of Texas, all applicants are informed that completion of the BSN degree does not guarantee eligibility for the registered nurse licensure examination. Professional character is necessary for an individual to conform to the requirements of the Nurse Practice Act. Individuals should seek special advising prior to enrolling in any professional nursing program in Texas if they have a personal history involving conditions that may endanger the health and safety of a person. Such conditions include but are not limited to: (1) a felony conviction involving acts likely to affect professional practice, (2) a misdemeanor conviction involving moral turpitude, or (3) physical or mental disability/illness, including prior or continued drug or alcohol abuse, that influences the ability to practice professional nursing. (Board of Nurse Examiners for the State of Texas, excerpts from the *Rules and Regulations Relating to Professional Nurse Education, Licensure and Practice, §213.27-§213.30*, November 1999, pp. B17-B23). Some clinical facilities may require criminal background

checks and / or drug screenings of students. Further licensure information is available in the office of the Director, Harris School of Nursing, TCU Box 298620, Fort Worth, TX 76129. In compliance with the Americans with Disabilities Act (ADA), a description of the abilities required for admission to and completion of the BSN curriculum is available upon request from the Director of the School.

### **Enrollment in the Nursing Major**

**TCU Students.** TCU students must have a 2.5 TCU cumulative grade point average (GPA) to enroll in courses limited to the nursing major. Continuing TCU nursing majors should file an <u>intent to enroll in practicum courses</u> by November 1 for the spring semester and April 1 for the fall semester. Forms are available in the HSN administrative office.

**Change of Major.** A TCU student may change to the nursing major if the student is not on academic warning or probation and has a 2.5 TCU cumulative GPA by the time the student is ready to enroll in courses limited to the nursing major. It is <u>strongly recommended</u> the change of major be completed <u>at least one semester prior</u> to the first semester of nursing practicum courses. Permission to enroll in practicum courses is determined by the availability of clinical placement slots in clinical facilities. The student should file an <u>intent to enroll in practicum courses</u> by November 1 for the spring semester and April 1 for the fall semester prior to practicum coursework. The student must meet the requirements for graduation based upon the published TCU Bulletin at the time of entry into the major.

**Reenrollment.** The student who has been a nursing major and leaves TCU must apply for reenrollment after an absence of a full fall or spring semester. If the student meets enrollment criteria, the Registrar's Office will contact the Harris School of Nursing to receive approval for the student to reenroll as a nursing major. The student must meet the requirements for graduation based upon the published TCU Bulletin at the time of reentry into the nursing major. Reentering students may be required to pass comprehensive mastery exam(s).

**Additional Bachelor's Degree.** A student with a previous undergraduate degree from TCU must meet the same enrollment requirements as other TCU students. A student with a Bachelor's degree from another university is considered a transfer student.

Transfer Students (a student who has been out of high school for at least one full semester and has attempted college or university work elsewhere for credit). Individuals who plan to apply as transfer students are urged to contact the TCU Admission Office and Harris School of Nursing in order to receive current information. The number of new transfer students admitted to practicum courses each semester is determined by the availability of faculty, facilities, and the number of qualified continuing TCU students. Selection of transfer students for initial entry into practicum courses is based upon indicators of the applicant's likelihood of success in the nursing program and in professional practice.

Transfer students must have at least a 2.5 cumulative GPA from other colleges/universities to be admitted to TCU as a nursing major. Transfer students are required to meet with an adviser to receive approval to enroll in nursing or prerequisite courses.

Deadlines for application for initial entry into practicum courses by transfer students is April 15 for the fall semester and November 15 for spring semester. Transfer applicants are advised to contact the School of Nursing as early as possible in the application process.

Transfer students will not be permitted to pursue a nursing major at TCU if they have been previously enrolled in another nursing program and were not in good standing upon exit or are not admissible to the previous program(s). All transfer student applicants who have been previously enrolled in a nursing program must submit, as part of their application, a letter from the dean or director of that nursing program indicating eligibility status for readmission.

**Other Requirements.** In addition to enrollment and progression policies, students must meet the following requirements to enroll in courses limited to the nursing major.

- 1. completion of prerequisite courses with grades of "C" or higher
- 2. current cardiopulmonary resuscitation (CPR) for healthcare providers card
- 3. documentation of required immunizations (contact HSN for list)
- 4. no more than 12 credit hours of University Curriculum Requirements (UCR) that have not been completed
- 5. completion of Nurse Entrance Test (contact HSN to schedule)
- 6. documentation of health insurance
- 7. drug screen and criminal background check as required by health care agencies

# Accelerated BSN Track for Non-Nurse College Graduates

Harris School of Nursing offers an accelerated BSN track for non-nurses with degrees in other fields. The program features a unique sequence of practicum courses that maximize clinical inquiry and role transition. Partnerships with regional health care systems provide students with a solid grounding in professional nursing practice. The 15-month course of study is full-time. Students begin the program in mid-May and graduate mid-August the next year. Applicants must hold a previous baccalaureate degree and possess a GPA of 3.00 or higher to meet eligibility. Admission is competitive; it is based on academic record, entrance exam scores, and completion of all prerequisite courses and UCR. Students must also comply with other admission requirements as listed above. Those interested should contact the School of Nursing for admission requirements unique to this program.

## **Progression in the Nursing Major**

## **Nursing Prerequisites**

2 of 8

The following courses must be completed with a grade of "C" or higher before entering the first practicum nursing courses

Anatomy & Physiology I (BIOL 20204 / Lab) Anatomy & Physiology II (BIOL 20214 / Lab

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Microbiology (BIOL 20233 / Lab)	3
Lifespan Growth and Development (NURS 10303)	3
Introductory Psychology (PSY 10213)	3
Introductory Sociology (SOCI 20213)	3
Math - Elementary Statistics (MATH 10043)	3
Nutrition (NTDT 10403)	3
Enrollment in all nursing courses limited to the nursing major requires at least a 2.5 TCU cumu	ulative GPA.

Students may repeat one nursing course if less than a "C" or a "No Credit" (NC) grade is earned.

Students are discontinued from the major if grades of "D", "F", or "NC" are earned in two or more nursing courses (excluding NURS 10303 Human Development and NURS 10043 Survey of Professional Nursing).

Students who are repeatedly unable to achieve or maintain a 2.5 GPA are discontinued from the major.

Students may be discontinued from the nursing major when their academic, practicum, or personal performance is determined to be inconsistent with professional responsibility and accountability. In rare instances, the safety of patients may necessitate removal of a student from practicum. Faculty members are responsible for recommending this action to the Director of the School when indicated.

As a minimum requirement for participating in a practicum, students' performance must be in compliance with the Standards of Clinical Nursing Practice published by the ANA and the Texas Board of Nurse Examiner's Rules and Regulations including "... not accepting an assignment when one's physical or emotional condition prevents the safe and effective delivery of care . . .". When in the opinion of the instructor a student is not prepared for the educational activity or is in violation of these rules for any reason, including but not limited to, impairment by reasons of alcohol and/or drug abuse, the student is dismissed from practicum for the day by the instructor. The instructor may recommend further action to the Director.

Requirements for Graduation. For the Bachelor of Science in Nursing degree a student must have:

A 2.0 cumulative GPA for all coursework completed at TCU.

Completed all nursing courses required for the major with grades of "C" or higher or "Pass".

Completed all University Curriculum Requirements.

**Multiple Majors.** Nursing students may, with prior approval of appropriate academic deans, pursue an additional major concurrent with nursing. Such students must declare nursing as the first major and complete all degree requirements for both nursing and the additional major. Students interested in this option are encouraged to meet with advisers from both majors as soon as possible to develop an academic plan.

#### **General Information**

**Finances.** Students enrolled in Harris School of Nursing are responsible for the related fees. Each practicum course carries a laboratory fee. Fees are charged for standardized achievement tests per semester which includes enrollment in a review course for the National Council Licensure Examination at the end of the nursing program. All students planning licensure as a registered nurse in the state of Texas are required to submit the required fee directly to the Board of Nurse Examiners and to the national company who administers the test during the last semester of nursing coursework. Purchase of uniforms is required. Professional liability insurance is required each year beginning in the sophomore year, second semester. Students are responsible for the cost of the urine drug screen and the criminal background check.

**Transportation.** Limited city bus service is available for transportation to practicum facilities. Plans should be made for the use of a car or shared transportation beginning with the first practicum nursing course.

**Nursing Scholarships and Grants-in-Aid.** A variety of scholarships and grants-in-aid are available to high school graduates and to students who have completed one or more years of college work. In addition, loans and tuition reimbursement are available from some area hospitals. Applications are made through the Director of Financial Aid, who can provide further information upon request.

**Employment.** Students may be employed on or off campus as opportunities are available and the course load and schedule permits. Work schedules should allow sufficient time for study. Students employed in clinical agencies may not wear the name tag or School patch during such employment. Students who are employed in a clinical setting must not sign their names as nursing students.

**The Nursing Student Association.** This organizational branch of the Texas Nursing Students' Association and the National Student Nurses' Association provides students opportunities to participate in local, state, and national affairs. These organizations are concerned with the role of the nursing student, the role of the nurse in the community and the future of nursing. Meetings are held monthly and regional meetings can be attended each semester. Participation is strongly encouraged.

**Harris Associates.** A group of select nursing students who assist in promoting Harris School of Nursing through various leadership activities. Students at all levels of the nursing program are recommended by HSN faculty and administration to serve.

**Learning Center.** A Learning Center in the Annie Richardson Bass Building is available to all nursing students to enhance independent learning and to provide access to computers, audiovisual materials, and a practice lab for mastering clinical skills. In the Learning Center, the student will become an active participant in an environment that facilitates both individual and small group learning situations. Computer assisted instruction and practical learning experiences enhance the students' knowledge gained through the classroom lecture component of the program. Students are required to use the labs for practice and demonstration of nursing skills.

**Testing Program.** Students are required throughout the program to sit for standardized achievement tests. Results of these tests provide a basis for review of individual student achievement as well as program effectiveness.

**Sigma Theta Tau International.** Since 1970, the Beta Alpha Chapter of the International Honor Society for Nursing, Sigma Theta Tau, has selected members from the Harris School of Nursing student body on the basis of academic merit. Qualified students are invited to join during their junior or senior years.

**Honors Program.** Nursing majors who plan to pursue Departmental Honors must be members of the University Honors Program and are advised carefully for such achievement. The School supports and encourages participation in the Honors Program.

### The Bachelor of Science in Nursing Degree

**Curriculum Plan.** Harris School of Nursing has an innovative curriculum designed to prepare graduates to work in a wide variety of agencies, clinics, home care agencies, and other community-based facilities in addition to hospitals and extended care facilities. Emphasis in classrooms and patient care settings is on the development of critical thinking, logical reasoning, and decision-making. Students are expected to assume considerable responsibility for their own learning. They are expected to become increasingly independent in the exercise of clinical judgment and in application of nursing process to a variety of nursing problems and situations.

Nursing courses constitute approximately one-half of the four-year program. The sequence of nursing courses provides learning experiences in all major practice areas and in a variety of institutions and agencies in and around Fort Worth and Tarrant County.

## **Typical Schedule**

Schedules for University Curriculum courses may vary for individual students.

All of the nursing courses listed below in addition to all courses designated with # must be completed with grades of C or above.

#### **FRESHMAN YEAR**

#### Semester 1

SOPHOMORE YEAR	
# NTDT 10403 (Nutrition) # BIOL 20214 (Human Anatomy & Physiology) # SOCI 20213 (Introductory Sociology) Foreign language NURS 10303 (Human Development) Total hours	3 4 3 3 3 16
Semester 2	
ENGL 10803 (Introduction to Composition) # BIOL 20204 (Human Anatomy & Physiology) # PSYC 10213 (General Psychology) Foreign language NURS 10043 (Survey of Professional Nursing) Total hours	3 4 3 3 3 16

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ENGL 20803 (Intermediate Composition)	3
U.S. History	3
# BIOL 20233 (Microbiology)	3
# MATH 10043 (Elementary Statistics) 1	3
NURS 20033 (Teaching Strategies)	3
Total hours	15

# Semester 2

NURS 20163 (Pharmacology)	3
NURS 20224 (Fundamentals and Assessment: Concepts)	4
NURS 20284 (Fundamentals and Assessment: Practicum	4
Religion	3
Social Science elective	3
Total hours	17

## JUNIOR YEAR\*\*\*

## Semester 1

NURS 30714 (Adult Nursing I: Concepts)	4
NURS 30783 (Adult Nursing I: Practicum)	3
NURS 30813 (Psychiatric-Mental Health Nursing: Concepts)	3
NURS 30882 (Psychiatric-Mental Health Nursing: Practicum)	2
Explorations elective	3
Total hours	15

# Semester 2

NURS 30313 (Maternity Nursing: Concepts)	3
NURS 30382 (Maternity Nursing: Practicum)	2
NURS 30413 (Pediatric Nursing: Concepts)	3

NURS 30482 (Pediatric Nursing: Practicum) NURS 30632 (Gerontological Nursing) Fine Art Total hours	2 2 3 15
SENIOR YEAR	
Semester 1	
NURS 40053 (Critical Inquiry into Health Care Delivery) NURS 40114 (Adult Nursing II: Concepts) NURS 40183 (Adult Nursing II: Practicum) NURS 40632 (Nursing Research and Theory) Free elective Total hours	3 4 3 2 3 15
Semester 2	
NURS 40813 (Community Health Nursing: Concepts) NURS 40882 (Community Health Nrusing: Practicum) NURS 40913 (Role Development and Nursing Management: Concepts) NURS 40984 (Role Development and Nursing Management: Practicum) Free elective Total hours GRAND TOTAL HOURS	3 2 3 4 3 15 124

<sup>\*\*\*</sup> Summer work in non-nursing courses is recommended prior to junior year

#### **Courses of Instruction**

**NURS 10043 Survey of Professional Nursing.** Open to all majors. Exploration of key factors influencing development and practice of professional nursing. Emphasis on culture, ethics, values, and history as context of health care and professional practice. Includes legal foundations of practice, essential knowledge, behaviours, and skills of professional nursing.

**NURS 10111 Drugs and the Consumer.** Open to all majors. Presentation and discussion of the major classes of both prescription and over the counter drugs in terms of use, safety, drug-drug, and drug-food interactions with emphasis on the role of the informed consumer. Students will be provided with the necessary tools to safely and intelligently evaluate drugs and to make an informed choice regarding their use.

**NURS 10121 Healthy Lifestyles.** Open to all majors. An introduction to health concepts and applications to daily life. Special emphasis placed on stress management, diet and exercise, sexual practices, and safety.

**NURS 10131 HIV/Aids Facts and Issues.** Open to all majors. Provides an understanding of Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome with a focus on prevention of this disease as well as related infections. A description of HIV and classification as well as epidemiology and related societal events will be discussed.

**NURS 10303 Human Development.** Open to all majors. Prerequisite: PSYC 10213. Introduces the student to principles of growth and development throughout life cycle from conception to death. Provides an overview of the major theories of human development.

NURS 10433 Freshman Seminar in Nursing. Topics may vary each time it is offered.

**NURS 20033 Teaching Strategies for Professional Practice.** Open to all majors. Prerequisite: NURS 10303 or concurrent with permission from the instructor. Introduces theoretical framework for health education and change. Describes the health teaching/learning system and provides opportunity for practical application in multiple settings.

**NURS 20163 Introduction to Pharmacology.** Prerequisite or concurrent: NURS 10043; concurrent: NURS 20224, 20284. Introduction to pharmacodynamics and pharmacokinetics. Includes basic terminology and mathematical calculations used in medication administration and the study of specified classifications of medications, their actions, side effects, adverse actions, nursing implications and drug administration. Three semester hours: two hours lecture, three hours laboratory.

**NURS 20222 Provider of Care I: Concepts.** Prerequisites: BIOL 20204, 20214, 20233, NURS 10303, NTDT 10403; concurrent: NURS 20282; concurrent or prerequisite: NURS 20033, 30043. Principles of health assessment, health promotion and nursing process in the care of clients through the lifespan are addressed. Assessment of the integumentary, musculoskeletal, cardiovascular and respiratory systems is covered. Application of health promotion is emphasized.

**NURS 20224 Fundamental Nursing and Health Assessment: Concepts.** Prerequisites: BIOL 20204, 20214, 20233, NURS 10303, NTDT 10403; concurrent: NURS 20284; prerequisite or concurrent: NURS 10043. Principles of health assessment, health promotion and nursing process in the care of adult and older adult clients are addressed. Assessment of the integumentary, musculoskeletal, cardiovascular, respiratory, gastrointestinal, genitourinary, visual, auditory and neurologic systems is covered. Application of health promotion is emphasized.

**NURS 20231 Special Problems in Nursing.** Supervised study for students who transfer into Nursing or for students who exhibit special needs during the freshman or sophomore years.

**NURS 20232 Special Problems in Nursing.** Supervised study for students who transfer into Nursing or for students who exhibit special needs during the freshman or sophomore years.

**NURS 20282 Provider of Care I: Practicum.** Prerequisites: BIOL 20204, 20214, 20233, NURS 10303, and NTDT 10403; concurrent: NURS 20222; concurrent or prerequisite: NURS 30043, 20033. The acquisition and

<sup>1</sup> MATH 10043 is a prerequisite to NURS 40632

application of health assessment, health promotion and nursing process in the care of clients throughout the lifespan. This course includes skills lab and practicum.

**NURS 20284 Fundamental Nursing and Health Assessment: Practicum.** Concurrent: NURS 20224, 20163; concurrent or prerequisite: NURS 10043. Acquisition and application of health assessment, health promotion, fundamental nursing skills and the nursing process in the care adult clients.

**NURS 30002 Junior Honors Seminar.** Prerequisite: Junior status. Students with GPA of 3.4 or above will be invited to enroll. Seminar related to contemporary issues related to health practices and behaviors relevant to professional nursing. Research studies emphasized.

**NURS 30053 Critical Inquiry into Health Care Delivery.** Prerequisite or concurrent: ENGL 10803, 20803. Open to all majors with Junior status. Analyzes the health care delivery system in the United States and selected countries. Focuses on society, values, rights, and responsibilities of individuals and groups within the health care delivery systems of the United States and selected countries. The role of the health care provider in influencing public policy related to health care is included. Students analyze the economic, human, and physical resources necessary and available for health care. (Approved for critical inquiry and writing emphasis credit in University Curriculum Requirements.)

**NURS 30063 Global Perspectives in Health.** The course examines selected cultures in an international setting. Social and scientific factors are related to health beliefs and practices and health care delivery systems of the country visited and examined. Critical analysis of selected topics will be accomplished. Open to all majors. Usually taught in summer abroad program.

**NURS 30163 Introduction to Pharmacology.** Prerequisites: NURS 20033, 20222, 20282, 30043. Introduction to pharmacodynamics and pharmacokinetics. Includes basic terminology and mathematical calculations used in medication administration and the study of specified classifications of medications, their actions, side effects, adverse actions, nursing implications, and drug administration. Three semester hours: two hours lecture, three hours laboratory

**NURS 30212 Provider of Care II: Concepts.** Prerequisite: NURS 20222, 20282, 20033, 30043; prerequisite or concurrent: NURS 30163; concurrent: NURS 30282. Health assessment, health promotion and nursing process in the care of clients throughout the lifespan continues in this course. Assessment of gastrointestinal; genitourinary; eyes, ear, nose and throat; and neurological systems is covered. Application of health promotion for the student continues. At the completion of NURS 20222, 20282, 30212, 30282 the student has completed three semester hours of health assessment through the lifespan.

**NURS 30282 Provider of Care II: Practicum.** Prerequisites: NURS 20033, 20222, 20282, 30043; prerequisite or concurrent: NURS 30163; concurrent: NURS 30212. A continuation of acquisition and application of health assessment, health promotion, and nursing process in the care of clients throughout the lifespan. The course includes a skills lab and clinical experience. At the completion on NURS 20222, 20282, 30212, 30282 the student has completed three semester hours of health assessment through the lifespan. This course includes skills lab and practicum.

**NURS 30330 Directed Study in Nursing.** Variable credit, 1-3 hours. Prerequisites: Faculty permission required; junior standing. Directed readings or projects in nursing requiring independent or small group study in consultation with a faculty.

**NURS 30331 Dosage Calculations for Nurses.** Prerequisite: NURS 30163 and permission of instructor. A one-semester hour course of supervised study for students who exhibit special needs during the junior or senior year in dosage calculation. Offers instruction to the student who needs continued guided learning and practice in the calculation of dosages and solutions. The student will concentrate on the performance of the necessary math skills for calculation, the importance of accuracy and application to specific kinds of nursing situations. This course is taught as a module during the first 6 weeks of the semester. Course completion can range up to 6 weeks depending on concurrent practicum course enrollment and expectations.

**NURS 30382 Maternity Nursing: Practicum.** Prerequisites: NURS 30714, 30783, 30813, 30883; concurrent: NURS 30313. Application of the nursing process to assist in health restoration of high risk childbearing women and their families. Emphasis will be placed on case management of families, collaboration with the health care delivery team and families, and a systems approach to the delivery of care.

**NURS 30413 Pediatric Nursing: Concepts.** Prerequisites: NURS 30714, 30783, 30813, 30882; concurrent: NURS 30482. The nursing process will be applied to children experiencing acute and chronic disruptions to their health. The role of nursing in the restoration of health by cooperative relationships with the child and family will be emphasized. Legal, research, socio cultural, and ethical implications of nursing practice will also be considered.

**NURS 30482 Pediatric Nursing: Practicum.** Prerequisites: NURS 30714, 30783, 30813; concurrent: NURS 30413. Application of the nursing process to assist in health restoration of children experiencing chronic and acute disruptions to health. Emphasis will be placed on collaboration with the family and the health care delivery team and the family, and a systems approach to the delivery of care.

**NURS 30503 Issues in Women's Health.** Open to all majors. Prerequisite: Junior status or permission of instructor. An overview of women's health issues using various social frameworks for analysis. Emphases include prevention, self-care, and social parameters of issues related to reproduction, aging, stress, and roles.

**NURS 30543 Family Health.** Provides an introduction to family systems theory, family dynamics and their application to practice in nursing and allied health disciplines. Emphasis is on family assessment. Family diversity, families with a chronically ill or disabled member and informal caregiving are examined. Students will critically evaluate family health practices, including hospice, home-based care, and families in crisis. (Offered for NURS or SOWO credit.)

**NURS 30632 Gerontological Nursing.** Prerequisites: NURS 20033, 20222, 20282, 30043. Issues relating to an aging population such as demographics, ageism, attitudes, and intergenerational concerns. Focuses on healthy aging as well as the specialized needs and nursing care of older persons based on the common physical and psychosocial changes that occur during the aging process. The impact of selected physical and mental health conditions is discussed. Includes observational experiences with older persons in a variety of community settings.

**NURS 30714 Adult Nursing I: Concepts.** Prerequisites: NURS 30163, 30632, 30212, 30282; concurrent: NURS 30783. Application of nursing process and theories to the health restoration of clients and families experiencing acute disruptions of selected body systems. Concepts of pathophysiology, pharmacology, and nutrition are integrated.

**NURS 30783 Adult Nursing I: Practicum.** Prerequisites: NURS 30163, 30632, 30212, 30282; Concurrent: NURS 30714; Students use nursing process, theories, and research findings in caring for adult clients and families with acute disruptions of selected body systems.

**NURS 30813 Psychiatric-Mental Health Nursing: Concepts.** Prerequisites: NURS 30163, 30632, 30212, 30282; Concurrent: NURS 30882. Concepts and principles of individual, family, group and community systems experiencing psychopathology will be explored. Discussion of mental health alterations and the human responses evoked from those alterations will be introduced. The use of nursing strategies and actions in the promotion of mental health will be emphasized.

**NURS 30882 Psychiatric-Mental Health Nursing: Practicum.** Prerequisite: NURS 30163, 30632, 30212, 30282; Concurrent: NURS 30813. Application of the nursing process with individuals, families, and groups experiencing psychosocial alteration or pathology.

**NURS 37043 Survey of Professional Nursing for Registered Nurses.** Prerequisite: Admission to ADN-MSN program. Exploration of key factors influencing development and practice of professional nursing. Emphasis on culture, ethics, values, and history as context of health care and professional practice. Includes legal foundations of practice and essential knowledge and competencies of professional nursing. The role of the nurse as a patient educator is stressed.

**NURS 39116 The Discipline and Practice of Professional Nursing.** Prerequisites: Admission to Accelerated BSN Track; NURS 20163; concurrent: NURS 39184. Examines humanitarian aims and scientific principles that underpin professional nursing. Nursing philosophy and praxis are compared with other ways of knowing and being-in-theworld. Emphasizes formal health care delivery systems, professionalism, communication, legal issues, ethics, cultural competence, teaching strategies, health promotion, and a human needs framework.

**NURS 39184 Reflective Practice and Clinical Inquiry I.** Prerequisites: Admission to Accelerated BSN Track; NURS 20163; Concurrent: NURS 39116. Combines dialogical reflection and clinical practice opportunities in health promotion and assessment. Human responses to disease and disability are examined. Includes acquisition and application of nursing arts. Explores the professional nurse's responsibilities in medication administration. Provides a solid foundation in the values, knowledge, and skills requisite to professional nursing.

**NURS 39285 Reflective Practice and Clinical Inquiry II.** Prerequisites: NURS 39116, 39184; concurrent: NURS 30714, 30813, 40312, 40632. Combines dialogical reflection and clinical practice opportunities in nursing care of individuals and families responding to episodic crises, life transitions, or disabling conditions. Acute and chronic models of illness are applied. Explores personal and societal impact of medicalizing normal developmental processes, such as birth and death. Family guidance and teaching receive emphasis.

**NURS 40003 Senior Honors Project.** Prerequisites: Completion of junior honors seminar; grade point average 3.4. Scholarly project is required involving an area of nursing for in-depth investigations.

**NURS 40113 Ethical Dilemmas in Health Care.** Open to all majors. Prerequisites: SOCI 20213, 20233, or permission of instructor; junior standing. Provides the student an opportunity to explore ethical problems related to health care.

**NURS 40114 Adult Nursing II: Concepts.** Concurrent: NURS 40183; Prerequisites: NURS 30714, 30783, 30813, 30882. Application of nursing concepts and nursing process to adult clients and families who are experiencing complex acute or chronic disruptions of selected body systems. Concepts of related to chronic and terminal illness and rehabilitation and quality of life issues will be examined. Concepts of pathophysiology, pharmacology, and nutrition are integrated.

**NURS 40183 Adult Nursing II: Practicum.** Concurrent or prerequisite: NURS 40414; Prerequisite: NURS 30714, 30783, 30813, 30882. Students use the nursing process, nursing concepts and research-based nursing interventions in caring for adult clients with complex acute, chronic, or terminal disruptions of selected body systems and their families. Students work with interdisciplinary teams in providing acute and chronic care. Students will have experiences in critical, subacute care, and community agencies servicing clients with chronic and/or terminal illnesses.

**NURS 40312 Maternity Nursing: Concepts.** Prerequisites: NURS 30714, 30783, 30813, 30882, ; Concurrent: NURS 40382. Nursing process and theories will be used with childbearing women and infants, throughout the perinatal period, including normal adaptations and disruptions. The role of nursing in the restoration of health by cooperative relationships with these individuals and groups will be emphasized. Legal, research, socio-cultural, and ethical implications of nursing practice will also be considered.

**NURS 40382 Maternity Nursing: Practicum.** Prerequisites: NURS 30714, 30783, 30813, 30882; Concurrent: NURS 40312. Application of the nursing process to assist in health restoration of high risk childbearing women and their families. Emphasis will be placed on Case Management of families, collaboration with the health care delivery team and families, and a systems approach to the delivery of care.

**NURS 40412 Pediatric Nursing: Concepts.** Prerequisites: NURS 30714, 30783, 30813, 30882, 30951; Concurrent: NURS 40482. The nursing process will be applied to children experiencing acute and chronic disruptions to their health. The role of nursing in the restoration of health by cooperative relationships with the child and family will be emphasized. Legal, research, sociocultural, and ethical applications of nursing practice will also be considered.

**NURS 40482 Pediatric Nursing: Practicum.** Prerequisites: NURS 30714, 30783, 30813, 30882; Concurrent: 40412. Application of the nursing process to assist in health restoration of children experiencing chronic and acute disruptions of health. Emphasis will be placed on collaboration with the family and the health care delivery team and the family, and a systems approach to the delivery of care.

**NURS 40543 Critical Aspects of Pediatric Nursing.** Nursing elective. Fifteen class hours and 90 practicum hours. Prerequisites: NURS 40213, 40283, 40713, 40783. Designed to allow the student optimum opportunity for in-

depth exploration of aspects of pediatric nursing of particular individual interest to the student.

**NURS 40632 Research and Theory in Nursing Practice.** Prerequisite: MATH 10043; NURS 30053, 40114, 40183, 40312, 40382, 40412, 40482. The use of theory and research in the construction of a scientific knowledge base for nursing practice will be discussed. Research as a process for developing and examining clinically-based nursing questions will be examined. The importance of evidence-based practice will be emphasized.

**NURS 40813 Community Health Nursing: Concepts.** Prerequisites: NURS 30053, 40114, 40183, 40312, 40382, 40412, 40482; Concurrent: NURS 40882. The concept of community/aggregate as client is examined. Methods of community/aggregate assessment, diagnoses, planning, implementation, and evaluation are analyzed. Roles in Community Health Nursing are explored. Nursing's role in meeting the health care needs of a total population is examined. Systems theory, epidemiology, levels of prevention, and the nation's objectives for health are analyzed.

**NURS 40882 Community Health Nursing: Practicum.** Prerequisite: NURS 30053, 40114, 40183, 40382, 40412, 40482; Concurrent: NURS 40813. The nursing process is applied to community/aggregate as Client. Communities/aggregates are assessed, community/aggregate diagnoses are identified, macro-level interventions planned, implemented, and evaluated. Systems theory, epidemiology, levels of prevention, and the nation's objectives for health are discussed.

**NURS 40913 Role Development and Nursing Management: Concepts.** Prerequisites: NURS 30313 (40312), 30382 (40382), 30413 (40412), 30482 (40482), 40053 (30053), 40114, 40183, 40632; concurrent: NURS 40984; prerequisite or concurrent: NURS 40813, 40882. Theories and principles of leadership and management, which provide the foundation for management of self, health care providers, multiple clients and the profession in the delivery of health care are introduced. Career paths, job seeking skills and professional responsibilities are explored. The Texas Nurse Practice Act and ANA Standards of Practice are analyzed in depth. Management roles within various health care settings are reviewed within the context of selected theories and research problications.

**NURS 40984 Role Development and Nursing Management: Practicum.** Prerequisites: NURS 30313 (40312), 30413 (40382), 30382 (40412), 30482 (40482), 40053 (30053), 40114, 40183, 40632; concurrent: NURS 40913; prerequisite or concurrent: NURS 40882, 40813. Students assume professional roles that require application of leadership principles and management skills for the provision of care to a group of clients and the management of a group of health care providers in a variety of clinical settings.

**NURS 49385 Reflective Practice and Clinical Inquiry III.** Prerequisites: NURS 30313, 30714, 30813, 39285, 40312, 40632; concurrent: NURS 30413, 30632, 40114, and 40813. Combines dialogical reflection and clinical practice opportunities in nursing care of adults and children with complex health alterations. Dynamic interaction between human development across the lifespan and advanced biomedical and information technologies is addressed. Explores continuum of care among client aggregates. Partnerships with selected communities promote and maintain public health.

**NURS 49488 Professional Residency.** Prerequisites: NURS 30413, 30632, 40114, 40813, 40913, 49385; concurrent: NURS 40913 or elective. Provides intensive opportunities for reflective practice highlighting students' clinical strengths and professional interests. Rotation through selected service areas diversifies experiential learning and grounds students in clinical practice. Application of leadership principles and management theories enhances role transition. Controversies in contemporary nursing practice are examined.

**NURS 50003 Advanced Pathophysiology.** Prerequisites: Admission to Graduate Program or permission of instructor. Provides an understanding of advanced knowledge base of pathophysiologic processes underlying human illness. Includes systems approach to pathophysiologic processes associated with altered health states in adults across the lifespan.

**NURS 50013 Advanced Health Assessment.** Prerequisites: Admission to Graduate Program or permission of instructor. Provides an advanced level of skill in the assessment of adults across the lifespan. Includes comprehensive advanced assessment of adults, development of diagnostic and inferential skills. Three detailed assessments of individual systems, culminating in one comprehensive systems assessment completed in clinical portion.

**NURS 50022 Advanced Practice Roles.** Prerequisites: Admission to Graduate Program. Provides a foundation for transition to the role of the nurse in advanced practice. Includes roles within advanced practice, theories of change, concepts of negotiation, collaboration, interdependence, advocacy and autonomy, and titling, certification and licensure issues. Clinical nurse specialist role is extensively examined.

**NURS 50053 Advanced Pharmacotherapeutics.** Prerequisites: Admission to Graduate Program or permission of instructor. Emphasizes pharmacological principles fundamental to the selection of pharmacologic agents in altered health states in adults across the lifespan. Includes the pharmacodynamic, pharmacokinetic and pharmacotherapeutic properties of drug categories and specific agents, clinical responses to the use of pharmacologic agents, efficacy and cost-effectiveness issues, client education, and adherence.

# Communication Sciences and Disorders

B.S. in Habilitation of the Deaf and Hard of Hearing
B.S. Degree with a Major in Speech-Language Pathology.
Requirements for a Minor in Communication Disorders
Honors Program
Courses of Instruction

#### (COSD)

Available on the B.S. degree with a major in Speech-Language Pathology or Habilitation of the Deaf and Hard of Hearing (DHH).

#### B.S. in Habilitation of the Deaf and Hard of Hearing

A total of 124 semester hours is required: University Curriculum Requirements-47 semester hours; Habilitation of the DHH-39 semester hours; Education-27 semester hours (including student teaching); Electives-11 semester hours (9 within the major). In addition to the academic credit distribution, students must meet the following requirements:

- 1.No COSD course in which the student receives a "D" may be counted toward the major or as a prerequisite for subsequent courses.
- 2.Complete 75 hours of clinical practice, at least 2 semesters of COSD 40340 and 1 semester of COSD 40350.
- 3.TCU cumulative grade point average of at least 2.5 and a 2.5 grade point average in COSD courses before enrolling in COSD 40340.
- 4.Students must be recommended for enrollment in COSD 40350 by COSD faculty. Recommendation is based on fulfillment of expectations specified in the clinic handbook and on:
  - A. Performance in COSD coursework,
  - B. Previous clinical experience and performance, and
  - C. Fluency in sign language as judged by course instructor.
- 5. Students must be successfully admitted into the School of Education

**Pass/No Credit Option:** No courses in the major or associated areas may be taken on a Pass/No Credit basis. Other courses taken on a Pass/No Credit basis will be limited to a maximum of nine credit hours.

## Suggested Courses for the Freshman Year

semester hours

### **FALL**

COSD 20303 Writing Workshop Laboratory Science Social Science Religion PEAC Total	3 3 3 3 1 16
SPRING	
Laboratory Science	3
Fine Arts	3
History 10603 or 10903	3
Math	3
Literature	3
PE-H	1
Total	16

## B.S. Degree with a Major in Speech-Language Pathology

A total of 124 semester hours is required: University Curriculum Requirements-47 semester hours; Speech-Language Pathology-33 semester hours; Psychology/Approved Electives-9 semester hours; Supporting Areas-9 semester hours; Electives-26 semester hours. In addition to the academic credit distribution, students must meet the following requirements:

- $1.\mbox{No COSD}$  course in which the student receives a "D" may be counted toward the major or as a prerequisite for subsequent courses.
- 2.Complete 75 hours of clinical practice, at least 1 semester of COSD 40300 and 2 semesters of COSD 50300.
- 3.TCU cumulative grade point average of at least 2.5 and a 2.5 grade point average in COSD courses before

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enrolling in COSD 40300.

- 4.Students must be recommended for enrollment in COSD 50300 and COSD 50350 by COSD faculty. Recommendation is based on fulfillment of expectations specified in the clinic handbook and on:
  - A. Performance in COSD coursework and
  - B. Previous clinical experience and performance.

**Pass/No Credit Option:** No courses in the major or associated areas may be taken on a Pass/No Credit basis. Other courses taken on a Pass/No Credit basis will be limited to a maximum of nine credit hours.

(NOTE: This should be viewed as a preprofessional degree. Students selecting this major will need to continue studies at the graduate level in order to meet standards for licensure as a speech-language pathologist and for certification by the American Speech-Language-Hearing Association (ASHA). The graduate program in Speech-Language Pathology at TCU is accredited by the Council on Academic Accreditation of ASHA. Admission to the program is competitive and based on applicant qualifications.)

#### Suggested Courses for the Freshman Year

semester hours

#### **FALL**

COSD 10303 Writing Workshop Laboratory Science Social Science Religion PEAC Total	3 3 3 3 1 16
SPRING	
COSD 10343	3
Laboratory Science	3
Social Science	3
History	3
Fine Arts	3
Psychology	3
PE-H	1
Total	16

## **Requirements for a Minor in Communication Disorders**

A minor requires 18 hours and may include an emphasis in habilitation of the Deaf and/or speech-language pathology. This minor requires COSD 10303 and 10343 plus 12 additional hours approved by a COSD faculty adviser.

## **Honors Program**

Communication Sciences and Disorders majors who plan to pursue Departmental Honors must be members of the University Honors Program and should enroll in COSD 30003 during their junior year and COSD 40003 during their senior year.

### **Courses of Instruction**

**COSD 10303 Survey of Communication Disorders.** Survey of disorders of articulation, language, stuttering, voice and hearing.

**COSD 10343 Basic Sign Language.** An introductory course in signing expressively and understanding basic sign language, receptively. Included is basic information on hearing loss and its effects on children and adults. Recommended for students majoring in special education and service-oriented fields.

**COSD 20303 Speech and Hearing Science.** An introduction to acoustic and physiological aspects of the speech and hearing mechanisms.

**COSD 20313 Voice and Articulation Improvement.** Practical application of techniques for articulation, pronunciation, and efficient voice production for effective speech. Emphasis on acceptable standards of speech for students preparing for professional careers.

**COSD 20323 Clinical Methods in Speech-Language Pathology.** Prerequisite: COSD 10303, 20333, and 30333, or permission of instructor. Principles and procedures in the assessment and treatment of communication

**COSD 20333 Phonetics.** Required of all majors and elective to others. Emphasis on speech perception and sound discrimination. Intensive work in transcription using the International Phonetic Alphabet.

**COSD 20343 Intermediate Sign Language.** Prerequisite: COSD 10343 or permission of instructor. Further development and refinement of receptive and expressive skills in Signed English and American Sign Language. Emphasis on vocabulary development for classroom use, ability to sign fluently, and the psycho-social aspects of deafness, including the sociolinguistics of sign language.

COSD 30003 Junior Honors Seminar. Prerequisite: Junior standing and membership in the Honors Program.

Under the guidance and supervision of a faculty member, current issues in communication sciences and disorders are explored.

**COSD 30303 Anatomy and Physiology of the Speech and Hearing Mechanisms.** Structure and function of the normal mechanisms required for speech and hearing.

**COSD 30323 Disorders of Phonology.** Prerequisites: COSD 10303 and 20333 or permission of instructor. Basic principles of diagnosis and treatment for individuals with developmental or functional disorders of articulation.

**COSD 30333 Language Development in Children.** Normal acquisition and development of language in children from infancy through adolescence.

**COSD 30343 Aural Rehabilitation.** Prerequisite: Permission of instructor. Overview of management and rehabilitation of persons with hearing loss. Focus on amplification, cochlear implants, assistive devices, speech training, speech reading, auditory training and language development.

**COSD 30353 Teaching Elementary School Subjects to DHH Children.** Prerequisite: Permission of instructor. Curriculum materials, and teaching methods for meeting specialized needs of DHH children, in the learning of reading and developing concepts and relationships in arithmetic and science.

**COSD 30363 Audiology.** Prerequisite: Permission of instructor. Basic audiometric techniques and interpretation of audiograms as related to problems of communication of persons with hearing loss.

**COSD 30373 Language Disorders in Children.** Prerequisite: COSD 30333. Introduction to the causes, characteristics, assessment and treatment of children with language disorders.

**COSD 30383 American Sign Language I.** Prerequisite: COSD 10343 or permission of the instructor. An introductory course in American Sign Language ASL which will introduce students to the grammatical aspects of ASL, inclusive of receptive and expressive signing skills with laboratory practice. Recommended for students in special education and service related fields of study.

**COSD 30393 Language Development of DHH.** Prerequisite: COSD 30333, or permission of instructor. Principles of language development as applied to DHH students; survey of principal methods in use; methods used in beginning language development with young DHH children.

**COSD 30970 Independent Study.** Prerequisite: Permission of instructor. Independent study of specially designed topics not addressed in regular course offerings. 1-6 hours, 3 hrs. maximum per semester.

**COSD 40003 Senior Honors Research Project.** Prerequisite: COSD 30003, senior standing, and membership in the Honors Program. The completion of a research project related to a current issue in normal and/or disordered communication.

**COSD 40300 Clinical Practicum in Speech-Language Pathology I.** Prerequisite: COSD 20323, 30323, 30373 and permission of instructor. One semester is required. Supervised clinical experiences in the management of speech and language disorders.

**COSD 40323 Advanced Language Development for DHH.** Prerequisite: COSD 30393, or permission of instructor. Language principles and usage for intermediate and advanced levels with the deaf and hard of hearing.

**COSD 40333 Teaching Speech to People with Hearing Loss.** Prerequisite: COSD 20333 or permission of instructor. Development of spoken languages, including articulation, prosody, and voice production for children and adults with hearing loss.

**COSD 40340 Clinical Practicum in Teaching DHH Students I.** Prerequisite: COSD 30393 and 40333 and permission of instructor. A minimum of two semesters required. Observation and supervised clinical teaching of DHH children and adults in an individual setting.

**COSD 40350 Clinical Practicum in Teaching DHH Students II.** Prerequisite: COSD 40340. Students must be recommended for enrollment by COSD faculty. Observation and supervised clinical teaching of DHH students.

**COSD 40383 American Sign Language II.** Prerequisite: COSD 30383 or permission of the instructor. This course is a continuation of the ASL I COSD 30383 with emphasis on deaf cultural aspects and the grammatical structure of ASL. This course utilizes extensive sign productions. Recommended for students in special education and service-related fields of study.

**COSD 50300 Clinical Practicum in Speech-Language Pathology II.** Prerequisite: COSD 40300. Student must be recommended for enrollment by COSD faculty. A minimum of two semesters required for undergraduate students. A maximum of three semesters is allowed. Graduate students with less than 30 clinical hours will be considered for enrollment in COSD 50300. Supervised clinical experience in management of the most common speech and language disorders.

**COSD 50323 Counseling Special Populations and Their Families.** Prerequisite: Senior or graduate standing. Theories, principles and practices in counseling special populations and their families with a focus on the communicatively impaired. Appropriate counseling strategies and techniques are explored with practical application experiences included.

**COSD 50343 Advanced Aural Rehabilitation.** Prerequisite: Senior or graduate standing and COSD 30343 and 30363 or permission of instructor. Theories of assessment and intervention in identification and aural rehabilitation of hearing-impaired and deaf children and adults. Includes methods of evaluation and training in the areas of audition, amplification, speech, language, speech-reading, assistive listening devices, cochlear implants, and communication modes and strategies.

**COSD 50350 Clinical Practicum in Audiology.** Prerequisites: Senior or graduate standing. Students must be recommended for enrollment by the Communication Disorders CD faculty. Such recommendations are based on the student's: 1) performance in COSD coursework with a grade of "C" or better expected in all COSD courses; and 2) previous clinical experience and performance with students expected to complete two semesters of COSD 40300 with a grade of "C" or better. A laboratory course in basic audiological testing techniques involving

assessments and evaluation of the hearing function. 1-3 semester hours.

**COSD 50353 Psycholinguistics.** Prerequisite: Senior or graduate standing. Phonetics or permission of instructor. An introduction to the history, scope, problems, and present state of the psychology of language. Includes survey of theories and methods of investigation of several disciplines concerned with the scientific studies of language.

**COSD 50363 Seminar on Stuttering.** Prerequisite: Senior or graduate standing and permission of instructor. A study of fluency development and breakdown in children and adults. Descriptions and development of speech fluency, onset and development of stuttering, characteristics of stuttering and people who stutter, and theories of stuttering are reviewed.

**COSD 50373 Medical Aspects of Speech-Language Pathology.** Prerequisite: Senior or graduate level standing in speech-language pathology or permission of instructor. A study of the medical and biophysical bases of communication disorders and the relevant medical management of such issues as part of the total treatment program.

**COSD 50383 Seminar on Voice Disorders.** Prerequisite: Senior or graduate standing and permission of instructor. A study of theories, classification systems and etiologies, with emphasis on respiration, phonation, resonance and articulation factors as they relate to disorders of voice.

**COSD 50393 Basic Evaluative Instruments for Language Disorders.** Theory, administration and interpretation of basic evaluative instruments and indications for therapy.

**COSD 50970 Directed Studies in Communication Disorders.** Prerequisites: Senior or graduate standing; permission of instructor. Directed study focusing on specialized topic in communication sciences and disorders. (1-6 semester hours, 3 hours maximum per semester.)

# Kinesiology

**Movement Science** Physical Education Health and Fitness Psychosocial Kinesiology **Athletic Training Minors** Courses of Instruction

#### (KINE)

Available on the B.S. degree with majors in Movement Science, Physical Education, Health and Fitness, and Psychosocial Kinesiology.

#### Overview

The Department of Kinesiology offers programs of study designed to provide students with the educational background necessary for the pursuit of careers in a variety of movement-based professions. The Bachelor of Science degree is offered with majors in Athletic Training, Health and Fitness, Movement Science, Physical Education, and Psychosocial Kinesiology. In addition, the department offers minors in Movement Science and Health. The Athletic Training major is accredited by the Commission on the Accreditation of Allied Health Education Programs. A variety of activity courses satisfying the University Core Curriculum requirement for Physical Education are also offered by the department.

The curriculum for each major academic area is comprised of three components: (1) 28 hours of Foundation courses common to all majors; (2) 12 hours of Emphasis courses specific to each major area; and (3) 21-28 hours of Associated Requirements taken outside the department that are intended to supplement the departmental courses. In addition to the major requirements, students must take UCR and elective course to accumulate a minimum of 124 hours for the Bachelor of Science degree. The department emphasizes learning experiences beyond the classroom environment. Students are required and/or encouraged to participate in research, internships, and special projects which are arranged through academic advisors.

Pass/No Credit Option. No Foundations, Emphasis, or Associated Requirements courses may be taken on a pass/no credit basis.

#### **Movement Science**

The Movement Science option provides students with the educational background required for a variety of movement-based professions. Students who select this major often continue their education in graduate programs in Kinesiology or Physical Therapy. Students are advised to consult with their advisor as early as possible in order to coordinate elective courses with specific interests.

## 1. University Curriculum Requirements

47 hours.

## 2. Major: Movement Science

40 hours.

# **Foundations**

KINE 10011 Personal Fitness

KINE 10103 Foundations of Kinesiology

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 20613 Measurement & Evaluation in Kinesiology

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

KINE 30713 Psychology of Sport

KINE 30803 Adapted Physical Activity

# Emphasis Courses

KINE 30503 Fitness Assessment

KINE 40103 Seminar in Kinesiology

KINE 40903 Senior Internship

KINE 40793 Senior Research

# 3. Associated Requirements

23 hours.

CHEM 10113 Freshman Chemistry CHEM 10123 Freshman Chemistry CHEM 10122 Chemistry Laboratory

BIOL 20204 Anatomy and Physiology

BIOL 20214 Anatomy and Physiology

PHYS 10151 Physics Laboratory

PHYS 10153 General Physics

MATH 10043 Elementary Statistics

MATH 10053 Precalculus Algebra

## 4. Electives as needed to complete

124 hours.

### **Physical Education**

The physical education option provides students with the educational preparation for a career in the teaching profession. Students will receive all-level certification upon successful completion of the major, and a state administered exam. In order to earn a teaching certification, students must meet and comply with the requirements described in the "Teacher Education Program" section of this bulletin. Specific requirements involve criteria for admission and retention to the teacher education program, and admission to student teaching. See the School of Education section of the bulletin for admission and retention criteria.

#### 1. University Curriculum Requirements

47 hours.

## 2. Major: Physical Education

40 hours.

#### Foundations

KINE 10011 Personal Fitness

KINE 10103 Foundations of Kinesiology

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 20613 Measurement & Evaluation in Kinesiology

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

KINE 30713 Psychology of Sport KINE 30803 Adapted Physical Activity

## Emphasis Courses

KINE 20403 Physical Education for Elementary School Children

KINE 40313 Individual and Dual Sports

KINE 40343 Team and Group Sports

KINE 40623 Physical Education for Secondary School Youth

## 3. Associated Requirements

24 hours.

## All-Level Certification

EDUC 30013 Foundations of Education

EDUC 30123 Educational Psychology

ECUC 30143 Child and Adolescent Development

EDSP 30603 Study of Exceptional Students

EDMS 30001 Professional Practice Seminar

EDUC 40213 Promoting Literacy in the Content Subjects

EDSE 50013 Instructional Planning

EDEL 40990 Student Teaching in the Elementary School (3 hours)

EDSE 40980 Student Teaching in the Secondary School (3 hours)

## 4. Electives as needed to complete

124 hours.

#### **Health and Fitness**

The Health and Fitness option provides students with the educational foundation required for pursuit of fitnessrelated careers. Students interested primarily in exercise prescription, assessment, cardiac rehabilitation, and the planning, organizing, and administration of fitness programs should select this option.

## 1. University Curriculum Requirements

47 hours.

# 2. Major: Health and Fitness

40 hours.

## Foundations

KINE 10011 Personal Fitness

KINE 10103 Foundations of Kinesiology

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 20613 Measurement & Evaluation in Kinesiology

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

KINE 30713 Psychology of Sport

KINE 30803 Adapted Physical Activity

## Emphasis Courses

KINE 30503 Fitness Assessment

KINE 30733 Exercise Psychology

KINE 40503 Fitness Programming

KINE 40903 Senior Internship

## 3. Associated Requirements

26 hours.

NTDT 10403 Nutrition BIOL 20204 Anatomy and Physiology

BIOL 20214 Anatomy and Physiology

MANA 30153 Organizational Management

HLTH 20233 Sport and Exercise Pharmacology HLTH 30203 Health and Stress Management HLTH 30423 Nutrition and Physical Activity HLTH 40203 Study of Human Disease

## 4. Electives as needed to complete

124 hours.

## **Psychosocial Kinesiology**

The Psychosocial Kinesiology major provides students with the educational background primarily designed to pursue a graduate degree in sport psychology, exercise psychology, sport sociology, or a related discipline. The most frequently pursued professions following graduate work in these areas include teaching and research as a university professor, or consulting in sport and exercise psychology.

## 1. University Curriculum Requirements

47 hours.

## 2. Major: Psychosocial Kinesiology

40 hours.

#### Foundations

KINE 10011 Personal Fitness

KINE 10103 Foundations of Kinesiology

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 20613 Measurement & Evaluation in Kinesiology

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

KINE 30713 Psychology of Sport

KINE 30803 Adapted Physical Activity

## Emphasis Courses

KINE 30733 Exercise Psychology KINE 40103 Seminar in Kinesiology KINE 40903 Senior Internship KINE 40793 Senior Research

## 3. Associated Requirements

23 hours.

MATH 10043 Elementary Statistics PSYC 10514 Principles of Behavior PSYC 30041 Psychology of Group Processes PSYC 30343 Social Psychology PSYC 30363 Abnormal Psychology

SOCI 20213 Introductory Sociology SOCI 30743 Men, Women and Society

SPCO 10123 Basic Speech Communication

## 4. Electives as required to complete

124 hours.

### **Athletic Training**

The Athletic Training major provides students with the educational background required to become a professional athletic trainer. The major is offered through a program accredited by the Council on the Accreditation of Allied Health Education Professions; thus, students who select this major will be prepared to sit for national certification and/or state licensure exams. Students must apply for admission into the Athletic Training Educational Program (ATEP) to be eligible to pursue this major. The application process begins by meeting with the ATEP Director in the Kinesiology Department. Successful candidates will have a strong academic record, a background in the natural sciences, and experience in athletic training during their high school years. Those who do not have previous experience in athletic training, but are judged to have potential as a student trainer, will be considered, especially if they have strong academic credentials.

Once admitted to the ATEP, students must maintain a cumulative grade point average (GPA) of at least a 2.5, and must receive no lower than a "C" in all major Foundations, Emphasis, and Associated Requirements courses. Students who do not meet these requirements will be placed on probation for a semester. If after one semester they have not achieved a cumulative GPA of at least a 2.5 and/or have not replaced grades below a "C" with a "C" or better, they may be dismissed from the program, or allowed to continue for a maximum of one additional probationary semester. The latter condition will be granted only with permission from the ATEP Director and the chair of the Department of Kinesiology. In addition to the academic requirements, students must demonstrate satisfactory performance in the clinical progression of skills, as determined by the ATEP Director and the athletic training staff. The clinical progression is specified in the Athletic Training Handbook given to each student trainer admitted to the program. Athletic training students should also be aware that teacher certification may be required to be an athletic trainer in some public schools.

## 1. University Curriculum Requirements

47 hours.

## 2. Athletic Training Major

43 hours.

## Foundations

KINE 10011 Personal Fitness

KINE 10103 Foundations of Kinesiology

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 20613 Measurement & Evaluation in Kinesiology

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

KINE 30713 Sport Psychology
KINE 30803 Adapted Physical Activity

#### Emphasis Courses

KINE 20303 Prevention & Care of Athletic Injuries

KINE 30303 Physical Evaluation of the Extremities

KINE 40303 Advanced Athletic Training

KINE 40523 Therapeutic Modalities

KINE 40533 Therapeutic Exercise

## 3. Associated Requirements

BIOL 20204 Anatomy and Physiology I

BIOL 20214 Anatomy and Physiology II

HLTH 20203 Health and Wellness Concepts

HLTH 20233 Sport and Exercise Pharmacology

HLTH 30423 Nutrition and Physical Activity

KINE 10101 Practicum in Athletic Training I

KINE 10201 Practicum in Athletic Training II

KINE 20101 Practicum in Athletic Training III

KINE 20201 Practicum in Athletic Training IV

#### 4. Electives as needed to complete

124 hours.

21 hours.

#### **Minors**

The Department of Kinesiology offers academic minors in Movement Science and Health.

#### 1. Minor: Movement Science

18 hours.

KINE 10603 Anatomical Kinesiology

KINE 20503 Motor Behavior

KINE 30423 Motor Development

KINE 30623 Biomechanics

KINE 30633 Exercise Physiology

### Choose one of the following:

KINE 30503 Fitness Assessment

KINE 30713 Psychology of Sport

KINE 30803 Adapted Physical Activity

## 2. Minor: Health 18 hours.

HLTH 20203 Health and Wellness Concepts

HLTH 20233 Sport and Exercise Pharmacology

HLTH 30203 Health and Stress Management

HLTH 30213 Health Aspects of Human Sexuality

HLTH 40203 Study of Human Disease

## Choose one of the following:

HLTH 30633 Exercise Physiology

NTDT 10403 Nutrition

NURS 30023 Cultural and Ethical Aspects of Health Care

NURS 40303 Critical Inquiry into Health Care Delivery

SOWO 20833 Introduction to Social Work

### **Courses of Instruction**

#### Health

**HLTH 10603 Anatomical Kinesiology.** A study of the gross structure of the human body with an emphasis on the relationship of anatomy to the study of physical activity, physical fitness, sport and exercise. (Offered as KINE or HLTH credit.)

**HLTH 20203 Health and Wellness Concepts.** A survey course designed to study basic health concepts and information relative to general areas of health. Relation of these concepts to personal lifestyles and healthy decisions

**HLTH 20233 Sport and Exercise Pharmacology.** Prerequisite: KINE 10603, or consent of instructor. The study of the pharmacological effects of various classifications of drugs commonly utilized to treat and manage various

types of hypokinetic diseases such as cardiovascular disease, diabetes, and obesity. The interaction between various drugs and exercise will be examined. In addition, the pharmacological effects of various nutritional supplements commonly used by athletes and other exercising individuals as ergogenic aids will be studied.

**HLTH 20613 Measurement and Evaluation.** Introduction to basic measurement and evaluation concepts and processes in Kinesiology and health. (Offered as KINE or HLTH credit.)

**HLTH 30203 Health and Stress Management.** A study of physiological, psychological, and sociological aspects of stress as related to overall health. Responses such as anger, fear, and depression with their underlying mechanisms in sates of health and disease will be examined. Emphasis is on identification of stressors and methods of prevention and coping with them.

**HLTH 30213 Health Aspects of Human Sexuality.** Sexuality as a normal aspect of life and as a source of creative energy. Study of physical, mental, emotional, social, and psychological phases of human sexuality as they are affected by male and female relationships.

**HLTH 30423 Nutrition and Physical Activity.** Prerequisite: NTDT 10403, or permission of instructor. A study of the roles that nutrition and physical activity play in maintaining health and fitness, with an emphasis on evaluating personal nutrition and physical activity habits, and developing an individualized plan for healthful eating and exercise.

**HLTH 30633 Exercise Physiology.** Prerequisite: KINE 10603 or consent of instructor. Kinesiology majors only: KINE 10103 Physiological responses of the systems of the human body to acute and chronic exercise. Emphasis is on the processes and mechanisms responsible for such responses. (Offered as KINE or HLTH credit.)

**HLTH 40203 Study of Human Disease.** An overview of the processes in human disease. The etiology, symptoms, treatment, and preventive measures of various diseases. Concepts of wellness are discussed.

**HLTH 40213 Instructional Strategies in Health Education.** Selection and application of teaching methods, materials and content, action-oriented classroom strategies and resources appropriate for Health Education at the various educational levels.

**HLTH 40533 Therapeutic Exercise.** Prerequisite: KINE 20303. Kinesiology majors only: KINE 10103. An upper level implementation of therapeutic exercise and rehabilitation techniques for the treatment of athletic injuries. Practical application of anatomy and physiology will provide for acquisition of clinical skills.

**HLTH 40770 Special Problems in Health Education.** Prerequisite: Senior standing and consent of instructor. Individual study involving research or other scholarly work in Health Education under the direction of a faculty member (1-3 sem. hours.)

#### Kinesology

**KINE 10011 Personal Fitness.** Principles, concepts, and components of physical fitness. Emphasis on design and practical implementation of individualized fitness program.

**KINE 10101 Practicum in Athletic Training I.** An introduction to the basic functioning of an Athletic Training facility to include basic administration and treatment of patients.

**KINE 10103 Foundations of Kinesiology.** An overview of the philosophical and historical perspectives of the academic discipline of Kinesiology. Current trends and topics are discussed to acquaint students with career opportunities in the various subspecialties within Kinesiology.

**KINE 10201 Practicum in Athletic Training II.** An introduction to use and design of athletic equipment and sportswear with special emphasis on emergency procedures and modalities for treatment of athletic injuries.

**KINE 10433 Freshman Seminar in Kinesiology Freshman Seminar in KINE.** Topics may vary each time it is offered.

**KINE 10603 Anatomical Kinesiology.** A study of the gross structure of the human body with an emphasis on the relationship of anatomy to the study of physical activity, physical fitness, sport and exercise. (Offered as KINE or HITH credit.)

**KINE 20101 Practicum in Athletic Training III.** Prerequisites: KINE 10201, and 30303; Supervised practice of clinical assessment skills for posture, gait, conditions and injuries of the physically active individual.

**KINE 20201 Practicum in Athletic Training IV.** Prerequisites: KINE 20101; Clinical assessment of general medical conditions and disabilities of athletes and other physically active individuals.

**KINE 20303 Care and Prevention of Athletic Injuries.** Prerequisite: KINE 10603. Study of recognition, prevention, reconditioning, and referral of athletic injuries.

**KINE 20403 Physical Education for Elementary School Children.** Prerequisite for Kinesiology majors only: KINE 10103. Presentation of various teaching strategies, procedures, classroom management, and evaluation techniques in order to meet goals and objectives of elementary physical education programs.

**KINE 20412 First Aid: Responding to Emergencies.** Theory and practice of first aid and accident prevention techniques as well as CPR instruction. Standard Red Cross certificate issued on successful completion of course and practical evaluation.

**KINE 20503 Motor Behavior.** Prerequisite: KINE 10603 or consent of instructor. Investigation of current theories of motor control, motor learning, and their relationship to the acquisition of motor skill.

**KINE 20613 Measurement and Evaluation.** Introduction to basic measurement and evaluation concepts and processes in Kinesiology and health. (Offered as KINE or HLTH credit.)

**KINE 20802 Coaching Basketball.** Theory and techniques relative to the skill and playing strategies in the sport of basketball.

KINE 20812 Coaching of Track and Field. Theory and techniques relative to the skill and playing strategies of the

sport track and field.

**KINE 20822 Coach of Volleyball and Softball.** Theory and techniques relative to the skill and playing strategies of the sports volleyball and softball.

**KINE 20832 Coaching Football.** Theory and techniques relative to the skill and playing strategies of the sport of football.

**KINE 20842 Coaching Baseball.** Theory and techniques relative to the skill and playing strategies of the sport of baseball.

**KINE 30303 Physical Examination of the Extremities.** Prerequisite: KINE 10603 or consent of instructor. Critical examination of the principles and applications of various examination techniques for athletic related injuries of the extremities.

**KINE 30423 Motor Development.** Prerequisite: KINE 10603 or consent of instructor. Kinesiology majors only: KINE 10103 An examination of human motor behavior from birth to adulthood. Emphasis placed on the development of fundamental skills and their effect on future motor performance.

**KINE 30503 Fitness Assessment.** Prerequisite: KINE 10603 or consent of instructor. Practical experience in aspects of physical fitness and prescription. Students receive hands on experience in areas of testing required for ACSM health/fitness instructor certification.

**KINE 30623 Biomechanics.** Prerequisite: KINE 10603 or consent of instructor. Kinesiology majors only: KINE 10103. Mechanical foundation and analysis of human movement. Emphasis is placed on the concepts of linear and angular kinetics to include forces and torques that act on the human body during movement.

**KINE 30633 Exercise Physiology.** Prerequisite: KINE 10603 or consent of instructor. Kinesiology majors only: KINE 10103 Physiological responses of the systems of the human body to acute and chronic exercise. Emphasis is on the processes and mechanisms responsible for such responses. (Offered as KINE or HLTH credit.)

**KINE 30713 Psychology of Sport.** Prerequisite: PSYC 10213 or 10514, or permission of instructor. Prerequisite for Kinesiology majors only: KINE 10103. Selected theories and practical applications germane to the understanding of psychological aspects of human behavior in sport and exercise settings.

**KINE 30733 Exercise Psychology.** Prerequisite: PSYC 10213 or 10514, or permission of instructor. Prerequisite for Kinesiology majors only: KINE 10103. Selected theories and practical applications germane to the understanding of psychological aspects of human behavior in exercise settings.

**KINE 30753 Curriculum and Program Design in Secondary Physical Education.** Prerequisite: KINE 10103. The development of goals, objectives, and scope of secondary physical education. Emphasis is placed on the systematic process of designing and evaluating curriculum in secondary schools.

**KINE 30803 Adapted Physical Activity.** Prerequisite. KINE 10603 or consent of instructor. Kinesiology majors only: KINE 10103. An overview of common disabilities and the relationship to appropriate physical activity experiences. Stress is placed on learning how to develop and adapt programs for individuals with disabilities in fitness, recreation, and school physical activity settings.

**KINE 40103 Seminar in Kinesiology.** Prerequisite: Consent of instructor. An examination of current issues in the field of Kinesiology. Emphasis is on a critical examination of research processes, and the application of research finds relevant to disciplines within Kinesiology.

**KINE 40303 Advanced Athletic Training.** Prerequisite: KINE 20303. Kinesiology majors only: KINE 10103. Study of advanced theories, techniques, and application of skill relative to athletic injury care and rehabilitation.

**KINE 40313 Individual and Dual Sports.** Prerequisite for Kinesiology majors only: KINE 10103. The development of knowledge, skill and play relative to selected individual and dual sports and activities in the field of Physical Education and recreation. Focuses on phases of skill development and teaching progression.

**KINE 40343 Team and Group Sports.** Prerequisite for Kinesiology majors only: KINE 10103. The development of knowledge, skill, and play relative to selected team and group sports and activities in the field of Physical Education and Recreation. Focuses on various phases of skill development and teaching progression.

**KINE 40503 Fitness Programming.** Prerequisites: KINE 10603 and KINE 30503 or consent of instructor. Kinesiology majors only: KINE 10103 Theoretical and practical applications of exercise assessment and exercise prescription in commercial fitness, community fitness, and cardiac rehabilitation.

**KINE 40523 Therapeutic Modalities.** Prerequisite: KINE 20303. Kinesiology majors only: KINE 10103. Critical examination of concepts and applications of therapeutic modalities and rehabilitative techniques regarding athletic injury.

**KINE 40533 Therapeutic Exercise.** Prerequisite: KINE 20303. Kinesiology majors only: KINE 10103. An upper level implementation of therapeutic exercise and rehabilitation techniques for the treatment of athletic injuries. Practical application of anatomy and physiology will provide for acquisition of clinical skills.

**KINE 40623 Physical Education for Secondary School Youth.** Prerequisite for Kinesiology majors only: KINE 10103. Examination of scope and value of Physical Education in the secondary schools. Factors essential to curriculum planning and instruction included. On-site clinical experiences.

**KINE 40700 Practicum in Adapted Physical Activity.** Prerequisite for Kinesiology majors only: KINE 10103. This course will provide hands-on teaching opportunities at schools servicing a variety of individuals with disabilities. Students will participate in the planning and implementation of appropriate physical activity programs. On-site clinical experiences.

**KINE 40760 Practicum in Kinesiology.** Prerequisite: Senior standing and consent of department. Kinesiology majors only: KINE 10103. Practical experience in an area of Kinesiology (1-3 sem. hours.)

KINE 40780 Special Problems in Kinesiology. Prerequisite: Senior standing and consent of department.

Kinesiology majors only: KINE 10103. Individual study involving research or other scholarly work in Kinesiology under the direction of a faculty member 1-3 sem hours.

**KINE 40793 Senior Research in Kinesiology.** Prerequisite: Senior standing and consent of department. Students work with individual faculty on a research project in an area of interest. The project involves formation of hypotheses, collection of data, and data analysis and interpretation.

**KINE 40903 Senior Internship.** Prerequisite: Senior standing and consent of department. Internship for the movement based professions. Students work with local professionals in an area related to their career interest.

KINE 50970 Special Topics in Kinesiology. Prerequisite: Approval of adviser and course instructor.

PEAC 10101 Football. Football

PEAC 10111 Track and Cross Country. Track & Cross Country

PEAC 10121 Golf. Golf

PEAC 10131 Tennis. Tennis

PEAC 10141 Basketball. Basketball

PEAC 10151 Baseball. Baseball

PEAC 10161 Swimming and Diving. Swimming & Diving

PEAC 10171 Gymnastics (Cheerleaders). Gymnastics (Cheerleaders)

PEAC 10181 Soccer. Soccer

PEAC 10191 Volleyball. Volleyball

PEAC 10231 Personal Defense. Techniques and theories of basic personal defense skills.

**PEAC 10261 Karate Forms.** An introduction to the skills, techniques, strategies and conditioning of Karate.

PEAC 10301 Flag Football. Fundamental skills, techniques and strategies of flag football.

PEAC 10311 Beginning Softball. Fundamental skills, techniques and strategies of softball.

PEAC 10331 Beginning Soccer. Fundamental skills, techniques and strategies of soccer.

PEAC 10341 Basketball. Fundamental skills, techniques and strategies of basketball.

**PEAC 10411 Body Conditioning.** Fundamental principles of exercise, individualized programs with lifetime fitness goals and fitness related activities.

**PEAC 10421 Weight Training.** Basic weight training techniques, personalized workout programs, and concepts and knowledge related to the development of individualized programs.

PEAC 10481 Cycling. Equipment selection, safety, riding techniques and training programs associated with biking.

PEAC 10491 Jogging. Techniques, principles and practice in jogging.

**PEAC 10521 Aerobic Dance.** Aerobic conditioning rhythmic workouts, with emphasis on fitness and cardiovascular conditioning while performing directed and individual routines.

**PEAC 10531 Modern Dance.** Techniques of modern dance with emphasis on fundamentals of movement, body technique, space and rhythm.

PEAC 10591 P E Ballet. Basic theory, skills and technique of beginning ballet for the non-dance major.

**PEAC 10601 Beginning Swimming.** Emphasis on stroke development and water safety designed for the non-swimmer.

**PEAC 10611 Intermediate Swimming.** Individual stroke development, conditioning and water safety. American Red Cross standards maintained with emphasis on improving swimming skills.

**PEAC 10622 Lifeguarding and CPR.** Knowledge and skill development for life guarding in accordance with American Red Cross standards. Lifesaving and CPR test and certification for those meeting required standards.

**PEAC 10631 Water Safety Instructor's Course.** Lifesaving skills as well as a training program for students who want to teach swimming. Prerequisite: Current Red Cross Advance Life-saving Certificate and strong execution of swimming skills.

**PEAC 10651 Scuba Diving.** Skill and safety instruction for underwater swimming and snorkeling. Equipment safety, rules of diving, skills and recreational benefits. Certification available.

**PEAC 10671 Water Polo.** Fundamental skills, rules and offensive tactics of water polo. Conditioning and game situations.

**PEAC 10691 Swim Conditioning.** Physical conditioning through aquatic activities. Concepts of swim conditioning and endurance as well as stroke improvement.

**PEAC 10711 Badminton.** Skill, techniques of play and competitive strategies of badminton. Singles and doubles play.

**PEAC 10721 Racquetball.** Fundamental skills, rules, basic shots, game strategies, equipment and safety of racquetball.

**PEAC 10731 Advanced Racquetball.** Continuation of racquetball. Prerequisite: PEAC 10721 or equivalent experience.

PEAC 10741 Beginning Tennis. Fundamental skills, basic strokes, rules, strategies and game play of tennis.

**PEAC 10751 Intermediate Tennis.** Review of basic tennis skills as well as development advanced strokes, strategies and game play in both singles and doubles. Prerequisite: PEAC 10741 or equivalent experience.

**PEAC 10761 Advanced Tennis.** Refinement of advanced techniques and strategies of tennis. Prerequisite: PEAC 10751 or equivalent experience.

**PEAC 10771 Beginning Golf.** Fundamental skills of swing, stance, and basic club use, putting and practice in course play.

**PEAC 10781 Advanced Golf.** Emphasis will be on skill and stroke improvement with individual assistance in game play.

PEAC 10801 Fundamentals of Bowling. Basic skills rules and strategies of bowling.

**PEAC 20031 Team Sports.** Fundamental knowledge and the development of skills associated with selected team sports.

# Social Work

Admission to advanced standing in the department and field education Honors Program
Honor Society,
Interdisciplinary Studies
Licensing
NASW/TCU
Pass/No Credit Option
Study Abroad Policy
Transfer Credit Policy
Requirements for the B.S. in Social Work degree
A minor in Social Work
Courses of Instruction

## (SOWO)

Social Work is available as a major on the B.S. in Social Work (B.S.S.W.) degree. It is also available as a double major on the B.S. degree and as a minor on most degrees.

The TCU Department of Social Work does not discriminate on the basis of age, gender, race, color, ethnicity, national origin, handicap, veteran status, political beliefs, or sexual orientation.

Social work is one of the human service professions. Social workers help individuals, groups or communities solve or relieve life problems using a variety of professional skills. The educational program integrates liberal arts courses with preparation for professional practice. The primary objective of the department is to prepare students as generalists for entry to the beginning level of social work practice. An additional objective is to prepare students for admission to graduate schools of social work (eligible for advanced standing in most masters degree programs).

The curriculum includes content in Social Welfare Policy and Services; Human Behavior and the Social Environment; Social Work Practice; Research; and Field Education. It focuses on values and ethics, populations at risk and diversity. Concurrent with their academic work, students are provided service learning opportunities and, during the senior year, two consecutive semesters of field education (internship) in a public or private social agency selected in accord with the students area of social work interest and educational needs.

**Accreditation.** The Department of Social Work and the social work major (not the minor) are fully accredited at the baccalaureate level by the Council on Social Work Education (C.S.W.E.).

## Admission to advanced standing in the department and field education

Students may declare the social work major at any time. Admission to advanced standing in the department and field education requires that students have attained junior status; have a 2.25 or higher overall GPA; complete a minimum of 9 hours of social work courses including 20833, have a 2.5 GPA in social work and have a C or better in all social work (SOWO) courses; make written application and receive faculty approval based on the application and a student-faculty conference (Junior Evaluation) to evaluate readiness for field education. Field Education may be postponed or denied if the faculty find the student insufficiently prepared or lacking required knowledge, skills, or values.

## **Honors Program**

Social Work majors who plan Departmental Honors must be members of the Honors Program and should enroll in SOWO 30003 during the spring semester of their junior year and SOWO 40003 during the fall semester of their senior year.

### **Honor Society**

The department sponsors the Iota Xi chapter of Phi Alpha, the national Social Work Honor Society. Membership is open to students who achieve a 3.0 overall GPA and a 3.25 GPA in social work.

## **Interdisciplinary Studies**

Students may undertake an interdisciplinary program with a double major in Social Work and another field, even when different degrees are involved (e.g., B.A. and B.S.). Programs such as Social Work and Religion Studies, Social Work and Psychology, and others require faculty advisers in both fields to coordinate course and degree planning.

## Licensing

Students are eligible to be licensed as social workers in Texas upon graduation. Licensing is generally transferable to other states. All students will sit for the Texas State licensing examination prior to graduation.

#### NASW/TCU

This organization exists for student professional development, sociability, information sharing, and carrying out service projects of interest to members.

#### Pass/No Credit Option

All courses in the major (SOWO) must be taken on letter grade system unless specifically noted as Pass/No Credit. Other courses including those in a minor may be taken Pass/No Credit. However, students may take no more than a total of 12 credits (excluding those offered in Social Work as Pass/No Credit) under the Pass/No Credit option.

## **Study Abroad Policy**

Students are encouraged to study abroad. The Department of Social Work requires that students take SOWO

30883 in the spring semester prior to entering Field Education at TCU, so students need to schedule study abroad accordingly.

## **Transfer Credit Policy**

Most UCR and related coursework from accredited universities will transfer. Social work courses from CSWE accredited social work programs will be accepted toward the social work degree. However, practice courses (SOWO 30883, 30893, 40883, 40893) must be taken at TCU. If taken at another school, practice courses will transfer as electives.

#### Requirements for the B.S. in Social Work degree

Requirements for the B.S. in Social Work degree total 124 semester hours and include:

**Three hours of human biology:** BIOL 10003 Contemporary Issues in Human Biology (may be applied to the UCR).

Three hours of statistics: MATH 10043 (may be applied to the UCR).

Three hours of psychology: PSYC 10213 General Psychology (may be applied to the UCR).

## Foundation Courses, 9 semester hours including:

SOCI 20213 Introduction to Sociology **or** SOCI 20223 Social Problems ANTH 20623 Introductory Cultural Anthropology **or** SOCI 30443 American Minority Groups SOWO 20833 Introduction to Social Work

#### Social Work Courses, 42 semester hours:

SOWO 30843 Human Behavior and the Social Environment I SOWO 30853 Human Behavior and the Social Environment II SOWO 30863 Issues in Social Welfare Policy SOWO 30883 Generalist Practice with Individuals SOWO 30893 Generalist Practice with Communities SOWO 40813 Research Methods in Social Work SOWO 40883 Generalist Practice with Diverse Populations SOWO 40893 Generalist Practice with Groups and Families SOWO 40886 Field Education I SOWO 40896 Field Education II

and 6 hours chosen from SOWO electives

Associated Requirements. Students must complete a minor or second major.

#### Electives:

SOWO 10533 Freshman Seminar in Social Work SOWO 30513 Professional Communication for the Human Services SOWO 30523 Addictions SOWO 30533 Counseling Skills and Crisis Intervention in the Criminal Justice System SOWO 30543 Family Health SOWO 30553 Social Work with Adolescents SOWO 30573 Child Welfare SOWO 30580 International Study in Social Work SOWO 30583 Issues in Diversity SOWO 40510 Directed Study in Social Work SOWO 40513 Social Work Ethics SOWO 40520 Contemporary Topics in Social Work SOWO 40523 Law and Social Work SOWO 40533 Advanced Generalist Practice with Families SOWO 40543 Gerontological Social Work SOWO 40563 Death and Dying

## A minor in Social Work

A minor in Social Work requires 18 hours of Social Work courses including 20833; 30863; and 30843 or 30853. Additional courses are to be selected from the Social Work curriculum excluding 40886 and 40896.

## **Courses of Instruction**

**SOWO 10533 Freshman Seminar in Social Work.** Topics may vary each time it is offered.

**SOWO 20833 Introduction to Social Work.** Introduces students to the social work profession including its historical development and process of professionalization. Discusses the knowledge, value, and skill components of social work practice, the variety of practice settings, and the types of client populations served. The course will include a service learning component in a local social service agency.

**SOWO 30003 Honors Tutorial in Social Work.** An examination of an issue affecting the social work profession or a field or method of social work practice determined in consultation with an instructor. This course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

**SOWO 30513 Professional Communication for the Human Services.** Prerequisites: SOWO 20833 or permission of the instructor. Developing effective communication as a professional social worker is the goal of this course. Emphasis is on writing skills necessary in professional practice although oral communication also is stressed.

The course requires written exercises submitted for review and rewritten to reflect ongoing professional development.

**SOWO 30523 Addictions.** Definitions and various forms of addiction; biological, psychological, social and family changes resulting from addiction; and intervention strategies. Emphasis is on how social workers use this information to address the problems of addiction through social work intervention with clients.

**SOWO 30533 Counseling Skills and Crisis Intervention in the Criminal Justice System.** An examination of theories and methods of professional intervention with emphasis on those professionals with clients in the criminal justice system. Focus is on the development of skills which can be applied to individuals, families, and groups in both community-based and institutional settings. This course is primarily for Criminal Justice majors and Social Work minors. (Offered as CRJU or SOWO credit.)

**SOWO 30543 Family Health.** Provides an introduction to family systems theory, family dynamics and their application to practice in nursing and allied health disciplines. Emphasis is on family assessment. Family diversity, families with a chronically ill or disabled member and informal caregiving are examined. Students will critically evaluate family health practices, including hospice, home-based care, and families in crisis. (Offered for NURS or SOWO credit.)

**SOWO 30553 Social Work with Adolescents.** Prerequisite: SOWO 20833 or permission of instructor. The problems and stresses of biological, psychological and social changes affecting adolescents are discussed. Emphasis is on how social workers use this information to address the problems of adolescent clients through intervention.

**SOWO 30573 Child Welfare.** Prerequisite: SOWO 20833. The social welfare system as it affects children in American society. The historical development of the system, the existing structure and the processes through which present policies have been established. Child welfare agencies and programs, principles and policies on which children's services are based, social and legislative issues relevant to children and children's programs, and specific techniques for working with children are included.

**SOWO 30580 International Study in Social Work.** Provides the opportunity for students to study the language, culture and social service delivery system of Mexico. Students will participate in the Language Center Summer Courses Program of the University of Guanajuato.

**SOWO 30583 Issues in Diversity.** This course helps students distinguish between myth and reality about cultural, ethnic, gender, sexual orientation, age and ability differences by thinking critically about diversity. Applications to American and global societies are made and experiential content is stressed.

**SOWO 30843 Human Behavior and Social Environment I.** Prerequisite: SOWO 20833. Theories of human development and functioning within societal and family contexts. The life cycle of the individual from conception to adulthood. Theories of diversity and problem behavior. Effects of ethnicity, gender, ability, sexual orientation, lifestyle, socioeconomic status, age marginality and oppression on human development and social functioning.

**SOWO 30853 Human Behavior and Social Environment II.** Prerequisite: SOWO 20833. Theories of human development and functioning within societal and family contexts. The life cycle of the individual from adulthood to old age. Theories of diversity and problem behavior. Effects of ethnicity, gender, ability, sexual orientation, lifestyle, socioeconomic status, age, marginality and oppression on human development and social functioning.

**SOWO 30863 Issues in Social Welfare Policy.** The historical development of social welfare policies in the U.S. Major legislative enactments which established the existing welfare structure. Social, economic, and political factors influencing the development of policy. Analysis of social welfare issues currently facing the U.S.

**SOWO 30883 Generalist Practice with Individuals.** Prerequisites: SOWO 20833, and 30863 or permission of the instructor. Knowledge, skills and value base used in the generalist practice of social work. Ecological approach using concepts, principles, and system perspectives applicable to a range of problem-solving situations requiring social work intervention. Individual, group and community interventive methods are presented. Study of case material and role playing exercises. Must be taken in the spring semester immediately prior to enrollment in SOWO 40886: Field Education I. If students postpone Field Education I, they are required to audit SOWO 30883 prior to entrance into the internship.

**SOWO 30893 Generalist Practice with Communities and Organizations.** Prerequisites: SOWO 20833, 30863. That practice aspect of social work concerned with the organization, planning and administration of social work services (as distinguished from provision of services directly to clients), and with the analysis and evaluation of policy and practice within the profession.

**SOWO 40003 Senior Honors Research Project.** Offered fall only. A supervised research experience culminating in the writing of a research paper typically based on the subject matter studied in SOWO 30003. The course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

**SOWO 40510 Directed Study in Social Work.** Designed for students who undertake readings or projects in social work in consultation with an instructor. Offered on a Pass/No Credit basis only.

**SOWO 40513 Social Work Ethics.** This course helps students become more aware of the ethical base of social work practice and strengthen their commitment to ethical behavior in impending practice and collegial relationships.

**SOWO 40520 Contemporary Topics in Social Work.** Topics of current interest in social work. Possibilities include Crisis Intervention, Suicide, Discrimination, Play Therapy, Intervention Techniques, AIDS, and Social Work with Special Client Populations.

**SOWO 40523 Law and Social Work.** Aspects of law relevant to social work practice: family relationships, legal offenders, the mentally ill, consumer protection, what constitutes negligence and malpractice by the social worker, law and ethics of confidentiality, collaboration with the legal profession and related issues.

**SOWO 40533 Advanced Generalist Practice with Families.** Prerequisite: SOWO 30883, or permission of instructor. The family as a system for social work intervention. Family forms, theories of family interaction, models of family intervention, and interventive skills are considered.

SOWO 40543 Gerontological Social Work. Provides an opportunity to explore practice with older adults and their

families. Explores direct practice roles, selected practice settings, and social policy issues.

**SOWO 40563 Death and Dying.** This course will give students an opportunity to explore and understand their perceptions and beliefs of death and dying and how individual cultural differences influence that experience and will prepare them for working with clients on grief and loss.

**SOWO 40813 Research Methods in Social Work.** Must be taken concurrently with SOWO 40886. Examines research methods to help students understand how social workers conduct research and how they use and evaluate research findings. Applications to practice are made. Focus is on evaluating practice and assessing the effectiveness of programs. Students are taught to do research and to be consumers of research.

**SOWO 40883 Generalist Practice with Diverse Populations.** Prerequisite: SOWO 40893, to be taken concurrently with SOWO 40896. Study of social work practice theory, methods, and skills for working with diverse and oppressed populations. Concepts and principles related to culturally competent practice in a range of situations will be covered. Case materials and role playing exercises are included.

**SOWO 40886 Field Education I.** Prerequisites: SOWO 20833, 30843, 30853 and 30883; 2.25 GPA; 2.5 GPA in social work; faculty approval. Supervised field learning within a social work agency, providing the student an opportunity to learn the structure, function, and policies of social work agencies and apply his or her social work knowledge to the development of skills in human service delivery. The student will spend 16 hours per week for 15 weeks in an assigned agency (240 hours). Students also attend a weekly university-based seminar which helps students integrate classroom and field learning.

**SOWO 40893 Generalist Practice with Groups and Families.** Prerequisite: SOWO 30883 or permission of the instructor, must be taken concurrently with SOWO 40886. A continuation of the study of the methods, skills, and value base used in the practice of social work. Concepts and principles applicable to a range of situations requiring social work intervention to deepen understanding of the interventive process with groups and families. Further study of case material and role playing exercises is included.

**SOWO 40896 Field Education II.** Prerequisites: SOWO 40886; 2.25 GPA; 2.5 GPA in social work. A continuation of SOWO 40886: Field Education I which helps to extend and deepen, under professional guidance, the development of practice skills with clients. The student will spend 16 hours per week for 15 weeks in an assigned agency (240hours). Students also attend a weekly university-based seminar which helps students integrate classroom and field learning.

# College of Science and Engineering

Organization
Degree Programs
The Bachelor of Arts Degree
The Bachelor of Science Degree
Multiple Majors
Transfer Credit
Pass/No Credit Option

#### Overview

The College of Science and Engineering was formed in 2000 when AddRan College of Arts and Sciences was reorganized into the College of Science and Engineering and AddRan College of Humanities and Social Sciences. Composed of the departments of Biology, Chemistry, Computer Science, Engineering, Geology, Mathematics, Nutritional Sciences, Physics and Astronomy, and Psychology, the goals of the college are to support the mission of the University; to integrate the research and undergraduate teaching missions; to prepare majors for careers and further study in science, mathematics, and engineering; to assist in the preparation of highly qualified K-12 mathematics and science teachers; and to provide experiences for all TCU students that will facilitate their becoming and continuing to be scientifically and mathematically literate citizens.

The college offers Bachelor of Science degrees with majors in 19 fields of study and Bachelor of Arts degrees with majors in 6 fields. The college also administers the Bachelor of General Studies degree. In conjunction with the Program in Ranch Management, a program leading to the B.S. degree with a major in Ranch Management is available through the College of Science and Engineering. Students in the degree program are advised by a designated representative of the dean of the college and should consult with the advisor early in their degree program. Minors are available in 14 fields.

The college is responsible for the Pre-Health Professions programs (pre-dentistry, pre-medicine, pre-veterinary medicine). The college also works in conjunction with the School of Education to offer a 3-2 program leading to a Master of Education degree and with the School of Business to offer a 3-2 program leading to a Master of Business Administration.

Sid W. Richardson houses departmental offices of Chemistry, Geology, and Physics and Astronomy. Biology and Psychology are in Winton-Scott Hall. Nutritional Sciences are in the Annie Richardson Bass Building. College administrative offices and departmental offices for Computer Science, Engineering, and Mathematics are located in the Tucker Technology Building.

## Organization

The College of Science and Engineering is organized into 9 departments.

## **Departments:**

Biology Chemistry Computer Science Engineering Geology Mathematics Nutritional Sciences Physics and Astronomy Psychology

## Interdepartmental programs:

Environmental Earth Resources (Geology) Environmental Science (Biology and Geology) Neuroscience (Psychology) Pre-Health Professions Ranch Management

## **Cooperative programs:**

Master of Education (3-2 program with School of Education)
Master of Business Administration (3-2 program with M.J. Neeley School of Business)

#### **Degree Programs**

The College of Science and Engineering administers programs which lead to the following baccalaureate degrees:

**The Bachelor of Arts** degree with majors in the following fields:

Biology Chemistry Geology Mathematics Physics Psychology

The Bachelor of Science degree with majors in the following fields:

Astronomy and Physics Biochemistry (Chemistry)

Biology Chemistry Combined Science (Pre-Health Professions) Computer Information Technology (Computer Science) Computer Science Dietetics (Nutritional Sciences) Engineering Environmental Science (Biology and Geology) Environmental Earth Resources (Geology) Food Management (Nutritional Sciences) Geology Mathematics Neuroscience (Psychology) Nutrition (Nutritional Sciences) Psychology Ranch Management

#### The Bachelor of General Studies degree

#### Minors

Astronomy
Biology
Chemistry
Combined Science
Computer Information Technology
Computer Science
Environmental Science
Geology
Health Care Ethics
Mathematics
Nutrition
Physics
Psychology
Ranch Management

Minors for students majoring in the College of Science and Engineering are also accepted from AddRan College of Humanities and Social Sciences, the College of Fine Arts, the College of Communication, School of Education, the School of Business (General Business), and the College of Health and Human Sciences.

## The Bachelor of Arts Degree

Students pursuing a program leading to a Bachelor of Arts degree must complete a minimum of 124 semester hours, 42 of which must be advanced (30000 level or above) from TCU, with a major and a minor selected from the approved list of majors and minors. The specific number of hours required for the major and minor may be found in the appropriate section of this Bulletin.

In addition, students must complete the following UCR for the Bachelor of Arts degree:

#### I. Foundations: 9 credit hours

The Foundations requirements, which include courses to refine and enhance skills in critical reading, written composition, and mathematics, allow students beginning the undergraduate curriculum to increase their proficiency in these essential skills.

A. The Writing Requirement-6 credit hours, and the Writing Emphasis Experience.

## 1. Writing Workshop-6 credit hours

This requirement is to be met by courses designated "Writing Workshop," with no more than 3 of these hours in freshman-level study. Writing Workshop courses assume the student's successful completion of four units of high school English.

This requirement is to be met by at least one course in various modes of composition, including analytical writing and research techniques and writing. Both writing courses are to include a reading component providing composition models of suitable kinds. Student writing in these courses is expected to increase competence in grammar, mechanics, and other conventions customary in written discourse.

AP or CLEP credit may satisfy up to 6 hours of the writing requirement.

## 2. Writing Emphasis Experience

To allow juniors and seniors to increase their writing skills, the University Curriculum includes a writing emphasis component.

This requirement, which ordinarily should not increase the credit hours required by the University Curriculum, is to be satisfied by two upper-division courses (3 credit hours for each) with a "writing emphasis" designation. Because any academic unit of the University may offer courses with a writing emphasis, courses satisfying other baccalaureate degree requirements may also meet the writing emphasis requirement of the University Curriculum. Writing should occur throughout the course and total a minimum of 2,500 words.

#### B. Mathematics-3 credit hours

This requirement is to be satisfied by Department of Mathematics courses at or above the freshman level. Appropriate courses assume the student's successful completion of 3 units of high school mathematics: two in algebra and one in geometry.

AP or CLEP credit may satisfy this requirement.

#### II. Explorations: 42 credit hours

The Explorations requirements assure that all baccalaureate candidates encounter certain broad areas of knowledge. Through this experience, the student will gain knowledge and perspectives by studying various domains of human knowledge and experience.

The Explorations requirements allow no more than 6 credit hours from courses in a single department or in that department's cross-listed courses. This limitation applies regardless of the UCR groups in which the department's course offerings appear. Approved integrative courses are excluded from this restriction.

Satisfactory fulfillment of the Explorations section requires completion of 42 credit hours. The College of Science and Engineering students are required to choose a course that exposes them to a non-U.S. cultural perspective as they fulfill the requirements of this section.

A. Physical and Life Sciences-9 credit hours (NOTE: Courses in mathematics, computer science, and engineering do not satisfy this requirement.)

Six (6) credit hours must be in laboratory courses such as those offered in biology, chemistry, geology, physics, and psychology.

The purpose of the requirement is to include study in scientific disciplines in which observation, deduction, and analytical reasoning are essential methods. The requirement also ensures that students gain an understanding of scientific discoveries achieved by such methods.

Courses meeting this requirement involve observing experimental parameters, recording and interpreting such observations, and drawing conclusions based on appropriate theoretical frameworks. The experimental dimension is to include appropriate mathematical concepts and applications. Students are also required to demonstrate their ability to present such material in a narrative form.

## B. Social Sciences-9 credit hours

The requirement is to be satisfied by courses using the methods of the social sciences. The courses customarily will include study of institutions as they affect individuals and groups. The approach to such study is through disciplines such as economics, political science, and sociology.

## C. Cultural Heritage-15 credit hours

Students must choose at least one course from each sub-section of Section C.

## 1. Religion-minimum of 3 credit hours

Courses satisfying this requirement examine the role of religion in human culture, with this examination directed to a single religion or to a comparative consideration of major religions. These courses include appropriate historical study as well as texts important to the religions.

## 2. Historical Studies-minimum of 3 credit hours

The minimum is to be met by a 3-credit-hour course in U.S. historical studies. Courses meeting this requirement make evident the methods of history. Such courses may be general in their subject matter or specific or topical in focus, but are to encourage the development of a critical and evaluative attitude toward historical texts and sources.

### 3. Critical Inquiry-minimum of 3 credit hours

Courses satisfying this requirement are primarily critical/evaluative in approach. This approach can be applied to modes of inquiry, to methods in various disciplines, or to public issues and contemporary views. These courses make evident the individual's responsibility for making informed decisions.

## 4. Fine Arts-minimum of 3 credit hours

The requirement is to be met by critical and/or historical courses studying one or more of the fine arts (e.g., theater, music, visual arts). Performance courses do not satisfy this requirement.

## D. Language and Literature-9 hours

- 1. Foreign Language-6 hours in the same language at the 20000 level or above satisfy this requirement.
- 2. Oral Communication or Literature-3 hours

#### a. Oral Communication

This requirement is satisfied by courses directed to developing skills in oral communication; to training in clear, logical, and persuasive communication appropriate in various contexts; and to evaluating such communication.

#### b. Literature

Courses satisfying this requirement enable students to learn to analyze and criticize literary texts. These courses are to include appropriate historical, biographical, and ideological materials, and to be developed around a single writer or group of writers, a period, a literary form or genre, and/or critical theories by which the same works are examined by various means.

### III. Physical Education: two credit hours

The Physical Education policies and exceptions listed in Requirements for Graduation in *The Bachelor's Degree* section of this bulletin also apply to the Bachelor of Arts degree.

#### NOTES:

- 1. 6 hours of UCR credits in a given department may be applied to other baccalaureate requirements in that department such as those for major, minor, etc.
- 2. Students transferring to TCU must complete a minimum of 6 hours in Writing Emphasis and 3 hours in Critical Inquiry courses at TCU.
- 3. No more than eight (8) semester hours of Physical Education activity courses may be applied toward graduation requirements.
- 4. Specific courses have been approved to meet the UCR. These courses are so identified in the printed schedule of classes for each term's offerings.
- 5. Foreign Language Requirements: Students who are not native speakers of English may satisfy the foreign language requirement for the B.A. degree by submitting to the English Language Center coordinator a score of at least 600 on the Test of English as a Foreign Language (TOEFL) and at least 5.0 on the Test of Written English (TWE). An oral interview may also be required. No academic credit is granted on this basis, but the requirement to take 6 hours of foreign language at the 20000 level may be waived.

## The Bachelor of Science Degree

Students pursuing a program leading to a Bachelor of Science degree must complete the minimum number of semester hours (typically 124 or 132), 42 of which must be advanced (30000 level or above) from TCU, specified for their particular major. Specific requirements of each major are to be found in the appropriate section of this bulletin. Where a minor is called for, it is to be selected with the assistance of the student's adviser from the list of approved minors.

In addition to the specific requirements, students must complete the following UCR for the Bachelor of Science degree:

#### I. Foundations: 9 credit hours

The Foundations requirements, which include courses to refine and enhance skills in critical reading, written composition, and mathematics, allow students beginning the undergraduate curriculum to increase their proficiency in these essential skills.

- A. The Writing Requirement-6 credit hours, and the Writing Emphasis Experience.
  - 1. Writing Workshop-6 credit hours

This requirement is to be met by courses designated "writing workshop," with no more than 3 of these hours in freshman-level study. Writing workshop courses assume the student's successful completion of 4 units of high school English.

This requirement is to be met by at least one course in various modes of composition, including analytical writing and research techniques and writing. Both writing courses are to include a reading component providing composition models of suitable kinds. Student writing in these courses is expected to increase competence in grammar, mechanics, and other conventions customary in written discourse.

AP or CLEP credit may satisfy up to 6 hours of the writing requirement.

2. Writing Emphasis Experience

To allow juniors and seniors to increase their writing skills, the University Curriculum includes a writing emphasis component.

This requirement, which ordinarily should not increase the credit hours required by the University Curriculum, is to be satisfied by two upper-division courses (3 credit hours for each) with a "writing emphasis" designation. Because any academic unit of the University may offer courses with a writing emphasis, courses satisfying other baccalaureate degree requirements may also meet the writing emphasis requirement of the University Curriculum.

#### B. Mathematics-3 credit hours

This requirement is to be satisfied by Department of Mathematics courses at or above the freshman level. Appropriate courses assume the student's successful completion of 3 units of high school mathematics: two in algebra and one in geometry.

AP or CLEP credit may satisfy this requirement.

## II. Explorations: 42 credit hours

The Explorations requirements assure that all baccalaureate candidates encounter certain broad areas of knowledge. Through this experience, the student will gain knowledge and perspectives by studying various domains of human knowledge and experience.

The Explorations requirements allow no more than 6 credit hours from courses in a single department or in that department's cross-listed courses. This limitation applies regardless of the UCR groups in which the department's course offerings appear. Approved integrative courses are excluded from this restriction.

The College of Science and Engineering students are required to choose a course that exposes them to a non-U.S. cultural perspective as they fulfill the requirements of this section.

A. Physical and Life Sciences-9 credit hours (Courses in mathematics, computer science and engineering do not satisfy this requirement).

Six (6) credit hours must be in laboratory courses such as those offered in biology, chemistry, geology, physics, and psychology.

The purpose of the requirement is to include study in scientific disciplines in which observation, deduction, and analytical reasoning are essential methods. The requirement also ensures that students gain an understanding of scientific discoveries achieved by such methods.

Courses meeting this requirement involve observing experimental parameters, recording and interpreting such observations, and drawing conclusions based on appropriate theoretical frameworks. The experimental dimension is to include appropriate mathematical concepts and applications. Students are also required to demonstrate their ability to present such material in a narrative form.

### B. Social Sciences-9 credit hours

The requirement is to be satisfied by courses using the methods of the social sciences. The courses customarily will include study of institutions as they affect individuals and groups. The approach to such study is through disciplines such as economics, political science, and sociology.

## C. Cultural Heritage-15 credit hours

Students must choose at least one course from each subsection of Section C.

## 1. Religion-minimum of 3 credit hours

Courses satisfying this requirement examine the role of religion in human culture, with this examination directed to a single religion or to a comparative consideration of major religions. These courses include appropriate historical study as well as texts important to the religions.

#### 2. Historical Studies-minimum of 3 credit hours

The minimum is to be met by a 3-credit-hour course in U.S. historical studies.

Courses meeting this requirement make evident the methods of history. Such courses may be general in their subject matter or specific or topical in focus, but are to encourage the development of a critical and evaluative attitude toward historical texts and sources.

## 3. Critical Inquiry-minimum of 3 credit hours

Courses satisfying this requirement are primarily critical/evaluative in approach. This approach can be applied to modes of inquiry, to methods in various disciplines, or to public issues and contemporary views. These courses make evident the individual's responsibility for making informed decisions.

### 4. Fine Arts-minimum of 3 credit hours

The requirement is to be met by critical and/or historical courses studying one or more of the fine arts (e.g., theater, music, visual arts). Performance courses do not satisfy this requirement.

#### D. Languages and Literature-9 credit hours

If any foreign language credit is used toward this requirement, 6 hours must be taken in the same language.

- 1. Foreign Language-Foreign language courses at or above the freshman level satisfy this requirement. AP or CLEP credit may also be applied.
- 2. Oral Communication or Literature-If foreign language credit is used, the remaining 3 credit hours are to be selected from oral communication or literature; otherwise, the 9 hours are to come from oral communication and literature courses.
  - a. Oral Communication This requirement is satisfied by courses directed to developing skills in oral communication; to training in clear, logical, and persuasive communication appropriate in various contexts; and to evaluating such communication.
  - b. Literature Courses satisfying this requirement enable students to learn to analyze and criticize literary texts. These courses are to include appropriate historical, biographical, and ideological materials, and to be developed around a single writer or group of writers, a period, a literary form or genre, and/or critical theories by which the same works are examined by various means.

#### III. Physical Education: 2 credit hours

The Physical Education policies and exceptions listed in Requirements for Graduation in *The Bachelor's Degree* section of this bulletin also apply to the Bachelor of Science degree.

#### NOTES:

- 1. Six (6) hours of UCR credits in a given department may be applied to other baccalaureate requirements in that department such as those for major, minor, teaching specialty, etc.
- 2. Students transferring to TCU must complete a minimum of 6 hours in Writing Emphasis courses at TCU.
- 3. No more than eight (8) physical activities courses may be applied toward graduation requirements.
- 4. Specific courses have been approved to meet the UCR. These courses are so identified in the printed schedule of classes for each term's offerings.
- 5. Foreign Language Requirements: Students who are not native speakers of English may satisfy the foreign language requirement for the B.S. degree by submitting to the English Language Center coordinator a score of at least 600 on the Test of English as a Foreign Language (TOEFL) and at least 5.0 on the Test of Written English (TWE). An oral interview may also be required.

## **Multiple Majors**

Students with a first major in Science and Engineering may declare an additional major in lieu of or in addition to a minor on either a B.A. or B.S. degree. The additional major may be selected from the list of Science and Engineering approved majors or may be selected from majors available in other TCU schools and colleges. Students seeking an additional major in a school or college other than Science and Engineering must have the approval of the dean of Science and Engineering and the dean of the additional major.

Students with a first major in another TCU school or college may select additional majors from those available in Science and Engineering with the approval of the dean of the first major and the dean of Science and Engineering. Students whose first major is in a TCU school or college other than Science and Engineering and who seek a second major from Science and Engineering need only satisfy the UCR requirements of the first major with one exception. If the student is meeting requirements of a Science and Engineering B.A. degree, the language requirement of 6 hours in the same foreign language at or above the 20000 level must be satisfied.

The degree awarded will be that appropriate to the major designated as the first major. All degree requirements for each major must be satisfied. These include all University Curriculum Requirements (UCR) associated with any particular major as well as all associated requirements.

## **Transfer Credit**

Students wishing to take courses at another college or university following their admission to Texas Christian University must receive approval of such courses through the office of the Dean of College of Science and Engineering **before** enrolling in them.

## Pass/No Credit Option

The department of the major controls acceptability of P/NC for studies in both the major and minor, if any. For a specific major, consult the appropriate section of the Science and Engineering section of this Bulletin. The P/NC option is not allowed in any English as a Foreign Language course offered by the English Language Center.

# Biology

Prerequisites
Requirements for the B.S. degree with a major in Biology
Requirements for the B.A. degree with a major in Biology
Requirements for a minor in Biology
Honors Program
Sigma Xi
Pass/No Credit Option
Courses of Instruction

#### (BIOL)

Available as a major or minor on the B.A. and B.S. degrees.

The B.A. is provided for the student who has a general interest in the biological sciences but who does not plan to pursue advanced work in graduate school or undertake professional achievements in biological sciences. Students who may plan a graduate program in biological sciences should enroll in the B.S. curriculum. Those who plan to apply to a medical college, dental college, or other professional program must meet additional requirements of such schools.

#### **Prerequisites**

Biology 10504-10514 or the equivalent are prerequisites to all other courses in the department except 20204-20214, 20233, 30233, 30613, and 30803. Credit will not be given for both 20233 and 30303.

## Requirements for the B.S. degree with a major in Biology

A minimum of 36 semester hours in Biology as follows: (1) BIOL 10504 and BIOL 10514, (2) BIOL 30403, (3) BIOL 30603, (4) BIOL 40021, (5) 21 additional hours in Biology including a minimum of 3 courses with laboratories (one of which may be either BIOL 40033, 40803 or 40900.) **Associated requirements:** CHEM 10113, 10123, 10122, 30122, and 30133; PHYS 10153, 10151, 10163, 10161; MATH 10043 or MATH 10524; additional courses in mathematics, computer science or statistics are encouraged. The total semester hours for the B.S. degree is 132.

## Requirements for the B.A. degree with a major in Biology

A minimum of 27 semester hours of Biology as follows: (1) BIOL 10504 and 10514, (2) BIOL 30403, (3) BIOL 30603, (4) BIOL 40021, (5)12 additional approved hours in Biology including a minimum of 2 courses with laboratories (excluding BIOL 40033, 40803, and 40900). Students who do not present credit for a high school course in chemistry will take one year of college chemistry. One year of high school or college physics is also advised. A total of 124 semester hours is required.

### Requirements for a minor in Biology

A minimum of 21 semester hours of Biology including a minimum of three upper division (30000 or above) courses.

**For the Combined Science minor on the B.A. degree**, the following courses may be applied: Biology 10504-10514, 20204, 20214, 20233 (or 30303), 30104, 30504, 30603, 40223.

## **Honors Program**

Biology majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in BIOL 40001 during their junior year and BIOL 40033 during the fall semester of their senior year. They will be given an incomplete in BIOL 40033 during the end of the fall semester, and will receive credit for the course in the spring after successfully completing a senior honors research project.

#### Sigma Xi

The department is a sponsor of Sigma XI, the Honor Society for Research in the Natural Sciences.

#### Pass/No Credit Option

Courses for the major (including associated requirements) and the minor may not be taken on a Pass/No Credit basis. The only exception is  $Biol\ 30011$ .

#### **Courses of Instruction**

**BIOL 10003 Contemporary Issues in Biology.** Two hours lecture and one two-hour laboratory period per week. A study of biology spanning contemporary issues in the biological sciences from the cellular and molecular to the ecosystem levels of biological organization. Laboratory experiences will utilize the biology computer lab for many of the laboratory exercises. Traditional laboratory exercises will also be included. Designed for non-science majors. Credit may not be earned for BIOL 10003 and any of the following biology courses: 10103, 10113, or 10213.

**BIOL 10213 Biological Concepts and the Human Experience.** Three hours lecture/discussion per week introducing students to the basic biological concepts underlying contemporary issues experienced by human beings. The course cannot be used for biology major credit or be substituted for the following biology courses: BIOL 10103, 10113, 10504 and 10514.

BIOL 10433 Freshman Seminar in Biology. Topics may vary each time it is offered.

**BIOL 10504 Principles of Life Sciences.** Three hours lecture and one laboratory per week. Prerequisite: A senior high school course in Biology or Chemistry. Origin of the universe and evolution of life forms the molecular level to

- the eukaryotic cell. Introduces the basic principles of cell structure, metabolism, Mendelian and quantitative genetics. This course is prescribed for each student declaring a major interest in Biology, Premedical or Predental programs.
- **BIOL 10514 Principles of Life Sciences.** Three hours lecture and one laboratory per week. Prerequisite: BIOL 10504. Evolution of plants and animals with an introduction to principles of natural selection, population genetics, taxonomy, anatomy and physiology. This course is prescribed for each student declaring a major interest in Biology, Premedical or Predental programs.
- BIOL 10970 Special Problems: Lower Division. Special problems.
- **BIOL 20204 Anatomy and Physiology.** Three hours lecture and one laboratory period per week. The structure and function of cells and tissues; the architectural plan of the human body, and the integumentary, skeletal and muscular systems. Not available for students who are Biology majors or minors or are in the pre-medical/predental program.
- **BIOL 20214 Anatomy and Physiology.** Three hours lecture and one laboratory period per week. Prerequisite: BIOL 20204 or permission of instructor. Structure and function of the nervous, circulatory, digestive, respiratory, excretory, reproductive and endocrine systems of the human body. Not available for students who are Biology majors or minors or are in the pre-medical/pre-dental program.
- **BIOL 20233 Basic Microbiology.** Two hours lecture and one laboratory period per week. Microorganisms and the manner in which they affect health; characteristics, growth requirements, methods of transfer, and reactions of the body toward invading organisms and the principles underlying immunity. Not available for students who are Biology majors or minors or are in the pre-medical/pre-dental program.
- **BIOL 30003 Biological Issues in Public Health.** Prerequisites: BIOL 10504 and 10514. Examination of the biological basis behind a variety of current issues in public health. Critical analysis of these issues through lectures, class discussion and debate.
- **BIOL 30104 Comparative Invertebrate Zoology.** Three hours lecture and one laboratory period per week. Advanced study of ecology, phylogeny, and comparative morphology of invertebrate animals.
- **BIOL 30124 Biology of the Vertebrates.** Three hours lecture and one laboratory per week. Systematics, evolution, distribution, life histories and special adaptations of the vertebrate animals.
- **BIOL 30233 Economic Botany.** Prerequisite: 10504, 10514. The economic importance of plants for food, building, material, clothing, fuel, medicine, oils, dyes and other products.
- **BIOL 30303 Microbiology.** Prerequisite: CHEM 10113-10123, or CHEM 10114-10124. A general course in microbiology. Two hours lecture and one laboratory period per week.
- **BIOL 30323 Introduction to Marine Science.** Three hours of lecture per week. A study of the oceans including physiography, chemical, physical, biological, and geological processes and related products. (Offered as BIOL or GEOL credit.)
- **BIOL 30403 Ecology.** Prerequisites: BIOL 10504-10514. Three hours lecture per week. Principles of plant and animal ecology with introduction to terrestrial and aquatic ecosystems.
- **BIOL 30404 Comparative Vertebrate Anatomy.** Two hours lecture and two laboratory periods per week. A comparative study of the morphology systems of chordates.
- **BIOL 30463 Physiological Psychology.** Three lectures per week. Prerequisite: PSYC 10213, 10514, 10524 or its equivalent. Study of the nervous system, action systems, and sensory systems as background for the physiological bases of discrimination, motivation, emotions, and learning. Also offered as Psychology 30463.
- **BIOL 30504 Plant Biology.** Three hours lecture and one laboratory period per week. Study of the morphology, life history, physiology, ecology, evolution and socio-economic aspects of plants./ Coverage includes the cyanobacteria, fungi and algae.
- **BIOL 30603 Cellular, Molecular, and Developmental Biology.** Prerequisites: BIOL 10504-10514. Three hours lecture per week. Basic structure and function of plant and animal cells; molecular genetics of cells and organisms; mechanisms governing cell reproduction and differentiation.
- **BIOL 30613 Natural History.** Two hours lecture and one hour of laboratory per week. A survey of some of the diverse habitats and lifeforms on earth, with an emphasis on North American ecosystems. Arctic tundra, forests, swamps, aquatic habitats, deserts, and mountains are considered in light of the unique adaptations required for associated fauna and flora, and especially, some of the challenges they face in the modern world. The course is designed for students with broad interests in science, especially environmental science and education majors and is also suitable for non-science majors.
- **BIOL 30703 Plant Systematics.** Two hours lecture and one laboratory period per week. Characteristics of the major groups and families of flowering plants. Basic history and general principles of taxonomy and fundamental concepts of phylogeny and plant evolution. identification of plants represented in the local flora.
- **BIOL 30803 History of Biology.** The course traces the origin and historical development of basic concepts in biology, including the background and the work of persons who significantly contributed to the understanding and formulation of biological concepts.
- BIOL 40001 Honors Seminar, Honors Seminar,
- BIOL 40011 Honors Seminar. Honors Seminar.
- **BIOL 40021 Introduction to Biological Research.** One hour lecture per week acquainting students with the diversity of research approaches and techniques used in the field of biology. All students enrolled in the course will

- take the Major's Field Test in Biology. Prerequisites: BIOL 10504, 10514, 30403 and 30603.
- BIOL 40033 Senior Honors Research in Biology. Senior honors research in Biology.
- **BIOL 40123 Genetics.** Prerequisites: BIOL 10504-10514, 30603; CHEM 10113, 10123, 10122 OR 10114, 10124, 30123 or concurrent enrollment. Three hours of lecture per week. Survey course in the study of mechanisms of inheritance with particular emphasis on molecular genetics.
- **BIOL 40133 Molecular Biology of Eukaryotes.** Prerequisites: BIOL 10504-10514, 30603; CHEM 30123 (or concurrent enrollment) or permission of instructor. Two hours of lecture and one laboratory period per week. A study of the molecular mechanisms of basic biological processes in eukaryotes with emphasis on gene regulation, the structure and function of macromolecules, cell growth and differentiation, mechanisms of diseases and applications in biotechnology.
- **BIOL 40142 Genetics Laboratory.** Two three-hour laboratories each week. Prerequisites: BIOL 30603 and 40123. Experiments that illustrate the basic principles of transmission and molecular genetics.
- **BIOL 40203 Histology.** Prerequisite: BIOL 30603 or permission of the instructor. Two hours lecture and one laboratory period per week. Study of basic tissues of the vertebrate body and how they differentiate.
- **BIOL 40223 Developmental Biology.** Prerequisite: BIOL 30603 or permission of the instructor. Two hours lecture and one laboratory period per week. An introduction to developmental biology and embryology. Modern molecular and genetic techniques will be combined with classic anatomical embryology.
- **BIOL 40253 Immunology.** Prerequisites: CHEM 30123, BIOL 30303 or 20233 or permission of instructor. Two hours lecture and one laboratory period per week. The immune system; characteristics of antigens; antibodies and their reactions; cellular and humoral aspects of immunity; immune disorders.
- **BIOL 40300 The Teaching of Biology.** Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students attend laboratory-staff meetings and serve as laboratory instructors of one section per week in various courses. For 1.5 semester hours credit.
- **BIOL 40303 Histogenesis.** Prerequisite: BIOL 30603. Three hours lecture per week on molecular mechanisms in stem-cell and tissue differentiation.
- **BIOL 40310 The Teaching of Biology.** Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students attend laboratory-staff meetings and serve as laboratory instructors of one section per week in various courses. For 1.5 semester hours credit.
- **BIOL 40404 General Animal Physiology.** Three hours lecture and one laboratory period per week. Prerequisites: PHYS 10153-51, 10161-61, and CHEM 30123, 30122, 30133, or permission of instructor. Basic functions of animal bodies will be studied in terms of physical and chemical principles; quantitative physiological experiments will be demonstrated and conducted.
- **BIOL 40501 Basic Biochemistry Laboratory.** See Chemistry Prerequisite: Prior completion or co-registration in BIOL 40503. One three-hour laboratory per week. Analysis of chemicals found in body fluids. Includes clinical methods and pathology.
- **BIOL 40503 Basic Biochemistry.** See Chemistry Prerequisite: CHEM 30123 or equivalent. Three hours lecture per week. Fundamental chemical properties, analysis techniques, metabolism and clinicopathology of proteins, lipids, carbohydrates, enzymes and hormones.
- **BIOL 40603 Virology.** Prerequisites: BIOL 10504, 30603, 40123. Three hours of lecture per week. Survey of viruses, molecular biology of virus life cycles, viral pathogenesis and gene therapy using viral vectors.
- BIOL 40603 Virology. Virology
- **BIOL 40803 Biological Research and Writing.** Field and laboratory research experiences for advanced students. Nine clock hours per week are required total 135 hrs/sem. Upon completion of an independent research project, the results will be written in a format suitable for publication in the scientific literature. Credit will not be given for both BIOL 40803 and BIOL 40900 for the same project. A student may receive credit for this course only one time. Does not substitute for BIOL 40033.
- **BIOL 40900 Senior Problems in Biology.** Field and laboratory problems for advanced students. Nine clock hours per week of laboratory and/or field work are required for each semester hour of credit, for up to a total six semester hours of credit. A student may receive only three hours of credit in the major for this course. Three hours of credit may also be taken for university electives. If a student has been enrolled in or will enroll in BIOL 40033 or BIOL 40803, then only up to three hours of BIOL 40900 may be taken for university elective credits.
- **BIOL 50103 Terrestrial Ecosystems.** Three hours lecture per week. Prerequisite: BIOL 30403 or permission of instructor. Concepts, principles, and mechanisms of the function of terrestrial ecosystems, including ecophysiology of component species, nutrient cycling, energy flow, ecosystem stability and global ecology.
- **BIOL 50133 Biochemistry.** Prerequisite: CHEM 30133, 40113 or permission of the instructor. Three lecture hours per week. A general survey of structure and function of biologically important compounds with methods of analysis. (Offered as BIOL or CHEM credit.)
- **BIOL 50143 Biochemistry.** Prerequisite: CHEM or BIOL 50133. Biosynthesis, replication of DNA, synthesis and processing of RNA and proteins, and special topics e.g. brain and muscle functions, hormones and signal transduction, cancer, development, etc. (Offered as BIOL or CHEM credit.)
- **BIOL 50303 Systematics and Evolution.** Three hours lecture per week. Prerequisite: BIOL 30403. Concepts of classical and numerical taxonomy and the principles of phylogeny, organic evolution and speciation.
- **BIOL 50313 Biogeography.** Prerequisite: BIOL 30403 or permission of instructor. Three hours lecture per week. An ecological approach to the study of the distribution of plant and animal communities.
- BIOL 50324 Techniques in Cell and Molecular Biology. Three hours of lecture and one 3-hour laboratory per

- week. Prerequisite: Concurrent enrollment in BIOL or CHEM 50133 or equivalent and permission of instructor. Survey of techniques central to molecular and cellular biology, including centrifugation, chromatography, electrophoresis, spectrophotometry and radioisotopes.
- **BIOL 50463 Fundamentals of Neuroscience.** Prerequisite: Graduate or senior standing or approval of the instructor. The fundamentals of functional neuroanatomy and neurophysiology with an emphasis on experimental and theoretical analysis of the basic brain behavior relationships. (Offered as BIOL or PSYC credit.)
- **BIOL 50472 Laboratory in Physiological Psychology and Neuroscience.** Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior (Offered as BIOL or PSYC credit)
- **BIOL 50482 Laboratory in Physiological Psychology and Neuroscience.** Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior (Offered as BIOL or PSYC credit)
- **BIOL 50502 Biochemistry Laboratory.** Two four-hour laboratory periods per week. Prerequisite: CHEM 50143 or concurrent registration. (Offered as BIOL or CHEM credit.)
- **BIOL 50602 Preparation of Environmental Impact Statements.** Two laboratory periods per week. The methodology of environmental impact statement preparation from initial collection of data to final report drafting is covered. The course is problem-oriented; students are taught to take the initiative in EIS preparation. (Offered as BIOL or GEOL credit.)
- **BIOL 50703 Ecology of Lakes and Streams.** Prerequisite: BIOL 30403 or permission of instructor. Two hours of lecture and one laboratory period per week. Study of the physical, chemical and biological factors affecting the ecology of lakes, ponds and streams.
- **BIOL 50713 Marine Ecology.** Prerequisite: BIOL 30403 or permission of the instructor. Two hours of lecture and one laboratory per week. A study of marine communities and factors that influence the distribution of marine organisms. At least one field trip to the Texas coast to sample marine communities. Samples collected during the field trip will be analyzed by students in the laboratory.
- **BIOL 50773 Introduction to Environmental Law.** Three hours lecture per week. Introduction to and analysis of selected federal statutes regulating environmental degradation and environmental clean-up, including the National Environmental Policy Act and regulation of air quality, water quality, wastes, hazardous and toxic substances and enforcement. (Offered as BIOL or GEOL credit.)
- **BIOL 50803 Ecology of Fishes.** Prerequisite: BIOL 30403 or permission of instructor. Two hours of lecture and one laboratory period per week. Ecology of fishes, basic techniques of fisheries management.
- **BIOL 50813 Medical Mycology.** Three hours lecture per week. Prerequisites: BIOL 30303 20233, CHEM 30123, 30133, or approval of instructor. Study of the causative etiological agents of the systemic mycoses, their isolation and identification.
- **BIOL 50883 Introduction to Environmental Engineering Technology.** Introduction to fundamentals of pollution control technology; impact of federal and state legislation on the construction, modification and control of industrial plants. Other topics include hazardous pollutants, modification to ambient quality, and basic pollution modeling. (Offered as BIOL or GEOL credit.)
- **BIOL 50903 Tropical Biology.** Two hours lecture per week, one week of field work in the tropics and a terminal project. Prerequisites: Six semester hours in Biology; travel costs are exclusive of tuition; permission of instructors. Systematics and ecology of tropical marine invertebrates and terrestrial vertebrates with emphasis on Cnidarians, Arthropods, Mollusks and Reptiles.
- **BIOL 50910 Biology Seminar.** 1. The primary goal is to acquaint the student with the preparation and presentation (oral and/or written) of scientific information from the biological literature. May be repeated for credit with different topics to a maximum of 3 times (one semester hour per topic). 2. Acquainting the student with the preparation and presentation (oral and/or written) of scientific information from the biological literature. May be repeated for credit with different topics to a maximum of 3 times. (One semester hour per topic.)
- **BIOL 50923 Herpetology.** Two hours lecture and one three-hour laboratories per week. Prerequisite: Permission of the instructor. Classification, laboratory, and field identification and seminars on natural history, ecology, evolution and behavior of reptiles and amphibians.

# Business (3-2 Program)

## Overview

The College of Science and Engineering and M.J. Neeley School of Business offer a combined program leading to a bachelor's degree in Arts and Sciences and a master's degree in Business Administration (MBA). The Three-Two Program, as it is called, takes five years to complete. (Note: Students intending to pursue the 3-2 program should make their plans known, as early as possible, to the Science and Engineering Dean's Office.)

Students interested in the program spend the first three years in Science and Engineering completing the University Curriculum Requirements and meeting the requirements of their major field. During the third year of study, application is made to the MBA program. To be considered for admission, applicants must have completed, or anticipate completing by the end of the third year, a minimum of 100 hours in nonbusiness courses and finished all major requirements and UCR requirements. Applicants must submit the usual application materials, including scores from the Graduate Management Admission Test (GMAT), and must present above-average academic records.

If admitted, a student enters the MBA phase of the Three-Two program in the fourth year of study at TCU. The first year of the MBA meets the minor requirements of the undergraduate degree. After successful completion of the first year of the MBA program, the student may petition the Dean of Science and Engineering to be awarded the undergraduate degree.

Business is available as a minor on the B.A. and B.S. degrees. For requirements, see the School of Business section.

## Chemistry

Requirements for the B.S. Degree with a major in Chemistry.
Requirements for the B.S. Degree with a major in Biochemistry.
Honors Program
Sigma XI
Pass/No Credit Option
Courses of Instruction

#### (CHEM)

Available as a major or minor on the B.A. and B.S. degrees. Biochemistry available as a major on the B.S. degree.

#### Requirements for the B.S. Degree with a major in Chemistry

A minimum of 38 hours, on a 132-hour degree, consisting of CHEM 10113-10123, 10122 (or 10114-10124), 30123-30133, 30122-30132, 40113-40123, 40132, 40091 (2 hours), 50162, 50163, 50282 and with one additional course chosen from 20104, 50133, 40200 (3 hours) or 40003-40013. Professional certification by the American Chemical Society also requires the student to take Chemistry 20104, 50133, and either 40200 (3 hours) or 40003-40013 which results in a minimum of 44 hours of chemistry. **Associated Requirements:** Physics 20473-20471, 20483-20481; Math 10524, 20524, 30224; and Computer Science 10403 (or 10203). Math 30524 is recommended.

## Requirements for the B.S. Degree with a major in Biochemistry

A minimum of 38 hours, on a 132-hour degree, consisting of CHEM 10113-10123, 10122 (or 10114-10124), 30123-30133, 30122-30132, 40091, 40164, 40200 (4 hours, or 40003-40013), 50163, 50133-50143, and 50502. Professional certification by the American Chemical Society requires the student to take Chemistry 20104 and 40113-40123-40132 instead of 40164 which results in a minimum of 46 hours of chemistry. **Associated Requirements:** Biology 10504, 10514, 30603, and one of the following: Biology 40123, 40133, or 40404. Physics 20473-20471, 20483-20481; Math 10524, 20524, and either Math 30803 or Computer Science 10403 (or 10203).

## Requirements for the B.A. Degree with a major in Chemistry.

A minimum of 24 hours normally consisting of CHEM 10113, 10123-10122 (or 10114-10124), 30123, 30122, 40164 (or 40113, 40123, 40132) and suitable electives chosen from 20104, one hour of 40091 or upper level courses with the exclusion of 40503, 50111, and 50120. A total of 124 hours is required for the B.A. dgree. Any minor approved by the College of Science and Engineering is acceptable. The B.A. degree in Chemistry is devised for the student with a general interest in the field who does not plan to pursue advanced work in graduate school or in professional activities. The student planning a professional career in Chemistry is strongly advised to satisfy the requirements of the B.S. degree.

## Requirements for the minor in Chemistry

18 semester hours to include 10113-10123, 10122 (or 10114-10124), 30123-30122, 40164 or 20104.

## **Honors Program**

A student may obtain Department Honors in Chemistry by successfully completing 6 hours of senior honors research (CHEM 40003 and 40013) or three hours of senior honors research plus three hours of study in a course approved by the department as one promoting the student's development as a research scholar. Such a course should be in addition to those normally required to achieve the baccalaureate degree. Requirements also include the writing of a Senior Honors Research paper which is approved by an appropriate committee and the achievement of an overall GPA of 3.5 or greater.

#### Sigma XI

The department is a sponsor of the TCU Chapter of Sigma XI.

## Pass/No Credit Option

Courses to be applied toward the major or minor may not be taken on the Pass/No Credit basis.

NOTE: CHEM 10113-10123 and 10122 provide credit equivalent to CHEM 10114-10124, which are Honors General Chemistry for science majors.

Credit will not be awarded for more than one of the general chemistry sequences (10113-10123-10122 or 10114-10124).

On special occasions, a given prerequisite may be waived at the discretion of the instructor.

## **Courses of Instruction**

**CHEM 10113 General Chemistry.** Three lecture hours per week. Introduction to the principles of chemistry, illustrating the central position of the discipline among the sciences.

**CHEM 10114 General Chemistry (Honors).** Three hours of lecture and one 3-hour laboratory per week. A study of chemical structure, states of matter and chemical dynamics with emphasis on the quantitative nature of the science of chemistry.

**CHEM 10122 General Chemistry Laboratory.** One lecture and one 3-hour laboratory session per week. Prerequisites: CHEM 10113 and prior or concurrent enrollment in CHEM 10123.

**CHEM 10123 General Chemistry.** Three lecture hours per week. Introduction to the principles of chemistry, illustrating the central position of the discipline among the sciences. (Successful completion of CHEM 10113 or the equivalent is a prerequisite for CHEM 10123.)

**CHEM 10124 General Chemistry (Honors).** Three hours of lecture and one 3-hour laboratory per week. A study of chemical structure, states of matter and chemical dynamics with emphasis on the quantitative nature of the science of chemistry.

**CHEM 10163 General Chemistry for Non-Science Majors.** Three hours lecture, and one three-hour laboratory period per week. Topics of interest to students e.g. drugs, AIDS, etc. and national and international problems such as air and water pollution will be examined to understand their chemical origins and potential solutions.

**CHEM 20104 Quantitative Analysis.** Two hours lecture and two laboratory periods per week. Prerequisites: CHEM 10122-10123, or 10124 or permission of instructor. Theory and practice of volumetric and gravimetric analysis; introduction to instrumental analysis.

**CHEM 30122 Organic Chemistry Laboratory.** One hour of lecture and one 4-hour laboratory per week. Prerequisite: CHEM 10122-10123 or 10124 and prior or concurrent registration in CHEM 30123. Techniques of purification, characterization, and synthesis of organic compounds.

**CHEM 30123 Organic Chemistry.** Three hours of lecture per week. Prerequisite: CHEM 10122-10123 or 10124. A survey of the classes of organic compounds with regard to nomenclature, structure, and reactions.

**CHEM 30132 Organic Qualitative Analysis.** One hour of lecture and one 4-hour laboratory per week. Prerequisite: CHEM 30123, 30122 and 30133 or concurrent registration. Chemical and instrumental means of identifying unknown organic substances.

**CHEM 30133 Organic Chemistry.** Three hours of lecture per week. Prerequisite: CHEM 30123. Stereochemistry, organic reaction mechanisms, and synthesis of organic compounds.

**CHEM 40003 Senior Honors Research Project.** A project in chemical research carried out under the direction of a member of the chemistry faculty and designed to partially fulfill the requirements for Departmental Honors in Chemistry. Hours arranged.

**CHEM 40013 Senior Honors Research Paper.** A project in chemical research carried out under the direction of a member of the chemistry faculty and designed to partially fulfill the requirements for Departmental Honors in Chemistry. Hours arranged.

**CHEM 40091 Seminar.** The chemical literature, modern research techniques and recent developments in chemistry may be topics considered. Two semesters of 40091 are required for the B.S. degree with a major in chemistry. Since the course is offered in the Fall semester only, these are normally taken in the Fall semesters of the junior and senior years.

**CHEM 40113 Physical Chemistry.** Three hours lecture per week. Prerequisite: CHEM 10123 or 10124, PHYS 20483 and MATH 30224 or concurrent enrollment. A theoretical study and explanation of a number of the more important physical phenomena as applied to the field of chemistry.

**CHEM 40123 Physical Chemistry.** Three hours lecture per week. Prerequisite: CHEM 10123 or 10124, PHYS 20483 and MATH 30224 or concurrent enrollment. A theoretical study and explanation of a number of the more important physical phenomena as applied to the field of chemistry.

**CHEM 40132 Physical Chemistry Laboratory.** Two 4-hour laboratory periods per week. Prerequisite: CHEM 40123 or concurrent registration. Laboratory experiments designed to establish the principles of physical chemistry and methods of physical chemical measurements.

**CHEM 40164 Introduction to Physical Chemistry.** Three hours lecture and one 4-hour laboratory period per week. Prerequisite: CHEM 10123-10122 or 10124. An introduction to the basic concepts of physical chemistry with particular reference to those aspects important to the biological sciences.

**CHEM 40200 Undergraduate Research.** A project in chemical research carried out under the direction of a member of the chemistry faculty. The student must have permission from the supervising faculty member prior to registration. (1-3 semester hours).

CHEM 40501 Basic Biochemistry Laboratory. Basic biochemistry lab.

**CHEM 40503 Basic Biochemistry.** Biology 40503 Two hours lecture and one laboratory period per week. Prerequisite: CHEM 30123 or equivalent. Fundamental chemical properties of amino acids, proteins, nucleic acids, carbohydrates and lipids. Emphasis is placed on the techniques of analysis of these compounds. Available for chemistry credit only to majors in Nutrition and Dietetics.

**CHEM 50001 Laboratory Safety.** Required of all graduate students in chemistry, this course deals with the safe handling of chemicals, the inventory and safe disposal of chemicals, safe handling of radioactive materials and lasers as well as details of federal, state and city regulations that apply to safety in academic and industrial laboratories. The course is also required of students who will be handling radioactive materials and is highly recommended for all other graduate students in the physical sciences.

**CHEM 50111 Laboratory Glassblowing.** One 4-hour laboratory period per week. An introduction to the preparation of laboratory research equipment constructed of sodium and borosilicate glass.

**CHEM 50120 Teaching of Chemistry.** Prerequisite: Permission of the instructor. Members of this class act as Chemistry laboratory assistants. Techniques of laboratory instruction are illustrated and the importance of laboratory safety is stressed. 1-3 semester hours.

**CHEM 50133 Biochemistry.** Prerequisite: CHEM 30133, 40113 or permission of the instructor. Three lecture hours per week. A general survey of structure and function of biologically important compounds with methods of analysis. (Offered as BIOL or CHEM credit.)

**CHEM 50143 Biochemistry.** Prerequisite: CHEM or BIOL 50133. Biosynthesis, replication of DNA, synthesis and processing of RNA and proteins, and special topics e.g. brain and muscle functions, hormones and signal transduction, cancer, development, etc. (Offered as BIOL or CHEM credit.)

**CHEM 50162 Advanced Inorganic Chemistry Laboratory.** One hour lecture and one 4-hour laboratory per week. Prerequisite: CHEM 50163 or concurrent registration. The laboratory emphasizes the synthesis, characterization and transformations of inorganic species.

**CHEM 50163 Advanced Inorganic Chemistry.** Three hours lecture per week. Prerequisite: CHEM 40123 or permission of the instructor. A survey of topics in modern inorganic chemistry with emphasis on synthesis, bonding and the mechanisms of reactions.

**CHEM 50173 Chemical Instrumentation.** Two hours lecture and one 4-hour laboratory per week. Prerequisite: Prior or concurrent registration in Chemistry 40123. Modern instrumental techniques applied to both inorganic and organic systems. Ultraviolet, infrared and nuclear magnetic resonance spectroscopy, vapor phase chromatography, polarography and various electrochemical methods of analysis are covered.

**CHEM 50182 Biophysical Chemistry Laboratory.** Two 4-hour laboratory periods per week. Prerequisite: Prior or concurrent registration in CHEM 50183. Physical chemical principles applied to biochemical systems.

**CHEM 50183 Biophysical Chemistry.** Three hours of lecture per week. Prerequisite: CHEM 40113 and prior or concurrent registration in CHEM 50143. Biological systems are discussed from the viewpoint of physical chemical theories and methods.

**CHEM 50223 Advanced Organic Chemistry.** Three hours lecture per week. Prerequisite: Chemistry 30132, 30133 or permission of instructor. A detailed study of stereochemistry, important organic reactions and mechanisms, organic syntheses and fundamentals of synthetic design.

**CHEM 50230 Special Problems in Chemistry.** Advanced work in biochemistry, inorganic, organic and physical chemistry to be determined by the previous preparation and interests of the individual student.

**CHEM 50263 Physical-Organic Chemistry.** Three hours lecture per week. Prerequisite: CHEM 30133 and prior or concurrent registration in CHEM 40123. An introduction to modern structural theory and reaction mechanism. Includes a discussion of physical methods.

**CHEM 50273 Inorganic Reactions.** Three hours of lecture per week. Prerequisite: CHEM 50163 or permission of the instructor. An advanced study of the preparative and derivative chemistry of important classes of transition metal and main group element compounds.

**CHEM 50282 Advanced Physical Chemistry.** Two hours lecture per week. Prerequisite: Chemistry 40123. An introduction to Quantum Chemistry and Statistical Thermodynamics is presented. Continuation of Chemistry 40113-40123.

**CHEM 50290 Chemical Thermodynamics.** Prerequisite: Chemistry 40113 or permission of instructor. An introduction to the applications of thermodynamics in chemistry. 1-3 hours of variable credit

**CHEM 50303 Chemical Kinetics.** Three lecture hours per week. Prerequisite: CHEM 40123. Phenomenological and theoretical aspects of the subject are stressed. Emphasis is placed on the study of rates of reaction as a means of elucidating reaction mechanisms. The study of specific gas phase and solution reactions is undertaken to illustrate basic theoretical principles as well as to distinguish molecular, ionic and free radical pathways, applications of isotope effects, activation parameters, medium effects and linear free-energy relationships are considered. Selected topics in conventional and enzyme catalysis are discussed.

**CHEM 50502 Biochemistry Laboratory.** Two four-hour laboratory periods per week. Prerequisite: CHEM 50143 or concurrent registration. (Offered as BIOL or CHEM credit.)

**CHEM 50783 Environmental Chemistry.** Prerequisites: CHEM 10114-10124 or permission of the instructor. Three hours of lecture per week. Chemistry of water, soil, energy, and air as related to environmental problems. Subjects include: nutrients and eutrophication, fluorocarbons, sulfur and nitrogen oxides, Eh-pH relationship, natural carbonate reactions, and cation exchange phenomena. Cross listed with GEOL 50783.

**CHEM 50993 Neurochemistry.** Three lecture hours per week. Prerequisite: CHEM 50133 or permission of instructor. The elucidation of biomedical phenomena that subserve the characteristic activity of the nervous system or are associated with neurological diseases.

## Combined Science

## Overview

Available as a minor on the B.A. and B.S. degrees. A major in combined science for individuals seeking broad-field science secondary teaching certification has been proposed. Contact the College of Science and Engineering or the School of Education for information concerning the status and requirements for this program.

Requirements for the minor follow one of these two patterns:

- 1. Three sequences, 6-8 hours each, from three different departments chosen from Group I below, plus two Group II courses, 6-8 hours, in one of these three departments, or
- 2. Two sequences, 6-8 hours each, from two different departments chosen from Group I below, followed by 6-8 hours in each of these two departments chosen from Group II.

At least 6 semester hours of the combined science minor must be in courses numbered 30000 or higher.

## Group I:

Biology: 10504-10514

Computer Science: 10403 and 20203

Chemistry: 10113-10123-10122 or 10114-10124

Geology: 10113 and 10123 or 10143

Mathematics: 10524, 20524

Physics: 10153, 10163, 10151, 10161 or 20473, 20471, 20483, 20481

## Group II:

Biology: 20204, 20214, 20233 (or 30303), 30104, 30203, 30343, 30404, 30504, 30603, 40223

Chemistry: 20103, 30122/30123, 30132/30133 Computer Science: 20803, 30203, 30253, 30403 Geology: Any courses numbered 20000 or higher

Mathematics: 30133, 30163, 30224, 30524, 30803, 40853, 50323, 50403, 50613, 50703 Physics: 20013 or 20073, 20023 or 20083, or any courses numbered 30000 or higher.

# Computer Information Technology

Requirements for the B.S. degree with a major in Computer Information Technology
Requirements for a minor in Computer Information Technology
Honors Program
Student Organizations
Pass/No Credit Option
Courses of Instruction

#### (CITE)

Computer Information Techonology is available as a major on the B.S. degree and as a minor on the B.A. and B.S. degrees.

#### Requirements for the B.S. degree with a major in Computer Information Technology

Forty semester hours of Computer Information Technology and Computer Science to include COSC 10403, 20203, 20803, 30603; CITE 30103, 30153, 30333, 30363, 30533, 40643, 40993 and 6 hours of approved COSC or CITE electives. No more than 4 hours of CITE 20970 may be counted toward these requirements.

Additional requirements include:

MATH 10043 or DESC 20153 MATH 10123 MATH 10283 or 10524 SPCO 10123 or 20103 EBUS 20263 MARK 30153 MANA 30153 DESC 30153

Minor in Computer Science is not allowed for the Computer Information Technology degree. A minimum of 124 semester hours is required for this degree.

#### Requirements for a minor in Computer Information Technology

Eighteen hours of COSC and CITE courses including: COSC 10403, COSC 20203, COSC 20533, CITE 20803, and an additional 6 hours selected from 30000 and 40000 courses.

## **Honors Program**

Computer Science and Computer Information Technology majors who are members of the Honors Program and who have a minimum 3.5 GPA in the major may pursue Departmental Honors by enrolling in COSC 50970 during the fall of their senior year and preparing a Senior Honors Project.

## **Student Organizations**

**Association for Computing Machinery.** The department sponsors a student chapter of the Association for Computing Machinery (ACM), an international organization for computer scientists.

**IEEE/CS.** The department sponsors a student chapter of the Institute of Electrical and Electronics Engineers/Computer Society, an international organization for computer scientists.

**Upsilon Pi Epsilon.** The department sponsors a chapter of Upsilon Pi Epsilon, the International Honor Society for the Computing Sciences.

**Sigma Xi.** The department is a sponsor of the TCU chapter of Sigma Xi, the Honor Society for Research in the Natural Sciences.

## Pass/No Credit Option

Students declaring a major in Computer Information Technology may not elect the Pass/No Credit option in any CITE or COSC classes with the exception of CITE 40453. There are no P/NC restrictions in the minor.

## **Courses of Instruction**

**CITE 20503 Multimedia Authoring.** Prerequisites: COSC 20203. A general introduction to the history, theory, and technologies that relate to electronic communication. Topics will include the fundamental multimedia elements of text, graphics, sound, video, and animation. Students will participate in team projects designed to create materials for publication on the Internet and CD-ROM.

**CITE 20970 Topics in Computer Information Technology.** Prerequisite: COSC 20203. Topics of current interest. May be repeated for credit when the topic changes. (1-3 sem. hrs.)

**CITE 30103 System and Network Administration.** Prerequisites: COSC 20203. Overview of operating system services and objectives. Installation and maintenance of Unix, Windows, and Macintosh operating systems. Issues in heterogeneous and homogeneous network maintenance and resource sharing. Introduction to scripting.

**CITE 30153 Interface Design and Scripting Fundamentals.** Prerequisites: COSC 20203. Fundamental principles of interface design. Using scripts to assemble existing programs into new applications. Topics include GUI and web site design, and cgi-bin applications utilizing platform independent scripting languages.

CITE 30333 Database Administration. Prerequisite: COSC 30603. Introduction to the database administration

in both small and large-scale database operations. Course focuses on the setup, analysis and maintenance of relational databases used in modern applications.

**CITE 30363 Web Technologies.** Prerequisite: COSC 30603 or consent of instructor. This course will provide an overview of current web technologies. The student will study both client-side and server-side technologies and will learn about web authoring, site management, and distributed web-based applications. The course will include a review of XHTML, CSS, client and server-side processing followed by in-depth coverage of JSP and Java Servlets, database connectivity, and distributed web applications. XML, web streaming technologies, topics on the wireless web will also be included. Projects will be required that demonstrate the student's understanding of these technologies and that utilize several of the commercially available software packages.

CITE 30533 Computers, Technology and Society. Prerequisite: none. In addition to the benefits from the introduction of new technologies, the costs and risks of such changes should be considered. Building on an overview of informal logic, class discussions will examine the social, political, legal, and ethical aspects of technology, with an emphasis on computer technology. Experimental activities and selected readings will provide a basis for the discussion. Credit will not be given for both COSC 10433 and CITE 30533.

**CITE 30703 Instructional Systems Development.** Prerequisites: CITE 30153. This course provides students with a foundation in the history, theory, organization, technologies and instructional procedures used in distance education/training. Various delivery systems that pertain to distance learning will be investigated as will future trends in training/instructional applications.

CITE 40353 Computer Hardware Concepts. Prerequisites: COSC 20203 and MATH 10123. Introduction to the design and operation of hardware systems that include embedded microcontrollers and/or microprocessors, and the programming techniques required to control hardware systems. After providing an overview of analog and digital circuit theory, the course focuses on the design and operation of the interfaces between the controller(s)/processor(s) and the rest of the hardware.

**CITE 40453 Computing Internship.** Prerequisites: Junior standing, 2.5 GPA in major, and approval of department chair. Practical experience in computer and information science. Must include a minimum of 260 work hours in approved practical experience situation. Includes 7-8 hours of class meetings. This course may only be taken pass/ no credit. Open to CISC, CITE and COSC majors only.

**CITE 40643 Issues in Project Management.** Prerequisites: Credit for, or concurrent enrollment in COSC 30603. This course presents an introduction to the issues involved in managing projects that are technology-based. Principles of project development, trade-off issues through the project life-cycle, and professional ethics will be covered. Team projects are included.

**CITE 40773 Administering Computer Resources.** Prerequisites: CITE 30103. Tasks of the computer center manager are studied in the context of the role of administrative decision maker. Management processes, models for tradeoff decisions, behavior concepts, leadership, team dynamics, and infrastructures are covered. Both centralized and distributed models with multiple platforms and networked delivery are considered.

**CITE 40913 Advanced Topics in Computer Information Technology.** Prerequisite: Permission of the instructor. Advanced topics of current interest. Students will study current literature. May be repeated for credit when the topic changes.

**CITE 40993 Senior Development Project.** Prerequisite: CITE 40643. Senior computer information technology majors are required to demonstrate their mastery of several computer science and information technology topics and their ability to communicate the results of their efforts to others. They are required to identify and analyze a computer development task, develop and implement a workable solution for its development, and then document the results of their efforts.

# Computer Science Programs

Requirements for the B.S. degree with a major in Computer Science
Requirements for a minor in Computer Science
Honors Program
Student Organizations
Pass/No Credit Option
Courses of Instruction

## (COSC)

Computer Science is available as a major on the B.S. degree and as a minor on the B.A. and B.S. degrees.

The program in computer science is accredited by the Computing >Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: 410-347-7700.

## Requirements for the B.S. degree with a major in Computer Science

42 semester hours of Computer Science, of which 36 hours must be COSC 10403, 20203, 20803, 30203, 30253, 30353, 30403, 30603, 40203, 40603, 40943, and 40993; and six hours of approved Computer Science electives shall be selected from courses at the 30000 level or above. **Mathematics and science:** 32 hours which must include (1) 17 hours of Mathematics (MATH 10123, 10143, 10524, 30224, and 30803), and (2) a two-semester science sequence (including laboratories) plus two additional one-semester science courses. All science courses must be selected from Biology, Chemistry, Geology, or Physics. Courses for non-science majors may not be counted in this category. A minimum of 132 semester hours is required. A Computer Science major must have a minimum 2.2 GPA in all Computer Science course work to graduate.

## Requirements for a minor in Computer Science

18 hours of Computer Science including: 10403, 20203, 20803, 30203, and an additional 6 hours selected from 30000 and 40000 level courses.

#### **Honors Program**

Computer Science and Computer Information Technology majors who are members of the Honors Program and who have a minimum 3.5 GPA in the major may pursue Departmental Honors by enrolling in COSC 50970 during the fall of their senior year and preparing a Senior Honors Project.

#### **Student Organizations**

**Association for Computing Machinery.** The department sponsors a student chapter of the Association for Computing Machinery (ACM), an international organization for computer scientists.

**IEEE/CS.** The department sponsors a student chapter of the Institute of Electrical and Electronics Engineers/Computer Society, an international organization for computer scientists.

**Upsilon Pi Epsilon.** The department sponsors a chapter of Upsilon Pi Epsilon, the International Honor Society for the Computing Sciences.

**Sigma Xi.** The department is a sponsor of the TCU chapter of Sigma Xi, the Honor Society for Research in the Natural Sciences.

## Pass/No Credit Option

Students declaring a major in Computer Science may not elect the Pass/No Credit option in any Computer Science course. There are no restrictions on the minor.

## **Courses of Instruction**

**COSC 10203 Computer Literacy.** Credit will not be given for both MANA 20103 and COSC 10203. Two hours lecture and one and a half hours of laboratory per week. Introduction to the history of computers, computer organization, and principles of operation. Hands-on experience utilizing a variety of computer software tools including word processing, database management, graphics, spreadsheet, and Internet applications.

**COSC 10403 Introduction to Programming.** Prerequisite: Two years of high school algebra or Math 10023. Introduction to computers, problem solving, algorithm design, and programming techniques. Includes what a computer is and is not, problem organization, data representation, and how to utilize the computer to solve problems. Numerical and non-numerical problems are solved in a high-level programming language.

COSC 10433 Freshman Seminar in Computer Science. Topics may vary each time it is offered.

**COSC 20101 Assembler Fundamentals.** Prerequisite: COSC 10403. Computer structure, machine language, instruction execution, addressing modes, and internal representation of data. Several assembler language programming assignments are required.

**COSC 20203 Techniques in Programming.** Prerequisites: COSC 10403 or equivalent and MATH 10052 or equivalent. A study of program design, development and programming techniques. Structured programming with problems selected from list processing, string processing, and file manipulation.

**COSC 20803 Data Structures.** Prerequisites: COSC 20203. Basic concepts of data. Linear lists, strings, and arrays. Representation of trees and graphs. Storage systems and structures. Symbol tables and searching techniques, sorting techniques. Formal specification of data structures and data structures in programming languages.

**COSC 20970 Topical Studies in Computer Science.** Prerequisites: COSC 20203. Courses dealing with a particular area of investigation in computer science. The topics will be changed from semester to semester and the course may be repeated when the topic is different. 1 - 3 sem. hrs.

**COSC 30203 Computer System Fundamentals.** Prerequisite: COSC 20803. Introduction to assembly language and the corresponding machine representation, assemblers, linkers, and loaders. Study of the design and implementation of 2-pass assemblers with special attention to symbol tables and the problems of resolving forward and external references.

**COSC 30253 Computer Organization.** COSC Prerequisites: COSC 30203 (may be concurrent) and MATH 10123, or, ENGR prerequisites: ENGR 30444. Corequisite: COSC 20101. Treatment of sequential and combinatorial circuits including flip-flops, multiplexers, decoders, adders, registers, counters. Design of functional components, of a computer including memory, ALU, control unit, busses. The tradeoffs of alternative architectural features such as word size, instruction sets, addressing modes. (Offered as COSC or ENGR credit.)

**COSC 30353 Microprocessor Based Digital Systems.** Prerequisite: COSC 30253. Introduction to the design of microprocessor based digital systems including the study of processor control signals, address decoding and memory interfacing, interfacing to serial and parallel ports, A/D conversion, and interrupt processing. Features of state-of-the-art microprocessors will be discussed. Both hardware and software assignments will be required. (Offered as COSC 30353 or ENGR 30583.)

**COSC 30403 Programming Language Concepts.** Prerequisite: COSC 20803. A study and comparison of the concepts and constructs of major programming language paradigms. Topics include evolution of programming languages, formal definition (syntax and semantics), data types, scope, subprograms, data abstraction. Students will review a published paper in the area of programming languages. Lab assignments are given in languages selected to illustrate paradigms.

**COSC 30453 Computer Architecture.** Prerequisite: COSC 30253. The logical organization and functional behavior of digital computers are studied. Fundamental principles in the design of the CPU, memory, I/O devices, and bus structures are presented. Performance enhancement topics such as caching, memory interleaving, interconnection schemes, pipelining, memory management, reduced instruction sets (RISC) and multiprocessing are discussed. (Offered as COSC 30453 or ENGR 30593.)

**COSC 30503 Advanced Systems Programming.** Prerequisite: COSC 30203. Introduction to the systems software features provided by a modern operating system. The techniques and problems associated with the use of concurrent execution of multiple tasks (spawning new tasks from within a task; intertask communications, synchronization, and termination; the use of low-level I/O primitives; and methods for dealing with mutual exclusion, race conditions, and deadlock). Students will be required to develop command language procedures and write programs which invoke operating system services.

**COSC 30603 Database Systems.** Prerequisite: COSC 20803, and MATH 10123. Introduction to the design, implementation, and use of relational database systems. Topics include entity-relationship modeling, dataflow modeling, relational algebra and tuple calculus, normalization, SQL, external data structures, query optimization, and transaction processing.

**COSC 30703 ADA Software Development and Programming.** Prerequisite: COSC 20803. Introduction to the problems associated with the development of large software systems and the features of the Ada programming language that can be used to attack many of these problems. Emphasis will be on those features of Ada that distinguish it from most other programming languages including the use of packages, formal specifications of interfaces, use of private types, operator overloading, tasking, representation clauses, exception handlers, and generics.

**COSC 30803 Simulation Techniques.** Prerequisites: COSC 20803. Discrete event simulation programming and analysis techniques for simulation experiments. Includes experimental sampling and model development in a special purpose simulation language.

**COSC 40003 Computer Networks.** Prerequisite: COSC 30253. Introduction to basic data communications concepts, including hardware and software aspects of protocols, asynchronous and synchronous communication, network configurations, and error detection. This course includes the study of both local area networks and long haul networks, the 7 layer ISO network model, the architecture of networks, and network communication protocols. Local and wide area networks including the internet and world wide web will be discussed.

**COSC 40103 Graphics.** Prerequisites: COSC 30253 and a knowledge of linear algebra MATH 30224. A basic course in graphics systems. Considers the equations of lines, planes, and surfaces; hidden line algorithms; rotations, scaling, and cutaway transformations; 3-D images and the use of shading and perspective; animation; and color graphics.

**COSC 40203 Operating Systems.** Prerequisites: COSC 30253 and MATH 10143. Introduction to operating systems principles. Includes management of CPU, memory, peripherals, and information; the problems associated with communications and controlling concurrent processes; and the differences in batch, time-sharing, and real-time operating systems.

**COSC 40503 Artificial Intelligence.** Prerequisite: COSC 30603. Introduction to knowledge representation and methods for intelligent search. Fundamental topics include state space search, logic, and inference engines. AI languages Prolog, Lisp, and Clips will be used to explore additional topics selected from two-person games, expert systems, automated theorem proving, planning, and machine learning.

**COSC 40603 Compiler Theory.** Prerequisites: COSC 30203, COSC 30403, and MATH 10143. Formal description of algorithmic languages, such as Pascal, and the techniques used in writing compilers for such. Topics include syntax, semantics, storage allocation, code generation, error handling and diagnostics, code optimization, etc. Includes the definition and writing of a compiler for a simple programming language.

**COSC 40803 Advanced Topics in Computer Hardware.** Prerequisite: Permission of instructor. Advanced topics of current interest in computer hardware, such as computer design, computer networks, advanced computer graphics. Students will study current literature. May be repeated for credit when topic changes.

**COSC 40903 Advanced Topics in Computer Software.** Prerequisite: Permission of instructor. Advanced topics of current interest in computer software, such as natural language programming, advanced operating systems, advanced compiler design, file structures, advanced database. Students will study current literature. May be repeated for credit when topic changes.

**COSC 40943 Software Engineering.** Prerequisite: Senior standing. Stages of the software development lifecycle (requirements analysis, specification, design, implementation, testing), evolution, and quality assurance. Classical and alternative process models and techniques are described and discussed. Management issues, professional responsibilities, and ethics of the profession are covered. Includes team projects and individual requirements analysis effort.

**COSC 40993 Senior Design Project.** Prerequisite: COSC 40943. Senior computer science majors are required to demonstrate their mastery of several computer science topics and their ability to communicate the results of their efforts to others. They are required to identify and analyze a computer science problem, develop and implement a workable solution to the problem, and then document the results of their efforts.

**COSC 50123 Object-Oriented Design and Programming.** Prerequisite: COSC 30403 or permission of instructor. Introduction to object-oriented techniques including design methodologies and programming language support. Survey of new languages and extensions to existing languages which provide support for encapsulation, inheritance, and polymorphism.

**COSC 50133 Formal Languages.** Prerequisites: COSC 40603. Languages and grammars which can be characterized in formal terms, for the purpose of constructing models for artificial (computer) languages. Topics will include finite automata, push down automata, Turing machines, solvable and unsolvable problems, etc.

COSC 50970 Special Topics in Computer Science. Prerequisite: Permission of instructor. (1-6 semester hours).

# Engineering

Requirements for the B.S. degree with a major in Engineering Honors Program
Transfer Students
Student Organizations
Fundamentals Examination
UCR Electives
Engineering Electives
Pass/No-Credit Option
Courses of Instruction

#### (ENGR)

The Department of Engineering mission statement is to educate individuals to be proficient in the art and science of engineering. In support of the mission, the course of study is designed to meet the following seven objectives:

- 1. to prepare students for successful careers in engineering and for lifelong learning;
- 2. to teach students methods of analysis, including modern computational techniques appropriate for engineers to use when solving problems;
- 3. to teach students the engineering design process;
- 4. to teach students to create and conduct engineering experiments as well as interpret data;
- 5. to prepare students to work in interdisciplinary teams, synthesize information, and understand effective team dynamics and leadership;
- 6. to develop effective communication skills; and
- 7. to instill in students an appreciation for and acceptance of their professional and ethical responsibilities.

Available as a major on the B.S. degree with the choice of either an electrical or mechanical emphasis. All programs of study include a solid liberal arts component and a fundamental core of engineering courses which provide a strong interdisciplinary background in engineering. They conclude with a three-semester design sequence which is common to students in both areas of emphasis. The programs satisfy all criteria established by the Accreditation Board for Engineering and Technology (ABET).

The programs of study are identical for the first three semesters with an emphasis choice required during the second year. A total of 136 semester hours of UCR, engineering and associated courses is required for the B.S. degree in engineering. All programs are based on a strong background in mathematics and the basic sciences. Suggested four-year course sequences are available from the Department of Engineering.

## Requirements for the B.S. degree with a major in Engineering

Forty-three semester hours in the Engineering Core including 10032, 10033, 10042, 20404, 20603, 20613, 30014, 30444, 30623, 30704, 30903, 40484, 40903, 40913; and twenty-one semester hours in an Engineering Emphasis. **The Electrical Emphasis** requirements include 20413, 30454, 30503, 30543, and a set of approved elective courses. **The Mechanical Emphasis** requirements include 20623, 30634, 30714, 30861, 30871, 40861, 40871, and a set of approved elective courses. All electives must be approved by an engineering faculty advisor to ensure that each student's program of study meets both university and engineering accreditation criteria. **Associated Requirements:** MATH 10524, 20524, 30524, 30613, 30803, PHYS 20473, 20471, 20483, 20481, CHEM 10113 (or CHEM 10114). ECON 10223, 10233, COSC 10403.

## **Honors Program**

Engineering majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in ENGR 30003 during their junior year and ENGR 40003 during their senior year.

## **Transfer Students**

Transfer applicants should refer to "General Policies" in the Admissions section of this bulletin for general admission requirements and deadlines. A degree plan will be prepared for each transfer student during the student's first semester of enrollment at TCU. The application of previous coursework to an engineering degree at TCU is based upon equivalency of content with TCU courses. Special approval is required to complete any Engineering Emphasis courses outside of TCU. A maximum of 15 semester hours of transfer credit may be applied to the Engineering Core. All engineering courses must be from programs with ABET accreditation, unless otherwise pre-approved. Contact the Department of Engineering for additional information on its transfer policy and procedures.

## **Student Organizations**

Several engineering and computer science student organizations have been established at TCU for the purpose of promoting professional goals and interests, and to provide fellowship and recreation for the members. Student chapters of Institute of Electrical and Electronics Engineers (IEEE), American Society of Mechanical Engineers (ASME), American Institute of Aeronautics and Astronautics (AIAA), and Association of Computing Machinery (ACM) American Institute of Aeronautics and Astronautics (AIAA), and Society of Women Engineers (SWE) are active on the TCU campus. These groups meet regularly to participate in plant tours or to entertain speakers on topics of current interest to engineering students. All engineering students are encouraged to join one of the student organizations, to participate in campus activities as well as the activities of the affiliated local professional engineering societies. Students may also choose to become student members of the Texas Society of Professional Engineers (TSPE) and to participate in their local chapter activities.

#### **Fundamentals Examination**

The Fundamentals of Engineering (FE) examination is administered once each year by the Advisement and Counseling coordinator in the Department of Engineering. Review sessions are offered by the Engineering Faculty. All engineering students are encouraged and advised to take the fundamentals examination prior to graduation.

#### **UCR Electives**

The humanities and social science components of engineering programs should exhibit both breadth and depth in the subject areas. The Department of Engineering provides a list of suggested UCR elective options that address this issue. All UCR electives must be selected with the advice and approval of an engineering academic advisor.

#### **Engineering Electives**

The design content of each engineering program must meet minimum standards. Thus, the electrical and mechanical emphasis engineering electives must be selected to assure an adequate design content for the total program. All engineering electives must be selected with the advice and approval of an engineering academic advisor.

## Pass/No-Credit Option

All courses used to meet UCR, associated and engineering program requirements must be taken on the letter grade system. An exception may be approved if a specific course is only available on a pass/no-credit basis.

#### **Courses of Instruction**

**ENGR 10032 Static Mechanics.** Prerequisites: ENGR 10022; corequisite: MATH 10524. Force systems and resultants, equilibrium, friction, structural analysis, geometric properties and distributed loadings, internal forces.

**ENGR 10033 Engineering Design and Graphics.** Introduction to the engineering design process. Manual and computer-aided design graphics. Student team projects. Manual and computer-aided engineering problem solving and presentation.

**ENGR 10042 Principles of Digital Logic.** Number systems. Arithmetic, Boolean algebra and logic operations. Timing diagrams. Introduction to the design and analysis of combinational and sequential logic circuits.

**ENGR 10053 A Hands-On Introduction to Engineering Design.** Introduction to some of the principles of engineering design. Simple microcontroller programming. Basic machine component design. Student teams design and construct autonomous mobile robots to accomplish an assigned task.

ENGR 10433 Freshman Seminar in Engineering. Topics may vary each time it is offered.

**ENGR 20404 Network Analysis I.** Prerequisite: Math 10524. Corequisite: Math 20524. Terminal characteristics of passive devices and energy sources. Steady-state response of networks containing these elements. Transient response of first- and second-order networks. Introduction of computer-aided analysis and design tools. Emphasis on the proper use of basic electrical laboratory instrumentation.

**ENGR 20413 Network Analysis II.** Prerequisite: ENGR 20404. Complex frequency response. Frequency domain analysis using Laplace and Fourier transforms. Two-port networks analysis and applications. Computer-aided analysis and design tools.

**ENGR 20603 Solid Mechanics I.** Prerequisites: ENGR 10032, MATH 10524. Fundamental topics in static structural analysis, concepts of stress and strain, and stress-strain-temperature relations. Stresses and deformations due to axial, torsional, and bending loads. Transverse shear. Combined loadings.

**ENGR 20613 Dynamics and Vibrations I.** Prerequisites: ENGR 20603, PHYS 20473, and credit for, or concurrent enrollment in MATH 30613. Kinematics and kinetics of a particle. Work-energy and impulse-momentum methods for particles. Planar kinematics and kinetics of a rigid body. Work-energy and impulse-momentum methods for rigid bodies. Free and forced response of damped single-degree-of-freedom systems.

**ENGR 20623 Solid Mechanics II.** Prerequisites: ENGR 20603, PHYS 20473: credit for or concurrent enrollment in MATH 30613. Curved beams. Thick-walled cylinders and spinning disks. Torsion of noncircular shafts. Energy methods. Theories of failure. Introduction to finite element analysis.

**ENGR 30003 Honors Tutorial.** Prerequisite: Junior standing and membership in the Honors Program. An examination of an important topic in mechanical or electrical engineering determined in consultation with an instructor. This course is offered on a directed study basis and must be arranged prior to the semester enrolled.

**ENGR 30014 Materials Science.** Prerequisite: CHEM 10113 or CHEM 10114. Introduction to the physical, chemical, mechanical, electrical, and optical properties of metals, semiconductors, ceramics, and polymers. Emphasis on the relationship between these properties and how performance is influenced by microstructure and processing. Atomic bonding. Crystal structure. Phase equilibria. Deformation and fracture. Composite materials. Electronic, magnetic, dielectric and optical properties. Laboratory methods for characterizing materials emphasized. (Offered as ENGR or PHYS credit.)

**ENGR 30444 Electronics I.** Prerequisite: ENGR 20404. Fundamentals of solid-state, discrete-component microelectronic devices, including the pn-junction diode, bipolar junction transistor, and field-effect transistors. The integrated circuit operational amplifier and its use in analog applications is emphasized. Utilization of pn-junction diodes and transistors as electronic switches for digital logic applications is stressed. Computer-aided analysis and design tools. Laboratory applications.

**ENGR 30454 Electronics II.** Prerequisite: ENGR 30444. Differential amplifiers. Frequency response of amplifiers with an emphasis on design for wideband operation. Negative feedback with practical circuit applications. Amplifier output stages. Analog integrated circuits including op-amps. Basic analog filter design. Sinusoidal oscillators. Laboratory applications.

ENGR 30503 Signals and Systems. Prerequisite: ENGR 20413 or instructor approval. Signal and system

representations. Convolution. Fourier series and transforms and applications. Laplace transforms and applications. Z-transforms and applications.

**ENGR 30543 Engineering Electromagnetics.** Prerequisites: ENGR 20404, MATH 30524, MATH 30613. Vector fields and operators. Electrostatic fields. Coulomb, Gauss, Joule, and Continuity Laws. Solution of boundary-value problems. Magnetostatic fields. Vector magnetic potential. Biot-Savart Law. Time-varying fields. Faraday's Law. Maxwell's equations. Plane waves. Transmission lines. The use of computer-aided calculation and visualization tools.

**ENGR 30573 Computer Organization.** COSC Prerequisites: COSC 30203 (may be concurrent) and MATH 10123, or, ENGR prerequisites: ENGR 30444. Corequisite: COSC 20101. Treatment of sequential and combinatorial circuits including flip-flops, multiplexers, decoders, adders, registers, counters. Design of functional components, of a computer including memory, ALU, control unit, busses. The tradeoffs of alternative architectural features such as word size, instruction sets, addressing modes. (Offered as COSC or ENGR credit.)

**ENGR 30583 Microprocessor Based Digital Systems.** Prerequisite: COSC 30253. Introduction to the design of microprocessor based digital systems including the study of processor control signals, address decoding and memory interfacing, interfacing to serial and parallel ports, A/D conversion, and interrupt processing. Features of state-of-the-art microprocessors will be discussed. Both hardware and software assignments will be required. (Offered as COSC 30353 or ENGR 30583.)

**ENGR 30593 Computer Architecture.** Prerequisite: COSC 30253. The logical organization and functional behavior of digital computers are studied. Fundamental principles in the design of the CPU, memory, I/O devices, and bus structures are presented. Performance enhancement topics such as caching, memory interleaving, interconnection schemes, pipelining, memory management, reduced instruction sets (RISC) and multiprocessing are discussed. (Offered as COSC 30453 or ENGR 30593.)

**ENGR 30613 Dynamics and Vibrations II.** Prerequisites: ENGR 20613, MATH 30613. Moving reference frames. Kinematics and kinetics of typical machines. Lagrange's equations. Rotating machinery and balancing. Free and forced response of damped multi-degree-of-freedom systems. Modal analysis.

**ENGR 30623 Control Systems I.** Prerequisites: ENGR 20613, 20404, MATH 30613. Analysis and design of feedback control systems. Laplace transforms and transfer functions. Transient and steady-state response. Root locus method. Nyquist diagrams. Bode plots. Control system simulation software. Introduction to state-space analysis and design.

**ENGR 30634 Manufacturing I.** Prerequisite: ENGR 20623. Manufacturing processes and engineering materials emphasizing metals, polymers, ceramics, and composites. Material selection. Product design for optimum manufacturability and quality control. Computer integrated manufacturing and process engineering.

**ENGR 30704 Thermal Sciences I.** Prerequisites: MATH 10524, CHEM 10113, PHYS 20473. An introduction to thermodynamics, fluid mechanics and heat transfer. System and control volume concepts in analysis. First and second laws in thermodynamics. Thermodynamics cycles. Fluid statics and steady flow of fluids. Introduction to topics in conduction, convection, and radiation heat transfer.

**ENGR 30714 Thermal Sciences II.** Prerequisite: ENGR 30704. Continuation of ENGR 30704. Further topics in thermodynamics and fluid mechanics. Applications of the first and second laws to power and refrigeration cycle analysis, psychrometrics, and reacting mixtures. Conservation equations. Inviscid and viscous incompressible flow. Introduction to compressible flow.

**ENGR 30861 Mechanical Systems Lab.** Prerequisite: ENGR 20603. Experimental, computational and analytical studies of phenomena in solid mechanics, dynamics and vibrations. Data acquisition, transmission, and analysis.

**ENGR 30871 Thermal Systems Lab I.** Corequisite: ENGR 30704. Experimental, computational and analytical studies of phenomena in fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. Data acquisition, transmission, and analysis.

**ENGR 30903 Issues in Engineering Design.** Prerequisite: Junior Standing. Examination of various issues inherent in engineering design. A review of the engineering method. Ethical issues of engineering design such as: product liability, risk assessment, intellectual property, competitive bidding, and the environmental and social impacts of design decisions. Project management, topics in engineering economy, and probabilistic concepts in design.

**ENGR 40003 Senior Honors Research Paper.** Prerequisite: ENGR 30003. A supervised research experience culminating in the writing of a research paper based on the subject matter studied in ENGR 3003 Honors Tutorial. The course is offered on a directed study basis and must be arranged prior to the semester enrolled.

**ENGR 40454 Semiconductor Device Electronics.** Prerequisite: ENGR 30454. Semiconductor materials and solid-state physics principles. Charge carrier transport phenomena. PN-junction analysis. Bipolar junction transistor physics. Metal-oxide-semiconductor MOS physics. MOS transistor principles. Computer-aided analysis and design tools will be used. Individual research laboratory project.

**ENGR 40484 Electromechanics.** Prerequisites: ENGR 20404, PHYS 20483, 20481. Electromechanical energy conversion principles. Magnetic circuits. Balanced three-phase system analysis. Development and applications of the circuit models for transformers, induction machines, synchronous machines, and DC machines. Laboratory exercises emphasize measurement of machine model parameters and comparison of predicted and observed steady-state performance.

**ENGR 40514 Communication Systems.** Prerequisite: ENGR 30503. Introduction to analog and digital communication systems and concepts. Sampling theorem. Amplitude modulation. Frequency modulation. Pulse-code modulation. Time-division and frequency-division multiplexing. Analog and digital noise analysis.

**ENGR 40544 Optical Fiber Communications.** Prerequisite: ENGR 30543 or PHYS 40653. Waveguiding and signal transmission properties of optical fibers. Optical sources. Power launching and coupling. Photodetectors. Optical receivers. Optical fiber transmission systems. Laboratory exercises emphasize the measurement of waveguiding characteristics.

**ENGR 40574 Digital Signal Processing.** Prerequisite: ENGR 30503. Sampling and quantization effects. Digital filter design. Structures for realizing discrete time systems. Discrete Fourier transform and fast Fourier transform.

Laboratory exercises emphasize digital signal processing techniques to applications in audio signal processing and telecommunications.

**ENGR 40613 Machine Component Design.** Prerequisites: ENGR 20613, 20623. The design and selection of mechanical components. Lubrication. Antifriction and journal bearings. The design of screws, fasteners, and joints. Mechanical springs. Gears and gearing systems. Clutches, brakes and couplings. Flexible mechanical elements. Flywheels and power units. Miscellaneous topics.

**ENGR 40623 Control Systems II.** Prerequisite: ENGR 30623. Design of control systems. Stability. System sensitivity. Nyquist, root locus and Bode design. Nichols chart analysis and design. Controllability and observability. Introduction to nonlinear control systems. Phase plane methods.

ENGR 40633 Manufacturing II. Prerequisite: ENGR 30634. A continuation of ENGR 30634.

**ENGR 40723 Heat Transfer.** Prerequisite: ENGR 30704. Thermal conductivity. Steady and unsteady conduction. Free and forced convection. Boundary layer concepts. Heat exchangers. Thermal radiation. Numerical procedures.

**ENGR 40733 Fluid Mechanics.** Prerequisite: ENGR 30704. Fluid statics. Conservation equations. Incompressible inviscid and viscous flow. Boundary layers. Dimensional analysis and similitude. Compressible flow.

**ENGR 40743 Thermal Systems Design.** Prerequisite: ENGR 30704. Design and analysis of thermal systems. Selection and evaluation of fluid flow equipment. Heat exchangers. Vapor power and refrigeration cycles. Fluid flow circuits. Preliminary cost estimations and economic evaluation. Availability analysis and optimization techniques.

**ENGR 40753 Advanced Engineering Dynamics.** Prerequisites: ENGR 20613, MATH 30613. Kinematics and kinetics of three dimensional motion. Gyroscopic systems, Energy and momentum methods. Generalized coordinates and Lagrange's equations. Special topics.

**ENGR 40763 Advanced Engineering Vibrations.** Prerequisites: ENGR 20613, MATH 30613. Free and forced vibration of single-degree-of-freedom and multiple-degree-of-freedom systems. Vibration of continuous systems, such as cables, beams and plates. Engineering applications of vibration theory. Special topics.

**ENGR 40861 Mechanical Systems Lab II.** Prerequisite: ENGR 30623. Experimental, computational and analytical studies of phenomena in solid mechanics, dynamics and vibrations. Data acquisition, transmission, and analysis.

**ENGR 40871 Thermal Systems Lab II.** Prerequisites: ENGR 30714, 30871. A continuation of ENGR 30871. Experimental, computational and analytical studies of phenomena in fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. Data acquisition, transmission, and analysis.

**ENGR 40903 Systems Design I.** Prerequisite: ENGR 30903. Two-semester interdisciplinary team projects. Application of analysis and design principles and techniques to the synthesis, modeling, optimization, fabrication, and testing of electrical, mechanical and electromechanical systems. Individual and team oral and written reports.

ENGR 40913 Systems Design II. Prerequisite: ENGR 40903. Continuation of ENGR 40903

**ENGR 40920 Senior Design Projects.** Prerequisite: Instructor approval. Individual design and development projects in fundamental or applied aspects of electrical or mechanical engineering 1-4 hours.

**ENGR 40970 Special Topics in Engineering.** Prerequisite: Instructor approval. 1-6 hours.

## **Environmental Earth Resources**

<u>Pass/No Credit Option</u> <u>Courses of Instruction</u>

## (ENER)

Administered by the Department of Geology and available as a major on the B.S. degree. Intended for students seeking a degree that combines environmental geology, GIS, and satellite imagery for mapping earth resources.

**Requirements** for a B.S. degree with a major in Environmental Earth Resources: 34 hours in Geology and 17 hours from related science/math departments.

#### A. Required Geology courses-20 hours

GEOL 10113 Understanding the Earth
GEOL 10143 Earth Resources & the Environment
GEOL 30213 Mineralogy
GEOL 30393 Environmental Earth Resources
GEOL 30423 Structural Geology
GEOL 50712 Environmental Geology
GEOL 50721 Geographic Information Systems
GEOL 50731 Remote Sensing Technology
GEOL 50901 Computer Applications in Geology

### B. 14 more required hours from the following options:

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GEOL 30113 Weather and Climate
GEOL 30123 Beaches, Coasts and Oceans
GEOL 30133 Earth History I
GEOL 30143 Earth History II
GEOL 30193 Environmental Stewardship
GEOL 30203 Catastrophes, Controversies, Genesis and Geology
GEOL 30223 Petrology
GEOL 30233 The Rock Cycle
GEOL 30243 Sedimentology
GEOL 30323 Introduction to Marine Science
GEOL 40413 Map Interpretation
GEOL 40493 Geomorphology
GEOL 40893 Senior Thesis
GEOL 40970 Special Problems in Geology
GEOL 50113 Soils
GEOL 50361 Basic Well Log Interpretation
GEOL 50423 Petroleum Geology
GEOL 50493 Physical Hydrology
GEOL 50602 Preparation of Environmental Impact Statements
GEOL 50741 Image Processing
GEOL 50751 Image Interpretation
GEOL 50762 Advanced GIS
GEOL 50773 Introduction to Environmental Law
GEOL 50783 Environmental Chemistry
GEOL 50883 Introduction to Environmental Engineering Technology
GEOL 50912 Statistical Applications for Microcomputers
GEOL 50922 Mapping Applications for Microcomputers
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## C. Additional associated requirements -17 hours:

BIOL 10003 Contemporary Issues in Biology CHEM 10113 General Chemistry COSC 10403 Introduction to Programming MATH 10524 Calculus I PHYS 10153 Physics I PHYS 10151 Physics I Lab

D. Approved electives: In science, math or computer science as approved by the advisor.

The total hours required for the B.S. degree with a major in Environmental Earth Resources is 132 semester hours.

## Pass/No Credit Option

Courses in the major and minor, if any, must be taken for letter grades

#### **Courses of Instruction**

## **Environmental Sciences**

Requirements for a minor in Environmental Sciences
Requirements for the B.S. degree with a major in Environmental Sciences
Pass/No Credit Option
Administration and Counseling
Courses of Instruction

#### (ENSC)

Available as a major for the B.S. degree.

This interdisciplinary program is administered by the Director of the Environmental Sciences Program, and also by the Environmental Sciences Facilty. Students may obtain information or advisement about the program from the Director or from the chairs of the Departments of Biology or Geology.

Faculty associated with the Environmental Sciences Program are:

Joseph C. Britton, Professor of Biology
R. Nowell Donovan, Provost and Vice Chancellor for Academic Affairs, Charles B. Moncrief Professor
Ray W. Drenner, Professor, and Chair of Biology
Arthur J. Ehlmann, Emeritus Professor of Geology
Gary W. Ferguson, Professor of Biology
Richard Hanson, Herndon Professor of Geology and Chair of Geology
Philip S. Hartman, Professor of Biology
John Horner, Professor Professor of Biology
Mike Misamore, Assistant Professor of Biology
Glenn C. Kroh, Associate Professor of Biology
Ken Morgan, Director, Center for Remote Sensing and Associate Dean of the College of Science and Engineering
Leo Newland, Professor of Biology & Geology
Rebecca Richards, Adjunct Professor
Michael Slattery, Associate Professor of Geology and Director of the Program

#### Requirements for a minor in Environmental Sciences

The following courses are required for a minor in Environmental Science:

BIOL 10003 Contemporary Issues in Biology ENSC 10143 Principles of Environmental Science BIOL 30013 Natural History of North America GEOL 30393 Soils in the Environment BIOL 30403 Ecology ENSC 40193 Environmental Stewardship Seminar

#### Requirements for the B.S. degree with a major in Environmental Sciences

#### A. Required Courses (49 semester hours)

THE CORE (25 semester hours)

BIOL 10003 Contemporary Issues in Biology
BIOL 30013 Natural History of North America
or
BIOL 10504 Principles of Life Sciences
BIOL 10514 Principles of Life Sciences
GEOL 10113 Understanding the Earth
ENSC 10143 Principles of Environmental Science
BIOL 30403 Ecology
GEOL 30393 Soils in the Environment
ENSC 40193 Environmental Stewardship Seminar
ENSC 40503 Environmental Methods and Statistics
BIOL 40001 Scientific Presentations

ELECTIVES (24 semester hours)

A minimum of 9 hours from Group A and 9 hours from Group B; 6 hours of electives must be designated Field Experience (FE).

## Group A

BIOL 30011 Introduction to Biological Research BIOL 30104 Comparative Invertebrate Zoology BIOL 30124 Biology of the Vertebrates BIOL 30233 Economic Botany BIOL 30303 Microbiology BIOL 30323 Introduction to Marine Science (also GEOL) BIOL 30504 Plant Biology BIOL 30703 Plant Systematics

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BIOL 40900 Natural History of the Southwest (FE)
BIOL 50103 Terrestrial Ecosytems
BIOL 50313 Biogeography
BIOL 50602 Preparation of Environmental Impact Statements (also GEOL)
BIOL 50703 Ecology of Lakes and Streams
BIOL 50713 Marine Ecology
BIOL 50773 Introduction to Environmental Law (also GEOL)
BIOL 50803 Ecology of Fishes
BIOL 50883 Introduction to Environmental Engineering Technology (also GEOL)
BIOL 50903 Tropical Biology
BIOL 50923 Herpetology
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#### **Group B**

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GEOL 30113 Weather and Climate
GEOL 30233 The Rock Cycle (FE)
GEOL 30323 Introduction to Marine Science (also BIOL 30323)
GEOL 40223 Sedimentology
GEOL 50493 Environmental Hydrology (FE)
GEOL 50602 Preparation of Environmental Impact Statements (also BIOL 50602)
GEOL 50712 Environmental Geology
GEOL 50721 Geographic Information Systems
GEOL 50731 Remote Sensing Technology
GEOL 50641 Image Processing
GEOL 50741 Image Processing
GEOL 50751 Image Interpretation
GEOL 50773 Introduction to Environmental Law (also BIOL 50773)
GEOL 50783 Environmental Chemistry
GEOL 50883 Introduction to Environmental Engineering Technology (also BIOL 50883)
GEOL 50901 Computer Applications in Geology
GEOL 50912 Statistical Applications for Microcomputers
GEOL 50922 Mapping Applications for Micro-computers
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#### Associated Requirements (16 hours)

CHEM 10113 Freshman Chemistry CHEM 10123 Freshman Chemistry CHEM 10122 Freshman Chemistry Lab PHYS 10153 General Physics I PHYS 10151 General Physics Laboratory MATH 10524 Calculus I

The total required for the B.S. degree with a major in Environmental Sciences is 132 semester hours.

#### Pass/No Credit Option

Courses in the major (or minor) must be taken for letter grade.

## **Administration and Counseling**

Students may obtain counseling and/or information from Dr. Michael Slattery, Room 226 Sid W. Richardson Physical Sciences Building, or from the chair of the Department of Biology or Geology. Programs for individual students will be prescribed by personal counseling taking into account the student's background and objectives

## **Courses of Instruction**

**ENSC 10143 Principles of Environmental Science.** Two hours lecture and two hours of laboratory per week. This course introduces students to the major environmental/resource problems that confront humanity in the 21st century. The course seeks to both develop a fundamental scientific knowledge and understanding of the concepts and principles that underlie current environmental problems, as well as to engage in critical and reflective thinking about our resources, the environment and or place within it. Field trip required.

**ENSC 40193 Environmental Stewardship Seminar.** Three hours of lecture per week. This course examines the case environmental stewardship, defined as the need to make informed and responsible decisions with regard to the planet. Students meet in a seminar-type format and cover broad, integrating themes that then serve as a foundation for topics that address more specific environmental problems, such as global warming, deforestation, sustainable development, and energy depletion. The course exposes students to the foundations necessary to enable them to develop their own environmental ethic.

**ENSC 40503 Environmental Methods and Statistics.** Environmental Methods and Statistics is a laboratory- and field-based course that presents essential general science and specific environmental methods, techniques, and theory. Students are exposed to the basic tools of environmental science - observation and notation, data gathering, using statistics, sampling, lab and field techniques, surveying, and safety. Specific environmental methodologies relating to soil, water, and ecological systems are explained. The course presents a wide cross-disciplinary range of techniques and information with a unique environmental perspective.

**ENSC 40970 Special Problems.** Prerequisite: permission of instructor. Field and laboratory problems for advanced undergraduate students. Fifty clock hours of laboratory and field work for each semester credit 1-6 semester hours.

# General Studies Program

Degree Requirements
Pass/No Credit Option

## (BGS)

A program leading to a Bachelor of General Studies (B.G.S.) degree is available for students whose educational goals may not be realized by traditional degree programs of the University. This program does not include a major or minor but does require that a student satisfy all general university requirements and have an emphasis of at least 24 hours. Degree plans must be approved by the Director of General Studies.

#### **Degree Requirements**

In addition to satisfying the College UCR, students must take:

- 1. A total of 124 semester hours with at least 45 semester hours taken at TCU,
- 2. A minimum of 24 semester hours in an emphasis area approved by the Director of General Studies,
- 3. Thirty-six semester hours at the advanced level (30000 level or above) with 24 or more of these advanced hours being taken at TCU.

The last 30 semester hours for the degree must be taken at TCU.

## Pass/No Credit Option

Courses in the major and minor, if any, must be taken for letter grades.

# Geology

Requirements for the B.S. degree with a major in Geology
Requirements for the B.A. degree with a major in Geology
Requirements for a minor in Geology
Honors Program
Student Organizations
Pass/No Credit Option
Courses of Instruction

#### (GEOL)

Available as a major or minor on the B.A. and B.S. degrees.

#### Requirements for the B.S. degree with a major in Geology

Thirty-six semester hours in Geology including 10113, 10143, 30133, 30143, 30213, 30223, 30243, 30423 and 40516. **Associated Requirements:** MATH 10524, and either 20524, or 10123; PHYS 10153, 10151, 10163, and 10161 (or PHYS 20473, 20471, 20483, and 20481); CHEM 10113, 10123, 10122 (or Chemistry 10114, 10124); COSC 10403 or MATH 10043 or DESC 20153. **Approved Electives:** Twelve semester hours of science electives, selected with regard to the interest of the student.

Students planning to pursue technical jobs or qualify for graduate work in geology are strongly advised to satisfy the requirements for the B.S. degree. Some Geology courses required for the B.S. degree require off-road field trips (particularly 40516, which requires a high degree of physical fitness and mobility). A total of 132 semester hours is required for graduation with the B.S. degree.

#### Requirements for the B.A. degree with a major in Geology

Twenty four semester hours in Geology consisting of 10113, 10143, 30133, 30143, 30213, 30223, 30243 and 30423. **Associated requirements:** CHEM 10113. Some Geology courses required for the B.A. degree require off-road field trips. **Minor:** Any minor approved for the B.A. degree is acceptable.

The B.A. degree with a major in Geology is devised primarily for the student seeking a curriculum combining geology with another field of study. A total of 124 semester hours is required for graduation with the B.A. degree.

#### Requirements for a minor in Geology

A total of 18 semester hours in geology of which 9 semester hours must be at the 30000 level or above.

## **Honors Program**

Geology majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in GEOL 30003 during their junior year and GEOL 40013 during the fall semester of their senior year.

## **Student Organizations**

Sigma Xi. The department is a sponsor of Sigma XI, the Honor Society for Research in the Natural Sciences.

**Sigma Gamma Epsilon.** The department is a sponsor of Sigma Gamma Epsilon, the Honor Society for Research in the Earth Sciences.

#### Pass/No Credit Option

Courses to be applied toward the major may not be taken on the Pass/No Credit basis.

#### **Courses of Instruction**

**GEOL 10113 Understanding the Earth.** Two hours of lecture and two hours of laboratory per week. A study of the physical environment of the planet Earth, its makeup, the processes that mould its surface features and an introduction to the resources that it provides.

**GEOL 10123 Dinosaurs and Their World.** Three hours of lecture per week. A broad-based inquiry into dinosaurs and the biological and geological aspects of their world that uses information from many areas of science.

**GEOL 10143 Principles of Environmental Science.** Two hours lecture and two hours of laboratory per week. This course introduces students to the major environmental/resource problems that confront humanity in the 21st century. The course seeks to both develop a fundamental scientific knowledge and understanding of the concepts and principles that underlie current environmental problems, as well as to engage in critical and reflective thinking about our resources, the environment and or place within it. Field trip required.

GEOL 10433 The Abyss of Time: Freshman Seminar in Geology. Freshman Seminar in Geology.

**GEOL 20213 Our Geological Legacy.** Prerequisite: GEOL 10113. Three hours of lecture per week. For the non-science major. Places society's relationship to geological phenomena within a scientific framework. Evaluates the apparent immutability of the earth. Field trip required.

GEOL 30003 Honors Seminar. Reading assignments and discussions on topics of great importance in geology.

GEOL 30103 Science, Scientists and Society. Three hours of lecture per week. A cross-disciplinary course in the

- natural sciences. The workings of science and scientists studied by examining recurring themes and selected episodes in the history of science. The scientific enterprise considered within the changing intellectual, cultural and social milieu in which it was practiced from Epicurus and Aristotle though Einstein and Heisenberg.
- **GEOL 30113 Weather and Climate.** Three hours of lecture per week. Introduction to the basic concepts and principles of atmospheric science in a descriptive format; emphasizes the physics responsible for changes in weather and climate complemented with popular treatment.
- **GEOL 30123 Beaches, Costs and Oceans.** Three hours of lecture per week. Fundamental principles that govern the evolution and nature of coastal environments. Examines the impact of natural oceanographic processes and the role of humans on the coastal environment. Survey of U.S. and world's beaches.
- **GEOL 30133 Historical Geology I.** Prerequisite: GEOL 10113 or equivalent. This first semester of a two semester lab/lecture introduces students to the general principles of earth history. Lab exercises and field trips introduce students to the practical aspects of earth history. Microscope work and field trips are mandatory.
- **GEOL 30143 Historical Geology II.** Prerequisite GEOL 30133 or equivalent. This second semester of a two semester lab/lecture course continues with an in depth look at the details of the geological history of North America and the history of life on earth. Lectures focus on historical detail, while lab exercises and field trips focus on major groups of fossils in the lab and field. Microscope work and field trips are mandatory.
- **GEOL 30203 Catastrophes, Controversies, Genesis and Geology.** Three hours of lecture per week. The workings of science and scientists considered by examining the emergence of geology as a science in the late 18th and early 19th centuries and its development through the Victorian Age, including the rise and demise of scriptural geology and the impact of geologic thought on social mores and religious beliefs.
- **GEOL 30213 Mineralogy.** Prerequisite GEOL 10113 or permission of the instructor. Two hours of lecture and one three hour laboratory period per week. A composite course consisting of an introduction to crystallography and a study of the common minerals.
- **GEOL 30223 Petrology.** Prerequisite: GEOL 30213. Two hours of lecture and one three hour laboratory period per week. A basic course in the origin and identification of igneous, sedimentary and metamorphic rocks. Field trip required.
- **GEOL 30233 Rock Cycle.** Prerequisite GEOL 10113 or permission of the instructor. Field seminar on the megascopic aspects of igneous, sedimentary and metamorphic rocks. Description and interpretation of features seen at scales between that of the individual outcrop and that of an entire basin.
- **GEOL 30243 Sedimentology.** Prerequisite: GEOL 30223 or permission of the instructor. Two hours of lecture and one three hour laboratory period per week. Principles and techniques of facies analysis, including the description and origin of sedimentary textures and sedimentary structures, and the collection of analysis of paleocurrent data. Field trips required.
- **GEOL 30323 Introduction to Marine Science.** Three hours of lecture per week. A study of the oceans including physiography, chemical, physical, biological, and geological processes and related products. (Offered as BIOL or GEOL credit.)
- **GEOL 30393 Environmental Earth Resources.** Prerequisite: one year of chemistry, GEOL 10143, or permission of the instructor. Two hours of lecture and one three hour laboratory period per week. Chemical weathering, chemical and physical properties of soils, clay mineralogy, sedimentary rocks, ion exchange phenomena.
- **GEOL 30423 Structural Geology.** Prerequisite: permission of the instructor. Two hours of lecture and one three hour laboratory period per week. An introductory study of the deformation of the Earth's crust. Field trips required.
- **GEOL 30573 Stratigraphy.** Prerequisite Geol 10123 and/or permission of the instructor. Three hours of lecture. An introduction to the practical and theoretical aspects of stratigraphy and depositional systems. This course uses practical examples and field- and literature-based projects to familiarize students with the basic theoretical stratigraphic framework in which geology exists. An off-road field trip will be required.
- **GEOL 40013 Honors Research.** Prerequisite: permission of the instructor. The student is required to do independent research on a geologic problem, submit a paper and give an oral presentation of the findings. A faculty supervisor will be appointed for each research problem.
- **GEOL 40313 Invertebrate Paleontology.** Prerequisite: permission of the instructor. Two hours of lecture and one three hour laboratory period per week. Major groups of invertebrate fossils, their morphology, classification, paleoecology, geologic distribution and phylogeny. Field trips required.
- **GEOL 40413 Map Interpretation.** Prerequisite: permission of the instructor. Two hours of lecture and one three hour laboratory period per week. The construction and interpretation of geological maps.
- **GEOL 40493 Geomorphology.** Prerequisite: permission of the instructor. Two hours of lecture and one two hour laboratory per week. Endogenic and exogenic processes and land forms; geologic control; short-term, long term and human-imposed landscape development; morphometric analysis and study of recent movements; environmental geomorphology.
- **GEOL 40516 Summer Field Course in Geology.** Prerequisite: permission of the instructor. Field investigations and mapping. Those planning to enroll should contact the Department of Geology by March 1 of the year in which enrollment is contemplated. Field work in rough and robust terrain required; a high degree of physical fitness recommended.
- **GEOL 40893 Senior Thesis.** Prerequisites: junior or senior status, a grade point of at least 3.00, and/or permission of instructor. Three hours of independent study with a focus on original research. The student is required to produce a bound thesis in a form suitable for publication in a scientific journal. Students are strongly recommended to enroll for this course in the penultimate semester of their degree plan with the expectation that the work may take more than a semester to complete.
- GEOL 40970 Special Problems. Prerequisite: permission of instructor. Field and laboratory problems for

- advanced undergraduate students. Fifty clock hours of laboratory and field work for each semester credit 1-6 semester hours.
- **GEOL 50113 Soils.** Two hours lecture and two hours laboratory per week. This course covers the formation, distribution, and classification of soils: major soil properties; field evaluation of soils; the use of soil survey information; and soil hydrology. The emphasis is on the study of soils as products of biophysical processes, and on soil properties of interest to geoscientists and natural resource managers.
- **GEOL 50233 Optical Mineralogy and Petrography.** Prerequisite: permission of the instructor. Two hours of lecture and one three hour laboratory period per week. Analysis of the behavior of light in crystalline substances, complete treatment of crystal optics and the identification of non-opaque, rock-forming minerals using immersion media and thin section techniques. Intensive use of the microscope required.
- **GEOL 50251 Scanning Electron Microscopy.** Prerequisite: permission of the instructor. Use of the S.E.M. in geological applications.
- **GEOL 50331 Basic Seismics.** Prerequisites: GEOL 40223. Three hours of lecture per week for five weeks. An introduction to techniques of gathering, processing and interpreting seismic data.
- **GEOL 50341 Interpreting Seismic Data.** Prerequisite: GEOL 40223. Three hours of laboratory per week for five weeks. A practicum in interpreting seismic data. Prerequisites: GEOL 50331 or equivalent.
- **GEOL 50351 Seismic Stratigraphy.** Prerequisites: GEOL 50331 or equivalent. Three hours of lecture per week for five weeks. An introduction to the principles of seismic stratigraphy and their application in oil and gas exploration.
- **GEOL 50361 Basic Well Log Interpretation.** Prerequisite: GEOL 40223. Three hours of lecture per week for five weeks. An introduction to the use of borehole geophysical logs in formation evaluation, correlation and subsurface facies analysis.
- **GEOL 50413 Global Tectonics and Basin Analysis.** Prerequisite: permission of the instructor. Three hours of lecture per week. Explores the relationship between plate motion and the evolution of sedimentary basins.
- **GEOL 50423 Petroleum Geology.** Prerequisite: permission of the instructor. Origin, migration and entrapment of hydrocarbons, exploration and production techniques used in the petroleum industry.
- **GEOL 50433 Coastal Processes.** Two hours of lecture and one two-hour laboratory per week. Advanced study of waves, winds, water levels, tides and currents and their interaction with shores, beaches, inlets, inner continental shelves and coastal structure. Other topics include tectonic, physical, climatic controls on coastline development, storms, and sediment transport in the coastal zone. Involves computer modeling. Required field trip to the Texas barrier islands.
- **GEOL 50493 Physical Hydrogeology.** Prerequisite Geol 10113 and permission of instructor. Two hours of lecture and two hours of laboratory per week. A study of the occurrence, movement, and exploitation of water in the hydrologic cycle including surface-atmosphere, groundwater, and surface water processes.
- **GEOL 50543 Sedimentary Environment and Facies.** Prerequisite: permission of the instructor. Three hours of lecture per week. Facies analysis and facies models applied to the problem of interpreting stratigraphic sequences and reconstructing paleogeography.
- **GEOL 50602 Preparation of Environmental Impact Statements.** Two laboratory periods per week. The methodology of environmental impact statement preparation from initial collection of data to final report drafting is covered. The course is problem-oriented; students are taught to take the initiative in EIS preparation. (Offered as BIOL or GEOL credit.)
- **GEOL 50603 Introduction to Geochemistry.** Prerequisite: CHEM 10114-10124 or permission of the instructor. Three hours of lecture per week. Application of basic chemical principles to understanding the origin, distribution and migration of chemical elements in the earth? s lithosphere, hydrosphere, atmosphere and biosphere.
- **GEOL 50613 Igneous and Metamorphic Petrology.** Prerequisite: GEOL 50233, or permission of instructor. Two hours of lecture and one three hour laboratory period per week. Petrogenesis of igneous and metamorphic rocks based on field, petrographic, chemical and isotopic data. Inferences on the evolution and dynamics of the crust and mantle. Involves use of microscope.
- **GEOL 50623 Volcanology.** Prerequisite: GEOL 50233. or permission of instructor. Two hours of lecture and one three hour laboratory period per week. Types and processes of volcanic eruptions; characteristics of modern volcanic products; recognition and significance of ancient volcanic deposits in the stratigraphic record. Involves use of microscope. Field trip required.
- **GEOL 50712 Environmental Geology.** Prerequisite: permission of the instructor. Three hours of lecture per week for ten weeks. Geologic processes, earth resources and engineering properties of crystal materials in the activities of society.
- **GEOL 50721 Geographic Information Systems.** Prerequisite: permission of the instructor. Three hours of lecture per week for five weeks. An introduction to computer systems for creating and managing large data bases and to techniques for displaying and interpreting layered environmental geologic data.
- **GEOL 50731 Remote Sensing Technology.** Prerequisite: Permission of the instructor. Three hours of lecture per week for five weeks. An introduction to the technology used in remote sensing, including MSS, TM and SPOT, thermal scanners and radar imaging.
- **GEOL 50741 Image Processing.** Prerequisite: permission of the instructor. Three hours of lecture per week for five weeks. An introduction to processing techniques used to enhance the display of remote sensing images with emphasis on those techniques useful in resource mapping.
- **GEOL 50751 Image Interpretation.** Prerequisite: permission of the instructor. Three hours of lecture per week for five weeks. Geologic and resource mapping and environmental monitoring using satellite images.

- **GEOL 50762 Advanced Geographic Information Systems.** Prerequisite: GEOL 50721. Hands-on computer use to demonstrate advanced computer techniques for mapping. Introduction to Mapfactory, ERDAS and ArcView software programs to conduct raster and vector database layering projects for geological and environmental map production.
- **GEOL 50773 Introduction to Environmental Law.** Three hours lecture per week. Introduction to and analysis of selected federal statutes regulating environmental degradation and environmental clean-up, including the National Environmental Policy Act and regulation of air quality, water quality, wastes, hazardous and toxic substances and enforcement. (Offered as BIOL or GEOL credit.)
- **GEOL 50783 Environmental Chemistry.** Prerequisites: CHEM 10114-10124 or permission of the instructor. Three hours of lecture per week. Chemistry of water, soil, energy, and air as related to environmental problems. Subjects include: nutrients and eutrophication, fluorocarbons, sulfur and nitrogen oxides, Eh-pH relationship, natural carbonate reactions, and cation exchange phenomena. Cross listed with CHEM 40783.
- **GEOL 50883 Introduction to Environmental Engineering Technology.** Introduction to fundamentals of pollution control technology; impact of federal and state legislation on the construction, modification and control of industrial plants. Other topics include hazardous pollutants, modification to ambient quality, and basic pollution modeling. (Offered as BIOL or GEOL credit.)
- **GEOL 50901 Computer Applications in Geology.** Prerequisites: COSC 10403 or equivalent and permission of the instructor. Three hours of lecture per week for five weeks. The use of microcomputers in Geology.
- **GEOL 50912 Statistical Applications for Microcomputers.** Prerequisite: GEOL 50901. Three hours of lecture per week for ten weeks. Statistical treatment of directional data and the use of multivariate and special regression techniques analysis of variance, discriminate function analysis and factor analysis in solving geologic problems.
- **GEOL 50922 Mapping Applications for Microcomputers.** Prerequisite: GEOL 50901. Three hours of lecture per week for ten weeks. Selecting and using mapping and drafting software.

# Health Care Ethics

## Overview

Available as a minor. 18 semester hours, with courses to be taken from at least three different academic units, as follows:

Required Courses (9 hours):

PHIL 10003 Philosophy One NURS 30053 Critical Inquiry into Health Care Delivery SOCI 20223 Social Problems

Elective Courses (9 hours):

HIST 40803 History of Medicine and Public Health NURS 40113 Ethical Dilemmas in Health Care PHIL 30313 Moral Problems
PHIL 30363 Ethic and Health Care PHIL 40393 Ethical Theory
RELI 30083 Religion and Environmental Ethics
RELI 30723 Religion and Science
SOCI 30223 Contemporary Topics in Sociology
SOCI 30483 Death and Dying
SOCI 30643 Sociology of Aging
SOCI 40523 Health, Illness and Medicine
SOWO 40520 Contemporary Topics in Social Work

## Mathematics

General Information
Requirements for the B.A. with a major in Mathematics
Requirements for the B.S. with a major in Mathematics
Requirements for the B.S. with a major in Mathematics
Actuarial concentration in Mathematics
Requirements for a minor in Mathematics
Secondary Teaching Certification
Mathematics Specialization for Elementary Education
Honors Program
Affiliations
Pass/No Credit Option
Courses of Instruction

#### (MATH)

Available as a major and a minor on the B.A. and B.S. degrees.

#### **General Information**

Factors which determine a student's placement include 1) high school credits presented, 2) scores achieved in the SAT, ACT, or other appropriate examination, and 3) performance in advanced placement examinations. Advanced placement, with credit, is available for Math 10052, 10053, 10524, and 20524.

For a student taking a major in mathematics (B.A. or B.S), the recommended sequence for the first four semesters is Math 10524, 20524, 30224, and 30524. In either the first or second semester the student should also complete Computer Science 10403. In addition, Math 10123 should be taken in one of the first four semesters.

Students planning to do graduate work in mathematics should take Math 50253, 50263, 50503, and 50513.

Students with majors in business ordinarily select from Math 10053, 10283, 10524, and 20524. Credit is not allowed for both Math 10043 and Desc 20153.

Credit is not allowed for both Math 10283 and Math 10524.

#### Requirements for the B.A. with a major in Mathematics

28 semester hours of mathematics with a grade of C or better, of which 19 must consist of Math 10123, 10524, 20524, 30224, and 30524. An additional 9 hours must be chosen from among Math 10143 and mathematics courses at or above the 30000-level. Also required are Computer Science 10403 and Physics 20473 and 20483. A minimum of 124 semester hours is required for the degree.

#### Requirements for the B.S. with a major in Mathematics

40 semester hours of mathematics with a grade of C or better, of which 28 must consist of Math 10123, 10524, 20524, 30224, 30524, 30803, 50253, and 50503. An additional 12 semester hours from among Math 10143 and mathematics courses at or above the 30000-level are required. Also required are Computer Science 10403 and Physics 20473 and 20483. A minimum of 132 semester hours is required for the degree.

### **Actuarial concentration in Mathematics**

This program may be pursued under either the B.A. or B.S. option as described above. Mathematics coursework for the actuarial concentration must include Math 30603, Math 30803, Math 30853, and Math 40603. Additional required courses outside the Mathematics Department are Econ 10223, Econ 10233, Econ 30223 and Econ 30233 as well as Acct 20153, Acct 20163 and Fina 30153. Students seeking a BA degree are advised to consider a minor in Economics. All actuarial students need to work closely with an advisor to plan course schedules.

#### Requirements for a minor in Mathematics

18 semester hours of Mathematics with a grade of C or better, including Math 10524, 20524 and 30224, and an additional 6 semester hours from among Math 10123 and courses at or above the 30000-level. Computer Science 10403 is also required.

## **Secondary Teaching Certification**

Students seeking certification for teaching Mathematics at the secondary school level should be advised by both the departmental secondary certification advisor and a secondary certification advisor in the School of Education. Specific requirements for Mathematics as a teaching field follow: For a single teaching field in Mathematics the B.S. program above should include in the 12 advanced hours Math 50303 and Math 50703. For two teaching fields, one of which is Mathematics, the B.A. requirements should include Math 30803 and Math 50303 among the advanced hours.

## **Mathematics Specialization for Elementary Education**

This specialization requires 19 hours of mathematics including Math 10524, 20053, 20063, and 9 additional semester hours. At least 6 of the 9 semester hours must be advanced hours and should be selected in consultation with the departmental elementary certification mathematics advisor.

#### **Honors Program**

Mathematics majors who plan to pursue departmental honors must be members of the Honors Program. A minimum 3.5 GPA in the major is required. Course work must include at least three of Math 40353, 40663, 50253, 50263, 50323, 50403, 50503, 50513, 50613, 50623, 50633, and 50703, or substitutes approved by the department. Students should enroll in Math 30000 during their junior year and Math 40000 during the fall semester

of their senior year. Departmental honors further require satisfactory presentation of thesis results to faculty.

#### **Affiliations**

TCU is an institutional member of the American Mathematical Society and of the Mathematical Association of America. The department holds a charter for Texas Alpha Chapter of Pi Mu Epsilon, a national mathematics honor society, and also participates in the sponsoring of a chapter of Sigma Xi, the honor society for research in the natural sciences.

## Pass/No Credit Option

Mathematics courses to be applied to a major in mathematics may not be taken Pass/No Credit.

#### **Courses of Instruction**

**MATH 10023 Fundamentals of Algebra.** Operations with polynomials. Fractions and exponents. Linear and quadratic equations, with applications. Arithmetic, geometric, and binomial series. Note: This course does not satisfy the UCR in mathematics. Credit will not be given in this course to anyone who has already received credit for any other mathematics course at TCU or comparable or higher-level course at other institutions or credit through AP/CLEP exams.

**MATH 10033 Topics in Mathematics.** Prerequisite: MATH 10023 or two years of high school algebra and one year of geometry. A selection of topics of general interest and some degree of applicability, such as mathematical modeling, geometry, deductive reasoning, mathematics of finance, probability, and statistics.

**MATH 10043 Elementary Statistics.** Prerequisite: MATH 10023 or two years of high school algebra. Empirical frequency distributions, binomial and normal distributions. Regression and correlation. Statistical inference.

**MATH 10052 Trigonometry.** Prerequisite: MATH 10023 or two years of high school algebra and one year of geometry. The trigonometric functions, their graphs, and applications. Note: This course does not satisfy the UCR in mathematics.

**MATH 10053 Precalculus Algebra.** Prerequisite: MATH 10023 or two years of high school algebra and one year of geometry. A conceptual introduction to functions with particular emphasis on topics needed for calculus. Study of linear, exponential, logarithmic, polynomial, and rational functions. Note: This course does not satisfy the UCR in mathematics.

**MATH 10123 Discrete Mathematics I.** Prerequisite: MATH 10053 or two years of high school algebra. Discrete algebraic structures. Algorithms and applications to programming. Selected topics such as recursion and induction, combinatorics, binary relations, graphs and trees, language, automata.

MATH 10143 Discrete Mathematics II. Prerequisite: MATH 10123. Continuation of MATH 10123.

**MATH 10283 Applied Calculus.** Prerequisite: MATH 10053 or two years of high school algebra and one year of geometry. The elements of calculus, with applications to business and economics. Note: credit will not be given for both MATH 10283 and MATH 10524.

**MATH 10524 Calculus I.** Prerequisite: MATH 10053 and MATH 10052 or equivalents. Differential and integral calculus of elementary functions, including exponential, logarithmic, and trigonometric functions. Applications. Note: credit will not be given for both MATH 10283 and MATH 10524.

**MATH 20053 Fundamentals of Modern Mathematics.** Systems of enumeration, change of base. Axiomatic approach to mathematical structures. Development of the real number system. Sets, logic, and the nature of mathematical proof. Relations, including inequalities in two variables, and functions. Note: may not be counted toward a major or minor in mathematics. Also, this course does not satisfy the UCR in mathematics.

**MATH 20063 Topics in Modern Mathematics.** Prerequisite: MATH 20053. Logic and an introduction to mathematical reasoning. Probability and elementary statistics. Geometry. Systems of measurement. Note: may not be counted toward a major or minor in mathematics.

**MATH 20524 Calculus II.** Prerequisite: MATH 10524. Techniques of integration and applications. Infinite series. Differential equations as time permits.

MATH 20970 Special Topics. 1 - 3 semester hours.

MATH 30000 Honors Seminar. Prerequisite: MATH 30224 or permission of the instructor. 1 - 3 semester hours.

**MATH 30133 Symbolic Logic I.** An introduction to the scope and limits of modern logic. The nature of logical systems and the various areas of logic are discussed. Alternative proof- procedures in propositional logic and predicate logic are presented. (Offered as MATH or PHIL credit.)

**MATH 30143 Symbolic Logic II.** Prerequisite: PHIL 30133. A continuation of 30133, with an emphasis on predicate logic, nonstandard logic, and metalogic. (Offered as MATH or PHIL credit.)

**MATH 30224 Linear Algebra.** Prerequisite: MATH 10524 and either MATH 10123 or MATH 20524. Vector spaces, linear independence, bases, and dimension. Linear mappings, matrices, and determinants. Eigenvalues and eigenvectors, diagonalization.

**MATH 30524 Calculus III.** Prerequisite: MATH 20524. Vector calculus and multiple integration. Optimization and Lagrange multipliers. Vector fields and potential functions. Gradient, curl, and divergence. Line and surface integrals. The theorems of Green, Stokes, and Gauss, as time permits.

**MATH 30603 Interest Theory.** Prerequisite: MATH 20524. A rigorous development of the theory of interest in both discrete and continuous time. Present value, yield rates, compound interest, amortization, and cash flows. Selected financial applications to bonds and securities.

**MATH 30613 Differential Equations.** Prerequisite: MATH 20524. Solution techniques for ordinary differential equations. Systems of differential equations. Mathematical modeling and applications.

**MATH 30803 Probability and Statistics I.** Prerequisite: MATH 10524. Probability theory. Permutations, combinations, elementary probability, and the binomial theorem. Frequency distributions, mean and standard deviation.

**MATH 30853 Statistics.** Prerequisites: MATH 20524 and 30803. Organization and analysis of data. Descriptive statistics. Confidence intervals and hypothesis testing. As time permits, topics in regression, analysis of variance, nonparametric statistics, sampling methods.

**MATH 40000 Undergraduate Research.** Prerequisite: twelve semester hours of mathematics. (1-3 semester hours).

**MATH 40353 Topology.** Prerequisite: MATH 30224 and 30524. Topological spaces, bases, connectedness, compactness. Continuous functions and homeomorphisms. Separation properties. Product and quotient spaces. Metric spaces.

**MATH 40603 Actuarial Mathematics.** Prerequisites: MATH 30524 and 30803. Applications of calculus, probability, and statistics, emphasizing problems in risk management and insurance.

**MATH 40663 Numerical Analysis.** Prerequisite: MATH 20524, 30613, and competence in a high-level programming language. Interpolation. Solution of nonlinear equations. Numerical integration and differentiation. Approximate solutions to ordinary differential equations.

MATH 40970 Special Topics. Prerequisite: MATH 30524 or permission of the instructor. 1 - 6 semester hours.

**MATH 50073 History of Mathematics.** Prerequisite: advanced standing in mathematics or permission of the instructor. A survey of the history of mathematics from ancient times to the seventeenth century. Emphasis on topics closely related to contemporary mathematics

**MATH 50073 History of Mathematics.** Prerequisite: Advanced standing in mathematics, or permission. The history of mathematics from the times of ancient Egypt and Mesopotamia until the advent of calculus in the seventeenth century.

**MATH 50253 Abstract Algebra I.** Prerequisite: MATH 10123 and MATH 30224. Introduction to groups and rings. Homomorphisms, isomorphisms, subgroups, and ideals. Quotient and product structures.

**MATH 50263 Abstract Algebra II.** Prerequisites: MATH 50253. A continuation of MATH 50253. Introduction to field extensions and Galois theory. Advanced topics in groups and rings.

**MATH 50303 Studies in Geometry and Topology.** Prerequisite: Twelve semester hours of mathematics, and permission of the instructor. Topics include the topology of surfaces, convex sets, networks, and non-Euclidean Geometry.

**MATH 50303 Studies: Geometry-Topology.** Prerequisite: Twelve semester hours of mathematics, and permission of the instructor. Analytic geometry of euclidean space, topology of euclidean space and surfaces, metrics, non-euclidean geometry.

**MATH 50323 Differential Geometry.** Prerequisite: MATH 30224 and 30524. Calculus on euclidean space. Geometry of curves and spaces.

**MATH 50403 Complex Analysis.** Prerequisite: MATH 30524. Analytic functions, harmonic functions, and the Cauchy-Riemann equations. Conformal mappings. Cauchy's integral theorem and formula, with applications. Power series and analytic continuation.

**MATH 50503 Real Analysis I.** Prerequisite: Math 10123, Math 30224, and Math 30524. A rigorous development of elementary limit processes. Continuity, sequences, series, differentiation, integration.

**MATH 50513 Real Analysis II.** Prerequisite: Math 50503. A continuation of Math 50503. Multivariable calculus, including the Implicit Function Theorem and change of variables. Other selected topics.

**MATH 50613 Partial Differential Equations.** Prerequisite: Math 30613. Basic theory of hyperbolic, parabolic, and elliptic partial differential equations.

**MATH 50623 Applied Mathematics I.** Prerequisite: Math 30224, Math 30524 and Math 30613. Selected topics, such as linear and nonlinear systems, equilibria, Fourier series, computational graph theory, optimization and linear programming, calculus of variations, complex integration.

MATH 50633 Applied Mathematics II. Prerequisite: MATH 50623. Continuation of MATH 50623.

**MATH 50703 Number Theory.** Prerequisite: Math 10123 and Math 30224. Properties of the integers. Divisibility, prime numbers, modular arithmetic, Chinese Remainder Theorem, Diophantine equations.

## Neuroscience

Requirements
Pass/No Credit Option

Available as a major on the B.S. degree.

This interdisciplinary major is built upon the understanding of basic principles in neuroscience. Neuroscience blends areas within Psychology, Biology and Chemistry which converge on the understanding of the brain and its relationship to the behavior and physiology of living organisms. A total of 132 semester hours is required. Students may obtain information and/or advisement from the Department of Psychology.

#### Requirements

The program consists of the following requirements:

- 1. BIOLOGY-20 hours
  - A. Required Courses, 8 hours:

BIOL 10504 Principles of Life Sciences BIOL 10514 Principles of Life Sciences

B. Minimum of 12 hours selected from:

BIOL 30303 Microbiology BIOL 30404 Comparative Vertebrate Anatomy BIOL 30603 Cellular, Molecular and Developmental Biology BIOL 40123 Genetics BIOL 40203 Histology BIOL 40404 General Animal Physiology

- 2. CHEMISTRY-23 hours
- A. Required Courses, 18 hours:

CHEM 10113-10123 General Chemistry CHEM 10122 General Chemistry Laboratory CHEM 30122 Organic Chemistry Laboratory CHEM 30123-30133 Organic Chemistry CHEM 30132 Organic Qualitative Analysis

B. Minimum of 6 hours selected from:

CHEM 50133 Biochemistry CHEM 50143 Biochemistry CHEM 50502 Biochemistry Laboratory CHEM 50993 Neurochemistry

- 3. PSYCHOLOGY-23 hours
  - A. Required Courses, 8 hours:

PSYC 10514 Principles of Behavior I PSYC 10524 Principles of Behavior II

B. Minimum of 6 hours selected from:

PSYC 30363 Abnormal Psychology PSYC 30414 Experimental Psychology: Learning PSYC 30423 Experimental Psychology: Perception PSYC 30433 Experimental Psychology: Motivation PSYC 30503 Behavioral Research

C. Minimum of 9 hours selected from:

PSYC 30463 Physiological Psychology PSYC 30483 Neuropsychology PSYC 50463 Fundamentals of Neuroscience PSYC 50472 Laboratory in Physiological Psychology and Neuroscience PSYC 50482 Laboratory in Physiological Psychology and Neuroscience PSYC 50513 Psychopharmacology

4. PHYSICS-8 hours

PHYS 10151 General Physics I Laboratory PHYS 10153 General Physics I

PHYS 10161 General Physics II Laboratory PHYS 10163 General Physics II  $\,$ 

5. MATHEMATICS AND COMPUTER SCIENCE-Minimum of 6 hours selected from

MATH 10043 Elementary Statistics MATH 10524 Calculus I COSC 10403 Introduction to Programming

## Pass/No Credit Option

Pass/No Credit is acceptable for couses in the major and minor, if any.

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## **Nutritional Sciences**

Option I. Coordinated Program in Dietetics
Option II. Nutrition (Didactic Program in Dietetics)
Option III. Food Management
Requirements for a minor in Nutrition
Honors Program
Affiliations
Pass/No Credit Option
Courses of Instruction

#### (NTDT)

Available as a major on the B.S. degree and a minor on the B.S. and B.A. degrees. The three degree options include:

Option I - Coordinated Program in Dietetics (American Dietetic Association)

Option II - Nutrition (Didactic Program in Dietetics, American Dietetic Association)

Option III - Food Management

General Requirements. All B.S. degrees in Nutritional Sciences follow the University Curriculum Requirements for the College of Science and Engineering.

#### Option I. Coordinated Program in Dietetics

A Coordinated Program in Dietetics is an academic program in a US regionally accredited college or university that culminates in a minimum of a baccalaureate degree. The Coordinated Program in Dietetics (CPD) at TCU offers the unique opportunity to acquire both the required didactic instruction (lecture and laboratory courses) and over 1000 clock hours of supervised practice necessary to meet the Foundation Knowledge and Skills and Competencies for Entry-Level Dietitians and the Standards of Education of the Commission on Accreditation for Dietetics Education (CADE) of The American Dietetic Association. Graduates receive verification/establish eligibility to write the registration examination for dietitians and/or apply for active membership in The American Dietetic Association.

Admission to TCU is required for all programs; however, admission to the University does not guarantee admission to the Coordinated Program in Dietetics. Eligibility for admission to the Coordinated Program in Dietetics is based on successful completion of at least 60 semester hours with a cumulative GPA of at least 2.7 on a 4.0 scale, 39 semester hours of required prerequisites and major courses (as listed below), and an application packet. Application packets for the Coordinated Program must be received by February 1, and applicants are notified of provisional acceptance by April 15. Students who are accepted will begin course work and supervised practice the subsequent fall semester. Final acceptance/enrollment in the Coordinated Program in Dietetics depends on successful completion of work in progress and required summer school prerequisites. A student's continuation in the program is contingent upon attainment of a strong academic record and successful completion of the program sequence.

The mission of the Coordinated Program in Dietetics at TCU is to educate competent entry-level dietitians within the liberal arts environment. In addition, the CPD provides the student with Foundation Knowledge and Skills and Competencies for entry-level dietitians in compliance with the Standards of Education of The American Dietetic Association. The CPD combines course work emphasizing the foundation of dietetic knowledge (communications, physical and biological sciences, social sciences, research, food, nutrition, management, and health care systems) and supervised practice experiences. The supervised practice experience involves working with dietetic professionals to demonstrate performance in medical nutrition therapy, community nutrition, food service systems management, and business/entrepreneurial dietetics.

Costs for tuition and university fees are available through the Office of Admissions or Financial Services. More detailed costs for students are outlined in the CPD Student Handbook and include approximately \$1000-1500 per year for travel to supervised practice sites, lab fees, photocopying, school and office supplies, textbooks, lab coats, malpractice insurance, and professional dues.

The Texas Christian University Coordinated Program in Dietetics is currently granted accreditation by the Commission on Accreditation for Dietetics Education (CADE) of The American Dietetic Association, 120 South Riverside Plaza, Chicago, Illinois 60606, 312/899-0040, ext. 5400.

**Major Requirements:** NTDT 10103, 10403, 20383, 30123, 30144, 30303, 30304, 30313, 30316, 30333, 40333, 40337, 40343, 40353, 40364, 40373, 40403. Total NTDT credit hours: 64. Other Required Courses: CHEM 10113, 10122, 10123, 30123, 40501 and 40503; BIOL 20214 and 20233; MATH 10043; ECON 10223; SOCI 20213; PSYC 10213; and MANA 30153.

A total of 136 semester hours is required for the baccalaureate degree.

## Option II. Nutrition (Didactic Program in Dietetics)

A Didactic Program in Dietetics is an academic program in a US regionally accredited college or university that culminates in a minimum of a baccalaureate degree. The Didactic Program in Dietetics (DPD) at TCU offers the required didactic instruction (lecture and laboratory classes) to meet the Foundation Knowledge and Skills and the Standards of Education of the Commission on Accreditation for Dietetics Education (CADE) of The American Dietetic Association. Graduates of the DPD are eligible to apply for a post-baccalaureate supervised practice program

(Dietetic Internship) leading to eligibility to write the registration examination for dietitians and/or apply for associate membership in The American Dietetic Association. Completion of TCU DPD requirements includes attainment of a minimum cumulative grade point average of 2.7 (based on a 4.0 scale) upon graduation and successful completion of the program sequence.

The mission of the Didactic Program in Dietetics at TCU is to educate students within a liberal arts environment and to provide Foundation Knowledge and Skills for the didactic component of entry-level dietetic programs. The DPD combines coursework emphasizing the foundations of dietetic knowledge (communications, physical and biological sciences, social sciences, research, food, nutrition, management, and health care systems).

Costs for tuition and university fees are available through the Office of Admissions or Financial Services. More detailed costs for students are outlined in the DPD Student Handbook and include approximately \$500-1000 per year for items such as textbooks, lab fees, photocopying, school and office supplies, lab coat, and professional dues.

The Texas Christian University Didactic Program in Dietetics is currently granted accreditation by the Commission on Accreditation for Dietetics Education (CADE) of The American Dietetic Association, 120 South Riverside Plaza, Chicago, Illinois 60606, 312/899-0040, ext. 5400.

Major Requirements: NTDT 10103, 10403, 20383, 30123, 30144, 30303, 30313, 30333, 40333, 40343, 40353, 40363, 40403. Total NTDT credit hours: 40. Other Required Courses: CHEM 10113, 10122, 10123, 30123(or equivalent), 40501, and 40503; BIOL 20214 and 20233; MATH 10043; ECON 10223; SOCI 20213; PSYC 10213; and MANA 30153. No minor is required.

A total of 124 semester hours is required for the baccalaureate degree.

#### **Option III. Food Management**

The Food Management major is designed for students who elect to emphasize the business aspects of the food and nutrition industry. It offers a four-year curriculum emphasizing course work in the procurement, production, distribution, service, and management of foodservice systems and results in a baccalaureate degree. The major culminates in a supervised practice experience in the food industry or a foodservice operation. A minor in general business, public relations/advertising, or radio-tv-film is required.

Graduates of this program are eligible for positions in sales (food and equipment vendors); promotion (food brokers and advertising); consumer education (industry representatives and professional food demonstrators); food safety and sanitation; media (radio, television, newspaper and other publications); operations (commercial, institutional, and military foodservice establishments); and/or entrepreneurial ventures (catering, consulting, and food styling).

**Major Requirements:** NTDT 10103, 10403, 20113, 20383, 30103, 30123, 30133, 30144, 30303, 30313, 40353, 40403, 40970. Total NTDT credit hours: 41-43. Other Required Courses: CHEM 10113, 10122, 10123; BIOL 20233; MATH 10043; ACCT 20153; MANA 30153; MARK 30153. Recommended Electives: NTDT 30333, NTDT 40162, NTDT 40343, 40353, 40363, ACCT 20153 and 20163; FINA 30153; MANA 30203; and MARK 30153.

Minor Requirements: General Business, Public Relations/Advertising, Radio-Television-Film or other approved minor

A total of 124 semester hours is required for the baccalaureate degree.

#### Requirements for a minor in Nutrition

To earn a minor in Nutrition, the student must complete 18 semester hours in Nutrition. Required courses include NTDT 10103, 10403, 30123, 30333, and 40363. The remaining three advanced hours may be selected from the following courses: NTDT 30133, 40333, 40343, or 40403.

#### **Honors Program**

Nutritional Sciences majors who plan to pursue Departmental Honors must be members of the Honors Program and should enroll in NTDT 30003 during their junior year and NTDT 40003 during the fall semester of their senior year.

## **Affiliations**

Students who demonstrate high scholarship are eligible for membership in the Beta Zeta chapter of Phi Upsilon Omicron, national honor society. The department sponsors a chapter of the Texas Student Dietetic Association. All NTDT majors are encouraged to join the American Dietetic Association (ADA), as well as the state and local chapters of the ADA.

## Pass/No Credit Option

All courses in the Department of Nutritional Sciences applied toward the major and minor must be taken on the letter grade system.

## **Courses of Instruction**

**NTDT 10103 Food Preparation.** Two 1-hour lectures, one 2-hour laboratory per week. Scientific principles and fundamental processes underlying food preparation with practical application.

**NTDT 10201 Nutrition Concepts.** Not available to students who have completed NTDT 10403. Nutrition information necessary for health promotion.

NTDT 10211 Nutrition and Weight Control. Relationship of nutrition to weight control.

- NTDT 10221 Sports Nutrition. Basic fundamentals of nutrition applicable to the sports-minded individual.
- **NTDT 10403 Nutrition.** The science of nutrition integrating physiological, biochemical, and psychological aspects of food ingestion and nutrient utilization.
- NTDT 10433 Freshman Seminar in Nutrition Sciences. Topics may vary each time it is offered.
- **NTDT 20113 Issues of Food in Society.** An in-depth study of local, national, and international food issues and the way critical analysis and rational thought can be utilized in the study of these issues. The role of ethics in determining values and justifying positions related to food and nutrition is emphasized.
- **NTDT 20383 Computer Applications in Foodservice and Nutrition Care Systems.** Experience in computer software applications in word processing, spreadsheet analysis, graphic data representation, nutrient analysis, nutritional assessment, and foodservice operational subsystems.
- **NTDT 30003 Honors Seminar.** Prerequisite: Advanced standing in Nutrition and Dietetics and recommendation of the chair. Studies, reports and discussions of literature related to significant problems and trends in Nutrition and Dietetics. Selection and design of a research project.
- **NTDT 30103 Gourmet Foods.** Two 1-hour lectures, one 2-hour laboratory per week. Planning, preparation and presentation of nutritious, attractive gourmet food, with practical laboratory experiences.
- **NTDT 30123 Nutrition Throughout the Life Cycle.** A study of the relationship of nutritional requirements to the life cycle, prenatal to old age; cultural and socioeconomic factors related to food with major focus on nutrition and health; nutritional assessment; interrelationships of nutrients; other nutrition related issues such as dental health, weight management, athletic training, drugs and alcohol, government agencies, and nutrition education for all age groups.
- **NTDT 30133 Meal Management.** Two 1-hour lectures, one 2-hour laboratory per week. Managing resources in meal planning and preparation; technology of food preservation; identification of market places and legislative concerns; aesthetic and practical experience in a laboratory.
- **NTDT 30144 Quantity Food Production.** Three 1-hour lectures and one 3-hour laboratory/supervised practice per week. Prerequisite: NTDT 10103. Advanced study in food preparation, emphasizing standards, principles and techniques of producing quality food in quantity. Care and use of equipment, work simplification, menu planning, and basic cost controls.
- **NTDT 30303 Overview of Foodservice and Nutrition Care Systems.** Prerequisite: MANA 30153 or permission of instructor. Introduction to foodservice and nutrition care systems emphasizing the systems approach, managerial principles, organizational behavior, educational principles, personnel management and counseling.
- **NTDT 30304 Supervised Practice in General Dietetics.** Two lecture hours and six to eight hours of supervised practice per week. Prerequisite: Admission to Coordinated Program in Dietetics and concurrent enrollment in NTDT 30303. Introduction to the practice of all aspects of dietetics through weekly observation and participation in foodservice and nutrition care settings.
- **NTDT 30313 Food Systems Management.** Prerequisites: NTDT 30144 and 30303. Systems approach to the organization and management of foodservice operations including the functional subsystems (procurement, production, service, and maintenance).
- **NTDT 30316 Supervised Practice in Food Systems Management.** Two lecture hours and sixteen hours of supervised practice per week. Prerequisites: Admission to Coordinated Program in Dietetics and concurrent enrollment in NTDT 30313. Selected problems and supervised practice directly correlated with NTDT 30313.
- **NTDT 30333 Medical Nutrition Therapy I.** Prerequisites: NTDT 10403 and 30123, CHEM 30123 and BIOL 20214, or permission of the instructor. Knowledge and skills necessary for nutrition assessment as a component of Medical Nutrition Therapy. Lecture and laboratory format provide skill enhancement in nutrition counseling, dietary evaluation, nutrition support, and calculation of therapeutic diets.
- **NTDT 40003 Senior Honors Research.** Prerequisite: Advanced standing in Nutrition and Dietetics and recommendation of the chair. Preparation of a research paper under the direction of the Nutrition and Dietetics faculty. The paper will be designed to partially fulfill the requirement for Departmental Honors.
- **NTDT 40333 Medical Nutrition Therapy II.** Prerequisites: NTDT 30333 and CHEM 40503, or permission of the instructor. Physiological and biochemical abnormalities associated with various diseases and disorders. Advanced knowledge and techniques necessary for comprehensive medical nutrition therapy. Discussion of the importance of nutrition intervention and the role of the registered dietitian as a member of the health care team.
- NTDT 40337 Supervised Practice in Medical Nutrition Therapy. Two lecture hours and 20 hours of supervised practice per week. Prerequisites: Enrollment in Coordinated Program in Dietetics, NTDT 30316 and concurrent enrollment in NTDT 40333. Application of principles of nutritional care in a clinical setting under the supervision of a Registered Dietitian.
- **NTDT 40343 Advanced Nutrition.** Prerequisites: NTDT 10403 and 30123; BIOL 20214; CHEM 30123, 40501, and 45003. Nutrition science using physiological and biochemical bases. Evaluation of current nutritional frauds.
- **NTDT 40353 Experimental Foods.** Two 1-hour lectures and one 2-hour laboratory per week. Prerequisites: NTDT 10103, 10403, CHEM 30123 or permission of instructor. Advanced theory and methods used in study of chemical and physical factors affecting food preparation and processing. Application of analytical methods to sensory and instrumental evaluation of food quality.
- **NTDT 40363 Community Nutrition.** Prerequisites: NTDT 30123, 30303, or permission of instructor. Nutritional problems and the services available in the community. Management of nutrition services, provision of nutrition information to the public, and the legislative process.
- NTDT 40364 Supervised Practice in Community Nutrition. Two lecture hours and twenty hours of supervised practice per week 8 weeks. Prerequisites: Enrollment in Coordinated Program in Dietetics, NTDT 40337, and

concurrent enrollment in NTDT 40363. Supervised experiences in selected community agencies and schools with emphasis on the provision of nutritional services and education.

**NTDT 40373 Culminating Supervised Practice.** Two lecture hours and twenty hours of supervised practice per week 6 weeks. Prerequisite: Enrollment in Coordinated Program in Dietetics, NTDT 40364, and concurrent enrollment in NTDT 40363. Supervised experience while working as an independent staff dietitian in an area of chosen specialty.

**NTDT 40403 Research Methods in Nutrition.** Prerequisites: Junior or Senior, NTDT 10403, NTDT 30123, and statistics or permission of instructor. Fundamentals of research design in nutrition. Completion of an individual research paper which incorporates proper research design, methodology, analysis, writing style, and writing format utilized in a nutrition research journal. Primarily designed for students with an interest in Nutrition and Dietetics.

**NTDT 40413 Procurement for the Foodservice Operation.** Prerequisites: NTDT 30144 and 30313. Managerial functions of purchasing, receiving, storing, and inventory control of materials for foodservice operations. Current economic, legislative, commercial, and industrial developments.

**NTDT 40423 Advanced Food Systems Management.** Prerequisites: NTDT 30144, 30303, and 30313. Advanced study of organization and management of foodservice operations. Financial management, marketing, and system analysis concepts applied to the foodservice industry.

**NTDT 40431 Seminar in Foodservice and Nutritional Care Systems.** Current trends and issues in nutrition care systems and the foodservice industry.

**NTDT 40970 Special Problems.** Hours to be arranged. Special problems requiring independent research and study within a related area of field experience in food, nutrition, or dietetics. 1-6 sem. hrs.

# Physics and Astronomy

UCR requirements for B.S. programs in Physics and Astronomy

Requirements for the B.S. Degree with a major in Physics Requirements for the B.S. degree with a major in Astronomy and Physics

Requirements for the B.A. degree with a major in Physics

Requirements for a minor in Astronomy

Requirements for a minor in Physics

Requirements for a B.S. degree in Physics with a secondary concentration in another field

Requirements for the B.S./M.B.A. program in Physics and Business

**Honors Societies** 

Pass/No Credit Option

Courses of Instruction

#### (PHYS)

Available as a major or minor on the B.A. and B.S. degrees with options listed below.

#### UCR requirements for B.S. programs in Physics and Astronomy

Writing Workshop (6 hrs.), Social Science (9 hrs.), Cultural Heritage (15 hrs.), Languages and Literature (9 hrs.), Physical Education (2 hrs.), Writing emphasis (6 hrs. usually combined with other requirements) for a minimum total of 41 hours; Science and Mathematics requirements are fulfilled in the Physics and Astronomy programs.

#### Requirements for the B.S. Degree with a major in Physics

Thirty-six hours of physics are required, including PHYS 20473, 20471, 20483, 20481, 30493, 30491, and twenty-four hours selected from 30013, 30553, 30603, 30703, 40113, 40653, 40663, 50703, 50713, 50723, 50733, 50743, and either 40103 or 40003. It is recommended that students planning to attend graduate school take PHYS 30553, 30603, 40113, 40653 and 40663. Twenty-two hours of Mathematics are required, including MATH 10524, 20524, 30224 and 30524. Students planning to attend graduate school should take MATH 50623 and 50633. Also required are: COSC 10403 (or an approved substitute); CHEM 10113, 10123 and 10122 (or 10114 and 10124). Study of a modern language is recommended. A total of 132 hours is required for a B.S. Degree in Physics.

#### Requirements for the B.S. degree with a major in Astronomy and Physics

Thirty-six semester hours of Physics and Astronomy including 10153, 10151, 10163, 10161, (or 20473, 20471, 20483, 20481), 30493, 20073, 20083, 30113, 30111, and 50743, also twelve hours selected from PHYS 30013, 30553, 30603, 30703, 40113, 40653, 40663, 50703, 50713, 50723, 50733, and either 40103 or 40003. It is recommended that students planning to attend graduate school take PHYS 30553, 30603, 40113, and 40653. Sixteen hours of mathematics are required including MATH 10524, 20524, 30224, 30524. It is recommended that students planning to attend graduate school take MATH 50623 and 50633. Also required are COSC 10403 (or an approved substitute); and either (a) CHEM 10113, 10123, and 10122 (or 10114 and 10124), or (b) CHEM 10113, GEOL 10113 and 30213. Study of a modern language is recommended. A total of 132 hours is required for a B.S. degree in Astronomy and Physics.

#### Requirements for the B.A. degree with a major in Physics

Twenty-six hours in Physics including PHYS 20473, 20471, 20483, 20481 (or with permission 10151, 10153, 10161, 10163), 30493. Twelve hours of Mathematics are required including MATH 10524, 20524 and 30224. The total number of hours for the B.A. in Physics is 124. Students planning graduate study in physics should seek the B.S. degree.

#### Requirements for a minor in Astronomy

Twenty hours of Physics including PHYS 10153, 10151, 10163, 10161,(or PHYS 20473, 20471, 20483 and 20481), Astronomy 20073, 20083, and 6 hours of upper division courses (30000 or above) including 30113, and

## Requirements for a minor in Physics

Eighteen hours of Physics including PHYS 10153, 10151, 10163 and 10161 (or PHYS 20473, 20471, 20483 and 20481), and 6 hours of upper division courses (30000 or above).

## Requirements for a B.S. degree in Physics with a secondary concentration in another field

Thirty hours of physics are required, including eleven hours of PHYS 20473, 20471, 20483, 20481 (or 10153, 10151, 10163, 10161), and 30493, also nineteen hours selected from PHYS 30013, 30113, 30111, 30491, 30553, 30603, 30703, 40113, 40653, 40663, 50703, 50713, 50723, 50733, 50743, and either 40103 or 40003. (It is recommended that nine or more hours be selected from 30553, 30603, 40113, and 40653). Associated requirements are: Sixteen hours of MATH 10524, 20524, 30224, and 30524; COSC 10403 (or an approved substitute); CHEM 10113; and an approved Secondary Concentration with a minimum of 24 hours. The total requirement for a B.S. degree in physics with a secondary concentration is 132 hours.

The approved concentrations with respective additional requirements are:

- A) B.S. degree in Physics with secondary concentration in the Bio-Medical Field. (For students interested in Pre-Med or in Biophysics graduate programs.) General requirements plus CHEM 10113, 10123, 10122, 30123, 30122, 30133, 30132; BIOL 10504, 10514 (an additional six hours selected from BIOL 30404, 30603, 40123, 40223 are recommended).
- B) B.S. degree in Physics with secondary concentration in Environmental Science. This option prepares students for graduate work in Physics or Environmental Science.) General requirements plus CHEM 10123; BIOL

10504, 10514, 30403, and three hours of approved upper level biology courses; GEOL 10113, 10143, 30393, and three hours selected from 30113, 30323, 50712, 50721, or 50783.

- **C) B.S. degree in Physics with secondary concentration in Computer Modeling.** (This option prepares students for graduate work in Physics.) General requirements except that PHYS 50733 and an approved project in either PHYS 40103, or 40003 are required. Additional requirements are COSC 20101, 20203, 20803, 30203 30403, also three hours selected from COSC 30803, 40503, 40903, or 50123; MATH 30613, 50613, and 40663.
- **D) B.S. degree in Physics with secondary concentration in Electronics.** (This option prepares students for graduate studies in Electrical Engineering or Physics.) General requirements except that PHYS 40113 and 40653 (or ENGR 30543) are required, and PHYS 40663 is recommended. Additional requirements are, ENGR 10042, 20404, 20413, 30013, 30444, 30454, 40454, and MATH 30613.

#### Requirements for the B.S./M.B.A. program in Physics and Business

Thirty hours of physics are required including 20473, 20471, 20483, 20481 (or 10153, 10151, 10163, 10161), and 30493, plus nineteen selected from 20073, 20083, 30013, 30113, 30111, 30491, 30553, 30603, 40113, 40653, 40663, 50703, 50713, 50723, 50633, 50743, and either 40103 or 40003. Sixteen hours of mathematics are required including MATH 10524, 20524, 30224, and 30524. Also required are COSC 10403 (or an approved substitute); CHEM 10113, ECON 10223, 10233, and BUAD 10013. In the fourth year, students take twenty-four hours of approved M.B.A. courses.

The total requirement for the B.S. in Physics is 132 hours, which includes twenty-seven hours of M.B.A. courses taken in the fourth year. In the fifth year the student takes M.B.A. courses to complete the requirements for the M.B.A degree. If the specified requirements were fulfilled at a reasonable rate, the student would be eligible to receive a B.S. degree in physics in four years and an M.B.A degree in five years. Students must apply to the MBA program in their junior year. For admission to the MBA program refer to the School of Business section of this Bulletin.

#### **Honors Program**

Physics and Astronomy majors who plan to pursue Departmental Honors must be enrolled in the Honors Program. Students should take PHYS 30003 during their junior year and PHYS 40003 during their senior year.

#### **Honors Societies**

The department sponsors Sigma Pi Sigma, the national honor society in Physics and Sigma Xi, the Honor Society for Research in the Natural Sciences.

#### Pass/No Credit Option

Courses for the major and minor may be taken on the Pass/No Credit basis.

#### **Courses of Instruction**

## **GROUP I - Introductory Physics Courses for Non-Science Majors**

**PHYS 10073 Concepts in Physical Science.** A laboratory science course for those with no previous background in physics, designed to stress the formulation of physical concepts at different levels of abstraction. Especially useful for education majors to gain insight and experience with science content and for music majors as a prerequisite to an understanding of musical acoustics.

**PHYS 10151 General Physics I Laboratory.** Three hours laboratory. Prerequisite: PHYS 10153, which is normally taken concurrently. Part one of a two semester sequence recommended for students enrolled in PHYS 10153. The sequence consists of selected experiments associated with PHYS 10153 and 10163.

**PHYS 10153 General Physics I.** Prerequisites: High school algebra and trigonometry or MATH 10053 and MATH 10052 or approval of instructor. Part of a two-semester survey of general physics recommended for students in the life sciences and premedical program. Topics covered in the sequence will include mechanics of solids and fluids, thermodynamics, sound and wave motion, optics, electricity and magnetism, atomic and nuclear physics. Emphasis will be given to the application of these concepts to problems in the life and health sciences.

**PHYS 10161 General Physics II Laboratory.** Three hours laboratory. Prerequisite: PHYS 10163, which is normally taken concurrently.

PHYS 10163 General Physics II. Prerequisite: PHYS 10153. Continuation of Physics 10153.

PHYS 10433 Freshman Seminar in Physics. Topics may vary each time it is offered.

#### **GROUP II - Introductory Astronomy Courses for Non-Science and Science Majors**

**PHYS 20013 Introductory Astronomy.** Structure and origin of the solar system. Students may receive credit for PHYS 20013 or 20073, but not both.

**PHYS 20023 Introductory Astronomy.** Stars, galaxies, stellar evolution, and cosmology. Students may receive credit for PHYS 20023 or 20083, but not both.

**PHYS 20073 Introductory Astronomy.** Three hours lecture and laboratory assignments. Structure and origin of the solar system. Laboratory assignments may be scheduled in the evening.

**PHYS 20083 Introductory Astronomy.** Three hours lecture and laboratory assignments. Stars, galaxies, stellar evolution, and cosmology. Laboratory assignments may be scheduled in the evening.

## **GROUP III - Introductory Physics Courses for Science Majors**

Credit will be given for only one of 10153, 20473 or for only one of 10163, 20483.

PHYS 10151 General Physics I Laboratory. Three hours laboratory. Prerequisite: PHYS 10153, which is

normally taken concurrently. Part one of a two semester sequence recommended for students enrolled in PHYS 10153. The sequence consists of selected experiments associated with PHYS 10153 and 10163.

**PHYS 10153 General Physics I.** Prerequisites: High school algebra and trigonometry or MATH 10053 and MATH 10052 or approval of instructor. Part of a two-semester survey of general physics recommended for students in the life sciences and premedical program. Topics covered in the sequence will include mechanics of solids and fluids, thermodynamics, sound and wave motion, optics, electricity and magnetism, atomic and nuclear physics. Emphasis will be given to the application of these concepts to problems in the life and health sciences.

**PHYS 10161 General Physics II Laboratory.** Three hours laboratory. Prerequisite: PHYS 10163, which is normally taken concurrently.

PHYS 10163 General Physics II. Prerequisite: PHYS 10153. Continuation of Physics 10153.

**PHYS 20471 Physics I Laboratory.** Three hours laboratory. Prerequisite: PHYS 20473, which is normally taken concurrently. A sequence of experiments selected to reinforce the concepts of Physics I.

**PHYS 20473 Physics I Mechanics.** Prerequisites: MATH 10524 which may be taken concurrently or permission of the instructor. The first of a three-semester survey recommended for students majoring in the physical sciences. Newton's laws of motion, the conservation of momentum, angular momentum, and energy; and the theory of gravitation.

**PHYS 20481 Physics II Laboratory.** Three hours laboratory. Prerequisite: PHYS 20483, which is normally taken concurrently. Selected experiments that demonstrate the Concepts of Physics II.

**PHYS 20483 Physics II Electromagnetism and Optics.** Prerequisites: PHYS 20473 and MATH 20524 which is normally taken concurrently or permission of instructor. The second of a three-semester sequence recommended for students of physical sciences. Electric charge, current and field; magnetism, time varying electromagnetic fields; physical and geometric optics.

**PHYS 30491 Physics III Laboratory.** Three hours laboratory. Prerequisite: PHYS 30493, which may be taken concurrently. Selected topics in modern physics.

**PHYS 30493 Physics III Modern Physics.** Prerequisites: PHYS 20473 and 20483 or 10153 and 10163, MATH 20524. Relativity, introduction to quantum mechanics, atomic structure, nuclear physics, and modern physics.

**GROUP IV - Advanced Undergraduate Physics and Astronomy Courses.** 

**PHYS 30003 Junior Honors Research in Physics or Astronomy.** Prerequisites: Admission to Honors Program in Physics and junior standing in Physics. The first of two courses required for Honors in Physics in which the candidate will carry out a program of research under the direction of a faculty member. The results of this research must be satisfactorily communicated to the department in an oral presentation and/or a written report.

**PHYS 30014 Materials Science.** Prerequisite: CHEM 10113 or CHEM 10114. Introduction to the physical, chemical, mechanical, electrical, and optical properties of metals, semiconductors, ceramics, and polymers. Emphasis on the relationship between these properties and how performance is influenced by microstructure and processing. Atomic bonding. Crystal structure. Phase equilibria. Deformation and fracture. Composite materials. Electronic, magnetic, dielectric and optical properties. Laboratory methods for characterizing materials emphasized. (Offered as ENGR or PHYS credit.)

**PHYS 30111 Experimental Astronomy.** Prerequisites: PHYS 20073 and 20083, 10153, 10163. Selected experiments in telescope properties and resolution, astrophotography, spectroscopy, planetarium studies, geometrical optics, physical optics, atomic physics, and studies of experimental data available in research journals.

**PHYS 30113 Intermediate Astronomy.** Prerequisites: PHYS 20073 and 20083 or 20013 and 20023, PHYS 20473 and 20483 or 10153 and 10163. Physical properties of planets, stars, and galaxies.

**PHYS 30553 Mechanics.** Prerequisites: PHYS 20473 and MATH 30524 or permission of instructor. Particle motion in one and three dimensions including oscillatory motion and motion under a central force. Dynamics of many particle systems. Lagrange's and Hamilton's equations.

**PHYS 30603 Thermal Physics.** Prerequisite: PHYS 30493, MATH 30524 or permission of instructor. Statistical formulation of the laws and applications of thermodynamics.

**PHYS 30703 Digital Electronics.** Prerequisites: First year physics, MATH 10524, COSC 10403. An introduction to DC and AC circuits, diodes, transistors, amplifier circuits, basic digital circuits, logic circuits, digital readouts, counters, timing circuits, AD converters, microprocessors, and microcomputers.

**PHYS 40003 Senior Honors Research in Physics or Astronomy.** Prerequisites: Admission to Honors Program in Physics and Senior Standing in Physics. A candidate for honors in Physics will carry out a program of research under the direct supervision of a faculty member. The results of the research must be presented in the form of an acceptable paper.

**PHYS 40050 The Teaching of Physics.** Prerequisite: 14 semester hours, 3 of which may be taken concurrently. Members of this class serve one day each week as physics laboratory assistants and share in departmental conferences. (1 1/2-3 sem. hrs.)

**PHYS 40103 Senior Research in Physics or Astronomy.** Prerequisites: Senior standing in Physics or Astronomy. The student will carry out a program of research under the direction of a faculty member. The results of the research will be presented in the form of an acceptable paper.

**PHYS 40113 Elements of Quantum Mechanics.** Prerequisites: PHYS 30493 and MATH 30524 or permission of instructor. The Schrodinger equations, operators, stationary states; Quantum theory of angular momentum; the harmonic oscillator and the hydrogen atom; quantum spin formulation.

**PHYS 40653 Electromagnetic Fields.** Prerequisites: PHYS 20483 and MATH 30524 or permission of instructor. Electric and magnetic fields, potential; dielectrics; relativity applied to electricity and magnetism; development of Maxwell's Equations in covariant form.

**PHYS 40663 Electromagnetic Radiation and Optics.** Prerequisite: PHYS 40653. Electromagnetic radiation in free space and in materials; introduction to nonlinear optics.

**PHYS 50030 Seminar in Contemporary Physics.** Prerequisite: Permission of instructor. Students enrolled will be expected to participate in, prepare, and lead discussions on selected topics in physics as suggested by the current journal literature. (1-4 sem. hrs.)

**PHYS 50703 Nonlinear Dynamics.** Prerequisite: permission of the instructor, PHYS 30553 is recommended. Characterization of Chaos, Routes to Chaos, Dissipative Dynamical Systems, Hamiltonian Systems.

**PHYS 50713 Contemporary Topics in Physics.** Prerequisite: Departmental permission. Regularly scheduled course on a subject of interest to students and faculty. Possible topics: Acoustics, Biophysics, Mathematical Physics, Modern Optics, and Nuclear Physics.

**PHYS 50723 Introduction to Solid State Physics.** Prerequisite: PHYS 30493; MATH 30524. Crystal structure, lattice dynamics, free electron theory, band theory, optical, electric and magnetic properties of solids.

**PHYS 50733 Computational Physics.** Prerequisites: PHYS 20483 and MATH 30524. Computational methods used in physics, systems of linear equations, eigenvalues problems, numerical solution of differential equations using different computer environments such as IBM PC, Macintosh, SUN workstation.

**PHYS 50743 Astrophysics.** Prerequisite: Departmental permission.. The distance scale, applications of dynamics, statistical mechanics, relativity and quantum theory to astrophysical phenomena, theory of stellar structure, processes in the interstellar medium and selected topics in cosmology.

**PHYS 50970 Special Problems in Physics.** Prerequisite: Departmental permission. Advanced work in physics the nature of which is to be determined by the previous preparation and interest of the individual. Credit will depend upon the nature of the study and the amount of work taken. 1-12 hrs.

Other Courses

**PHYS 20053 Physics of Music and Sound.** Two hours lecture and 3 hours laboratory. Prerequisite: Sophomore standing or approval of instructor. Nature and transmission of sound characteristics of musical instruments and speech, musical intervals, musical scales, musical temperament, and architectural acoustics. The laboratory includes experiments on vibration, resonance, objective and subjective characteristics of sound, and sound synthesis.

## Pre-Health Professions

General Requirements General suggestions Health Care Ethics Minor <u>Combination B.S. Degree Program (The "Three-Year Program")</u> Alpha Epsilon Delta Scholarships |

## Introduction

TCU offers a curriculum preparing students for programs leading to doctoral degrees in the following health professions: Dentistry (D.D.S.), Allopathic Medicine (M.D.), Optometry (O.D.), Osteopathic Medicine (D.O.), Podiatric Medicine (D.P.M.), and Veterinary Medicine (D.V.M.).

The Pre-Health Professions program also offers advising services to students interested in other health fields (e.g., physical therapy, occupational therapy).

Health Professions Advisory Committee (HPAC) consists of faculty members who teach courses normally taken by students pursuing the above professional goals and presently includes Professors Tim Barth, Psychology; Doug Ingram, Physics; David Minter, Chemistry; Giri Akkaraju, Biology; Andrew Paquet, Biology; and Phil Hartman, Biology, (Chair). Denise Bennett, the administrative assistant to the program, is housed in SWR 244

The duties of the committee are to advise students on their curriculum, to provide counseling regarding the health professions, and to evaluate, both for the student and for the professional schools, the student's suitability for entering the profession. The committee offers "mock" interviews and will write a committee-based letter of evaluation for those students who submit the appropriate biographical materials. Additional information is available at www.tcu/bio.edu/premed/premed.html

Curriculum: Health profession schools prefer applicants who have completed a four-year curriculum leading to a B.A. or B.S. degree. While the health professions schools will accept students in any major, certain courses are required or suggested as described below. In addition, if medicine, dentistry or veterinary medicine is a student's primary career goal, the Health Professions Advisory Committee strongly recommends that students major within the College of Science and Engineering.

Required and Suggested Courses: Although each professional program has its own list of required and suggested courses, those shown below will meet the requirements of the majority. Students should check the current requirements of schools to which they intend to apply before they begin their junior year at TCU to insure that new or unusual requirements can be met before graduation.

Pass/No Credit Option. Courses required by professional schools for admission should not be taken on the Pass/ No Credit basis.

## **General Requirements**

Biology: 10504, 10514

Chemistry: 10113, 10123, 10122 (or 10114 and 10124), 30123, 30122, 30133

Math: 10052, 10053 (if not completed in high school)

Physics: 10153, 10151, 10163, 10161

Other: University Curriculum Requirements and requirements of the major/minor

## **General suggestions**

Humanities: ENGL 30223, HIST 40803, PHIL 10003, 30313, 30363, SPAN 10103, RELI 30723.

Social Sciences: SOCI 40523, 40533, SOWO 30853, 30863.
Natural Sciences: BIOL 30303, 30404, 30603, 40123, 40133, 40203, 40223, 40404; CHEM 40164, 50133,

50143; MATH 10043; COSC 10403, PSYC 10213, 30463.

Other: NTDT 10403, SPCO 10123, 30153; KINE 10603, 30623, 30633; HLTH 40203; COSD 10303,

10343,30303; NURS 30053.

#### **Additional Pre-dental Courses**

Required: Two advanced Biology courses as listed under General Suggestions with BIOL 30303, 40123, 40133, 40503 and 50133 especially recommended.

Suggested: ART 10133, 20243

#### **Additional Pre-medical Courses**

Required: Biology (same as pre-dental), MATH 10043 or 10524, CHEM 30132

Suggested: None

#### **Additional Pre-optometry Courses**

Required: BIOL 20204-20214 or 30404, 30303, 40404; MATH 10524; PSYC 10213, 30503; CHEM 50133

Suggested: None

## **Additional Pre-pharmacy Courses**

Required: BIOL 30303, 30404; MATH 10524 and 10043.

#### **Additional Pre-podiatric Courses**

Required: Same as premed.

#### **Additional Pre-veterinary Courses**

Required: BIOL 30303, 30603, 40123, 40253, 50133; MATH 10524; ENGL one literature course plus 30223 (or SPCO 20103); RAMA 30703.

Suggested: MATH 10043

Aptitude Tests: Most professional schools require aptitude tests to have been taken at the time of application. Generally, these should be taken 15-17 months before contemplated admission; i.e., in the spring of the junior year for 4-year students or in the sophomore year for 3-year students (see below). Information on these exams is available in the Pre-Health Professions office SWR-244: The Dental Aptitude Test (DAT), the Medical College Aptitude Test (MCAT), the Optometry Aptitude Test (OAT).

#### **Health Care Ethics Minor**

(See Health Care Ethics)

## Combination B.S. Degree Program (The "Three-Year Program")

A few highly qualified pre-health professions students may be accepted by the professional school after the completion of a three-year college curriculum. TCU offers the B.S. combination degree program for these students. The student must complete a minimum of 94 semester hours including the prescribed courses, the UCR, and aptitude tests listed above. The last 45 hours of the 94 must be taken at TCU. The B.S. combination degree will be awarded after successful completion of the first year of professional school. Students uncertain as to their plans or major should start out in this program. Students must declare their interest in this program (i.e., file a degree plan) prior to application to a professional school. A typical curriculum that meets all these requirements is outlined below.

#### Typical Combination B.S. Degree Program for Pre-Health Professions Students

FRESHMAN YEAR	semester hours
BIOL 10504, 10514 CHEM 10113,10123,10122 Writing Workshop, other UCR Physical Education or ROTC total	8 8 12-15 2 30-33
SOPHOMORE YEAR	
BIOL 30603 CHEM 30123, 30122, 30133, 30132 PHYS 10151, 10153, 10161, 10163 UCR total	3 10 8 12 33
APTITUDE TEST should be taken at this point	
JUNIOR YEAR	
BIOL UCR Electives or Additional Requirements Total	7-9 15 6-9 28-33

#### **Alpha Epsilon Delta**

The program sponsors the Texas Zeta Chapter of Alpha Epsilon Delta, the national honor society for preprofessional health science students. Additional information is available at www.bio.tcu.edu/aed/aed.html

#### **Scholarships**

The M.D. Anderson Foundation of Houston sponsors several scholarships for pre-health profession students who are at least sophomores, have a GPA above 3.0, are in the top third of their class, have a record of service to TCU, the community, or the profession, and have demonstrated a high motivation toward a career in medicine and dentistry. Applications are available from the Financial Aid Office.

# Psychology

The B.S. degree with a major in Psychology
The B.A. degree with a major in Psychology
Requirements for a minor in Psychology
Area of Specialization for Secondary Certification in Psychology
Outreach Program
Honors in Psychology
Psi Chi
Pass/No Credit Option
Courses of Instruction

#### (PSYC)

Available as a major on the B.A. and B.S. degree and as a minor on the B.A. and B.S. degree.

Although the programs may be used to achieve a variety of objectives, they are designed with three primary goals in mind: (1) to provide majors with a strong background for graduate or professional training in psychology or related fields, (2) to educate intelligent consumers who can seek, evaluate and apply selected psychological services effectively, and (3) to provide fundamental information for a critical understanding of psychological knowledge and problems.

In addition to basic coursework, the programs offer learning experiences that include research projects, individual career planning, special seminars, and supervised off-campus activities. Such courses, primarily for juniors and seniors, require approval from the students' adviser or the instructor during the semester prior to the one in which the student intends to enroll. Students are encouraged to consult with their academic adviser at least once each semester to plan an appropriate selection of courses to meet their individual goals. Further information regarding the psychology curriculum may be obtained from the chairman of the department.

#### The B.S. degree with a major in Psychology

Recommended for students planning graduate work in Psychology or a related field or who anticipate a career in a psychology-related field. **Requirements in Psychology**. A minimum of 42 hours including either 10213, 10514, or 10524, plus 30503 and 40993. At least one course must be taken from each of the following five areas, plus at least one additional course from A,B,C, or D.

Area A: 30463, 30483, 50513;

Area B: 30433\*, 30473\*, 30414\*

Area C: 30453\*, 30423\*, 40433\*

Area D: 30443, 40493\*, 30353 or 30343\*

Area E: 30363, 30373, 40463

[\* = courses that require MATH 10043 (Elementary Statistics) and PSYC 30503 (Behavioral Research) as prerequisites]. A maximum of 6 hours of 40960 and/or 40970 may be applied to the 42 minimum required hours in psychology, but additional hours may be taken as psychology electives.

#### The B.A. degree with a major in Psychology

This degree is suited for students who have a general interest in psychology but do not plan a career in psychology or a psychology-related field. It may prove suitable for a variety of career objectives not subsumed under the B.S. program. **Requirements in Psychology**. A minimum of 30 hours including either 10213, 10514, or 10524, plus 30503 and 40993. At least one course must be taken from each of the five areas listed in Areas A-E under the B.S. degree requirements. A maximum of 6 hours of 40960 and/or 40970 may be applied to the 30 minimum required hours in psychology, but additional hours may be taken as psychology electives.

**Associated Requirements**: Same as for B.S. degree. The total number of hours required for the B.A. degree is 124.

#### Requirements for a minor in Psychology

A minor in psychology requires 18 hours in psychology, including either 10213, 10514, or 10524. A maximum of 3 hours of 40960 and/or 40970 may be applied to the minor in psychology.

#### Area of Specialization for Secondary Certification in Psychology

Required: 10213, 10514, or 10524, plus 30503. Also, select enough from the courses listed in Areas A-E under the B.S. degree requirements to make a total of at least 24 semester hours.

## Outreach Program

The Outreach Program is designed to afford qualified students the opportunity to participate in psychology-related internships in local community settings. The program has two purposes:

- 1. The major goal of the Outreach Program is to increase student awareness of professional psychology by allowing students to engage in activities similar to those of a counseling or clinical psychologist. Many psychology majors are interested in becoming helping professionals, and it is our belief that these students can make more informed decisions about their careers if they have experienced these professional activities first hand.
- 2. A second goal of the Outreach Program is to help students to build their resumes through professionally-related

internship experiences. In this way they can not only include the field work experience on their resumes, but they also have the opportunity to earn letters of recommendation from off-campus professionals.

**Requirements.** The Psychology Department's field work experience consists of a two semester sequence, Introduction to Field Work (PSYC 40453) taken in the fall semester, and Advanced Field Work (PSYC 40960) taken in the following spring semester.

## **Honors in Psychology**

A student wishing to complete Departmental Honors in Psychology must be enrolled in the Honors Program and complete 30003 and 40003. It is recommended that students enroll in 40003 for the fall semester of the senior year.

#### Psi Chi

The department sponsors the TCU Chapter of Psi Chi, the national honor society for psychology.

## Pass/No Credit Option

Pass/No Credit is acceptable for courses in the major and minor, if any.

#### **Courses of Instruction**

**PSYC 10110 Techniques of College Learning.** The study of the skills and techniques necessary for efficient learning. Application of the principles of learning, cognition, and motivation to the problems of college learning. (1-3 sem. hrs.)

**PSYC 10213 General Psychology.** One of the prerequisites for higher-level psychology courses. The science of psychology, integrating biological, social, cognitive, and learning influences on behavior; basic behavior processes, and principles of human and infrahuman behavior. Credit cannot be given for both PSYC 10213 and either 10514 or 10524.

PSYC 10433 Freshman Seminar in Psychology. Topics may vary each time it is offered.

**PSYC 10514 Principles of Behavior I.** Recommended for B.S. in Psychology. An introduction to the scientific study of behavior. The nature of scientific inquiry of behavior and relevant basic behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10514.

**PSYC 10514 Principles of Behavior I.** Recommended for B.S. in Psychology. An introduction to the scientific study of behavior. The nature of scientific inquiry of behavior and relevant basic behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10514.

**PSYC 10524 Principles of Behavior II.** Recommended for B.S. in Psychology. An introduction to the scientific inquiry of behavior. The nature of scientific inquiry of behavior and relevant behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10524.

**PSYC 10524 Principles of Behavior II.** Recommended for B.S. in Psychology. An introduction to the scientific inquiry of behavior. The nature of scientific inquiry of behavior and relevant behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10524.

**PSYC 10533 Freshman Seminar in Psychology.** Topics may vary each time it is offered.

**PSYC 20393 Psychology of Love.** Teaches students how to think critically about the psychological research on romantic attraction and close relationships. The course goal is to educate intelligent consumers of media information and misinformation, teaching them to separate scientifically valid from invalid claims about the causes and consequences of initial romantic attraction, deepening close relationships, sex differences, problems that occur within close relationships, and effective versus ineffective strategies for resolving conflicts in close relationships.

**PSYC 20553 Psychology of Adjustment.** Basic principles of psychology in relation to the development, assessment, and modification of personality adjustment. Emphasizes patterns of normal adjustment (intra- and interpersonal) to typical contemporary environments.

**PSYC 30003 Honors Tutorial.** Prerequisite: Junior standing and membership in the Honors Program. An examination of a major issue in psychology. This course is only offered as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment.

**PSYC 30113 States of Consciousness.** Prerequisite: PSYC 10213, or 10514, or 10524. An overview of contemporary knowledge about various states of consciousness including both theoretical perspectives and contemporary applications.

**PSYC 30133 Parapsychology: Science or Pseudoscience?.** Prerequisite: PSYC 10213, or 10514, or 10524. The nature of scientific theories and their application to the claims of paranormal events. The emphasis is on a skeptical analysis of such reputed phenomena as extra sensory perception, psychokinesis, clairvoyance, and precognition. Alternative explanations of claims of the paranormal using established scientific principles, laws and theories of behavior are examined.

**PSYC 30263 Problem Solving in Task Oriented Groups.** Two hours lecture and three hours lab. Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Instruction and practice in the elements of effective participation in task oriented groups and in the strategies and techniques of systematic problem solving. Topics in group processes include group membership roles, task oriented roles, leadership roles, group norms, competition, and conflict management. Topics in problem solving include problem definition, brainstorming, means-end analysis, and structured decision making.

**PSYC 30323 Child Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524. Human behavior from conception to adolescence; the influences of heredity and maturation, physical, social and cognitive development,

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with child observations.

**PSYC 30333 Sexual Behavior in Humans and Other Animals.** Prerequisite: PSYC 10213, or 10514, or 10524 or approval of instructor. Emphasis on empirical studies of sexuality, encompassing its varied manifestations, its many determinants, and contemporary theories of sexuality, with an emphasis on evolutionary theory. Bodily mechanisms and their development, sexually transmitted diseases, and aspects of reproduction are also covered.

**PSYC 30343 Social Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524. Methods and principles related to the experience and behavior of individuals in interaction with each other, in group situations, and in relation to items in the sociocultural setting. Credit cannot be given for both PSYC 30343 and PSYC 30353.

**PSYC 30353 Social Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524. Methods and principles related to the experience and behavior of individuals in interaction with each other, in group situations, and in relation to items in the sociocultural setting. Credit cannot be given for both PSYC 30343 and PSYC 30353.

**PSYC 30363 Abnormal Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524. Personality and behavior processes in normal and deviant personalities; variations and causes of psychopathology, problems of classification, diagnosis and management.

**PSYC 30373 Organizational Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Analysis of methods, accumulated knowledge, and systematic approaches to problems of group behavior in organizations including personnel management, selection, training, motivation, performance appraisal, leadership, working conditions, and human engineering.

**PSYC 30383 Sport Psychology: Performance Enhancement Techniques.** Prerequisites: PSYC 10213, or 10514, or 10524. A comprehensive introduction to the theories and methods of applied sport psychology or performance enhancement. Applies contemporary theories from social psychology, learning, consciousness studies, and applied psychology to the problems of improving performance in any contest. Develops the conceptual basis for the psychological techniques used by sport psychologists, examines empirical evidence for effectiveness of these methods, and elaborates the significance of sports as a metaphor for other life situations where performance is important.

**PSYC 30403 The Human Senses.** Prerequisite: PSYC 30503. A survey of the structure and function of sensory systems, with particular emphasis on vision and hearing.

**PSYC 30414 Experimental Psychology: Learning.** Three lectures and one laboratory per week. Prerequisite: PSYC 30503. Basic methods and concepts employed in the study of learning.

**PSYC 30423 Experimental Psychology: Perception.** Two lectures and one laboratory period per week. Prerequisite: PSYC 30503. Basic experimental techniques employed in the study of detection, discrimination and recognition.

**PSYC 30433 Experimental Psychology: Motivation.** Prerequisite: PSYC 30503. Basic concepts, theories, and techniques employed in the study of motivation.

**PSYC 30443 Psychology of Personality.** Prerequisite: PSYC 10213, or 10514, or 10524. The factual and theoretical status of the development, structure, and dynamic functioning of the adult personality.

**PSYC 30453 Memory and Cognition.** Prerequisite: PSYC 30503. An overview of major issues and topics in modern cognitive psychology with particular emphasis on interpreting basic research in memory and cognitive processes.

**PSYC 30463 Physiological Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524 or approval of instructor. Study of the nervous system, action systems, and sensory systems to provide background for examining the physiological bases of discrimination, motivation, emotions, and learning. (Also offered as Biology 30463.)

**PSYC 30473 Comparative Psychology.** Prerequisites: PSYC 30503. Provides knowledge of animal behavior as a field of research based on mechanistic and evolutionary approaches. Provides a basic vocabulary and a conceptual framework which enables the student to appreciate the importance and scope of animal behavior as an interdisciplinary field and to identify areas of interest for further study.

**PSYC 30483 Human Neuropsychology.** Prerequisites: PSYC 10213, or 10514, or 10524, or approval of instructor. Presents an approach to the study of human brain function by examining the behavioral syndromes resulting from neurological disease and brain damage. Topics will include an overview of the nervous system; neuropsychological assessment; cortical dysfunction; language disorders; developmental neuropsychology; and recovery of function following brain trauma.

**PSYC 30493 Evolutionary Psychology.** Prerequisites: PSYC 10213 or PSYC 10514, or PSYC 10524. A comprehensive view of human evolution. Topics include the fossil record, primates and hominids, evidence of the effects of natural selection on human anatomy and behavior, the development of human culture, mating patterns, technology, social structures, emergence of art and civilization, and the evolutionary shaping of perceptual, cognitive, and motivational processes.

**PSYC 30503 Behavioral Research.** Prerequisite: PSYC 10213, 10514, or 10524, plus MATH 10043. Basic elements of behavioral research-planning, execution, analysis, and interpretation. Includes selection of research problems, measurement of behavioral constructs, development of instruments, and experimental and non-experimental designs as well as the basic statistical methods and concepts needed in behavioral research.

**PSYC 30603 Historical Foundations of Modern Psychology.** Prerequisites: PSYC 10213, 10514, or 10524, and 9 hrs. of psychology or permission of the instructor. The roots of modern psychology and the development of the schools of psychology will be discussed. The historical developments in science and philosophy that were the determinants of the founding of psychology will be analyzed.

**PSYC 30993 Psychology of Sex, Violence, and Aggression.** Teaches students how to think critically about psychological research on sex, violence, and aggression. The course goal is to educate intelligent consumers of

media information and misinformation, teaching them to separate scientifically valid from invalid claims that such factors as genetics, biochemistry, socialization practices, sex differences, ambient temperature, alcohol, television, movies, and video games affect interpersonal violence and aggression.

**PSYC 40003 Senior Honors Research Paper.** Prerequisite: PSYC 30003, Senior standing, and membership in the Honors Program. A supervised research experience and a thesis that is usually based on the subject matter studied in 30003. This course is offered only as a tutorial. Arrangements for this course must be made with an instructor the semester prior to enrollment. It is recommended that enrollment occur the fall semester of the senior year.

**PSYC 40123 Environmental Psychology.** Prerequisite: PSYC 10213, 10514 or 10524, and 30503, or consent of instructor. This course examines, from the perspective of a psychologist, how the physical environment influences specific types of human behavior including work, recreation, learning, group interaction, crime prevention and others.

**PSYC 40260 Introductory Field Work.** Prerequisite: Fifteen semester hours in Psychology. This applied course extends learning beyond the classroom and provides development opportunities in leadership, diversity, counseling, etc. Students also gain self-knowledge of individual strengths (e.g. extroversion) and career preferences through assessments and actual experience. Students must obtain a volunteer or internship position (assistance is available through the instructor or the TCU Leadership Center). Earned credit hours are based on the number of hours worked (up to 3 credit hours for 90 worked hours), attending class 1 hour per week, and completion of all assignments such as self-leadership papers, weekly journals, or projects.

**PSYC 40403 Psychology of Counseling.** Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Counseling in institutional, educational, and community settings; roles and functions of counselors; the relations of the counselor in different settings with clients and organizations.

**PSYC 40413 Cognitive Development.** Prerequisite: PSYC 30323, 30503, 30453, or approval of instructor. Major periods of cognitive development including infancy, early childhood, middle childhood, and adolescence; development of cognitive skills such as reasoning, problem solving, memory, language, and perception; acquisition of applied cognitive skills such as arithmetic, reading, writing, and physics.

**PSYC 40433 Developmental Psychology.** Prerequisite: PSYC 30503. Data and research methods related to the development of the human organism from its prenatal origins through old age.

**PSYC 40463 Behavioral Modification.** Prerequisite: PSYC 30503. An introduction to the principles and practices of behavior modification and behavior therapy. Emphasis is on applications in education and in problems of children and institutionalized adults.

**PSYC 40473 Psychology of Women and Men.** Prerequisite: junior or senior standing. This course is designed to be an overview of theory and research on contemporary American concepts of femininity and masculinity, the implications of these definitions for the average woman or man and some alternative interpretations of the meaning of ones sex role identity.

**PSYC 40483 Seminar in the Biological Mechanisms of Behavior.** Prerequisite: PSYC 30463 or its equivalent, or approval of instructor. A topic seminar with an emphasis on developing an understanding of the interaction of the biological, genetic, psychological, and social factors that underlie the development of behavior.

**PSYC 40493 Introduction to Psychological Measurement.** Prerequisite: PSYC 30503. Characteristics of tests and measurement scales; survey of individual and group tests in psychology, education, and clinical settings.

## PSYC 40513 Scotland: Search for Genius.

**PSYC 40950 Contemporary Topics in Psychology.** Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Topics of current interest in psychology or society. 1-6 sem. hrs.

**PSYC 40960 Advanced Field Work.** Prerequisite: PSYC 40290. This experiential course provides advanced opportunities through volunteer or internship positions. Students complete questionnaires and gain awareness of their skills and preferences (e.g., intuition). Then they investigate how personal factors influence their leadership or service giving skills. Service environments also provide experiential learning related to diversity. Students obtain their own positions (e.g., crisis intervention vollunteer; mentoring elementary students) and earned credit hours are based on the actual number of hours worked (e.g., 3 credit hours requires 120 worked hours), attending class 1 hour per week, and completion of assignments.

**PSYC 40970 Independent Studies.** Prerequisites: Twelve semester hours in Psychology and departmental approval. Supervised research or study in specialized areas not covered in regular course offerings. (1-6 sem. hrs.)

**PSYC 40993 Senior Seminar in Psychology.** Prerequisites: PSYC 30503 and senior standing in psychology. Teaches students how to think critically about ethics and research topics in psychology. Excellent preparation for the Graduate Record Examination in psychology and for graduate school in all areas of psychology. In depth coverage of such topics as Ethics and Methods of Psychology as a Scientific Discipline, Biopsychology, Perception, Learning, Motivation, Emotion, Memory, Thinking, Intelligence, Language, Development, Personality, Psychological Disorders, Psychotherapy, and Social Psychology.

## **PSYC 50213 Interactive Data Analysis.**

**PSYC 50403 Advanced Physiological Psychology.** Prerequisite: Senior or Graduate standing and PSYC 30463 or approval of instructor. An in depth analysis of the neural and endocrine components of normal and abnormal behavior with emphasis on classic studies in the field.

**PSYC 50411 Theoretical Foundations of Statistical Inference.** Prerequisite: Graduate standing in Psychology; Ph.D. students must take concurrently with PSYC 50423. Supplements PSYC 50423. Provides an in-depth view of the models and theories underlying analysis of variance, correlation and regression analysis, and the nonparametric techniques.

**PSYC 50413 History and Systems of Psychology.** Prerequisite: Senior or graduate standing in Psychology, or approval of instructor. The scientific and philosophic antecedents of contemporary psychology in relation to their

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current influence on the field.

**PSYC 50423 Graduate Statistics.** Prerequisite: Senior or Graduate standing or approval of instructor. The conceptual basis of statistical inference. Topics include: analysis of variance models, correlation and regression analysis, and nonparametric techniques.

**PSYC 50453 Experimental Social Psychology.** Two lectures and one laboratory period per week. Prerequisite: PSYC 30353 or its equivalent, or approval of instructor. Concepts and methods of research on attitudes, communication and persuasion, group structure, and group processes.

**PSYC 50463 Fundamentals of Neuroscience.** Prerequisite: Graduate or senior standing or approval of the instructor. The fundamentals of functional neuroanatomy and neurophysiology with an emphasis on experimental and theoretical analysis of the basic brain behavior relationships. (Offered as BIOL or PSYC credit.)

**PSYC 50472 Laboratory in Physiological Psychology and Neuroscience.** Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior (Also offered as BIOL 50472)

**PSYC 50482 Laboratory in Physiological Psychology and Neuroscience.** Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior (Also offered as BIOL 50482)

**PSYC 50493 Advanced Personality.** Prerequisite: Senior or graduate standing in psychology and PSYC 40443, or approval of instructor. Current topics from the empirical and theoretical literature on personality.

**PSYC 50513 Psychopharmacology.** Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Theory and principles of behavioral and biochemical methods of assaying drug action, with primary emphasis on the study of the effects of neuropharmacological agents or endogenous systems.

**PSYC 50523 Experimental Design.** Prerequisite: PSYC 50423 or approval of instructor. The planning and design of behavioral research including the specification of research problems, development of appropriate designs, the use of appropriate analytic techniques and the interpretation of results. Primary attention is given to analysis of variance models as analytic techniques, but multivariate techniques such as regression and discriminant function models are also considered.

**PSYC 50563 Developmental Psychology.** Prerequisite: Senior or graduate standing in Psychology, or approval of instructor. Data and research methods related to the development of the human organism from its prenatal origins through old age.

**PSYC 50583 Cognition.** Prerequisite: Senior or graduate standing in Psychology, or approval of instructor. Current topics in the area of cognition including thinking, language, memory, decision making, and problem solving.

**PSYC 50603 Contemporary Learning Theory.** Prerequisite: Senior or graduate standing in Psychology, or approval of instructor. Selected theoretical principles important for understanding complex behavior, and their recent extensions and application to human social behavior, autonomic and psychosomatic function, etc.

# Ranch Management Program

Certificate of Ranch Management
Bachelor of Science with minor in Business
Minor in Ranch Management
Evening Courses
Courses of Instruction

#### Overview

Ranch Management is available as a major on the B.S. degree, as a minor on the B.A. and B.S. degrees and as a certificate program. Since 1956, students from 40 states and 22 nations have studied ranching at TCU through the certificate program. The B.S. degree and Minor options will begin with the 2004 fall semester.

## **Admission to the Ranch Management Program**

Applicants meeting academic enrollment criteria, should have sufficient working experience in agriculture to understand the nature of the industry. Basic knowledge and experience with farming or ranching enterprises enable the student to obtain more value out of the course of study. Enrollment is limited. Selection to the class is made after each applicant completes the application, including transcripts and a personal interview. When all other considerations are equal, earlier applicants are given priority.

For information, applications or interview, write to the director, Ranch Management Program, TCU Box 297420, Fort Worth, Texas 76129, or call (817) 257-7145.

#### **Certificate of Ranch Management**

The Ranch Mangement certificate program requires one academic year (nine months) to complete. Students are provided intensive classroom instruction in basic management principles. The program of study includes courses in livestock production, natural resource conservation, forage production, accounting principles, marketing, personnel management, and general management principles. Field work is coordinated with classroom study to demonstrate principles as they are applied in production situations.

Classes are presented in three-hour units to allow concentration of subject matter and to facilitate field work. Generally, class hours are from 9:00 a.m. to noon and 1:00 p.m. to 4:00 p.m. five days a week, although class hours may vary somewhat when field work requires additional time for travel. Basic vocational skills are taught that require physical mobility and manual dexterity. Field work includes five week-long trips and numerous day trips. No other courses may be taken during the year. The two-semester program leads to 34 hours of credit and a Ranch Management Certificate.

#### **Bachelor of Science with minor in Business**

The College of Science and Engineering administers the Bachelor of Science degree. Students must complete the University Core Requirements prior to making formal application to the Ranch Management Program at the beginning of their junior year. Qualified students are given ¿conditional¿ acceptance into the program. Students must then successfully complete the requirements for a General Business minor for non-business majors before entering the 34 hours of required Ranch Management courses.

#### **Declaring Pre-Ranch Mangement.**

All students wishing to become Ranch Management majors should first declare themselves 'pre-ranch management' students. Students remain pre-ranch management students until being formally admitted to the Ranch Management program. Before taking upper-division (30000-level and above except MARK 30513, MANA 30153, FINA 30153, BIOL 30403, BIOL 30504, or GEOL 30504) courses, all pre-ranch management students must:

a. complete the University Curriculum Requirements including, BIOL 10504,

BIOL 10514, ECON 10223, and ECON 10233.

b. maintain a TCU cumulative GPA of at least 2.50

c. contact the Ranch Management Program for admissions

policies, procedures and deadlines.

d. be formally admitted to the Ranch Management program with a ¿conditional¿ acceptance.

#### **Transfer students**

Transfer students must first become pre-ranch management students. Approval is not automatic, and admission to TCU does not guarantee the student admission as a pre-ranch management student. Transfer students should first work with the office of Transfer Admissions regarding transfer credits and specific transfer student requirements and guidelines. Students must apply to the Ranch Management program and be formally admitted prior to taking the upper level Ranch Management courses. A GPA of 2.50 is required for admission to the Ranch Management Program.

TCU cumulative GPA of 2.5 required for admission. A TCU cumulative GPA of at least 2.50 is required, but does not guarantee admission to the Ranch Management Program. In addition, applicants to the Ranch Management Program should have sufficient working experience in agriculture to understand the nature of the industry. Enrollment is limited.

#### **ALL TCU STUDENTS**

Entering Freshmen Declare Pre-Ranch Management

Begin taking Lower Division Sequence Requirement including one Upper Division required Science course. See Course Requirements.

#### Sophomores

Formally apply for admission to the Ranch Management Program. Obtain information and interview dates from the Ranch Management Program.

Must have a 2.50 minimum TCU cumulative GPA

See the Ranch Management Program for other requirements.

#### Juniors

Admitted to the Ranch Management Program with a ¿conditional acceptance¿

Declare a Major in Ranch Management

Begin taking the courses for a General Business Minor

Seniors

Complete Upper Division Ranch Management Courses (No other courses may be taken at this time during the two semesters of Ranch Management Courses).

#### Transfer Students

Declare Pre-Ranch Management

Begin taking Associated Requirements for Ranch Management and courses for the

General Business Minor

Formally apply for admission to the Ranch Management Program.

Must have a 2.50 minimum TCU cumulative GPA

#### Components of the B. S. Degree in Ranch Management:

A. University Curriculum Requirements (53 semester hours) Students seeking a Bachelor of Science degree in Ranch Management must fulfill all of the University Curriculum Requirements listed below:

- I. Foundations: 9 semester hours
- a. Writing: 6 hours and the Writing Emphasis Experience
- b. Mathematics: 3 hours
- II. Explorations: 42 semester hours.
- a. Physical and Life Science: minimum of 9 hours must include: BIOL 10504, BIOL 10514
- b. Social Sciences: minimum of 9 hours must include: ECON 10223, ECON 10233
- c. Cultural Heritage: minimum of 15 hours to include:
- -- 1. Religion Studies: minimum of 3 hours
- -- 2. Historical Studies: minimum of 3 credit hours
- -- 3. Critical Inquiry: minimum of 3 credit hours
- -- 4. Fine Arts: minimum of 3 credit hours
- d. Language and Literature: minimum of 9 hours. If any foreign language is used toward this requirement, 6 hours must be taken in the same language.
- -- 1. Foreign Language. If any foreign language is used toward this requirement, 6 hours must be taken in the same language.
- -- 2. Oral Communication and Literature
- III. Physical Education/ Health Concepts: 2 semester hours

#### B. Associated Requirements

Math: 3 hours (MATH 10283, MATH 10524 or MATH 10043); Sciences: 3 hours (BIOL 30403, BIOL 30504 or GEOL 30393

C. General Business Minor For Non-Business Majors.

Refer to General Business Minor for Non-Business Majors for specific requirements.

Required Courses: 18 hours

ACCT 20153 Principles of Financial Accounting ACCT 20163 Principles of Managerial Accounting

MANA 20153 Legal and Social Environment of Business

MANA 30513 Organizational Management

FINA 30513 Financial Management

MARK 30153 Marketing Management

## D. Upper Division Ranch Management Courses

Required Courses: 34 hours

RAMA 30102 Ranch Operations and Development

RAMA 30213 Ranch Business Management

RAMA 30403 Soil and Water Conservation

RAMA 30703 Animal Nutrition and Feeding RAMA 40103 Beef Cattle Production

RAMA 40112 Sheep and Goat Production

RAMA 40303 Animal Health Management

RAMA 40313 Animal Health and Reproduction

RAMA 40503 Range Management

RAMA 40603 Ranch Records and Finance

RAMA 40803 Marketing of Livestock and Meats

RAMA 40903 Forage Production and Use

## **Minor in Ranch Management**

Available as a minor on the B.A. and B.S. degrees. Students may pursue a degree in a discipline other than Ranch

Management and utilize the Ranch Management certificate program to meet graduation requirements, provided they are qualified for admission into the Ranch Management program. A TCU cumulative GPA of at least 2.50 is required. The Ranch Management minor requires 34 hours of coursework which consist of the Upper Division Ranch Management courses list in the above segment.

#### **Evening Courses**

The TCU Ranch Management Program is meeting the educational needs of the ranching community by presenting evening classes through the TCU Office of Extended Education.

These courses are designed for ranchers, business and professional people as well as other students unable to attend the full-time Ranch Management Program. The full-time faculty members of the Ranch Management Program teach the evening courses. Course materials are the same as the course material used for the day classes. Information from ranch studies is brought into the classroom even though extensive travel is not possible. In some instances, two courses from the regular program have been combined to provide a uniform format of three-semester hour's credits. One course will be offered each semester until the full cycle of courses has been completed. The class is presented in a three-hour lecture on Tuesday evening from 7:00 p.m. until 10:00 p.m. Upon successful completion of the seven courses the enrollee becomes a graduate of the Evening Division of Ranch Mangement and receives a certificate of completion.

Admission is through the TCU Office of Extended Education. For an application and other admission information contact the Office of Extended Education at 817-257-7130. Admitted TCU students may take the Evening Division courses as electives.

#### **Courses of Instruction**

**RAMA 30102 Ranch Jobs and Development.** Methods of livestock identification, dehorning, castration, and controlling external parasites; the planning and construction of fences, corrals, and buildings to facilitate the handling of livestock.

**RAMA 30213 Ranch Business Management.** Business law as applied to the livestock producer, business organization, estate planning, labor relations, application of management principles to ranching.

**RAMA 30403 Soil and Water Conservation.** Soil formation and development; soil characteristics which affect productivity; soil erosion by wind and water; soil, water, and wildlife conservation and management practices; Soil and Water Conservation District and U.S.D.A. agency assistance; preparation of coordinated conservation plan.

#### RAMA 30413 Conservation and Development.

**RAMA 30703 Animal Nutrition and Feeding.** Digestion and use of feeds for maintenance and production, selection of feeds for maintenance and production, selection of feeds based on composition and cost, ration formulation, feed processing and handling, dry lot feeding programs, supplemental feeding on pasture, possible limiting factors in feeding efficiency.

**RAMA 30713 Animal Nutrition and Feeding.** Digestion and use of feeds for maintenance and production, selection of feeds for maintenance and production, selection of feeds based on composition and cost, ration formulation, feed processing and handling, dry lot feeding programs, supplemental feeding on pasture, possible limiting factors in feeding efficiency.

**RAMA 40103 Beef Cattle Production.** Economics of beef production enterprises; selection by records and visual appraisal for economically important traits including reproduction, gainability, and carcass value; inheritance; systems of breeding; production programs; management practices.

**RAMA 40112 Sheep and Goat Production.** Sheep breeds and crosses; selection for mutton and wool production; Angora goat selection; breeding; supplemental feeding; marketing of wool and mohair.

**RAMA 40113 Beef Cattle Production.** Economics of beef production enterprises; selection by records and visual appraisal for economically important traits including reproduction, gainability, and carcass value; inheritance; systems of breeding; production programs; management practices.

**RAMA 40303 Animal Health Management.** Anatomy and physiology of cattle, indications of health and disease, development of immunity, specific infectious and noninfectious diseases of cattle, control of internal and external parasites, toxicology, basic veterinary skills and equipment.

**RAMA 40313 Animal Health and Reproduction.** Reproduction in cattle including organs and functions, natural and artificial breeding management, calving management, examination of cows for pregnancy, evaluation of bulls for soundness and fertility, selection of horses for soundness, treatment for sickness and injury, horse breeding.

**RAMA 40323 Animal Health and Reproduction.** Reproduction in cattle including organs and functions, natural and artificial breeding management, calving management, examination of cows for pregnancy, evaluation of bulls for soundness and fertility, selection of horses for soundness, treatment for sickness and injury, horse breeding.

**RAMA 40503 Range Management.** Principles of plant growth and reproduction; economic characteristics and field identification of range plants; ecology of range plants and animals; management of rangeland for all its uses including setting and adjusting stocking rates, distribution of grazing, grazing methods and supporting practices; preparation of ranch management plan.

**RAMA 40513 Grassland Management.** Principles of plant growth and reproduction; economic characteristics and field identification of range plants; ecology of range plants and animals; management of rangeland for all its uses including setting and adjusting stocking rates, distribution of grazing, grazing methods and supporting practices; preparation of ranch management plan.

**RAMA 40603 Ranch Records and Finance.** Basic records needed for management and income tax reports - records of income and expense, inventories, net worth statements, budgets, production records; term problem in which all records for a year's operation are recorded and financial statements are prepared; sources of credit for ranch operations.

RAMA 40613 Ranch Business Management. Basic records needed for management and income tax reports -

records of income and expense, inventories, net worth statements, budgets, production records; term problem in which all records for a year's operation are recorded and financial statements are prepared; sources of credit for ranch operations.

**RAMA 40803 Marketing of Livestock and Meats.** Relation of production to marketing, trends in marketing and consumption, meat processing and distribution, U.S.D.A. activities, market outlets and procedures, futures, seasonal and cyclical influences on prices, selection of time and place to market, handling and transportation of livestock to improve weighing conditions and minimize losses, merchandising purebred livestock.

**RAMA 40813 Marketing of Livestock and Meats.** Relation of production to marketing, trends in marketing and consumption, meat processing and distribution, U.S.D.A. activities, market outlets and procedures, futures, seasonal and cyclical influences on prices, selection of time and place to market, handling and transportation of livestock to improve weighing conditions and minimize losses, merchandising purebred livestock.

**RAMA 40903 Forage Production and Use.** Characteristics and management of introduced pasture plants; combinations for extended grazing, seedbed preparation and planting; weed control, fertilization, irrigation, grazing management and harvest for hay, silage and seed.

#### RAMA 40970 Special Topics in Ranch Management.

**UNPR 10001 Self Assessment and Career Exploration.** This course provides opportunities for premajors to assess abilities, interests, values, and personality; meet with faculty from a variety of potential major and minor fields; learn about the decision-making process and factors related to choosing a major/career;

**UNPR 30002 Professional Careers: Planning & Decision-making.** Prerequisites: Junior status, or permission of instructor. This team-taught course is to acquaint students with decision-making skills related to career development, with emphasis on those who will enter professional sports or the performing arts. It emphasizes financial negotiations; transactions and investments; career development; and life skills and problems.

## General Information

TCU is a major private teaching and research university with the residential, person-centered environment usually found on a small college campus. While accomplishing its mission of educating individuals to think and act as ethical leaders and responsible citizens in the global community, the University provides the unique TCU Experience. This experience gives students an uncommon balance of at least four factors:

TCU offers the **strengths and choices of a major university tempered with the true humanity of a small college** and works to develop and nourish the individual talents of each student.

The University's teacher-scholars and artists **conduct and publish research, express themselves artistically, and teach in a friendly, academic community.** Professional staff members strive to be national leaders in their fields of expertise. TCU students, too, are uncommon and impressive, well-rounded individuals with high potential for success and leadership.

The University takes pride in its **historic relationship** with the Christian Church (Disciples of Christ), which has always stressed a broad interpretation and respect for faith traditions. TCU does not seek to impose a particular religious point of view, but challenges each student to consider what he or she believes.

TCU's emphasis on the development of the individual takes place in part in an **arts and science-centered education that is global in the broadest sense of the word,** which is embraced by all seven schools and colleges. TCU promotes study-abroad and encourages faculty, staff and students to think about the future and what will be required to build a just, ethical and productive world community.

Comprised of seven academic divisions -- AddRan College of Humanities and Social Sciences, M.J. Neeley School of Business, the College of Communication, the School of Education, the College of Fine Arts, the College of Health and Human Sciences and the College of Science and Engineering -- the University is independent and self-governing.

Nationally recognized Division I-A athletics contributes to the vital collegiality of the campus. Of the 16 sports --football and baseball for men; volleyball, rifle and soccer for women; and basketball, cross country, track, tennis, golf, and swimming and diving for men and women -- many are ranked in the Top 25 in the nation.

International study and experiences are an important part of TCU; the University ranks among the top 10 doctoral granting institutions in the United States in terms of the percentage of graduates who have studied abroad. Programs in various locations such as London, Edinburgh, Hungary, Japan, Mexico and Chile provide students an opportunity to live and learn abroad.

The school that was to be TCU was born in the troubled years following the Civil War. In 1869, young brothers Addison and Randolph Clark began holding classes in the village of Fort Worth, from which cattle trails ranged northward. In 1873 they moved 40 miles away to establish AddRan Male and Female College at bucolic Thorp Spring. Inclusion of women in the title is arguably the first instance of coeducation in the Southwest.

After 20 years, the school affiliated with the Christian Churches of Texas and became AddRan Christian College. Moved to Waco in 1895, the school changed its name in 1902 to Texas Christian University. Fire destroyed its main building in 1910, and the University returned to Fort Worth and opened in its present location in 1911. Its future was assured in 1923 with a gift by Mrs. Mary Couts Burnett. (See "Milestones of History" under "Resources" on the main page for other important events.)

With a controlled enrollment of about 8,000 students, TCU draws from all 50 states and more than 75 countries. Of the 420 full-time faculty, 59 percent are tenured; the student:faculty ratio is about 15:1. The 260-acre campus, located only a few miles from downtown Fort Worth, houses about 3,000 students and offers a full range of activities and recreational facilities for students.

In short, higher education may be a business to some, but at TCU, we consider it our mission:

To educate individuals to think and act as ethical leaders and responsible citizens in the global community.

## Admissions

General Policies
Credit by Examination and Portfolio Assessment
Credit for Military Service
Nonresidential Course Work

#### Overview

Texas Christian University does not discriminate on the basis of personal status, individual characteristics or group affiliation, including but not limited to classes protected under federal and state law.

Applications for admission to the undergraduate schools and colleges and requests for further information should be addressed to the Office of Admission, Room 112 of Sadler Hall; the mailing address is TCU Box 297013, Fort Worth, Texas 76129. Non-degree students should contact the Office of Extended Education, TCU Box 297026, Fort Worth, Texas 76129.

#### **General Policies**

**Admission to the University.** Qualified undergraduate students are admitted *to the University* rather than to a specific program, school or college. Application deadlines and notification dates for freshman and transfer applicants are stated in the Application for Undergraduate Admission. Deadlines for applying for financial aid may be obtained by contacting the Office of Scholarships and Financial Aid.

**Health Record and Insurance.** All students taking nine or more semester hours must have a health record on file in the Brown-Lupton Health Center prior to final admission to TCU. Medical insurance is required of all undergraduate students taking nine or more hours. Students may choose insurance through family coverage, TCU's plan or another carrier of their choice.

**Residence Hall Requirement.** Unmarried students under 21 years of age classified as freshmen at the time of registration and enrolling for nine or more semester hours are required to live on campus unless living at their parents' residence. Students who are 17 years old or younger at the time of registration will be approved to live in residence halls on a case-by-case basis.

International Visa Students. Refer to section titled Admission of International Students.

#### Credit by Examination and Portfolio Assessment

Through several methods, students may earn academic credit for college-level learning by taking an examination in the appropriate area. Credit granted usually can be used to satisfy specific and general degree requirements. Refer to the section "Bachelor Degree Requirements" found elsewhere in this bulletin.

The credit by examination procedures are reviewed and updated annually. A current brochure is available from the Office of Admission, and information is also available online at http://www.admissions.tcu.edu.

On a limited basis, portfolio assessment is another method used to earn academic credit for college-level learning. A portfolio is a formal, written document including a résumé, detailed personal history, description of skills and competencies, and documentation to support the student's request for credit. Only limited credit has been approved using this method. More information on the portfolio assessment program can be obtained by contacting Office of Extended Education, (817) 257-7130.

#### **Credit for Military Service**

The University follows, with limitations, the recommendations of the American Council on Education as published in the Guide to the Evaluation of Educational Experiences in the Armed Services in granting credit for military service schools

Courses must be in the "baccalaureate/associate degree category" as defined by the ACE Guide. This requirement precludes acceptance of vocational, technical or certificate category courses, or military occupational specialties or job experience.

For consideration of credit from military service schools, the applicant must submit the following military records:

- 1. certified original of the DD Form 295, or
- 2. copy of the DD Form 214, or
- 3. course completion certificates, or
- 4. a Community College of the Air Force transcript.

The Office of the Registrar will assist persons eligible for veterans education assistance benefits.

## **Nonresidential Course Work**

The University examines all nonresidential learning experiences and grants credit on a case-by-case basis.

## Admission of Students

Admission of Freshman Students
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Admission of Students Seeking an Additional Bachelor's Degree

#### **Admission of Freshman Students**

TCU invites applications from qualified high school students who have graduated or expect to graduate from an accredited secondary school. The student should request information about TCU early in the high school career to learn about admission requirements.

Students applying from secondary schools should request, complete, and return application forms following their junior year in high school. Applicants are considered for admission after the Office of Admission receives:

- a. completed application form
- b. official secondary school transcript
- c. SAT or ACT scores
- d. \$40 application fee
- e. essay and résumé of activities
- f. secondary school guidance counselor's evaluation of applicant.

It is the student's responsibility to complete the application procedure. Students accepted to the University prior to high school graduation are admitted on a tentative basis, pending successful completion of their senior year with academic performance consistent with that upon which the admission decision was based. Verification of graduation is required.

Any college-level coursework attempted after admission but before matriculation must be reviewed by the Office of Admission prior to enrollment and may nullify the offer of admission.

Admitted students must return a nonrefundable enrollment fee by May 1st (National Candidate Reply Date) to secure a place in the fall class.

The following factors are considered when selecting candidates for admission:

- 1. High School Record. Students are expected to have completed upon graduation a **minimum** of 4 units of English, 3 units of mathematics (including 2 units of algebra and 1 of geometry), 3 units of science (including one laboratory science), 3 units of social studies, 2 units of foreign language and 2 units of academic electives. The quality and quantity of coursework taken, grades earned, and subsequent rank in the high school class are important in assessing a candidate's probability for success at TCU.
- 2. Admission Tests. Candidates must present results of the SAT or the ACT. Arrangements to take one of these tests should be made through the student's secondary school. If the candidate has been out of high school more than three years, the SAT/ACT requirement is waived. In addition, prospective performance music majors must audition either in person or by recording. Prospective ballet and modern dance majors must also audition.
- 3. Essay and Counselor's Evaluation. The student's essay is a significant part of the application as is the high school counselor's evaluation. If the candidate has been out of high school more than three years, the counselor's evaluation requirement is waived.
- 4. Extracurricular Participation. Activities outside of class, including employment, community/volunteer work, and leadership experiences are evaluated.
- 5. College Courses taken while in high school. The quality of coursework completed and the grades earned will be considered during the admission process. Official college transcripts must be presented to determine transferability of credit.

## **Admission of Transfer Students**

A transfer student is defined as one who has been out of high school for at least one full semester and has attempted college or university work for credit.

Students planning to transfer from another college or university should submit the following for admission consideration:

- a. completed application form
- b. official transcripts from each college attended
- c. \$40 application fee
- d. secondary school transcript and SAT or ACT scores if, at the time of application, fewer than 24 semester hours of transferable work have been completed.

Admission to TCU as a transfer student is based upon evidence of ability to succeed in college-level work. The applicant's total record will be assessed, taking into account the following:

- 1. the cumulative grade point average
- 2. quality of curriculum

- 3. the number of hours and GPA in core subjects
- 4. the high school record and test results (if possessing fewer than 24 transferable semester hours at the time of application)
- 5. extracurricular activities, achievements and honors
- 6. essay.

The applicant must be in good academic standing and be eligible to return to all previous institutions. Official transcripts must be submitted from each college attended whether the work was satisfactory, unsatisfactory, or interrupted. Failure to disclose any part of a previous academic record is a serious violation of trust and will subject a student to dismissal and forfeiture of credit earned while in attendance at TCU.

Evidence of acceptable academic standing at an accredited college or university and appropriate academic credentials are required. A minimum cumulative GPA of 2.0 is necessary for consideration although a cumulative GPA of 2.75 or higher is generally required for admission. Every application will be reviewed on an individual basis. In most cases, greater emphasis is placed on academic work completed in recent semesters than on work completed in the more distant past.

Grades on all attempted transferable courses except physical education activity courses (including repeated courses and those in which grades of F, D or I were received) will be used in calculating the grade point average to determine the applicant's qualification for admission. Once admitted, a student's transfer grades will not be entered on the student's permanent record at TCU.

Students admitted to the University will receive, with their letter of admission, a transcript evaluation sheet listing all transferable courses. A course listed as "transferable" on the transcript evaluation is not necessarily applicable or acceptable under certain degree programs.

Courses that do not transfer to TCU include the following:

- 1. courses in which a grade lower than C was earned
- 2. courses considered to be developmental (e.g., orientation, time management, library skills) or remedial (e.g., those in English, math and reading)
- 3. Vocational-Technical courses.

No more than 66 hours from a community college may be credited toward a bachelor's degree, and no course transferred from a community college may be used to satisfy the TCU advanced-hour requirement. No more than 8 semester hours of physical education activity courses may be applied toward graduation requirements.

A nonrefundable enrollment fee is required no later than four weeks prior to the beginning of the initial term.

Note: Students transferring to TCU must present a record of all transfer work for evaluation to the Office of Admission for approval by the appropriate academic dean prior to their enrollment in the University. Transfer coursework not presented prior to enrollment may not be counted toward a degree.

After enrolling at TCU, all students must receive prior written approval of the appropriate academic dean if they wish to take courses at another institution and have those courses count toward a degree at TCU. Coursework taken without prior written approval may not be applied to a degree.

Some programs have certain requirements that must be met to enroll in upper division courses. Transfer applicants who plan to declare a major in the M.J. Neeley School of Business, College of Health and Human Sciences or the School of Education, for instance, should refer to those special requirements set forth in the appropriate programmatic sections of this Bulletin.

#### **Admission of International Students**

International (non-immigrant) undergraduate applicants for admission to TCU must demonstrate:

- 1. High scholastic achievement, with above-average academic performance in their secondary or high school studies and on national examinations, where such examinations are administered. Students transferring from a university or other institution of higher education should have above-average grades in their post-secondary studies. Former TCU international students should refer to the section on *Re-enrollment of Former Students*.
- 2. A satisfactory command of English as demonstrated by such examinations as TOEFL (Test of English as a Foreign Language), the SAT, the ACT or another widely recognized test of English proficiency. The minimum TOEFL score accepted for admission of beginning undergraduate students is 550 on the paper-based examination or 213 on the computer-based examination. Transfer students who have successfully completed English composition at a U.S. college and have 24 hours of transferable credit may be exempt from English testing.

Applicants who have not achieved the required level of English proficiency are encouraged to enroll in TCU's Intensive English Program, which offers six sessions each year.

Regardless of the level of English language proficiency, all admitted international students are tested upon arrival at the University and, depending on their test results, may or may not be required to take certain English language credit courses to overcome deficiencies.

Admitted students must eliminate any deficiencies determined by the TCU English Proficiency Exam within the first two full semesters in order to continue their studies at TCU.

**Procedures**. Nonimmigrant applicants should request the "International Student Application for Undergraduate Admission."

The application contains detailed instructions regarding documents that must be submitted and deadlines for application.

Admission for summer sessions is considered only for applicants with at least 24 semester hours of higher education in the U.S.

When the application is complete, the International Committee on Admissions will evaluate the credentials and send the applicant a letter stating its decision. If admitted, the applicant will be provided information regarding dates of arrival, orientation, testing, and additional requirements. At least two months prior to orientation, students must submit a health record and provide proof of the availability of funds to cover all educational and living expenses for the duration of their studies at TCU. International orientation is required of all new international students.

Advanced credit may be granted for certain courses considered to be beyond the level of U.S. secondary school courses, provided that the grades are at least average. Results from exams such as the International Baccalaureate, the German Abitur, the British General Certificate of Education (GCE) "A" Levels, and other similar national exams can be considered for possible advanced credit.

The University standards and procedures regarding international students are consistent with those expressed in the "Admissions Standards and Procedures" of NAFSA: Association of International Educators.

**Housing.** Undergraduate applicants in their first year of higher education and who are less than 21 years of age are required to reside in on-campus housing. Other applicants may apply for housing on campus after being granted admission and may receive a reservation depending on space availability at the time of application.

Additional information can be obtained from the Office of International Admission, TCU Box 297013, Texas Christian University, Fort Worth, Texas 76129, U.S.A. or by calling (817) 257-7871 or sending a FAX to (817) 257-7268.

#### **Admission of Non-Degree Students**

Students interested in taking courses for academic credit but not in seeking a degree from TCU may be admitted for non-degree study. Non-degree students are held to the same standards governing academic progress (including probation/suspension) as degree students.

Non-degree status would apply to persons in the following categories:

- 1. taking only ROTC at TCU and enrolled at another college or university
- 2. seeking Ranch Management certification
- 3. seeking only teacher certification
- 4. with an undergraduate degree desiring additional undergraduate coursework
- 5. applying as summer visiting students.

Persons who do not fit into any of these categories, but want to take credit courses, will be considered for limited enrollment status.

## **Limited enrollment status** is open to persons who:

- 1. are 22 years of age or older with a high school diploma and/or equivalency diploma based on the GED,
- 2. are in good standing at all colleges where they are currently enrolled or have ever been enrolled, and
- 3. have not been previously denied admission or readmission to TCU.

A limited enrollment student may not enroll in more than six (6) semester hours of coursework per semester or three (3) hours per summer session. Exceptions must be approved by the Office of Extended Education. A maximum of twelve (12) semester hours may be accumulated. At that time a student may apply as a degree-seeking student or receive special permission to continue beyond the 12 hours limitation.

Applications for non-degree study may be obtained from the Office of Extended Education.

Non-immigrant students may be considered for non-degree status without the limitations stated above, but must abide by the regulations stipulated by the Office of International Student Affairs. These applicants should contact the Office of International Student Affairs for specific limitations, application forms, and procedures for international students.

**Non-degree to degree status:** Undergraduate students who wish to change from non-degree to degree status must submit the appropriate application form obtained from the Office of Admission. The semester hours earned as a non-degree student can be applied toward a degree program if applicable.

## **Admission of Students by Individual Approval**

Students who demonstrate outstanding academic achievement and potential, but have not yet graduated from high school, may be admitted by individual approval. Such students seeking concurrent enrollment or early admission should contact the Office of Admission for further information.

Applicants 21 years of age or older who submit results of a General Education Development (GED) examination may be considered for admission on an individual basis. Such applicants generally are encouraged to attend a two-year college for a semester or more in preparation for university studies.

#### **Re-enrollment of Former Students**

Students previously enrolled and in acceptable academic standing in an undergraduate degree program who wish to re-enter TCU after absence of a full fall or spring semester must apply for re-enrollment and pay an application fee. Official transcripts from each college or university attended since the last enrollment at TCU must be submitted to

the Office of the Registrar (see exception under "re-enrollment following suspension"). Eligibility for re-enrollment will be determined upon review and assessment of the student's entire record.

Former TCU students originally awarded an *academic scholarship* who are applying for re-enrollment may petition for the restoration of that scholarship or may be eligible to compete for a transfer academic scholarship if coursework has been completed at another university. Students may not receive a scholarship that exceeds the original TCU scholarship.

**Non-immigrant students** should apply for re-enrollment at least two months prior to registration in order to meet all requirements of the Office of International Student Affairs.

**Re-enrollment involving a change of major**. When a student is re-enrolled with a change of major, the Office of the Registrar will initiate the Change of Major form. Permission to change major requires approval of the dean of the new major. All entrance requirements specific to the new major must also be met. See *Requirements for Graduation* section.

**Re-enrollment following suspension**. All students suspended from TCU for academic or disciplinary reasons must apply for re-enrollment through the Office of the Registrar. No enrollment will be permitted following a period of suspension until re-enrollment is approved by the Office of the Registrar after consultation with the appropriate dean. (See *Academic Probation and Suspension* elsewhere in this bulletin.)

A student suspended from TCU may not transfer credit that was earned at another college or university during the period of enforced suspension, but must submit all transcripts of any work attempted or completed during that period.

A student may not re-enter TCU while on academic suspension from another college or university.

**Re-enrollment following extended separation from the University.** A student accepted for re-enrollment after a ten-year separation from TCU may petition to have all prior coursework at TCU (selected course exclusion is not permitted) excluded from the TCU GPA calculation and credit toward graduation. The petition should be filed no later than the end of the first semester of re-enrollment in a degree program and be addressed to the registrar who will seek the approval of the appropriate academic dean. If the petition is granted, it is irrevocable. Excluded courses and corresponding grades will still appear on the official transcript but will not be included in calculation of the GPA, will not be counted as meeting credit hour requirements for graduation, and will not be used to satisfy course requirements.

#### Admission of Students Seeking an Additional Bachelor's Degree

First-time applicants should complete the Application for Undergraduate Admission for Transfer Students. Students who have previously attended TCU should complete the Application for Re-enrollment and see the section Re-enrollment of Former Students. See Additional Bachelor's Degree in the Bachelor's Degree section. The student's entire academic record, as well as credentials submitted with the application, will be assessed prior to an admission decision.

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Basketball - Women's Jeff Mittie, B.A., M.S. -- Head Women's Basketball Coach Larry Tidwell, B.A., M.Ed. -- Assistant Women's Basketball Coach Tricia Porter, B.B.A., M.L.A. D Director of Basketball Operations Yolanda Wells-Broughton, B.A., M.S. D Assistant WomenÕs Basketball Coach Tonya Benton, B.S. -- Assistant Women's Basketball Coach

#### Football

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Coach Mike Sinquefield, B.G.S. -- Director of Football Operations
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Richard Bumpas, B.S. -- Assistant Football Coach
Dick Winder, B.S., M.S. -- Assistant Football Coach
Charles McMillian, B.S. -- Assistant Football Coach
Chad Glasgow, B.S. -- Assistant Football Coach
Mike Schultz, B.A., M.L.A. -- Assistant Football Coach
Dan Sharp, B.A., M.L.A. -- Assistant Football Coach
Eddie Williamson, B.A., M.A. -- Assistant Football Coach
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#### Golf - Women's

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#### Rifle Karen

Monez, A.A. -- Women's Rifle Coach

#### Soccer

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#### Swimming

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#### Tennis - Men's

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## Tennis - Women's

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## Track Monte

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#### Volleyball Prentice

Lewis, B.A. -- Head Women's Volleyball Coach Jason Tanaka, B.A. -- Assistant Women's Volleyball Coach Barbara Kovacs, B.A., M.A. -- Assistant Women's Volleyball Coach

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## **Center for Academic Services**

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#### **Center for Teaching Excellence**

Catherine Wehlburg, B.S., M.Ed., Ph.D. -- Director Arrion Howard, B.A. -- Instructional Design Assistant Romana Hughes, B.A.A.S. -- Coordinator of eLearning Initiatives

## Chancellor's Office

Karen M. Baker, B.A. -- Assistant to the Chancellor

## **Extended Education**

David Grebel, B.A., M.Div., M.A. -- Director Christopher D. Baran, B.S., B.A., M.A. -- Coordinator, Operations and Marketing Julia Lovett, B.S., M.Ed. -- Coordinator, Community Programs and Professional Development

#### **Finance and Administration**

Carol N. Campbell, B.S.B., C.P.A. -- Vice Chancellor for Finance and Administration/Treasurer Richard (Dick) P. Hoban, B.B.A., C.P.A -- Assistant Treasurer

#### **Financial Analysis and Property Management**

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#### **Financial Services**

Jocelyn Allen, B.B.A., C.P.A. -- Financial Systems Administrator
Wendy Crowley, B.S. -- Director of Student Financial Services
Brad Davis, B.B.A., C.P.A. -- Student Financial Systems and Collections Administrator Roger Fuller, B.A. -- Director of Purchasing
Peg Meroney -- Director of Financial Operations
Tammy Tanner, B.B.A., M.S.A., C.P.A. -- Director of Accounting
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#### **Information Services**

David E. Edmondson, B.B.A., M.S.D.D. -- Assistant Provost

Administrative Information Systems
Michael Ten Eyck, B.B.A., M.B.A. -- Manager
Jolene Alonso, B.S.B. -- Systems Analyst
Susie Davis, B.B.A., M.B.A., C.P.A. -- Systems Analyst
Bob Hansard, B.A., M.B.A., C.P.A. -- Systems Analyst
Joshua Harmon, B.A. -- Systems Programmer
Joy Holekamp, B.B.A. -- Systems Analyst
Cindy McPherson, B.F.A, M.L.A. -- Programmer/Analyst
Henry Sanchez, B.A, M.B.A. -- Systems Analyst
Michael Selman, B.B.A. -- Systems Analyst
Steve Taylor, B.S. -- Systems Analyst
Greg Wendt, B.S. -- Systems Analyst
Tiffany Wendt, B.A.S. -- Systems Analyst
Yolanda Winston, B.B.A. -- Programmer/Analyst
Richard O. Yantis, B.B.A. -- Technical Project Leader

#### Technical Services

William Senter, B.A., M.B.A. -- Manager
Jonathan Altschul, B.A., -- Server Administrator
Karen Bowerman, B.S. -- Senior Client Server Specialist
Craig Carlson, B.B.A -- Database Administrator
Jon K. Eidson, B.S., M.B.A. -- Database Administrator
Tony Fleming, B.S. -- Senior Network Engineer
David Jewett -- Client Server Specialist
Warner Kimbrell -- Network Engineer
Bryan Lucas, B.B.A. -- Network Specialist
James Mayne, B.A., B.S., M.A. -- Network Security Engineer

User Services

Kim Weber, B.S. -- Manager
Ann Bailey, B.B.A -- User Services Consultant
Carlene Coover, B.S., M.B.A.--Training Consultant
Sean Gillaspy, B.S., -- User Services Consultant
Rebecca Glass, B.S. -- User Services Consultant
Matthew Hinze, B.A. -- User Services Consultant
Cathleen Jackson, A.A.-- User Services Consultant
Lenelda Pennington, B.S. -- User Services Consultant
Richard Reed, B.S. -- Information Commons Coordinator
Barbara Savak, B.G.S., M.L.A., -- Training and Documentation Analyst
Ivan E. Taylor, B.S., Ph.D. -- User Services Consultants Supervisor

**Institute of Behavioral Research** 

D. Dwayne Simpson, Ph.D. -- Director
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Kirk Broome, Ph.D. -- Research Scientist
Michael Czuchry, Ph.D. -- Research Scientist
Donald F. Dansereau, Ph.D. -- Senior Research Scientist
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Patrick M. Flynn, Ph.D. -- Associate Director
Jack Greener, Ph.D. -- Research Scientist
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Danica Knight, Ph.D. -- Research Scientist
Kevin Knight, Ph.D. -- Research Scientist
Janis T. Morey, M.Ed. -- Research Associate
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Michael Strom, B.A., M.A., M.L.I.S. -- Archivist, Special Collections

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#### **Research and Sponsored Projects**

Jan M. Fox, B.B.A. -- Coordinator

#### Scholarships and Student Financial Aid

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#### **Student Affairs**

Campus Life

Susan Adams, B.S., M.S. -- Associate Vice Chancellor and Dean of Campus Life Phyllis Bodie, B.S., M.Ed. -- Assistant Director of the Student Center & Program Advisor Tiffany Abbot, B.A., M.Ed. -- Director of Fraternity/Sorority Affairs Larry Markley, B.A., M.A. -- Director of Student Center John Singleton, B.A., M.Ed. -- B.A., M.A. Director of International Student Affairs Mike Russel, B.S., M.Ed. -- Associate Dean of Campus Life Glory Robinson, B.S., M.Ed. -- Associate Dean of Campus Life James Parker, B.A., M.Ed. -- Assistant Dean of Campus Life Shelley Story, B.A., M.Ed. -- Assistant Dean of Campus Life

Campus Police Steve McGee, B.B.A., J.D. -- Chief J.C. Williams -- Assistant Chief

Career Services

Patricia Bergmaier, B.S., M.S. -- Executive Director Charles Dunning, B.A., M.Ed. -- Assistant Director Marjory Eisenman, B.S., M.S. -- Assistant Director William Stowe, B.A., M.A., Ph.D. -- Associate Director

Health Services
John S. Terrell, M.D. -- Director

Health Center
Bert Franks, M.D. -- Physician
Burton W. Schwartz, A.B., M.D. -- Physician
Donna Behl, B.S.N., R.N.C. -- OB/GYN Nurse Practitioner
Wendell Geiger, B.S., M.A. -- Physician Assistant

Counseling Center Howard B. Eudaly, Jr., M.D. -- Director Monica Kintigh, Ph.D. -- Licensed Counselor John Koechel, Ph.D. -- Clinical Psychologist

Residential Services
Roger Fisher, B.S., M.A. -- Director
Robin Williamson, B.A., M.Ed. -- Associate Director of Administration
Barbara Hawkins, B.A., M.A. -- Associate Director of Residential Life
Richard Oliver, B.G.S. -- Assistant Director of Facilities

#### Student Development Services

Barbara Brown Herman, B.A., M.A., Ph.D. -- Vice Chancellor and Dean of Student Development Kay Higgins, B.A., M.A. PhD. -- Director of Special Programs

Darron Turner, B.S. -- Assistant Dean for Student Development

Greg Trevino, B.B.A. -- Assistant Director of Intercultural Education and Services

Cynthia Walsh B.A., J.D. -- Director of the Leadership Center Carrie Zimmerman, B.A., M.Div. -- Director of the First Year Marcy Paul, B.A., M.A.-- Director of Women's Resource Center

Amy Blaschke, B.S., Program Coordinator

Melissa Boyd, B.A., M.S., Assistant Director of the Leadership Center

Eric Cox, B.A., M.A., Assistant Director of the Leadership Center

## Campus Recreation

Steve Kintigh, B.A., M.S. -- Director

Mary Ellen Milam, B.S., M.S. -- Associate Director

Kristin McAfee, B.A. -- Assistant Director - Outdoor Recreation Cristina Mitchell, B.S., M.A. -- Assistant Director - Intramural Sports

Robert Manners, B.A., M.A. -- Assistant Director - Aquatics

## Alcohol and Drug Education

Angela Taylor, B.S., M.S. Ph.D. -- Director for Alcohol and Drug Education and Assistant Dean of Student

Development

Kimberely Greenhall, B.S., M.Ed. -- Associate Director of Alcohol and Drug Education

#### University Ministries

Charles Calabrese, B.A., M.Div., M.S. -- Roman Catholic Minister

Jonathan Ogujiofor, B.S., M.S. -- University Minister for Minority Students

Bryan Young, B.A., M.Theo. -- United Methodist Minister

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Judy Alter, B.A., M.S., Ph.D. -- Director

Susan Petty, B.A. -- Editor

#### **University Advancement**

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Ann Louden, B.A., M.L.A. -- Director of Principal Gifts

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Nancy Petruso, B.A., M.A. -- Assistant Vice Chancellor

Alice Carter, B.A., M.A. -- Director of Advancement Research

Andrea Heitz, B.A., M.S., M.T.S. -- Research Officer

Virginia Schmidt, B.A. -- Research Officer Sandra Tuomey, B.A. -- Director of Donor Relations

Nancy Madsen, B.J., M.L.A. -- Assistant Director of Donor Relations and Stewardship Coordinator

Amy Cohorn, B.B.A. ¿ Scholarship Stewardship Coordinator

## Constituent Programs

Roby V. Key, B.S., M.Ed., Ed.D. - Associate Vice Chancellor

Kristi Hoban, B.S., M.S. -- Assistant Vice Chancellor

Chandler Smith, B.S. -- Associate Director of Alumni Relations

Rebekah Waits, B.B.A. -- Assistant Director of Alumni Relations Melissa Austin-Weeks, B.S.N. -- Special Events Coordinator

Cindy Hayes, B.A., M.S. -- Director of Annual Fund

Melanie Hanna, B.S. -- Annual Fund Officer

Kelly Imig, B.S. -- Director of Phonathon Melanie Morriss, B.B.A. -- Annual Fund Officer

Karen Nichols, B.S. -- Director of Student Programs

Monica Ray -- Web Services Coordinator

Davis Babb, B.S. -- Associate Athletic Director for Development

Mark Mourer, B.S., M.S. -- Director of Frog Club

Marisa Schenke, B.S., M.Ed. -- Assistant Director of Frog Club Gay Donohoo, B.S. -- Director of Development Information Services Cheryl Gray, B.A. -- Gift Processing Manager

Trey Lawyer -- Administrative Services Manager

Yvonne Mann, B.B.A. -- Technical Services Manager

## Corporations, Foundations, & Parents Relations

April Culver, B.S., M.A. -- Assistant Vice Chancellor & Director of Parent Relations

Dennis Alexander, B.S. -- Director of Foundation Relations

Valerie DeSantis Larsen, B.A. -- Director of Corporate Relations

## Leadership Gifts

Daniel G. Grigg, B.S. -- Assistant Vice Chancellor

Brian Allen, B.B.A. -- Senior Associate

Adam Baggs, B.A., M.P.A. -- Senior Associate

Kathy Limmer, B.A. -- Senior Associate Steve Savage, B.S. -- Senior Associate

Catherine R. Sheffield, B.S. -- Director of Gift Planning

DeVonna Tinney, B.B.A. -- Senior Associate

## William L. Adams Center for Writing

Steven Sherwood, B.S., M.F.A. -- Director David Kuhne, B.A., M.F.A., Ph.D. -- Associate Director Harry Antrim, B.A., M.A., Ph.D. -- Instructional Staff Cheryl Carithers, B.A., M.A. -- Instructional Staff Billie Hara, B.A., M.A. -- Instructional Staff Margaret-Rose Marek, B.S., M.A. -- Instructional Staff

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# **Faculty Directory**

AddRan College of Humanities and Social Sciences
M. J. Neeley School of Business
College of Communication
School of Education
College of Fine Arts
College of Health and Human Sciences
College of Science and Engineering
Ranch Management Program
Emeritus Faculty

#### AddRan College of Humanities and Social Sciences

Mary L. Volcansek, Dean Michael R. Butler, Associate Dean Don M. Coerver, Associate Dean Ida N. Hernandez, Assistant to the Dean

#### **Aerospace Studies Faculty**

LT. COL. WANDA I. ECHEVARRIA, Assistant Professor. B.A. (University of Puerto Rico), 1982; M.Ed. (Boston University), 1986. Since 2002.

CAPT DAVID R. MONTALVO, Assistant Professor. B.S. (University of Texas at Austin), 1999. Since 2004.

LT. COL. BRADLEY S. KEANE, *Professor and Chair of the Department*. B.A. (University of California at Los Angeles), 1976; M.P.A. (Golden Gate University), 1987. Since 2003.

#### Design, Merchandising and Textiles

LARK F. CALDWELL, Associate Professor. B.S. (Baylor University), 1977; M.Ed. (Sam Houston State University), 1979; Ph.D. (Texas Woman's University), 1986. Since 1987.

JANACE E. CLARKE, *Associate Professor*. B.S (State University of New York at Oneonta), 1991; M.A. (Texas Woman's University), 1994; Ph.D. (Texas Woman's University), 1998. Since 2000.

SALLY L. FORTENBERRY, Associate Professor. B.S. (Carson-Newman College), 1980; M.S. (Texas Woman's University), 1981; Ph.D. (Texas Woman's University), 1985. Since 1989.

JANE KOLAR KUCKO, *Associate Professor and Chair of the Department.* B.S. (University of Nebraska), 1981; M.S. (Oklahoma State University), 1983; Ph.D. (Texas Woman's University), 2003. Since 1984.

FREDERICK DANIEL OBERKIRCHER III, Associate Professor. B.S. (Pennsylvania State University), 1968; M.S. (Pennsyvania State University), 1970, Since 1974.

LAURA PRESTWOOD, Assistant Professor. B.S. (Meredith College), 1990; M.F.A. (Winthrop University), 1999. Since 2002

JOSEPH SELF, Assistant Professor. B.S. Architecture (University of Texas at Austin), 1987; M. Architecture (Rice University), 1989, Since 2000.

POLLY P. STARR, *Instructor.* B.S. (Texas Wesleyan College), 1967; M.S. (University of North Texas), 1987. Since 1987.

#### **Economics**

DOUGLAS G. BUTLER, Instructor. B.A. (Luoisiana State University), 1989. Since 2003.

MICHAEL R. BUTLER, Associate Professor and Associate Dean of AddRan College of Humanities and Social Sciences. B.A. (Emory University), 1980; M.A. (Georgia State University), 1982; Ph.D. (University of North Carolina), 1986. Since 1986.

DAWN C. ELLIOTT, Associate Professor. B.A. (University of the West Indies), 1988; M.A. (Florida Atlantic University), 1990; Ph.D. (New School for Social Research), 1994. Since 1995.

ROBERT F. GARNETT JR., Assistant Professor. B.A. (College of William and Mary), 1984; Ph.D. (University of Massachusetts), 1994. Since 1996.

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KRISTIN KLOPFENSTEIN Assistant Professor. B.A. (George Washington University), 1994; M.A. (University of Colorado), 1998; Ph.D. (University of Colorado), 1999. Since 1999.

JOHN R. LOVETT, *Instructor*. B.A. (Southwest Missouri State University), 1988; M.A. (University of Colorado), 1993; Ph.D. (University of Colorado), 1996. Since 2000.

EDWARD M. McNERTNEY, Associate Professor. B.A. (Bloomsburg State College), 1969; M.A. (Bowling Green State University), 1970; Ph.D. (University of Massachusetts), 1977. Since 1977.

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STEPHEN F. QUINN, Associate Professor. B.A. (Rockford College), 1988; M.S. (University of Illinois), 1994; Ph.D. (University of Illinois), 1994. Since 1995.

#### **English**

BONNIE BLACKWELL, Associate Professor. B.A. (University of Texas at Austin), 1990; M.A. (Cornell University), 1996; Ph.D. (Cornell University), 1998. Since 1998.

NEIL EASTERBROOK, Associate Professor. B.A. (Ithaca College), 1979; M.A.T. (Colgate University), 1981; M.A. (State University of New York at Buffalo), 1986; Ph.D. (State University of New York at Buffalo), 1988. Since 1990.

RICHARD L. ENOS, *Professor and Lillian Radford Chair of Rhetoric and Composition*. B.A. (California State University), 1969; M.A. (Indiana University), 1970; Ph.D. (Indiana University), 1973. Since 1995.

BOB J. FRYE, *Emeritus Professor and Distinguished Lecturer* . B.A. (Wayland Baptist University), 1961; M.A. (University of Tennessee), 1964; Ph.D. (University of Tennessee), 1966. Since 1966.

THERESA GAUL, Assistant Professor. B.A. (College of St. Catherine), 1990; M.A. (University of Wisconsin), 1992; Ph.D. (University of Wisconsin), 1998. Since 1999.

ANN L. GEORGE, Associate Professor and Director of Undergraduate Studies. B.A. (Michigan State University), 1979; M.F.A. (University of North Carolina at Greensboro), 1981; Ph.D. (Pennsylvania State University), 1997. Since 1997.

SHARON M. HARRIS, Lorraine Sherley Professor of Literature. B.A. (University of Portland), 1983; M.A. (University of Portland), 1985; Ph.D. (University of Washington), 1988. Since 2000.

JILL CAROLINE HAVENS, *Instructor*. B.A. (Mount Holyoke College), 1989; Ph.D. (Oxford University), 1996. Since 2003.

CHARLOTTE HOGG, Assistant Professor. B.A. (University of Nebraska), 1993; M.A. (Oregon State University). 1996; Ph.D. (University of Nebraska), 2001. Since 2001

LINDA K. HUGHES, Addie Levy Professor of Literature. B.A. (Wichita State University), 1970; M.A. (University of Missouri), 1971; Ph.D. (University of Missouri), 1976. Since 1988.

CARRIE SHIVELY LEVERENZ, Associate Professor and Director of Composition. B.A. (Mt. Vernon Nazarene University), 1981; M.A. (St. Bonaventure University), 1985; Ph.D. (Ohio State University), 1994. Since 2000.

BRAD LUCAS, Assistant Professor. B.A. (University of Illinois), 1992; M.A. (Southwest Texas State University), 1994; Ph.D (University of Nevada), 2002. Since 2003.

TIMOTHY L. PARRISH, *Associate Professor*. B.A. (Trinity University), 1986; M.A. (University of Chicago), 1988; Ph.D. (University of Washington), 1993. Since 2003.

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STEPHEN D. POWELL, Associate Professor. B.A. (Oberlin College), 1989; M.A. (Indiana University), 1990; Ph.D. (University of Toronto), 1995. Since 1996.

CURT NELSON RODE, *Instructor*. B.A. (University of Illinois), 1988; M.A. (University of Tennessee), 1992; Ph.D. (University of Tennessee), 1998. Since 2003.

ELIZABETH SPILLER, Associate Professor. B.A. (Amherst College), 1987; M.A. (Harvard University), 1990; Ph.D. (Harvard University), 1995. Since 2000.

KAREN E. STEELE, Associate Professor. B.A. (St. Olaf College), 1988; M.A. (University of Texas at Austin), 1992; Ph.D. (University of Texas at Austin), 1996. Since 1996.

AUSTRALIA TARVER, Associate Professor. B.A. (Fisk University), 1964; M.A. (Ohio University), 1965; Ph.D. (University of Iowa), 1978. Since 1995.

DAVID VANDERWERKEN, Professor. B.A. (Colgate University), 1968; Ph.D. (Rice University), 1973. Since 1971.

DANIEL E. WILLIAMS, *Professor and Chair of the Department*. B.A. (University of Washington), 1973; M.A. (University of Denver), 1976; Ph.D. (University of Denver), 1980. Since 2003.

### History

D. CLAYTON BROWN, *Professor.* B.A. (North Texas State University), 1964; M.A. (North Texas State University), 1965; Ph.D. (University of California at Los Angeles), 1970. Since 1971.

JODI M. CAMPBELL, Assistant Professor. B.A. (University of Nebraska), 1990; M.A. (Tulane University), 1992; Ph.D. (University of Minnesota), 1999. Since 2002.

GREGG CANTRELL, *Professor and Erma and Ralph Lowe Chair in Texas Studies*. B.A. (Texas A & M University), 1979; M.A. (Texas A & M University), 1980; Ph.D. (Texas A & M University), 1988. Since 2003.

JAMES T. CHAMBERS, Associate Professor. B.A. (Memphis State University), 1965; M.A. (University of Illinois), 1967; Ph.D. (University of Illinois), 1973. Since 1971.

DON M. COERVER, *Professor and Associate Dean of AddRan College of Humanities and Social Sciences.* B.A. (Southern Methodist University), 1964; M.A. (Southern Methodist University), 1970; Ph.D. (Tulane University),

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TODD M. KERSTETTER, *Assistant Professor.* B.A. (Duke University), 1986; M.A. (University of Nebraska), 1992; Ph.D. (University of Nebraska), 1997. Since 2000.

KATHRYNE McDORMAN, Associate Professor. B.A. (University of Kentucky), 1967; M.A. (University of North Carolina), 1969; Ph.D. (Vanderbilt University), 1976. Since 1977.

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JEFFREY ROET, *Instructor*. B.A. (State University of New York at Buffalo), 1973; M.A. (Northwestern University), 1977; Ph.D. (Northwestern University), 1982.

CLAIRE A. SANDERS, *Instructor.* B.A. (Mount Holyoke College), 1983; J.D. (University of North Carolina), 1986; M.A. (University of North Carolina), 1991; Ph.D. (University of North Carolina), 1996. Since 1998.

GENE A. SMITH, *Professor and Director of the Center for Texas Studies.* B.A. (Auburn University), 1984; M.A. (Auburn University), 1987; Ph.D. (Auburn University), 1991. Since 1994.

SARA SOHMER, *Instructor*. B.A. (University of Tennessee), 1966; M.A. (University of Wisconsin), 1967; Ph.D. (University of Hawaii), 1988. Since 1995.

KENNETH STEVENS, *Professor and Chair of the Department.* B.A. (Indiana University), 1968; M.A. (Indiana University), 1974; Ph.D. (Indiana University), 1982. Since 1983.

PETER A. SZOK, Assistant Professor. B.S. (Georgetown University), 1990; M.A. (Tulane University), 1994; Ph.D. (Tulane University), 1998. Since 2002.

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## Military Science

MSG. RODNEY BYUS, Senior Military Instructor. Since 2002.

LTC. MARK E. CONDRY, *Professor and Chair of the Department*. B.S. (United States Military Academy), 1982; M.A. (University of Florida), 1991. Since 2003.

LTC.(Ret) DANNY L. GREENE, Assistant Professor. B.A. (Mercer University), 1975; M.S.Ed. (University of Southern California), 1983. Since 2003.

MAJ. KRISTIN D. KREMER, Assistant Professor. B.A. (Loyola University of Chicago), 1991; M.B.A. (Baker University), 2001. Since 2003.

### **Modern Languages and Literatures**

JEANINE S. ALESCH, Assistant Professor. A.B. (Bryn Mawr College), 1986; M.A. (University of Pennsylvania), 1992; Ph.D. (University of Pennsylvania), 1996. Since 2001.

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YUMIKO KEITGES, *Instructor*. B.A. (University of Texas at Austin), 1985; M.A. (University of Texas at Austin), 1989. Since 1991.

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MONICA MARCHI, Lecturer. B.A. (Univerita' degli Studi di Bologna), 1988; M.A. (Texas Christian University), 1991. Since 2004.

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JEFFREY D. TODD, Associate Professor. B.A. (Ashbury College), 1983; M.A. (University of Cincinnati), 1987; Ph.D. (University of Cincinnati), 1997. Since 1997.

FELIX W. TWERASER, Associate Professor. B.A. (Grinnell College), 1983; M.A. (Indiana University), 1987; Ph.D.

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#### **Philosophy**

GREGG E. FRANZWA, *Professor.* B.S.C. (Santa Clara University), 1967; M.B.A. (University of California at Berkeley), 1969; M.A. (San Francisco State University), 1972; Ph.D. (University of Rochester), 1975. Since 1976.

RICHARD F. GALVIN, *Professor.* B.A. (Macalester College), 1974; M.A. (University of California at Santa Barbara), 1980; Ph.D. (University of California at Santa Barbara), 1983. Since 1982.

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#### **Political Science**

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J. MICHAEL DODSON, *Professor*. B.A. (University of South Dakota), 1967; M.A. (University of New Mexico), 1969; Ph.D. (Indiana University), 1974. Since 1973.

MANOCHEHR DORRAJ, *Professor.* B.A. (University of Texas at Austin), 1975; M.A. (University of Texas at Austin), 1979; Ph.D. (University of Texas at Austin), 1984. Since 1990.

JOANNE CONNOR GREEN, *Associate Professor.* B.S. (State University of New York at Buffalo), 1990); M.A. (University of Florida), 1992; Ph.D. (University of Florida), 1994. Since 1994.

DONALD W. JACKSON, *Professor and Herman Brown Chair of Political Science*. B.A. (Southern Methodist University), 1959; J.D. (Southern Methodist University), 1962; M.A. (University of Wisconsin), 1969; Ph.D. (University of Wisconsin), 1972. Since 1975.

CHARLES LOCKHART, *Professor.* B.A. (Kansas State University), 1967; M.A. (State University of New York at Buffalo), 1969; Ph.D. (State University of New York at Buffalo), 1971. Since 1974.

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JAMES W. RIDDLESPERGER, JR., *Professor and Chair of the Department.* B.A. (North Texas State University), 1975; M.A. (North Texas State University), 1980; Ph.D. (University of Missouri), 1982. Since 1982.

ADAM SCHIFFER, Assistant Professor. B.A. (Chapman University), 1996; M.A. (Arizona State University), 1998; Ph.D. (University of North Carolina), 2003. Since 2003.

MARY L. VOLCANSEK, *Professor and Dean of AddRan College of Humanities and Social Sciences*. B.A. (Abilene Christian College), 1969; M.A. (Texas Tech University), 1971; Ph.D. (Texas Tech University), 1973. Since 2000.

JAMES C. WRIGHT, JR., *Distinguished Lecturer*. Member of United States House of Representatives, 1954-1989 (Majority Leader, 1976-1987; Speaker 1987-1989). Since 1992.

## Religion

D. JAMES ATWOOD, *Instructor and Assistant to the Dean of Admissions*. B.A. (TCU), 1970; M.A. (Vanderbilt University), 1975; Ph.D. (Vanderbilt University), 1978. Since 1983.

CLAUDIA V. CAMP, *Professor.* B.A. (Duke University), 1972; M. Div. (Harvard University), 1977; Ph.D. (Duke University), 1982. Since 1980.

JONATHAN H. EBEL, *Lecturer*. A.B. (Harvard University), 1993; M.A. (University of Chicago Divinity School), 1999. Since 2004.

ANDREW O. FORT, Professor. B.A. (Amherst College), 1974; Ph.D. (University of Pennsylvania), 1982. Since 1982.

C. DAVID GRANT, Associate Professor. B.A. (Austin College), 1972; M.Th. (Southern Methodist University), 1976; M.A. (Harvard University), 1980; Ph.D. (Harvard University), 1981. Since 1981.

DAVID M. GUNN, *Professor and A. A. Bradford Chair of Religion*. B.A. (Melbourne, Australia), 1964; M.A. (Melbourne, Australia), 1966; B.D. (Otago, New Zealand), 1967; Ph.D. (Newcastle-upon-Tyne, England), 1975. Since 1993.

JACK A. HILL, Associate Professor. B.A. (Occidental College), 1971; M.T.S. (Harvard University), 1974; M.A. (Vanderbilt University), 1985; Ph.D. (Vanderbilt University), 1988. Since 2000.

NADIA M. LAHUTSKY, Associate Professor. B.A. (Hiram College), 1973; M.A. (Vanderbilt University), 1979; Ph.D. (Vanderbilt University), 1984. Since 1981.

DARREN J. N. MIDDLETON, Associate Professor. B.A. (Manchester, England), 1989; M.Phil. (Oxford, England), 1991; Ph.D. (Glasgow, Scotland), 1996. Since 1998.

JOHNNY E. MILES, Lecturer. B.A. (Oklahoma Christian College), 1989; M.S., M.Div. (Abilene Christian University),

1994; Ph.D. (Baylor University), 2001. Since 2004.

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S. BRENT PLATE, Assistant Professor. B.A. (Seattle Pacific University), 1990; M.A.T.S. (Columbia Theological Seminary), 1993; M.Th. (Glasgow, Scotland), 1995; Ph.D. (Emory University), 1999. Since 2001.

JAN JAYNES QUESADA, *Instructor.* B.A. (University of North Carolina), 1984; M.A. (Baylor University), 1990; Ph.D. (Baylor University), 1996. Since 1999.

DARYL D. SCHMIDT, John F. Weatherly Professor of New Testament and Chair of the Department. B.A. (Bethel College), 1966; M. Div. (Mennonite Biblical Seminary), 1970; Ph.D. (Graduate Theological Union, Berkeley), 1979. Since 1979.

YUSHAU SODIQ, Associate Professor. B.A. (Islamic U., Medina, Saudi Arabia), 1976; M.A. (Islamic U., Medina, Saudi Arabia), 1980; M.A. (Temple University), 1988; Ph.D. (Temple University), 1991. Since 1992.

JULIUS TSAI, Assistant Professor. B.A. (Swarthmore College), 1991; M.Div. (Harvard Divinity School), 1996; Ph.D. (Stanford University), 2003. Since 2003.

#### Sociology, Criminal Justice, and Anthropology

LARRY D. ADAMS, Associate Professor. B.A. (Baylor University), 1962; M.A. (TCU), 1966; Ph.D. (Florida State University), 1969. Since 1969.

CARY ADKINSON, Lecturer. B.A. (Southern Methodist University), 1988; M.A. (University of Texas at Arlington), 1996. Since 2004.

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BAYLISS J. CAMP, Assistant Professor. A.B. (Stanford University), 1995; M.A. (Harvard University), 1999; Ph.D. (Harvard University), 2003. Since 2003.

JEFF FERRELL, Associate Professor. B.S.(Southern Methodist University), 1975; M.A. (University of Texas at Austin), 1977; Ph.D. (University of Texas at Austin); 1982. Since 2003.

JEAN GILES-SIMS, *Professor.* B.A. (University of New Hampshire), 1973; M.A (University of New Hampshire), 1976; Ph.D. (University of New Hampshire), 1979. Since 1979.

THOMAS H. GUDERJAN, Assistant Professor. B.A. (Southern Illinois University), 1976; M.A., (Southern Methodist University), 1983; Ph.D. (Southern Methodist University) 1988. Since 2000.

MICHAEL A. KATOVICH, *Professor.* B.A. (University of Illinois), 1974; M.A. (University of Iowa), 1978; Ph.D. (University of Iowa), 1983. Since 1983.

PATRICK T. KINKADE, Associate Professor. B.A. (University of California at Berkeley), 1981; M.A. (California State University at Los Angeles), 1983; Ph.D. (University of California at Irvine), 1990. Since 1990.

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ANGELA L. THOMPSON, *Instructor.* B.A. (Wellesley College), 1988; M.A. (Brandeis University), 1993; Ph.D. (Brandeis University), 1998. Since 1998.

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KEITH WHITWORTH, *Instructor*. B.A. (Oauchita Baptist University), 1983; M.A. (Southwest Baptist University), 1993. Since 2000.

MORRISON G. WONG, *Professor.* B.A. (California State University at San Jose), 1972; M.A. (University of California at Riverside), 1975; Ph.D. (University of California at Riverside), 1977. Since 1981.

## Spanish and Latin American Studies

DAVID BEDFORD, *Instructor.* B.A. (Texas Tech University), 1970; M.A. (Texas Tech University), 1973; M.A. (Southwestern Baptist Theological Seminary), 1994; Ph.D. (University of Texas at Austin), 1976. Since 1996.

TERESA BLACKWELL, Lecturer. B.S.Ed. (University of Arkansas), 1972; M.Ed., (University of Texas at Arlington), 1978. Since 2003.

LEE A. DANIEL, *Professor.* B.A. (Tarleton State University), 1968; M.A. (North Texas State University), 1972; Ph.D. (Texas Tech University), 1979. Since 1985.

ARTURO C. FLORES, *Professor.* B.A. (Universidad Austral de Chile), 1972; M.A. (Arizona State University), 1977; Ph.D. (University of Arizona), 1985. Since 1986.

BONNIE FREDERICK, *Professor and Chair of the Department*. B.A. (North Texas State University), 1974; M.A. (North Texas State University), 1979; Ph.D. (University of Arizona), 1983. Since 2001.

DONALD H. FRISCHMANN, Associate Professor. B.A. (University of Missouri), 1975; M.A. (Ohio State University), 1978; Ph.D. (University of Arizona), 1985. Since 1985.

DIANNE R. HOBBS, *Instructor*. B.A. (University of Texas at Arlington), 1981; M.A. (University of Texas at Arlington), 1985; Ph.D. (University of Texas at Austin), 1990. Since 2001.

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MARY R. N. McKINNEY, *Instructor*. B.A. (TCU), 1975; M.A. (Stephen F. Austin State University), 1976; Ph.D. (University of Texas at Arlington), 1984. Since 2000.

KARLA O'DONALD, Lecturer. B.A. (University of Texas at Arlington), 1997; M.A. (University of Texas at Arlington), 2002. Since 2004.

EDNA RODRIGUEZ-MANGUAL, Assistant Professor. B.A. (Universidad de Puerto Rico), 1987; M.A. (Purdue University), 1994; Ph.D. (Emory University), 2000. Since 2001.

STEVEN SLOAN, Assistant Professor. B.A. (University of Nevada at Reno), 1993; Ph.D. (Tulane University), 2003. Since 2003.

PEGGY W. WATSON, Associate Professor and Director of the Honors Program. B.A. (Tulane University), 1969; M.A, (Tulane University), 1976; Ph.D. (Tulane University), 1989. Since 1989.

## M. J. Neeley School of Business

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ARNOLD I. BARKMAN, Associate Professor of Accounting A.B. (Columbia College), 1963; M.B.A. (Cornell), 1965; Ph.D. (Houston), 1974; C.M.A., 1977. Since 1974.

JULIE BAKER, Associate Professor of Marketing B.A. (Iowa State University), 1973; M.A. (University of Nebraska), 1984; Ph.D., (Texas A&M), 1990.

CHRISTOPHER B. BARRY, *Professor of Finance*, Holder of the Robert and Maria Lowdon Chair of Business Administration. B.S.I.M. (Georgia Tech), 1970; D.B.A. (Indiana), 1973. Since 1988.

REBECCA A. BEASLEY, Instructor of Marketing. B.A. (TCU), 1965; M.S.W. (UT- Arlington), 1977; M.B.A. (Ibid.), 1981; Ph.D. (Ibid.), 1992. Since 1995.

STANLEY B. BLOCK, *Professor of Finance*. B.B.A. (UT-Austin), 1961; M.B.A. (Cornell), 1964; Ph.D. (Louisiana State), 1967. Since 1967.

ROBERT W. BOATLER, Associate Professor of Finance. B.A. (UT -Austin), 1966; Ph.D. (Cornell), 1973. Since 1977.

TYSON R. BROWNING, Assistant Professor of Enterprise Operations. B.S. (Abilene Christian), 1993; S.M. (Massachusetts Institute of Technology), 1996; Ph.D. (Ibid.) 1999. Since 2003.

GARRY BRUTON, Associate Professor of Management. B.A. (Oklahoma), 1978; M.B.A. (George Washington), 1982; Ph.D. (Oklahoma State), 1989. Since 1998.

SANDRA R. CALLAGHAN, Associate Professor of Accounting. B.S. (TCU), 1988; M.P.A. (UT-Austin), 1990; Ph.D. (Michigan State), 1998. Since 1998.

DANIEL QI CHEN, Assistant Professor of Information Systems. B.E. (Shanghai Maritime University), 1994; MBA (Washington University), 1999. Since 2004.

JANICE B. COBB, Instructor of Accounting. B.B.A. (TCU), 1984; M.B.A. (TCU), 1986. Since 1997.

DAVID W. CRAVENS, *Professor of Marketing*, Holder of the Eunice and James L. West Chair of American Enterprise. B.S. (M.I.T.), 1953; M.B.A. (Indiana), 1957; D.B.A. (Ibid.), 1967. Since 1981.

WILLIAM L. CRON, *Professor of Marketing*. B.S.B.A. (Xavier University), 1971; M.B.A. (Indiana University), 1972; D.B.A. (Indiana University), 1981. Since 2002.

TERRY E. DIELMAN, *Professor of Decision Sciences*. B.A. (Emporia State), 1973; M.S. (Cincinnati), 1975; Ph.D. (Michigan), 1979. Since 1978.

HENRY T. (TED) DOLL, Instructor of E-Business. B.S. (Wyoming), 1963; B.S. (Ibid.), 1964. Since 1998.

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North Texas). Since 2000.

DAVID W. FINN, Associate Professor of Marketing. B.B.A. (Massachusetts), 1973; Ph.D. (Ibid.), 1977. Since 1980.

CHARLES R. GREER, *Professor of Management and Associate Dean of Graduate Programs/Research*. B.A. (Emporia State), 1967; M.S. (Wichita State), 1971; M.B.A.(Kansas), 1973; Ph.D. (Ibid.), 1975. Since 1988.

IN-MU HAW, Professor of Accounting. B.A. (Cheong-Ju Univ), 1974; M.B.A. (Alabama), 1979; Ph.D. (Ibid.), 1983. Since 1990.

BEATA JONES, Lecturer of Information Sytems/E-Business. B.B.A. (Baruch College) 1988; M.S. (Ibid.), 1988; Ph.D. (City University-New York), 1993. Since 1995.

JACK W. JONES, *Professor of Management*. B.S.E.E. (Florida), 1962; M.S.E.E. (SMU), 1967; M.M.S. (TCU), 1972; Ph.D. (North Texas), 1977; P.E., 1971. Since 1973.

VAN JONES, *Instructor of Finance*. B.S. (TCU), 1961; M.B.A. (TCU), 1963; D.Min. (Tyndale Biblical Seminary), 1989; Ph.D. (Tyndale Biblical Seminary), 1996; Ph.D. (Louisiana Baptist Theological Seminary), 1996. Since 2001.

CLAYTON KOHL, Lecturer in Finance. B.S. (Baylor) 1997; M.S. (City University-London), 1998; Ph.D. (City University-London), 2002. Since 2002.

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TED W. LEGATSKI, Associate Professor of Professional Practice in Management. B.B.A. (Sam Houston State), 1989; M.B.A. (Ibid.) 1991; Ph.D. (Texas A&M), 1997, Since 2002.

RANDY LEWIS, Instructor of Management. A.A. (TCJC), 1983; B.B.A. (Dallas Baptist), 1995; M.B.A. (TCU), 1998. Since 1999.

STEVE C. LIM, Associate Professor of Accounting. B.A. (Korea Univ), 1976; M.S. (Ibid.), 1980; Ph.D. (Wharton School), 1989. Since 1999.

JOSEPH B. LIPSCOMB, *Professor of Finance and Real Estate*, and *Director* Luther King Capital Management Center for Financial Studies. B.S. (Texas A&M), 1968; M.B.A. (Houston), 1972; Ph.D. (Ibid.), 1978. Since 1977.

LARRY J. LOCKWOOD, *Professor of Finance*, Holder of the C.R. Williams Professor of Financial Services. B.S. (David Lipscomb Univ), 1975; M.A. (Western Kentucky), 1979; M.S. (Purdue), 1980; Ph.D. (Ibid.), 1982. Since 1994.

GEORGE S. LOW, Associate Professor of Marketing. B.A. (Brigham Young), 1982; M.B.A. (Western Ontario), 1988; Ph.D. (Colorado), 1994. Since 1996.

REBECCA A. LUCE, Assistant Professor of Management. B.A. (Kent State), 1972; M.A. (Ibid.), 1973; J.D. (Univ of Akron), 1982; Ph.D. (Michigan State), 2002. Since 2000.

JANE M. MACKAY, Associate Professor of Management Information Systems/E-Business, and Director of the E-Business Program. B.S. (Massachusetts), 1968; M.L.S. (Texas Woman's Univ), 1974; Ph.D. (UT-Austin), 1987. Since 1986.

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DONALD R. NICHOLS, *Professor of Accounting*. B.B.A. (North Texas State), 1963; M.B.A. (Ibid.), 1965; Ph.D. (Oklahoma), 1970. Since 1984.

GARY L. NICKELSON, Instructor of Management. B.A. (Texas Tech), 1969; J.D. (UT-Austin), 1972. Since 1976.

NANCY W. NIX, *Director*, Supply and Value Chain Center, and *Assistant Professor of Professional Practice*. B.S. (Salisbury State), 1980; M.B.A. (Temple) 1994; Ph.D. (Tennessee) 2001. Since 2001.

PATRICK NUSS. Lecturer of Information Systems/ E-Business, B.S. (De)Paul); M.B.A. (Northwestern); Since 2000.

LAWRENCE H. PETERS, *Professor of Management*. A.B. (Washington), 1968; M.S. (Southern Illinois), 1969; Ph.D. (Purdue), 1975. Since 1985.

DAVID S. PRESTON, Assistant Professor of Information Systems. B.S. (University of Florida), 1991; M.E. (University of Florida), 1993; M.B.A. (University of Georgia), 2000. Since 2004.

RANGA V. RAMASESH, *Professor of Decision Sciences*. B.E. (Univ of Mysore), 1968; M.E. (Indian Institute of Science), 1970; M.B.A. (Rochester), 1982; Ph.D. (Pennsylvania State), 1988. Since 1988.

OREL (TED) A. RHODES, *Lecturer of Accounting*. B.S. (Hardin-Simmons), 1957; MRE-BCM (Southwestern Baptist Theological), 1962; MCM (Southwestern Baptist Theological), 1971; M.B.A. (TCU), 1979. Since 1998.

ROBERT T. RHODES, Assistant Professor of Professional Practice. J.D. (Baylor), 1980; L.L.M. (Tulane), 1992. Since 1984

MAURICIO RODRIGUEZ, Associate Professor of Finance and Chair Department of Finance. B.B.A. (George Washington Univ), 1988; M.B.A. (The American Univ), 1989; Ph.D. (Connecticut), 1994. Since 1994.

RICHARD A. SCHNEIBLE, JR., Assistant Professor of Accounting. B.S. (St. Bonaventure University), 1998; Ph.D. (Syracuse University), 2003. Since 2003.

NEAL SHAW, Assistant Professor of Information Systems. B.S. (Texas Tech); Ph.D. Texas Tech) 1999. Since 2002.

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GREGORY K. STEPHENS, Associate Professor of Management and Chair, Department of Management. B.S. (Brigham Young), 1982; M.B.A. (Ibid.), 1984; Ph.D. (California-Irvine), 1992. Since 1990.

JOHN M. THOMPSON, III., Instructor of Management and Marketing. B.S. in Commerce (TCU), 1963; M.B.A. (Ibid.), 1969. Since 1983.

DOUGLAS VAN EATON, *Lecturer in Department of Finance*. B.A., Economics, (University of Washington), 1982; M.A. (Ibid.), 1982; Ph.D. and B.A., Finance, (Ibid.), 1993. Since 2001.

ROBERT L. VIGELAND, *Professor of Accounting* and *Chair*, Department of Accounting. B.S. (Lehigh), 1971; M.Ph. (Columbia), 1976; Ph.D. (Ibid.), 1977. Since 1989.

STEPHANIE L. WADE, *Lecturer in Business Law.*, B.B.A. (Boise State University), 1986; Juris Doctorate Degree (South Texas College of Law), 1993. Since 2002.

ANDREW C. WAISBURD, Assistant Professor of Finance. B.S. (Cornell), 1993; M.S. (Indiana Univ), 1998; Ph.D. (Ibid.), 2000. Since 2000.

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ZACH G. ZACHARIA, Assistant Professor of Supply Chain Management. B.S. (Calgary), 1985; M.B.A. (Alberta), 1993; Ph.D. (Tennessee), 2001. Since 2001.

## **College of Communication**

William T. Slater, Dean David E. Whillock, Associate Dean Dorenda Kesler, Assistant to the Dean

## Journalism

ROBERT BOHLER. Director of Student Publications. B.A. (Valdosta State), 1979; M.A. (Ibid.), 1990. Since 2000.

BEVERLY HORVIT. Assistant Professor. B.A. (SMU), 1989; M.J. (Univ of Missouri-Columbia), 1996; Ph.D. (Ibid.), 1999. Since 2003.

SUZANNE HUFFMAN, Associate Professor. B.A. (TCU), 1973; M.A. (Iowa), 1978; Ph.D. (Missouri), 1992. Since 1999.

STEVE LEVERING, Instructor. B.S. (Samford University), 1990. Since 2002.

JOHN MILLER. Instructor in Journalism. B.A. (Texas Christian University), 1969. Since 2003.

DOUGLAS ANN NEWSOM, *Professor*. B.J. (Texas-Austin), 1954; B.F.A. (Ibid.), 1955; M.J. (Ibid.), 1956; Ph.D. (Ibid.), 1978. Since 1969.

JULIE O'NEIL, Assistant Professor. B.B.A. (UT - Austin), 1992; B.J. (Ibid.), 1992; M.A. (St. Mary's University), 1997; Ph.D. (University of Utah), 2001. Since 2001.

WILLIAM T. SLATER, *Professor and Dean of the College*. B.A. (Tufts University), 1972; M.A. (Stanford), 1973; Ph.D. (Ibid.), 1977. Since 2002.

MAGGIE B. THOMAS, Associate Professor. B.A. (Baylor), 1966; M.S. (Texas A&M), 1985; Ph.D. (Ibid.), 1988. Since 1991.

TOMMY G. THOMASON, Associate Professor and Chairman of the Department. B.A. (Ouachita Baptist University), 1970; M.A. (Texas A&M-Commerce), 1972; Ed.D. (Ibid.), 1984. Since 1984.

JOHN R. TISDALE, Assistant Professor. B.S. (Lamar University), 1983; M.A. (Ibid.), 1988; Ph.D. (University of North Texas), 1996. Since 2002.

JANICE WOOD, Assistant Professor. B.A. (Carson-Newman College), 1977; M.A. (University of South Carolina, Columbia), 1981. Since 2004.

MIKE WOOD, Instructor in Journalism. B.S. (Texas Wesleyan University), 1964; M.S. (TCU), 2002. Since 2002.

#### Radio-Television-Film

RICHARD J. ALLEN, *Professor and Chair of the Department*. B.F.A. (New York U.), 1981; M.F.A. (Indiana), 1984. Since 1993.

RONALD ANDREW HASKETT, Station Manager and University Instructional Staff. B.S. (East Texas State), 1979; M.S. (TCU), 1982. Since 1985.

JONATHAN KRASZEWSKI, Assistant Professor . B.A. (Indiana University of Pennsylvania) 1996; M.A. (Georgetown University), 1998. Since 2004.

CHARLES J. LaMENDOLA, *Instructor in Radio-TV-Film and Studio/Video Production Supervisor*. B.S. (Arkansas State), 1981; M.S. (Ibid.), 1988. Since 1994.

GREG MANSUR, Instructor. B.A. (Rhode Island College), 1991; M.A. (TCU) 2004. Since 2001.

JOAN M. MCGETTIGAN, Associate Professor. B.A. (Temple U.), 1981; M.A. (Penn State), 1985; Ph.D. (Ibid.), 1994. Since 1997.

JOEL TIMMER, Assistant Professor. B.S. (Miami U.), 1988; J.D. (U of California-Los Angeles), 1993; Ph.D. (Indiana U), 2002. Since 2002.

DAVID E. WHILLOCK, *Professor and Associate Dean of the College*. B.A. (Hendrix College), 1976; M.A. (Arkansas), 1979; Ph.D. (Missouri), 1986. Since 1991.

#### **Communication Studies**

RALPH R. BEHNKE, *Professor*. B.A. (Missouri-Kansas City), 1959; M.S. (Wisconsin), 1963; Ph.D. (Kansas), 1966. Since 1974.

RYAN G. BURNS, *Instructor*. B.S. (TCU), 1995; M.A. (Texas Tech University), 1997; Ph. D. (U. of Oklahoma), 2002. Since 2002.

PAUL E. KING, Professor. B.S. (Hardin-Simmons), 1978; M.S. (TCU), 1980; Ph.D. (North Texas), 1985. Since 1980.

ANNE E. LUCCHETTI, Assistant Professor. B.A. (Albion College), 1989; M.S. (Purdue University), 1991; Ph.D. (University of Texas at Austin),1998. Since 1999.

WILLIAM G. POWERS, *Professor*. B.S. (Illinois State), 1970; M.S., (Ibid.), 1971; Ph.D. (Oklahoma), 1973. Since 1996.

CHRIS R. SAWYER, Associate Professor and Chair of the Department. B.A. (Houston Baptist University), 1976; M.S. (TCU), 1980; Ph.D. (University of North Texas) 1992. Since 1999.

MELISSA J. YOUNG, Associate Professor. B.A. (SUNY), 1991; M.A. (Ibid.), 1993; Ph.D. (Ibid.), 1996. Since 1995.

### **School of Education**

Samuel M. Deitz, Dean
Mary Lane, Assistant to the Dean
Henry J. Patterson, Associate Dean
Sherrie Reynolds, Director of Graduate Studies
J. Steven Hodnett, Director of Special Programs
Diana Woolsey, Director of Teacher Certification
Marilyn Tolbert, Director of KinderFrogs School
C. Dale Young II, Director of Field Experiences and Career Services

SUSAN E. ANDERSON, Associate Professor. B.S.Ed. (Virginia), 1983;

M.Ed. (Ibid.), 1986; Ed.D. (Ibid.), 1992. Since 1992.

CATHY C. BLOCK, *Professor*. B.S. (Lamar), 1970; M.S. (North Texas), 1974; Ph.D. (Wisconsin-Madison), 1976. Since 1977.

VICTOR J. BOSCHINI, JR., *Professor and Chancellor.* B.A. (Mount Union), 1978; M.A. (Bowling Green), 1979; Ed.D. (Indiana University), 1989. Since 2003.

SAMUEL M. DEITZ, *Professor and Dean*. B.A.E. (Florida), 1966; M.A.E. (Ibid.), 1969; Ph.D. (Ibid.), 1971. Since 2000.

JUDITH GROULX, Associate Professor. B.A. (Mount Holyoke), 1970; M.S. (TCU), 1983; Ph.D. (Ibid.), 1986. Since 1987.

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M. FRANCYNE HUCKABY, Assistant Professor. B.A. (Austin), 1989; M.Ed. (TCU), 1996. Since 2004.
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ROBERT M. MANINGER, Assistant Professor. B.S.Ed. (Lubbock Christian College), 1983; M.Ed. (Tarleton State), 1994; Ed.D. (North Texas), 2003. Since 2004.

NANCY MEADOWS, Associate Professor. B.A. (Texas), 1972; M.Ed. (Ibid.), 1973; Ed.D. (Washington), 1988. Since 1991.

ETTA MILLER, Associate Professor. B.A. (Roosevelt), 1960; M.A. (Chicago), 1966; Ed.D. (SUNY-Albany), 1974. Since 1972.

HENRY J. PATTERSON, *Professor and Associate Dean.* B.S. (Kansas State Teachers), 1952; M.S. (Ibid.), 1956; Ed.Sp. (Ibid.), 1961; Ed.D. (Arizona), 1968. Since 1971.

MARY M. PATTON, *Associate Professor*. B.S. (Texas), 1971; M.Ed. (Ibid.), 1973; Ph.D. (Ibid.), 1990. Since 1994.

DAN POWELL, Associate Professor. B.S. Ed. (TCU.), 1974; M.Ed.. (North Texas), 1977; Ph.D. (Ibid.), 1982. Since 2004.

SHERRIE REYNOLDS, *Professor*. B.S. (Arizona), 1964; M.S. (Southern Illinois), 1965; M.A. (Texas Woman's), 1976; Ph.D. (Ibid.), 1983. Since 1987.

DONAL M. SACKEN, Professor. B.A. (Texas), 1970; J.D. (Ibid.), 1973; Ph.D. (Georgia), 1977. Since 1991.

CECILIA SILVA, Associate Professor. B.A. (Ohio State), 1975; M.A. (California State-Los Angeles), 1982; Ph.D. (USC), 1990. Since 1995.

RANAE STETSON, Associate Professor, B.S. (Nevada-Las Vegas), 1982; M.Ed. (Ibid.), 1987; Ed.D. (Houston), 1991. Since 1996.

KAY B. STEVENS, Associate Professor, B.S. (North Texas), 1969; M.S. (Kentucky), 1979; Ed.D. (Ibid.), 1989. Since 2002.

ELIZABETH R. TAYLOR, Associate Professor, B.S. (Abilene Christian), 1975; M.A. (Sul Ross), 1979; Ph.D. (St. Mary's), 1993. Since 1998.

CORNELL THOMAS, *Associate Professor*. B.S. Mus. Ed. (Missouri), 1978; M. Mus. Ed. (Jackson State), 1980; Ed.D. (Texas A&M-Commerce), 1990. Since 1990.

WILLIAM VANDERHOOF, JR., Assistant Professor. B.A. (Susquehanna), 1955; M.S. (SUNY-Geneseo), 1966. Since 1969.

JANET WATKINS, Associate Professor. B.A. (Houston Baptist), 1969; M.A.T. (TCU), 1975; Ph.D. (U. of North Texas). Since 1995.

MOLLY WEINBURGH, Associate Professor. B.A. (Agnes Scott), 1974; M.A.T. (Emory), 1980; Ph.D. (Ibid.), 1993, Since 2002.

C. DALE YOUNG II, Adjunct Instructor, Director of Field Experiences and Career Services. B.S. (TCU), 1966; M.Ed. (Ibid.), 1968. Since 1978.

Starpoint and KinderFrogs Schools

KRISTEN ADAMS, Instructor. B.A. (Trinity University), 1994; M.Ed. (TCU), 2003. Since 2003.

SHELLEY F. COCHRAN, *Instructor*. B.S.Ed.(TCU), 1976; M.Ed. (TWU), 1979. Since 2003.

ROBIN N. DAVIS, *Instructor*. B.F.A. (UTA), 1974; B.S.Ed. (TCU), 1976; M.Ed. (North Texas), 1979. Since 1984.

RANELLA FRANKLIN, *Instructor*. B.S.Ed. (UNT), 1976; M.Ed. (Ibid.), 1979. Since 2003

KIMBERLY PAYNE, *Instructor*. B.S.Ed. (TCU), 1979; M.Ed (Ibid.), 1981. Since 1996.

MADELINE KING THOMAS, *Instructor*. B.S.Ed. (TCU), 1976; M.Ed. (Texas Woman's), 1979. Since 1985.

MARILYN S. TOLBERT, *Director of KinderFrogs School.* B.S.Ed. (TCU), 1996. M.Ed. (Ibid.), 2000. Since 2003.

Upward Bound

J. STEVEN HODNETT, Director of Special Programs. B.S.E. (Southern

Arkansas); 1982 M.Ed. (Ibid), Since 1995.

#### College of Fine Arts

Scott A. Sullivan, Dean H. Joseph Butler, Associate Dean and Director of Graduate Studies Andie Piehl, Assistant to the Dean

#### **Art and Art History**

BABBETTE BOHN, *Professor* (Art History). B.A. (Northwestern), 1972; M.A. (Boston U.), 1975; M.Phil. (Columbia), 1978; Ph.D. (Ibid.), 1982. Since 1988.

DAVID CONN, *Professor* (Printmaking, Drawing, Design). B.F.A. (Maryland Inst.), 1967; M.F.A. (Oklahoma), 1969. Since 1969.

LORI BOORNAZIAN DIEL, Assistant Professor (Art History). B.A. (Emory), 1992; M.A. (Tulane), 1996. Since 2001.

LEWIS A. GLASER, *Professor* (Graphic Design). B.A. (Western Michigan), 1977; M.F.A. (Syracuse), 1988. Since 1987

LINDA DEE GUY, *Professor* (Printmaking, Drawing). B.A. (South Florida), 1974; M.F.A. (Maryland Inst.), 1976. Since 1976.

SHARON GOWENS, Assistant Art History Librarian. B.A. (TCU), 1972; M.A. (Southern Methodist), 2001. Since 1998.

SUSAN HARRINGTON, Associate Professor (Drawing, Painting, Life Studies). B.F.A. (Maryland Institute College of Art), 1972; M.A. (Purdue), 1977; M.F.A. (North Texas), 1984. Since 1988.

MARILYN IVY, Lecturer, (Art Education), B.F.A. (TCU), 1970; M.A. ((Texas Woman's), 2000. Since 2003.

CHRIS POWELL, Instructor (Ceramics, Sculpture), B.F.A. (Abilene Christian), 1980; M.F.A. (Bradley), 1983. Since 1984.

EDITH JANE RILEY, Art History Librarian. B.F.A. (Stephen F. Austin), 1974; M.A. (Southern Methodist), 1983. Since 1983.

CAMERON SCHOEPP, Associate Professor (Sculpture), B.F.A. (Pacific Lutheran), 1984; M.F.A. (TCU), 1987. Since 2003.

PAT SLOAN, Assistant Professor (Graphic Design), B.F.A. (Stephens College), 1970; M.F.A. (North Texas), 1978. Since 2004.

LUTHER A. SMITH, JR., *Professor* (Photography). B.A. (Illinois, Urbana-Champaign), 1972; M.F.A. (Rhode Island School of Design), 1974. Since 1983.

SCOTT A. SULLIVAN, *Professor and Dean of the College of Fine Arts*. B.A. (John Carroll U.), 1969; M.A. (Case Western Reserve U.), 1972; Ph.D., (Case Western Reserve U.), 1978. Since 2000.

MARK EDWARD THISTLETHWAITE, *Professor and Holder of the Kay and Velma Kimbell Chair of Art History*. B.A. (California - Santa Barbara), 1970; M.A. (Ibid.), 1972; Ph.D. (Pennsylvania), 1977. Since 1977.

RONALD WATSON, *Professor* (Drawing and Painting) and *Chair of the Department*. B.F.A. (Nebraska), 1964; M.F.A. (Ibid.), 1967. Since 1982.

JAMES WOODSON, *Professor* (Painting, Drawing, Life Studies). B.F.A. (TCU), 1965; M.F.A. (Texas-Austin), 1967. Since 1974.

### **Ballet and Modern Dance**

FERNANDO BUJONES, Choreographer-in-Residence, American Ballet Theatre 1972-95. Gold medal for Highest Technical Achievement, Varna, Bulgaria 1974. International Guest Artist and choreographer. Artistic Director of Ballet Mississippi (1993; Ballet Monterrey, Mexico (1995); Orlando Ballet(2000).

LI-CHOU CHENG, Ballet Master in Residence. Former ballet master and soloist for the Beijing Central Ballet and principal teacher for the Boston Ballet. Since 1990.

ELIZABETH GILLASPY, Assistant Professor. B.B.A. (Texas Tech), 1985. M.F.A. (TCU), 1990. Secondary Certification - Dance (TCU), 1995. Since 1990.

ANDREA HARRIS, Assistant Professor. B.F.A. (TCU), 1991; M.F.A. (Ibid.), 1997; PhD Candidate (University of Wisconsin-Madison), 2004.

SUSAN DOUGLAS ROBERTS, Associate Professor. B.A. (TCU), 1979; B.F.A. (Ibid.), 1980; M.F.A. (Illinois), 1983. Since 1984.

ELLEN PAGE SHELTON, Associate Professor and Chair of the Department. B.F.A. (TCU), 1971. M.F.A. (Ibid.), 1978. Since 1973.

### Music

SHEILA M. ALLEN, Associate Professor of Voice. B.M. (Oberlin Conservatory), 1966; M.M. (Eastman School of Music, Rochester), 1967; D.M.A. (Ibid.), 1974. Since 1985.

DAVID BROCK, Assistant Professor of Voice. B.A. (Abilene Christian University), 1974; M.M. (New England Conservatory of Music), 1978. Since 2002.

JON BURGESS, Associate Professor of Trumpet. B.M. (Illinois), 1978; M.M. (Kansas), 1980; D.M.A. (Arizona) 1988. Since 2000.

H. JOSEPH BUTLER, *Professor; University Organist; Associate Dean and Director of Graduate Studies*. B.A. (Bowdoin), 1976; M.M. (New England Conservatory), 1978; D.M.A. (Eastman), 1985. Since 1996.

JESÚS CASTRO-BALBI, Assistant Professor of Cello. B.M. (Conservatoire National Supérieur, France) 1995; Artist Diploma (Indiana University), 1997; M.M. (Yale University School of Music), 1999; D.M.A. (The Julliard School), 2002. Since 2003.

RICHARD ESTES, Associate Professor and Director of Opera Theatre. B.M. (Stetson), 1970; M.M. (Catholic U.), 1974. Since 1992.

JOSÉ FEGHALI, Artist-in-Residence. Graduate of the Royal Academy of Music in London; Grand Prize Winner, Van Cliburn International Piano Competition, 1985. Since 1990.

BLAISE J. FERRANDINO, Associate Professor of Music Theory and Composition. B.M. (Ithaca College), 1980; M.M. (Syracuse), 1982; D.M.A. (Hartford), 1990. Since 1990.

BOBBY R. FRANCIS, Associate Professor of Music and Director of Bands. B.M.E. (Commerce), 1981; M.M.E. (Commerce), 1989. Since 2000.

GERALD R. GABEL, Associate Professor of Music Theory and Composition. B.M. (Northern Iowa), 1974; M.A. (California - San Diego), 1977; Ph.D. (Ibid.), 1984. Since 1987.

MISHA GALAGANOV, Assistant Professor of Viola. B.M. (Jerusalem), 1994; Artist Certificate (SMU), 1996; M.M. (Rice), 1998; D.M.A. (Rice), 2003. Since 2000.

ROBERT GARWELL, Professor of Music. B.F.A. (Ohio U.), 1965; M.F.A. (Ibid.), 1967; D.M.A. (Oklahoma), 1977. Since 1989.

RICHARD C. GIPSON, *Director*. A.A. (Del Mar College), 1969; B.M. (University of Texas at Austin), 1971; M.M. (University of Texas at Austin), 1973; D.Ed/Music Education (Pennsylvania State University), 1978. Since 2002.

JOHN READ GIORDANO, *Associate Professor*. B.M.E. (TCU), 1960; M.M. (Ibid.), 1962; Diploma Superieure (Conservatoire Royal de Musique, Brussels), 1965. Emeritus Musical Director and Conductor of the Fort Worth Symphony Orchestra. Since 1973.

ROSS GRANT, Interim Assistant Director of Bands. B.M.E. (Ouachita Baptist University), M.M.E. (North Texas State), Ph.D. (North Texas State). Since 2001.

GERMÁN AUGUSTO GUTIÉRREZ, Assistant Professor/Director of Orchestral Studies and Director of the Center for Latin American Music. Maestro en Musica (Tolima Conservatory), 1978; M.M. (Illinois), 1991; D.A. (University of Northern Colorado), 1997. Since 1996.

LEANNE HEDGES KIRKHAM, *Director of Music Preparatory Program and Instructor in Piano* B.M. (TCU), 1978; M.M. (Ibid.), 1981. Since 1981.

HAROLD MARTINA, Artist-in-Residence Institute of Fine Arts (Medellin, Columbia); Academy of Music (Vienna, Austria). Since 1999.

MICHAEL MECKNA, Professor of Musicology. B.A. (California State), 1978; Ph.D. (California), 1984. Since 1990.

SHERI NEILL, Assistant Professor of Music Education. B.M.E. (Texas Tech), 1970; M.Ed, (Stephen F. Austin University), 1983; Ph.D. (University of Missouri-Kansas City), 1998. Since 2001.

JOHN OWINGS, Herndon Professor of Piano. B.M. (UT-Austin), 1965; M.S. (Juilliard), 1970. Since 1990.

JANET W. PUMMILL, Staff Accompanist. B.M. (North Texas), 1964; M.M. (Illinois), 1968. Since 1992.

RONALD L. SHIREY, Professor of Choral Music. B.M. (Tulsa), 1955; M.M. (Ibid.), 1961. Since 1976.

JUDITH A. SOLOMON, Associate Professor of Piano. B.A. (Rutgers), 1965; M. Mus. (Yale), 1968. Since 1968.

CURT THOMPSON, Associate Professor of Violin. B.M. (Indiana), 1992: M.M. (Indiana), 1994; D.M.A. (Rice), 2003. Since 1997.

TAMÁS UNGÁR, *Professor of Piano*. A.Mus.A., L.Mus.A. (Sydney Conservatorium, Australia), 1965; D.M. (Indiana), 1983. Since 1978.

BRIAN WEST, Assistant Professor in Percussion. B.M.E. (North Texas), 1992; M.A. (Indiana U of Pennsylvania), 1994; D.M.A. (Oklahoma), 2003. Since 2001.

GARY WHITMAN, Associate Professor of Woodwinds. B.M.E. (North Texas), 1976; M.M.E. (Ibid.), 1978. Since 1989.

CURTIS W. WILSON, Professor of Music. B.M.E. (TCU), 1963; M.M. (Ibid.), 1966. Since 1976.

BRIAN YOUNGBLOOD, Assistant Director of Bands. B.M.E. (Abilene Christian) 1987; M.M. (East Texas State), 1992. Since 1999.

#### Theatre

MICHELLE ALFORD, Costume Studio Supervisor. B.F.A. (University of North Texas), 1995. Since 2002.

ROBERT APREA, Technical Director. B.A. (Arkansas Tech University); M.F.A. (Texas Tech University). Since 2003.

JENNIFER ENGLER, Assistant Professor. B.F.A. (Emporia State University), 1995; M.F.A. (Michigan State University), 1998. Since 2003.

ANNE HEALY, Instructor. B.F.A. (University of Northern Iowa), 1984; M.F.A. (University of Miami), 1986. Since 2002.

LaLONNIE LEHMAN, Associate Professor. B.A. (TCU), 1972; M.A. (Ibid.), 1975. Since 1972.

NANCY MYERS McCAULEY, Associate Professor. B.S. (Illinois State University), 1966; M.F.A. (University of Wisconsin-Madison), 1971. Since 1979.

HARRY PARKER, *Professor and Chair of the Department*. B.F.A. (TCU), 1980; M.A. (University of Kansas), 1982; Ph.D. (Ibid.), 1992. Since 2003.

ALEXANDER ROBERTSON, Scene Studio Supervisor. B.F.A. (TCU), 1999. Since 2003.

MICHAEL SKINNER, Assistant Professor. B.A. (West Texas State University) 1990, M.F.A. (University of Oklahoma), 1993. Since 1993.

THOMAS J. WALSH, Assistant Professor. B.A. (San Diego State University), 1979, M.F.A. (University of Texas-Austin), 1982, Ph.D. (University of Texas-Austin), 1996. Since 1999.

## College of Health and Human Sciences

Rhonda Keen-Payne, Dean Marinda Allender, Assistant Dean Sharon Hudson, Assistant to the Dean Sybil White, Assistant to the Dean for Graduate Studies

#### **Harris School of Nursing**

MARINDA E. ALLENDER, *Instructor*. B.S.N. (Virginia), 1978; M.S.N. (UT Arlington), 1985. Certified Pediatric Nurse. Since 1989.

KATHLEEN BALDWIN, Associate Professor and Director of HSN Graduate Studies. Diploma (West Pennsylvania Hospital School of Nursing, Pittsburgh), 1968; B.S. (Texas Woman's Univ, Dallas), 1981; M.S. (Texas Woman's, Dallas), 1984; Ph.D. (Texas Woman's Univ, Dallas), 1988. Gerontological Nurse Practitioner and Adult Nurse Practitioner. Since 1999.

DONELLE M. BARNES, *Associate Professor*. A.A. (Chabot Community College), 1976; B.S.N. (California State Univ, Los Angeles), 1979; M.S.N. (Indiana Wesleyan Univ), 1985; Ph.D. (Univ of California, San Francisco), 1996. Since 2002.

LAZELLE E. BENEFIELD, *Associate Professor*. Diploma (Johns Hopkins Hospital School of Nursing, MD), 1972; B.S.N. (Univ of Florida), 1976; M.S.N. (Univ of Alabama), 1978; Ph.D. (Old Dominion Univ), 1989. Since 1993.

JIMMIE COMPTON BORUM, Lecturer. B.S.N. (Texas Woman's Univ), 1994; M.S. (Texas Woman's Univ), 1997. Since 2002.

PATRICIA J. BRADLEY, Associate Professor. Diploma (Butterworth Hospital, MI), 1974; B.S. (Ferris State Univ, MI), 1977; M.S.N. (Wayne State Univ, MI), 1981; D.N.S. (Indiana Univ), 1993. Since 1991.

PAULETTE BURNS, Associate Professor and Director of Harris School of Nursing. B.S.N. (Univ of Maryland), 1971; M.S. (Univ of Oklahoma), 1980; Ph.D. (Texas Woman's Univ), 1989. Since 2001.

CAROLYN SPENCE CAGLE, *Associate Professor*. B.S.N. (Mankato State), 1972; M.S. (Northern Illinois), 1976; Ph.D. (Texas Woman's Univ), 1983. Since 1978.

DENNIS CHEEK, *Professor*. A.S. (Yuba College), 1979; B.S.N. (California State Univ, Fresno), 1982; M.S. (Univ of California), 1988; Ph.D. (Univ of Nevada), 1996. Since 2003.

LINDA CURRY, *Professor*. A.A. (Florida), 1963; B.S.N. (Florida), 1965; M.N. (Florida), 1966; Ph.D. (North Texas State Univ), 1984. Since 1976.

MARILYN DURAN, *Lecturer*. Diploma (Baptist School of Nursing, Little Rock, AR), 1983; B.S.N. (Univ of Arkansas for Medical Sciences), 1991; M.S.N. (Arkansas State Univ), 1998. Since 2001.

PAMELA JEAN FRABLE, Assistant Professor. B.A. (Univ of Chicago), 1976; N.D. (Case Western Reserve Univ), 1982. Since 2000.

LINDA HARRINGTON, Assistant Professor. B.S.N. (Univ of Texas Health Science Center, San Antonio), 1981; M.S.N. (UT Arlington), 1984; Ph.D. (Texas Woman's Univ), 1987. Since 2002.

DIANE ACKALL HAWLEY, *Lecturer*. B.S.N. (TCU), 1981; M.S. (Texas Woman's Univ), 1988; Ph.D. (New Mexico State Univ), 1998. Clinical Nurse Specialist in Medical-Surgical Nursing. Since 1998.

RHONDA KEEN-PAYNE, W. F. "Tex" and Pauline Curry Rankin Professor of Nursing and Dean of the College of Health and Human Sciences. B.S.N. (TCU), 1978; M.N.Sc. (Arkansas), 1981; Ph.D. (Texas Woman's Univ), 1985. Since

1982.

SUZY LOCKWOOD, Assistant Professor. B.S.N. (TCU), 1983; M.S.N. (UT Arlington), 1994; Ph.D. (UT Arlington), 2001. Since 1997.

LINDA L. MARTIN, Lecturer. B.S.N. (UT Arlington), 1980; M.S.N. (UT Arlington), 1997. Family Nurse Practitioner. Since 2001.

DEBRA MCLACHLAN, *Lecturer*. Diploma (Quincy City Hospital School of Nursing), 1975; B.S.N. (Univ of New Hampshire), 1980; M.S.N. (Boston College), 1984; Ph.D. (King's College), 2003. Adult Nurse Practitioner. Since 1997.

R. LEA MONTGOMERY, Instructor. A.D.N. (Angelo State Univ), 1991; B.S.N. (Angelo State Univ), 1993; M.S. (Texas Woman's Univ), 1996. Since 2001.

PATRICIA NEWCOMB, Lecturer. B.A. (Univ of Dallas), 1977; B.S.N. (TCU), 1983; M.S.N. (UT Arlington), 1989. Pediatric Nurse Practitioner. Since 2001.

KRIS RIDDLESPERGER, *Lecturer*. B.E.S. (Univ of Missouri-Columbia), 1980; B.S.N. (TCU), 1985; M.S.(Texas Woman's Univ), 1989; Ph.D. (Texas Woman's Univ), 2000. Clinical Nurse Specialist. Since 1995.

DEBRA SCHMIDT, Lecturer. Diploma (Methodist Hospital School of Nursing, Lubbock, TX), 1976; B.S.N. (West Texas A&M Univ), 1980; M.S.N. (Univ of Texas, Arlington), 1991. Since 2003.

CHARLES ALAN WALKER, Associate Professor. B.S. (TCU), 1977; B.S.N. (TCU), 1983; M.S.N. (UT Arlington), 1989; Ph.D. (Texas Woman's Univ), 2000. Since 2001.

MARY BETH WALKER, *Director of the Learning Center*. B.S.N. (TCU), 1980; M.S. (Texas Woman's Univ), 1995. Women's Health Nurse Practitioner. Since 1996.

SUSAN WEEKS, *Instructor*. B.S.N. (William Jewell College), 1983; M.S. (Texas Woman's Univ), 1986. Clinical Nurse Specialist in Psych-Mental Health Nursing. Since 1994.

JO NELL WELLS, Assistant Professor. B.S.N. (Univ of Central Arkansas), 1974; M.S.N. (Wichita State Univ), 1981; Ph.D. (Texas Woman's Univ), 1998. Since 1998.

SUSAN WILSON, Associate Professor. B.S.N. (UTMB, Galveston), 1967; M.N. (Washington), 1970; Ph.D. (Texas A&M), 1985. Certified Family Nurse Practitioner. Since 1988.

#### **Communication Sciences and Disorders**

KAREN COLSON, Assistant Professor. B.S. (Middle Tennessee State Univ), 1978; M.S. (Univ of Tennessee), 1979; Ph.D. (Univ of Iowa), 1988. Since 2001.

LYNN K. FLAHIVE, Instructor. B.S. (Marquette), 1977; M.S. (Marquette), 1978. Since 1991.

TERESA DENNETT GONZALEZ, Lecturer. B.S. (Texas Woman's Univ), 1976; M.S. (Texas Woman's Univ), 1985. Since 1992.

AMBER DIERSING-LEEPER, Adjunct. B.A. (Texas Tech Univ), 1999; M.S. (Texas Woman's Univ), 2003. Since 2003.

JOAN S. KLECAN-AKER, *Professor*. B.S. (Middle Tennessee), 1968; M.A. (Memphis State), 1971; Ph.D. (Florida State), 1982. Since 1994.

JANET ROYER LANZA, Instructor. B.S. (TCU), 1975; M.S. (TCU), 1976. Since 1989.

JEAN P. MATNEY, Adjunct. B.S. (Univ of North Texas), 1952; M.A. (Texas Woman's Univ), 1977. Since 1990.

HELEN A. McCAFFREY MORRISON, *Associate Professor*. B.A. (Trinity Univ), 1974; M.S. (Oklahoma), 1976; Ph.D. (UT Austin), 1992. Since 1995.

SHARON B. RAPP, Adjunct. B.S. (Colorado State Univ), 1980; M.S. (Colorado State Univ), 1982. Since 1995.

WILLIAM J. RYAN, Associate Professor and Chair of Department of Communication Sciences and Disorders. B.S. (SUNY), 1965; M.S. (Purdue), 1969; Ph.D. (Purdue), 1971. Since 1996.

CAROL H. SYMON, Instructor. B.S. (Purdue), 1971: M.S. (Purdue) 1972. Since 2000.

AMY VANN, Adjunct. B.S. (TCU), 1991; M.S. (TCU), 1992. Since 2001.

JENNIFER BARBER WATSON, *Professor*. B.S. (Northern Arizona), 1976; M.A. (Northwestern), 1979; Ph.D. (Northwestern), 1981. Since 1982.

ROSALYNA YARBROUGH, Adjunct. B.S. (TCU); M.S. (TCU), 1996. Since 2000.

## Kinesiology

T. ROSS BAILEY, Instructor. B.S. (TCU), 1976; M.Ed. (TCU), 1977. Since 1977.

STEPHEN L. BROTHERTON, *Adjunct Assistant Professor*. B.S. (TCU), 1978; M.D. (UT Southwestern), 1982. Since 1998.

CHRISTOPHER P. HALL, Instructor. B.S. (TCU), 1983; M.L.A. (TCU), 1989. Since 1984.

BERT M. FRANKS, Adjunct Assistant Profesor. B.S. (TCU), 1956; M.D. (UT Southwestern), 1960. Since 1998.

MATTHEW S. JOHNSON, Assistant Professor. B.A. (Notre Dame), 1993; M.A. (Univ of North Carolina, Chapel Hill), 1996; Ph.D. (Univ of Tennessee, Knoxville), 1998. Since 2001.

JOSEPH C. MILNE, Adjunct Assistant Professor. B.S. (BYU), 1983; M.D. (Baylor), 1987. Since 1998.

JOEL B. MITCHELL, *Professor and Chair of Department of Kinesiology*. B.A. (Lewis and Clark), 1978; M.A. (Maryland), 1983; Ph.D. (Ball State), 1988. Since 1988.

TODD NALDER, Instructor. B.S. (Wyoming), 1993; M.A. (Minnesota), 1995. Since 1999.

CAROL J. POPE, Associate Professor. B.S.Ed. (UT Austin), 1975; M.A. (Texas Woman's Univ), 1978; Ph.D. (Texas Woman's Univ), 1985. Since 1989.

DEBORAH J. RHEA, Associate Professor. B.S. (UT Arlington), 1980; M.Ed. (Houston) 1990; Ed.D. (Houston), 1995. Since 1999.

MEENA SHAH, Assistant Professor. B.Sc. (Robert Gordon's, Aberdeen, Scotland), 1982; Ph.D. (London Univ, London), 1986. Since 2001.

STEVEN R. SNOWDEN, Clinical Associate Professor. B.S. (Texas A&M), 1987; M.A. (Sam Houston State), 1988; Ph.D. (Texas A&M), 1991. Since 2003.

DAN L. SOUTHARD, Professor. B.A. (Buena Vista), 1969; M.A. (Iowa), 1977; Ph.D. (Iowa), 1980. Since 1980.

#### Social Work

ALAN DETTLAFF, Instructor. B.S.S.W. (TCU), 1995; M.S.W. (UT Arlington) 1999. Since 2001.

TRACY J. DIETZ, Associate Professor. B.S. (Wisconsin-Platteville), 1973; M.S.S.W. (Wisconsin-Madison), 1986; Ph.D. (Wisconsin-Madison), 1993. Since 1992.

DAVID A. JENKINS, Associate Professor. B.S. (Louisiana State), 1983; M.S.W. (Louisiana State), 1988; Ph.D. (Florida State), 1992. Since 1991.

LINDA S. MOORE, *Professor and Chair of Department of Social Work*. B.A. (Eastern Col), 1969; M.S.W. (Virginia Commonwealth), 1975; Ph.D. (Texas Woman's Univ), 1994. Since 1977.

#### **College of Science and Engineering**

Michael D. McCracken, Dean Bonnie E. Melhart, Associate Dean and Director of Bachelor of General Studies Program Kenneth M. Morgan, Associate Dean Armida M. Guzman, Assistant to the Dean

### **Biology**

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WAYNE J. BARCELLONA, Associate Professor. A.B. (Southern California), 1962; M.S. (Ibid.), 1965; Ph.D. (Ibid.), 1970. Since 1973.

BLOOM, MARK, Instructor. B.S. (Dallas Baptist), 1994, M.S. (Baylor), 1997. Since 2003.

JOSEPH C. BRITTON, *Professor.* B.A. (TCU), 1963; M.A. (Ibid.), 1965; Ph.D. (George Washington), 1970. Since 1971.

ERNEST F. COUCH, Associate Professor. B.S. (Southern Methodist), 1959; M.A. (North Texas), 1962; Ph.D. (Tulane), 1967. Since 1967.

RAY W. DRENNER, Professor and Chair of the Department. B.A. (Kansas), 1972; Ph.D. (Ibid.), 1977. Since 1977.

GARY W. FERGUSON, *Professor*. B.S. (Tulane), 1963; M.S. (Texas Tech), 1965; Ph.D. (Michigan), 1969. Since 1974.

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JOHN D. HORNER, *Professor.* B.S. (Louisiana State), 1979; M.S. (New Mexico), 1983; Ph.D. (Ibid.), 1987. Since 1990.

GAIL I. JONES, Lecturer. B.A. (Radford U.), 1971; M.S. (TCU), 1979; Ph.D. (North Texas), 1992. Since 1997.

GLENN C. KROH, Associate Professor. Assoc. Degree (Pennsylvania State), 1962; B.S. (Ibid.), 1966; M.S. (Ibid.), 1970; Ph.D. (Michigan State), 1975. Since 1975.

MICHAEL D. McCRACKEN, Associate Professor and Dean of the College of Science and Engineering. B.S. Ed. (Texas Tech), 1963; M.S. (Ibid.), 1965; Ph.D. (Indiana), 1969. Since 1971.

MISAMORE, MIKE, Assistant Professor. B.S. (Wisconsin), 1989; M.S. (Charlestons, S.C.), 1993; Ph.D. (Louisiana State), 1998. Since 2003.

LEO W. NEWLAND, Professor. B.S. (Texas A&M), 1964; M.S. (Wisconsin), 1965; Ph.D. (Ibid.), 1968. Since 1969.

ANDREW PAQUET, JR., Associate Professor. B.S. (New Mexico), 1967; M.S. (Ibid.), 1970; Ph.D. (Arizona), 1974. Since 1975.

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JOSEPH A. BOBICH, Professor. B.S. (Michigan), 1965; Ph.D. (UCLA), 1971. Since 1973.

JEFFERY L. COFFER, *Professor and Chair of the Department*. B.S. (Wofford), 1982; M.S. (Wisconsin-Milwaukee), 1985; Ph.D. (Ibid.), 1987. Since 1990.

TRACY A. HANNA, Associate Professor. B.A. (Brown), 1988; Ph.D. (California-Berkeley), 1994. Since 1998.

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DAVID E. MINTER, *Professor.* B.S. (Stephen F. Austin), 1968; M.S. (Ibid.), 1970; Ph.D. (Texas-Austin), 1974. Since 1980.

JEAN-LUC G. MONTCHAMP, Associate Professor. Diploma of Engineering in Chemistry (School of Industrial Chemistry in Lyon, France), 1989; Ph.D. (Purdue), 1992. Since 1998.

ROBERT H. NEILSON, Professor. B.S. (Carnegie-Mellon), 1969; Ph.D. (Duke), 1973. Since 1978.

MANFRED G. REINECKE, Professor. B.S. (Wisconsin), 1956; Ph.D. (California-Berkeley), 1960. Since 1964.

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BILLY J. FARMER, Instructor. B.S. (Howard Payne), 1979; M.S. (E. Texas State), 1995. Since 2002.

CHARLES J. HANNON, Assistant Professor. B.A. (Texas A&M), 1979; M.S. (Texas-Arlington), 1994; Ph.D. (Ibid), 2000. Since 2001.

BONNIE E. MELHART, Associate Professor and Associate Dean of College of Science and Engineering. B.A. (Wright State), 1972; M.S. (Southern Illinois), 1974; M.S. (California-Irvine), 1988; Ph.D. (Ibid.), 1990. Since 1990.

C. THOMAS NUTE, Associate Professor. B.A. (California-San Diego), 1968; M.S. (Texas A&M), 1970; Ph.D. (Ibid.), 1977. Since 1981.

L. DONNELL PAYNE, Associate Professor. B.S. (Sam Houston), 1973; M.S. (Ibid.), 1976; Ph.D. (Texas-Arlington), 1988. Since 1988.

J. RICHARD RINEWALT, Associate Professor and Chair of the Department. B.S.E.E. (Texas-Arlington), 1969; M.S.E.E. (Ibid.), 1971; Ph.D. (Illinois), 1976. Professional Engineer-Texas, 1982. Since 1986.

## Engineering

ROBERT R. BITTLE, Associate Professor. B.S. (Oklahoma State), 1980; M.S. (Purdue), 1983; Ph.D. (Iowa State), 1994. Since 1994. Professional Engineer-Texas.

EDWARD S. KOLESAR, *Professor and Holder of the W.A. "Tex" Moncrief Jr. Chair of Engineering.* B.S. (Akron), 1973; M.S. (Air Force Institute of Technology), 1978; Ph.D. (Texas-Austin), 1985. Professional Engineer-Texas. Since 1993.

TRISTAN J. TAYAG. Associate Professor. B.S.E.E. (Johns Hopkins), 1986; M.S.E.E. (Ibid.); 1987; Ph.D. (Virginia), 1991. Since 1997.

PATRICK L. WALTER, Senior Design Lecturer. B.S. (Penn State), 1965; M.S. (New Mexico), 1967; Ph.D. (Arizona State), 1978. Professional Engineer-New Mexico. Since 1995.

R. STEPHEN WEIS, *Professor and William L. and Betty F. Adams Chair of Education.* B.S.E.E. (U. S. Naval Academy), 1979; M.S.E.E. (Georgia Tech), 1984; Ph.D. (Ibid.), 1987. Since 1992. Professional Engineer-Texas.

WALTON E. WILLIAMSON, JR. Professor and Chair of the Department. B.S.M.E. (Stanford), 1966; M.S.A.E. (Texas-Austin), 1967; Ph.D. (Ibid.), 1970. Since 1999.

## Geology

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H. G. DOLLAR, Instructor. B.S. (Texas-Arlington), 1966; M.A. (Ibid.), 1970. Since 2000.

ROBERT S. DORAN, John William and Helen Stubbs Potter Professor and Chair of the Department. B.A. (Iowa), 1962; M.A. (Ibid.), 1964; M.S. (U. of Washington), 1967; Ph.D. (Ibid.), 1968. Since 1969.

ZE-LI DOU, Associate Professor. B.A. (Queens College, CUNY), 1987; Ph.D. (Princeton), 1993. Since 1994.

PENG FAN, Associate Professor. B.A. (National Taiwan Normal U., Taiwan), 1970; M.A. (National Tsing-Hua U., Taiwan), 1972; Ph.D. (Indiana), 1980. Since 1983.

GEORGE T. GILBERT, Associate Professor. B.A. (Washington U.), 1979; Ph.D. (Harvard), 1984. Since 1990.

RHONDA L. HATCHER, Associate Professor. B.A. (Colorado), 1980; A.M. (Harvard), 1982; Ph.D. (Ibid.), 1987. Since 1990.

SCOTT NOLLET, Assistant Professor. B.S. (Minnesota), 1985; Ph.D. (California-Berkeley), 1994. Since 2000.

ALLISON C. OWEN, Instructor. B.A. (Kansas Wesleyn U.), 1981; M.L.S. (Texas Women's U.), 1983; M.A. (Ibid), 1987. Since 2000.

EFTON PARK, Professor. B.S. (Oklahoma), 1983; Ph.D. (SUNY-Stony Brook), 1988. Since 1992.

IGOR P. PROKHORENKOV, Associate Professor. B.S. (Moscow State U.), 1991; Ph.D. (Rice), 1997. Since 1998.

KEN RICHARDSON, Associate Professor. B.A. (Rice), 1986; M.A. (Ibid.), 1989; Ph.D. (Ibid.), 1993. Since 1994.

KRISTI E. RITTBY, Instructor. B.S. (TCU), 1997; M.S. (Texas-Arlington), 2000. Since 2002.

SUSAN G. STAPLES, Associate Professor. B.S. (Case Western Reserve), 1983; Ph.D. (Michigan), 1988. Since 1995.

## **Nutritional Sciences**

MARLYN DART, Assistant Professor. B.S. (Texas Woman's U.), 1980; M.S. (Ibid.) 1994; Ph.D. (Ibid.) 2001. Since

MARY ANNE GORMAN, *Professor.* B.A. (North Texas), 1970; M.Ed. (Ibid.), 1974; Ph.D. (Texas Woman's U.), 1983. Since 1983.

SARAH C. HAMPTON, *Instructor.* B.S. (Indiana University of Pennsylvania), 1985; M.S. (Hood College), 1991. Since 1999.

GINA J. HILL, Assistant Professor. B.S. (Texas Tech), 1998; M.S. (Ibid.), 1999; Ph.D. (Ibid.), 2003. Since 2003.

ANNE D. VANBEBER, Associate Professor and Chair of the Department. B.S. (Texas Tech), 1979; M.S. (Texas Woman's U.), 1982; Ph.D. (Ibid.), 1991. Since 1992.

### **Physics and Astronomy**

CURTIS C. BRADLEY, Assistant Professor. B.A. (Oregon State), 1985; M.A. (Rice), 1992; Ph.D. (Ibid.), 1997. Since 1998.

WILLIAM R. M. GRAHAM, *Professor. B.Sc.* (Western Ontario), 1966; M.Sc. (Ibid.), 1968; Ph.D. (York) 1971. Since 1977.

DOUGLAS R. INGRAM, Instructor. B.A. (Texas-Austin), 1990; M.Sc. (U. of Washington), 1991; Ph.D. (Ibid.), 1996. Since 1996.

PAMELA M. MARCUM, Associate Professor. B.S. (Florida Institute of Technology), 1987; M.S. (Ibid.), 1989; Ph.D. (Wisconsin), 1994. Since 1996.

BRUCE N. MILLER, *Professor. B.A.* (Columbia), 1963; M.Sc. (Chicago), 1965; Ph. D. (Rice), 1969. Since 1971.

C. A. QUARLES, W.A. "Tex" Moncrief Jr. Professor. B.A. (TCU), 1960; M.A. (Princeton), 1962; Ph.D. (Ibid.), 1964. Since 1967.

C. MAGNUS L. RITTBY, Associate Professor and Chair of the Department. B.S. (U. of Sussex), 1980; Ph.D. (U. of Stockholm), 1985. Since 1990.

T. WALDEK ZERDA, Professor. M.S. (Silesian U.), 1971; Ph.D. (Ibid.), 1978; D.S. (Poznan), 1983. Since 1987.

#### Psychology

TIMOTHY M. BARTH, *Professor and Chair of the Department*. B.S. (St. Bonaventure), 1979; M.S. (Wesleyan), 1982; Ph.D. (Texas-Austin), 1986. Since 1990.

GARY W. BOEHM, Assistant Professor. B.A. (Utah State U.), 1989; M.S. (U. of Connecticut), 1992; Ph.D. (Ibid.), 1996. Since 1999.

CHARLES F. BOND, JR., Professor. A.B. (North Carolina), 1975; Ph.D. (Duke), 1980. Since 1986.

DAVID R. CROSS, Associate Professor. B.A. (California-Fresno), 1977; M.A. (Michigan), 1984; Ph.D. (Ibid.), 1985. Since 1985.

DONALD F. DANSEREAU, *Professor.* B.S. (SUNY-Buffalo), 1964; M.A. (Carnegie-Mellon), 1966; Ph.D. (Ibid.), 1969. Since 1968.

JENNIFER J. HIGA, Associate Professor. B.S. (U. of Puget Sound), 1982; M.S. (Washington State), 1984; Ph.D. (Ibid.), 1987. Since 1998.

TIMOTHY L. HUBBARD, Associate Professor. B.A. (Denver), 1984; Ph.D. (Dartmouth), 1988. Since 1995.

GEORGE R. KING, Assistant Professor. B.A. (Emory U.), 1983; M.S. (Washington State U.), 1985; Ph.D. (SUNY-Stony Brook), 1989. Since 1999.

CHARLES G. LORD, Professor. B.A. (U. of Rhode Island), 1976; Ph.D. (Stanford), 1980. Since 1987.

MAURICIO R. PAPINI, *Professor.* Licentiate (U. of Buenos Aires), 1976; Ph.D. (U. of San Luis, Argentina), 1985. Since 1990.

Christie K. Napa Scollon, Assistant Professor B.A. (Southern Methodist University), 1999; M.A. (Ibid), 1999; Ph.D. (University of Illinois at Urbana-Champaign) 2004.

D. DWAYNE SIMPSON, *Professor and Director, Institute of Behavioral Research.* B.A. (Texas-Austin), 1966; Ph.D. (TCU), 1970. Since 1990.

#### **Ranch Management Program**

KERRY L. CORNELIUS, Assistant Director and Burnett Ranches Professor. B.S. (Tarleton State), 1985; Ranch Management Program (TCU), 1986; M.S. (Tarleton) 1995. Since 1995.

JEFFREY C. GEIDER, Assistant Director and Houston Livestock Show and Rodeo Profesor. Ranch Management Program (TCU), 1981; B.G.S. (TCU), 1981; M.L.A. (TCU), 1999. Since 1997.

JAMES E. LINK, *Director and John Biggs Professor*. B.S. (Emporia State), 1972; Ranch Management Program (TCU), 1972; M.B.A. (TCU), 1980. Since 1976.

CLINTON H. PARSONS, Assistant Director and Southwestern Exposition and Livestock Show Professor. B.S. (Texas A&M), 1996; M.S. (Colorado State),1998; Ph.D. (Texas Tech),2001. Since 2003.

## **Emeritus Faculty**

ERNEST ALLEN, Emeritus Assistant Professor of French, German and Spanish

BILLIE SUE ANDERSON, Emeritus Assistant Professor of Kinesiology and Physical Education

MALCOLM D. ARNOULT, Emeritus Professor of Psychology

MYRTLE BAILEY, Emeritus Associate Professor of Home Economics

WILLIAM R. BAIRD, Emeritus Professor of New Testament

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# Finances

<u>Payment</u> <u>Refunds</u> <u>Tuition and Fees</u>

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#### Refunds

For a fall or spring semester, a student who withdraws from the university on or before the fifth class day may receive a 100 percent tuition refund. If withdrawal from the university occurs on or before the tenth class day, a 75 percent tuition refund is made. A 50 percent tuition refund is made upon withdrawal from the university on or before the  $15^{th}$  class day, and a 25 percent tuition refund is made if withdrawal is made on or before the  $20^{th}$  class day.

Students initially enrolled or reenrolled after spring 2001 semester. For a fall or spring semester, a student who initially enrolls for 12-18 hours but drops to less than 12 hours on or before the fifth class day will be refunded the difference between the flat-rate tuition for the semester and the applicable hourly tuition amount for the reduced number of hours. A student who drops to less than 12 hours on or before the 10 <sup>th</sup> class day will receive a refund for 75 percent of the difference between the flat-rate tuition for the semester and the applicable hourly tuition amount for the reduced number of hours. A student who drops to less than 12 hours on or before the 15 <sup>th</sup> class day will receive a refund for 50 percent of the difference. A student who drops to less than 12 hours on or before the 20 <sup>th</sup> class day will receive a refund for 25 percent of the difference.

For a fall or spring semester, a student who withdraws *from a class* on or before the fifth class day may receive a 100 percent tuition refund for the class if the student initially enrolled for less than 12 hours and remains enrolled for less than 12 hours at the end of the fifth class day. If withdrawal from the class occurs on or before the tenth class day, a 75 percent tuition refund is made. A 50 percent tuition refund is made upon withdrawal from the class on or before the 15<sup>th</sup> class day, and a 25 percent tuition refund is made if withdrawal is made on or before the 20<sup>th</sup> class day.

Students enrolled as of spring 2001 semester and maintaining continuous enrollment. For a fall or spring semester, a student who withdraws from a class on or before the fifth class day may receive a 100 percent tuition refund. If withdrawal from a class occurs on or before the tenth class day, a 75 percent tuition refund is made. A 50 percent tuition refund is made upon withdrawal from a class on or before the 15<sup>th</sup> class day, and a 25 percent tuition refund is made if withdrawal is made on or before the 20<sup>th</sup> class day.

**Return of Federal Financial Aid.** A student who withdraws from the University before the 60% point in the enrollment period (summer, fall, or spring) may have to return a prorated portion of the financial aid he or she received or that TCU received on his or her behalf. Detailed information about the federal policy on the 'Return of Title IV Funds' is available in the financial aid office.

## Overview

An independent church-related institution of higher education, Texas Christian University is chartered as a private

non-profit corporation financed by gifts from alumni and friends, by endowment earnings, and by tuition and fees. The University receives no direct support from the state or federal government.

Tuition and fees are set at a level consistent with the educational services the University provides, and a large program of scholarships and financial aid helps some 75 percent of the students with their educational costs each year. Information about the financial aid program follows in this section of the Bulletin and more details are available from the Office of Scholarships and Student Financial Aid.

#### **Tuition and Fees**

Tuition and fees at Texas Christian University are usually set in the spring to be effective with Term I of the following summer session. Current tuition and fee schedules are available from:

Office of Admissions TCU Box 297013 Fort Worth, TX 76129 (817) 257-7490

Financial Services TCU Box 297011 Fort Worth, TX 76129 (817) 257-7834

Residential Services TCU Box 297360 Fort Worth, TX 76129 (817) 257-7865

# Student Financial Aid

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#### Overview

Texas Christian University provides an extensive, individually designed financial aid program. There are certain principles that guide the administration of the various programs administered by the TCU Office of Scholarships and Student Financial Aid. First, financing a university education is a joint venture between the family and TCU. Second, eligibility for Title IV federal financial assistance, TCU-funded, and state financial aid programs will be based upon information on the Free Application for Federal Student Aid (FAFSA) as provided by the family. Third, academic scholarships will be based upon the academic achievement of the students. Fourth, those who have excelled academically will be given the largest share of TCU-funded dollars.

Applicants for assistance must be admitted to the University before aid is committed. Those students qualifying for academic scholarships will be reviewed by the Academic Scholarship Committee and notified of the results in March or November depending upon the date of entrance to the University.

Applicants for financial assistance programs must submit the Free Application for Federal Student Aid (FAFSA) no later than March 15 for fall entry and September 1 for spring entry. These dates ensure that this information will arrive at TCU prior to the deadline of May 1 and November 1, respectively. The FAFSA is available at www.fafsa.ed.gov or from high school guidance offices, the TCU financial aid office, or in the case of transfer students, other college financial aid offices. Financial assistance files completed after May 1 or November 1 will be reviewed; however, there may be a reduction in the aid offering due to budget limitations. (Deadlines for Ranch Management applicants, athletes, and fine arts performance majors may be extended due to University recruitment practices and for transfer students whose admission is pending due to the availability of final transcripts.) All individuals whose FAFSA is selected for verification will be required to submit a copy of the parents' and student's federal income tax return and a verification worksheet to substantiate the application. Additional documents may be required in individual cases.

Students generally receive aid from a variety of sources. Scholarships, federal and state grants, work, and/or loans are combined or "packaged" to form the financial assistance award. Approximately 75 percent of the current TCU student body is receiving financial assistance. Questions regarding the University's aid program may be directed to: Director of Scholarships and Student Financial Aid, Texas Christian University, TCU Box 297012, Fort Worth, Texas 76129, (817) 257-7858.

## **General Policies for All Programs**

- 1. Students may receive more than one TCU-funded award. However, the annual aggregate of the combined awards may not exceed the value of full tuition for the hours enrolled up to 36 credit hours. Institutional funds may only be applied to tuition costs unless specifically designated as Room and Board Grants. Note: With the exception of the Pell Grant, most federal and state grant programs are also limited to paying tuition costs.
- 2. Any aid granted by the University may be withdrawn at any time for unsatisfactory conduct.
- 3. If invited to participate in the Honors Program, scholarship recipients are encouraged to do so.
- 4. All students receiving financial aid from sources outside the University must notify the Office of Scholarships and Student Financial Aid of the amount and source of such aid.
- 5. Most financial aid awards are granted for one year and may be renewed if the recipient meets required stipulations. All reapplications and required documents must be received prior to May 1 to ensure funding.
- 6. Maximum duration of TCU funded awards will be eight semesters or a total of 128 TCU semester hours of undergraduate study, whichever occurs first.
- 7. Maximum duration of federally funded awards will be 180 attempted credit hours.
- 8. Students who receive financial eligibility-based assistance through TCU may not receive funds from any additional source which will exceed their eligibility. Any student who has been "over-awarded" will have his or her awards reduced by the Office of Scholarships and Student Financial Aid so that all aid received will comply with federal and state guidelines. When possible, this reduction takes place in either the employment or loan programs.
- 9. TCU funded assistance is restricted to tuition costs for first-degree undergraduates. (Exceptions are made for Ranch Management, Piano Certificate, or Artist Diploma programs and for recipients of Alumni half-tuition, City of Fort Worth Grant, and Professional/Personal Development Grant.)
- 10. Academic scholarships may only be applied to tuition costs. Students receiving awards from other sources that are restricted to tuition charges must choose which award(s) to accept in the event these funds exceed tuition.

- 11. In recognition of the time demand as a condition of these awards, students receiving Band, Orchestra, or Choral grants may be eligible for a ninth or tenth semester of funding. To be eligible, the recipient must be in a program requiring more than 128 hours for a baccalaureate degree and be recommended by both the ensemble director and academic dean and be approved by the Director of Scholarships and Student Financial Aid.
- 12. A student must register for at least 12 semester hours to receive TCU funded financial assistance (other than programs designated for part-time students). However, students registering for less than 12 but at least 6 semester hours will be considered for all state and federal programs administered by the Office of Scholarships and Student Financial Aid. Additionally, academic scholarship renewal requires successful completion of at least 12 hours per semester and 27 semester hours of "letter grade" credits each academic year (fall/spring).
- 13. Students must maintain the requirements outlined in the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress in order to apply for and receive financial aid.
- 14. With the exception of TCU International Summer Study programs, grant assistance is generally not available during the summer terms.
- 15. Graduating seniors in their last semester may register as part-time students. Aid will be offered on a pro rata basis. The student must register for at least 6 hours of credit.
- 16. Students participating in the TCU London Center or TCU-sponsored international programs are eligible for all TCU-administered aid. Students participating in the Institute of European Studies (IES) or the Council on International Educational Exchange (CIEE) are eligible for all TCU-administered aid except Federal Work/study, Federal Perkins Loan and Nursing Student Loan. State and federal aid, other than Federal Work/study, Perkins Loan and Nursing Student Loan, is available for other U.S. University Programs and non-U.S. University Programs if there is a consortium agreement on file at TCU.

## **Academic Scholarships**

TCU rewards academic achievement. The following list of awards is designed to recognize entering students who have excelled academically. In order for a student to compete for an academic award, freshman applicants must complete the application for admission and submit SAT/ACT scores by December 15. Transfer student applicants must be admitted by April 15 for the fall semester and October 1 for the spring semester. These awards are based solely on academic performance without regard to the family's financial condition as evidenced by the FAFSA.

#### Freshman Awards

Applicants who meet the December 15 and November 1 (spring entry) admission deadline and submit an outstanding record of academic achievement in a college-prep curriculum will be considered in the competition. Candidates typically rank at the top of their high school class (if class rank is reported), earn high scores on the SAT or ACT and possess a significant record of co-curriular and community involvement. Communication skills, counselor and teacher recommendations, and optionally submitted materials will also be considered.

There are specific renewal requirements common to all academic awards. They are:

- 1. Successful completion of 27 "letter grade" hours each academic year (fall and spring). Note: Summer courses do not satisfy the requirement.
- 2. A TCU cumulative GPA of 3.0 is required at the conclusion of the freshman year. Thereafter, a 3.25 TCU cumulative GPA is required at the conclusion of each spring semester.
- 3. Pass/No Credit courses will not count toward satisfying requirements. Courses required for the degree in which letter grades are not available may be counted toward fulfilling the 27-hour requirement.
- 4. F grade, W or Q, I, AU, NR, CR, Advanced Placement (AP), College Level Examination Program (CLEP), and College Board Achievement Tests in Foreign Languages (ACH) will not count toward satisfying requirements.
- 5. Duration of freshman awards is 8 semesters or 128 TCU semester hours, whichever occurs first.

## **Chancellor Scholarship**

**Amount:** Full tuition for up to 18 hours per semester for up to 8 undergraduate semesters. Total value in excess of \$78,800.

## **Deans Scholarship**

Amount: \$8,000 per year for up to 8 undergraduate semesters. Total value \$32,000.

## **Faculty Scholarship**

**Amount:** \$6,000 per year for up to 8 undergraduate semesters. Total value \$24,000.

## **TCU Scholarship**

Amount: \$4,000 per year for up to 8 undergraduate semesters. Total value \$16,000.

National Merit National Achievement National Hispanic

Amount: \$2,000 per year for up to 8 undergraduate semesters. Total value \$8,000.

Special Note: Scholars must be designated as finalists in the competition and Merit finalists must officially designate TCU as their first choice. This scholarship may be awarded in addition to another TCU scholrship if the total amount

of institutional merit scholarship does not exceed the cost of tuition at TCU.

## TCU Eagle and Gold Scout Scholarship

Amount: \$2,000 per year for up to 8 undergraduate semesters. Total value \$8,000.

Special Note: This special recognition, for attaining the highest rank in Boy Scouts or Girl Scouts, is awarded to admitted applicants who have not been presented any other TCU merit-based award. Completed applications, which are available in the TCU Financial Aid Office, must be received by May 1 of the candidate's high school senior year.

#### **TCU Academic Achievement Award**

This award is for current TCU students who were at the top of their class at the end of the freshman year and were not awarded an academic scholarship upon entering the University.

#### **Transfer Awards**

Transfer scholarships are highly competitive. Candidates must present a minimum cumulative college GPA of 3.25 and at least 27 hours of transferable course work. Other factors that will be considered are strength of curriculum, GPA earned during the last 30 hours of course work, communication skills, and extra-curricular activities. Renewal of scholarships is based on the successful completion of at least 27 hours of letter-grade course work at TCU during the academic year (Fall and Spring Terms). A TCU cumulative GPA of 3.25 is required at the conclusion of the Spring Term.

## **Transfer Chancellor Scholarship**

Amount: Full Tuition for up to 18 hours per semester for up to 4 undergraduate semesters.

Total value in excess of \$39,400.

Special Note: Candidates must also, by June 1st, have completed either their associate's degree from a community/junior college, or at least 64 transferable hours of senior/junior college course work.

#### **Transfer Deans Scholarship**

Amount: \$8,000 per year for up to 6 undergraduate semesters. Total value \$24,000.

#### **Transfer Faculty Scholarship**

Amount: \$6,000 per year for up to 6 undergraduate semesters. Total value \$18,000.

## **Transfer TCU Scholarship**

Amount: \$4,000 per year for up to 6 undergraduate semesters. Total value \$12,000.

## Phi Theta Kappa Alumni Scholarship

**Amount** \$4,250 per year for up to 6 undergraduate semesters. Total value of \$12,750.

Special Note: Active PTK membership is also a pre-requisite for this TCU-sponsored award.

### TCC/TCU Cornerstone Scholarship

Amount: \$8,500 per year for up to 4 undergraduate semesters. Total value \$17,000.

Special Note: This scholarship is awarded to select top Tarrant County College Cornerstone Scholars. Candidates must have completed the program at TCC with two years full-time course work or an Associate's Degree. Meeting minimums does not ensure selection.

### Sponsored Scholarships, Outside Awards

Individuals, foundations, and other agencies place scholarships with TCU. These are awarded by the University through its regular channels in keeping with the standards and/or the conditions stipulated by the donor. Qualified students are considered for these scholarships on the basis of the TCU admissions application. In addition, financial assistance is offered by a number of corporations, foundations, and other organizations, which grant them directly to the student, who may then select the institution where the award is to be used. High school principals and counselors usually have information concerning such awards.

## Performance Awards

TCU offers talent-based awards. Recipients of these awards are recommended by the individual department(s) and the awards may or may not be based in part upon the results of the FAFSA.

**Athletic Grant-in-Aid.** Grants-in-aid for intercollegiate athletes are granted in accordance with the policies of the National Collegiate Athletic Association and the USA Athletic Conference; however, athletes who apply for state or federal grants or for other TCU financial assistance programs must meet the standards for regular financial assistance.

**Nordan Fine Arts Scholarship.** These awards are made to exceptionally talented students in art, ballet/modern dance, music, and theatre. They hold a value of up to \$32,000 over a four-year period for undergraduate students. The awards are renewable each year subject to the recipient fulfilling expectations. For more information contact: Dean, College of Fine Arts, TCU Box 298000, Fort Worth, Texas 76129.

Band Awards. Funds are available to some members of the Horned Frog Band. The amount of the award will

depend upon talent and availability of other aid. Awards are made on recommendation of the Director of Bands after an audition. Awards may be renewed.

**Orchestra and Choral Awards.** Funds are available to some members of the University Orchestra and Choral Programs. The amount of the awards depends upon talent and availability of other aid. Awards are made on recommendation of the Director of the Orchestra and the Director of the Choir after an audition. Awards may be renewed.

## **Religious Affiliated Programs**

To receive aid from more than one religious-affiliated program, applicants must demonstrate financial eligibility through the Free Application for Federal Student Aid (FAFSA).

**Beasley Foundation Grants.** These grants are for members of the Christian Church (Disciples of Christ) and are made available through the Theodore and Beulah Beasley Foundation, Inc. They are based on the results of the FAFSA, academic achievement, and leadership potential. To be eligible, a student must rank in the top 25% of his/her high school class or have a minimum SAT 950/ACT 23 or a 3.0 high school grade point average, or a 2.5 cumulative transfer grade point average. The amount of assistance depends on the results of the FAFSA and availability of other aid. Most awards range from \$1,000 to \$2,500. Consideration for renewal is based upon successful completion of at least 24 hours and achievement of a minimum TCU cumulative GPA of 2.5.

**Bermont Family Undergraduate Jewish Student Scholarship.** Award for entering freshmen or transfer students who are Jewish. Preference will be given to student applicants who demonstrate financial need as evidenced by the Free Application for Federal Student Aid (FAFSA). Amount varies.

**Church Vocation Loan.** Through the cooperation of the Christian Church (Disciples of Christ), TCU is able to award financial assistance to students, regardless of denomination, preparing to become ordained clergy, church musicians, or directors of religious education in a full-time church vocation affiliated with a church denomination. These awards will be in an amount not to exceed one-half tuition for up to 18 hours per semester. The minister and the board (or governing body) of the applicant's home congregation must certify the applicant as a member in good standing and as a candidate for full-time church-related work. In addition, a letter of recommendation from an appropriate church official is required, along with an essay from the candidate reflecting on the individual's theological development and commitment to a career in the church. This certification should be received by TCU prior to May 1 for the fall semester and November 1 for the spring semester.

Prior to May 1 each year, all recipients will re-certify their intention to enter a full-time church vocation and present evidence of their progress toward that goal. The home congregation, the TCU Scholarship Committee and the Department of Religion will review the re-certification. Award decisions will be based on several factors including academic record, applicant's essay and letter of recommendation. Candidates who are members of the Christian Church (Disciples of Christ) will be given preference. Financial eligibility as demonstrated by the FAFSA will be considered although it will not be an absolute prerequisite for receiving an award.

Recipients of a church vocation loan must enroll in an undergraduate program leading to a baccalaureate degree from TCU. They are required to major or minor in Religion or major in church music. Minimum renewal requirements are a 2.5 TCU cumulative GPA and successful completion of at least 24 semester hours during the academic year. Recipients are required to sign a promissory note for the amount of the loan plus interest. Recipients who complete their preparation and go into church vocations will have this obligation forgiven based on the number of years in a church vocation. Applications for a church vocation loan may be obtained from the Director of Scholarships and Student Financial Aid at TCU.

**Christian Youth Fellowship (CYF Grant).** Through the cooperation of the Christian Church (Disciples of Christ), TCU is able to offer tuition assistance to regional officers of the Christian Youth Fellowship. These awards will be in an amount not to exceed one-half tuition for up to 18 hours per semester and is renewable for eight semesters providing the student meets the criteria for financial aid satisfactory academic progress. Additionally, a TCU cumulative 2.5 GPA is required for renewal.

**Minister and Minister's Dependent Grant.** Through funds provided by the Christian Churches of Texas, New Mexico and Louisiana, partial-tuition grants are available to certain categories of "closely related" students attending TCU. Included are:

- 1. spouses of full-time students of Brite Divinity School, the graduate seminary;
- 2. unmarried youths under 23 years of age who are dependent children of Christian Church ministers in full-time active service (including missionaries) and youths of Juliette Fowler Home (including employees of the Home);
- 3. spouses of full-time Christian Church (Disciples of Christ) ministers and
- 4. full-time Christian Church (Disciples of Christ) ministers who wish to continue their education on a part-time basis in the undergraduate program.

Students enrolled full-time in the regular undergraduate program are entitled to one-half tuition grants for up to 18 hours per semester. Applications must be made by May 1 each year.

## Federal Grant Programs

Eligibility for the following programs is based upon receipt and evaluation of the FAFSA. The FAFSA must be submitted no later than March 15 for fall entry and September 1 for spring entry. These dates ensure that this information will arrive at TCU prior to the deadline of May 1 and November 1, respectively. These programs are subject to the provisions stated in General Policies, listed earlier in this section of the Bulletin, as well as specific programmatic requirements as defined.

**Federal Pell Grant.** This is a federally funded grant for undergraduate students only. The maximum amount of the grant is established by the U.S. Department of Education on an annual basis. Grants range from \$200 to \$4,050 depending on federal allocations and eliqibility.

**Federal Supplemental Educational Opportunity Grant (SEOG).** The average SEOG award at TCU is approximately \$400 per academic year. Eligibility extends to completion of the first undergraduate degree. All SEOG awards are dependent on the funding levels approved by federal government appropriations and awards to the institutions.

## **State and Institutional Grant Programs**

Eligibility for the following programs is based upon receipt and evaluation of the FAFSA. The FAFSA must be submitted no later than March 15 for fall entry and September 1 for spring entry. These dates ensure that this information will arrive at TCU prior to the deadline of May 1 and November 1, respectively. These programs are subject to the provisions stated in General Policies, listed earlier in this section of the Bulletin, as well as specific programmatic requirements as defined.

**TCU Grant.** Students with financial eligibility are considered for participation in this program. The results of the FAFSA, class rank and SAT/ACT are reviewed. The award is based upon the quality of the entire applicant pool. Renewal is based upon results of the FAFSA and a minimum TCU cumulative GPA of 2.5.

Middle Income Assistance Program. Awards vary, generally between \$500 and \$2,550.

**Tuition Equalization Grant (TEG).** The State of Texas sponsors a program to help equalize the cost of tuition between independent universities and the state public institutions. TCU participates in this program. To qualify, a student must:

- 1. be a Texas resident as defined by the Texas Higher Education Coordinating Board;
- 2. establish financial eligibility as evidenced by the FAFSA;
- 3. not be the recipient of an athletic scholarship during the semester the student is receiving the TEG;
- 4. provide results of a processed FAFSA no later than May 1 for fall and November 1 for spring.

**Leveraging Educational Assistance Partnership (LEAP).** LEAP may be combined with the TEG to assist undergraduates who have established additional eligibility through the FAFSA. The number awarded and the amount of the award are dependent upon the availability of funds provided by the federal government.

**TEXAS Grant Program.** The state of Texas sponsors a program to provide a grant of money to enable academically prepared, eligible students to attend public and private nonprofit institutions of higher education in Texas. TCU participates in this program. To qualify, a student must:

- 1. be a Texas resident as defined by the Texas Higher Education Coordinating Board;
- 2. establish financial eligibility as evidenced by the FAFSA;
- 3. graduate from a public or accredited private high school in Texas no earlier than Fall 1998 or receive an Associates Degree in May 2001 or later;
- 4. complete the recommended or advanced high school curriculum or its equivalent;
- 5. not be convicted of a felony or a crime involving a controlled substance;
- $6. \; enroll \; at \; least \; 3/4 \; time \; in \; an \; undergraduate \; degree \; or \; certificate \; program \; within \; 16 \; months \; of \; high \; school \; graduation.$

## **Programs for Non-Traditional Students**

Responding to the needs of several types of part-time, adult and non-traditional students, TCU offers the following programs. Information and applications may be obtained by contacting the Office of Scholarships and Student Financial Aid, Sadler Hall 108, telephone (817) 257-7858. Students receiving assistance through these programs must maintain the standards set forth in the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress outlined elsewhere in this Undergraduate Studies Bulletin.

**Personal/Professional Development Grant.** Awards are available to qualified part-time, independent students at least 22 years of age. These first-come, first-served grants are available to students who often do not qualify for other forms of financial assistance. With the exception of Pell Grants and educational loans, these grants may not be combined with other TCU-administered aid.

**Alumni Half-Tuition.** Persons with a TCU degree are eligible to take additional undergraduate courses, except for performance music, at half-tuition. Funds for this program are limited and some restrictions apply. A student may not be receiving tuition costs from any other source with the exception of educational loans and may not combine this award with other financial aid administered by TCU. A student concurrently enrolled in a graduate degree program at TCU may not combine this award with aid through a Graduate Department. Readmission to the University as a non-degree student is available through the Office of Extended Education. For admission as a degree-seeking student contact the Office of Admission. This assistance is awarded on a funds and space available basis to students who register on the second day of class. Applications, which may be completed in advance, are available in the Office of Scholarships and Student Financial Aid, Sadler Hall 108.

**City of Fort Worth Grant**. City of Fort Worth employees are eligible to receive tuition assistance in accordance with a cooperative agreement between TCU and the City of Fort Worth. Applications are available in the Office of Scholarships and Student Financial Aid, Sadler Hall 108.

## **Employment Programs**

**Federal Work-Study Program (FWS).** This federally funded program provides jobs for students who have financial eligibility as evidenced by the FAFSA and who wish to earn a part of their educational expenses. Students

employed through this program must be capable of maintaining good standing in their course of study while employed. This program will also be used in combination with other types of financial aid to package awards. Job listings are available through the website, http://tcu.erecruiting.com. User name is 'TCU', and password is 'go frogs.' Applications for employment must be filed directly with the department seeking employees. Community service opportunities, including the America Reads program, are available either on or off campus. Student employees are paid by check every two weeks for actual hours worked.

**University Student Employment.** TCU offers a number of student jobs through the various departments on campus. See job postings at http://tcu.erecruiting.com. User name is 'TCU' and password is 'go frogs.' Eligibility is not necessarily related to the FAFSA.

**Employment in the Fort Worth Area.** Students may also find employment in the Fort Worth area. Business establishments adjacent to the campus frequently employ TCU students. Other business enterprises in more distant areas of the community also employ TCU students who have means of transportation to and from the job. Employment opportunities in the area are particularly advantageous to students who are pursuing certain career fields where on-the-job training may be helpful. The Career Services Office provides assistance in helping students locate these types of employment.

**Residence Hall Assistants.** There are several staff positions for upper-class students as Resident Assistants in each residence hall. Required are leadership ability, an appreciation for the University's educational philosophy, and a concern for other students' needs. Applications should be made to the Office of Residential Services. Dates for applications are announced each spring.

## **Student Loan Programs**

Loans must be repaid and require the signing of a promissory note. There are several types of loans available to students attending TCU.

**B-On-Time Loan** The B-On-Time is a state loan cancellation program. This is a no interest loan with a 3% origination fee deducted from the disbursement. The loan will be forgiven for students who complete their undergraduate degree in 4 calendar years or less with a cumulative GPA of 3.0 or higher. Applicant must have graduated from High School May 2003 or later. Full time enrollment required. Texas Residency is required. Students may not receive this and the Texas Grant at the same time. Normal repayment is a minimum of \$75.00 over a period of up to 15 years. Payment begins 6 months after student ceases to be enrolled half time. Renewal is based on the availability of funds and requires annual filing of the FAFSA, and TCU cumulative GPA of 2.5 or higher. Funds are limited.

**Federal Carl Perkins Student Loan** (formerly National Direct Student Loan, NDSL). TCU is the lender. Eligibility is determined by the FAFSA. This program has a 5% per year interest rate. No payment of principal or interest is required nor does the interest accrue until one ceases to be a half-time student (normally carrying 6 semester hours). Repayment begins nine months after one is no longer enrolled at least half-time. One may prepay (early payment) at any time while incurring no additional charge. Normal payment is a minimum of \$40 per month over a period of up to ten years. A signed promissory note is required.

**Nursing Student Loan (NSL)** TCU is the lender. Eligibility is determined by the FAFSA. This program has a 5% per year interest rate. No payment of interest or principal is required nor does the interest accrue until one ceases to be at least a half-time student (normally carrying 6 semester hours). Repayment begins nine months after one is no longer enrolled at least half-time. Normal repayment is a minimum of \$15 per month over a period of up to ten years. Applicants must sign a promissory note in Sadler Hall Room 108 during the first five days of classes or the loan may be cancelled.

**Federal Stafford Student Loan (FSSL).** Formerly Guaranteed Student Loan (GSL). Eligibility is determined by the FAFSA. TCU is not the lender. The applicant may choose any bank, savings and loan association, credit union, or other traditional lender that participates in the student loan program. The Office of Scholarships and Student Financial Aid maintains a list of lenders that are used by a number of TCU students and that provide a satisfactory level of service to students. For new borrowers, the interest rate is a variable rate, which will never exceed 8.25% annually. Borrowers with an outstanding loan balance prior to July 1, 1994, should review their disclosure statements for applicable interest rate information. Normally, the repayment period for the loan will be ten years. The federal government pays the interest during the period of at least half-time enrollment and during the sixmonth grace period.

Undergraduate students may borrow up to \$2,625 during the first year of study, \$3,500 during the second year of study, and \$5,500 per year for subsequent years of study to a maximum of \$23,000. Repayment begins six months after one is no longer enrolled at least half-time. The lender will deduct a federally mandated origination fee up to 4% from the proceeds of the loan at the time of disbursement.

Borrowers may not participate in this program and the Hinson-Hazlewood Stafford Student Loan Program during the same loan period.

**Unsubsidized Federal Stafford Student Loan.** The FAFSA is required. Eligibility is determined by subtracting other forms of aid from the TCU 'Estimated Cost of Attendance' as defined by federal law. Terms and interest rates are the same as for the FSSL with the following exceptions: interest on the Unsubsidized FSSL must be paid monthly, quarterly, or be added into the principal amount of the loan.

Dependent undergraduate students may borrow up to the following maximums by combining FSSL with the Unsubsidized Federal Stafford Loan: \$2,625 during the first year of study, \$3,500 per year during the second year of study, and \$5,500 per year for subsequent years of study to a maximum of \$23,000.

Independent undergraduate students may borrow up to the following maximums by combining FSSL with the Unsubsidized Federal Stafford Student Loan: \$6,625 during the first year of study, \$7,500 during the second year of study, and \$10,500 per year for subsequent years of study to a maximum of \$46,000.

**Hinson-Hazlewood Stafford Student Loan.** The lender is the Texas Higher Education Coordinating Board. This loan is available to Texas residents who have demonstrated financial eligibility through completion of the FAFSA and

are enrolled at least half-time. The yearly loan maximums are identical to the Federal Stafford Student Loan Program. The interest rate is a variable rate, which caps at 8.25% per year. Repayment begins following a six month grace period after the student is no longer enrolled. Minimum monthly payment is \$50.

Borrowers may not participate in this loan program and the Federal Stafford Student Loan program during the same loan period.

**Hinson-Hazlewood Unsubsidized Stafford Student Loan.** The lender is the Texas Higher Education Coordinating Board. The loan is available to Texas residents. The eligibility and interest payment requirements are the same as those for the Unsubsidized Federal Stafford Student Loan. The interest rate varies and caps at 8.25 for new borrowers.

Borrowers may not participate in this loan program and the Unsubsidized Federal Stafford Student Loan program during the same loan period.

**Hinson-Hazlewood College Access Loan (CAL).** The lender is the Texas Higher Education Coordinating Board. This loan is for Texas residents or recipients of competitive academic scholarships of at least \$500 who are enrolled at least half-time and requires completion of the FAFSA. A loan may be up to \$10,000 per year to a maximum of \$45,000. This program has a 5.25% simple interest rate beginning the date of disbursement. Borrowers with an outstanding balance prior to June 15, 2003, should review their disclosure statements for applicable interest rate information. Repayment begins six months after the student ceases to be enrolled at least half-time.

**Federal Parent Loan For Undergraduate Students (PLUS).** TCU is not your lender. A parent of an undergraduate student may borrow an amount up to the 'estimated cost of attendance' as defined by federal law minus other forms of financial aid. The program has a variable interest rate, which for new borrowers has a 9% cap. Borrowers with an outstanding loan balance prior to July 1, 1994, should review their disclosure statements for applicable interest rate information. Repayment of principal and interest begins approximately 60 days following disbursement and allows the borrower up to ten years in repayment.

**Etta Newby Loan.** TCU is the lender. This program requires Texas residency with preference given to Fort Worth high school graduates. A FAFSA must be filed. Applicants must have at least a 2.5 overall grade point average. Freshmen must have at least a 950 SAT/23 ACT. The maximum borrowing is \$2,000 per year, \$8,000 aggregate. There is no interest charged; however, recipients are expected (not required) to make contributions to the fund after the debt is repaid. Repayment begins one month after the student graduates or ceases to be at least a half-time student at TCU. Funds are limited.

**Emergency Loans.** TCU has additional funds provided by friends and alumni to be used in emergency situations. Loans are short term and must be repaid during the same academic year. Loan applications are reviewed by a loan committee.

## **Other Financial Assistance Programs**

**Tandy Grant.** Charles Tandy established a trust fund in 1975 for the purpose of underwriting grants for employees of the Tandy Corporation and their lineal descendants (i.e., children and grandchildren.) The dollar amount of the grants varies from year to year, depending upon the number of applicants and the amount available from the fund. Students may apply for the minimum grant simply by completing the application form, which may be obtained in the TCU Office of Scholarships and Student Financial Aid. A FAFSA is required in order to be considered for more than the minimum grant. This award is subject to the General Policies of All Programs as outlined elsewhere in this Bulletin.

**Big Brothers Big Sisters of Tarrant County Scholarship.** TCU students who are currently serving as a Big Brother or Sister, or those who have been a Little Brother or Sister at one time may apply. Recipients receive \$2,000 for the academic year and may reapply for a total of four years. Financial eligibility must be established through the FAFSA. Incoming freshmen must be ranked in the top 25% of their high school class. Transfer students and current TCU students must have a grade point average of 2.5. Due to a need for minority Big Brothers, the donor has stipulted a preference for male minority applicants. Applications are available in the TCU Office of Scholarships and Student Financial Aid.

**Hatton W. Sumners Partial-Tuition Grant.** Students majoring in political science, history, pre-law, or educational social studies may apply. Applicants must be U. S. citizens, enrolled full time, be in good academic standing and demonstrate financial eligibility through the FAFSA. Amount varies.

**Hope Pierce Tartt Scholarship.** Residents of Gregg, Harrison, Marion, Panola, and Upshur counties in the state of Texas may apply. The FAFSA is required. Amount varies and is generally between \$500 and \$1,000.

**International Student Awards.** A limited number of awards are available for international students based upon financial need and/or merit. The award amounts vary. Awards are subject to the General Policies of All Programs and the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress.

**Martin Luther King, Jr. Scholarship.** Application process is open to students who indicate a career goal that demonstrates a service to humanity. Amount varies and is generally between \$500 and \$2,000.

M. D. Anderson Pre-Med Scholarship. Applicants must have completed Chemistry 10113, 10122, 10123, or Chemistry 10114 or 10124 and Biology 10504, 10514, or equivalent, and have a cumulative TCU GPA of at least 3.0 overall and in the sciences. Applicants must demonstrate service to TCU, fellow students and the profession. Evidence of health-related experience and motivation toward a career as a doctor or dentist is also required. Amount varies and is generally from \$500 to \$5,000 per year.

**State Scholarship and Grant Programs.** Some states offer funding to residents attending TCU. These states include Connecticut, Delaware, Vermont, and Pennsylvania. Residents of one of these states should contact the Higher Edcation Assistance Agency at the appropriate state capitol.

**Summer International Study Grant.** A limited number of grants are available for continuing TCU students in degree programs. The award amounts vary. Students must file a FAFSA for the academic year preceding the

summer international study to be considered. Awards are subject to the General Policies of All Programs and the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress.

**London Center Study Grant.** Award for degree-seeking students with financial eligibility enrolling in the TCU London Center. Applicants must have at least a 2.5 TCU cumulative GPA. Amounts vary and are generally between \$500 and \$2,000.

**ROTC Scholarship Programs.** The U.S. Army and Air Force defray some or all expenses for tuition and fees, provide a textbook allowance, and pay a monthly stipend to highly qualified young persons selected to participate in the ROTC College Scholarship Program. Successful completion of the ROTC course and all academic requirements for a bachelor's degree qualifies participants for an officer's commission in the Air Force or Army. A service obligation is incurred by those commissioned through this program. Awards are available to entering freshmen as well as to current TCU students.

Four-year and Three-year Advance Designee ROTC Scholarship winners are eligible to compete for a limited number of TCU Room and Board Supplement Grants and TCU ROTC Activity Grants. To be considered, the student must meet the scholarship deadline (January 15) and the financial aid deadline (May 1). Inquiries should be made directly to the Professor of Military Science (Army) or the Professor of Aerospace Studies (Air Force) at TCU.

**Veterans Administration (V.A.)** The Office of the Registrar will assist individuals eligible for veteran educational assistance benefits.

**Vocational Rehabilitation.** The Texas Rehabilitation Commission (TRC) offers assistance for tuition and non-refundable fees to students who have certain disabling conditions provided their vocational objectives have been approved by a TRC counselor. Examples of such conditions include orthopedic deformities, emotional disorders, diabetes, epilepsy, and heart conditions. Other services are also available to assist the handicapped student to become employable. Application for such service should be made at Texas Rehabilitation Commission, Fort Worth District Office.

## Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress

All students must maintain certain requirements to receive financial aid. Credit hours attempted, credit hours completed and TCU grade point average are reviewed in June at the conclusion of each academic year to determine whether satisfactory progress is being maintained. Additionally, a student on academic warning or academic probation will be reviewed at the conclusion of each academic semester. (See Sections I, II, III.)

The following statement outlines the requirements for satisfactory progress and how those requirements are monitored. Enrollment status is determined on the final day of the 100% refund period.

## Section I-Full-Time Undergraduate Student (12+ hours/semester):

A.Complete and receive academic credit for at least 24 hours annually. (See Section V.)

- B.Maintain a TCU grade point average (GPA) of at least 2.0 on hours completed.
- C. Not be on academic probation.

## Section II-3/4-Time Undergraduate Student (9-11 hours/semester):

A.Complete and receive academic credit for at least 6 hours per semester.

- B. Maintain a TCU grade point average of at least 2.0 on hours completed.
- C. Not be on academic probation.

## Section III-1/2-Time Undergraduate Student (6-8 hours/semester)

- A. Complete and receive academic credit for 50% of the number of hours for
- which enrolled. (See Section V.)
- B. Maintain a TCU cumulative grade point average of at least 2.0 on hours  ${\sf CLC}$
- completed.

completed.

C. Not be on academic probation.

## Section IV-Less Than Half-Time Undergraduate Student (1-5 hours/semester)

- A. Complete and receive academic credit for all courses for which enrolled. (See Section V.)
- B. Maintain a TCU cumulative grade point average of at least 2.0 on the hours
- C.Not be on academic probation.

## **Section V-Criteria Used to Evaluate Grades**

A.The following will be counted as credits completed: A through D grades, and P.

B. The following will not be considered as credits completed: F grade, W or Q, I, and AU; Repeated Courses; Advanced Placement (AP); College Level Examination Program (CLEP); College Board Achievement Tests in Foreign Languages (ACH).

C. Repeated courses will not be counted as credits completed unless the student previously received a grade of F in the course or a grade of D in a course in which a grade of C or higher is required for degree completion. A student affected by either of these situations must notify the Office of Scholarships and Student Financial Aid for an individual review.

## Section VI-Schedule of Completion of Degree Requirements - Full-Time Student

Satisfactory completion of academic work for receipt of financial aid is also measured in annual increments beginning with the fall semester.

A student who completes fewer than the required number of hours for any increment may attend summer school to re-establish eligibility for financial aid for the following semester. *Aid may then be awarded on a funds-available basis*. If intending to transfer work to TCU, the individual's academic dean must approve the course work as applying toward a TCU degree. Full-time students will not be allowed more than five years of financial assistance.

## Section VII-Schedule of Completion of Degree Requirements: Part-Time Student

A student who has registered as a part-time student (11 semester hours or fewer) in at least two of the last four semesters, excluding summer school, will be allowed a total of six years of financial assistance. For those students whose academic career has consistently been part-time, an extension of this time limit is available based on an individual review.

#### **Section VIII: Financial Assistance Probation**

A student will be expected to maintain satisfactory academic progress (TCU cumulative GPA) as defined in Section(s) I, II, and III while in attendance. If a student does not progress at the required rate, he/she will be placed on financial aid probation. Should the student not obtain the required elements to remove himself/herself from probation or if the student is placed on academic probation or continued on academic probation a second time, the student will then be placed on financial assistance suspension (see Section VIII).

#### Section IX: Financial Assistance Suspension

Financial assistance suspension is the loss of aid for a specific period. The student will not be allowed to participate in any university, state or federal programs, including all educational loan programs. A student will remain on financial aid suspension until he/she is removed from academic probation.

#### **Section X: Appeals Procedure**

If a student is denied financial aid or academic scholarship because of lack of satisfactory academic progress, he/ she may appeal the denial of assistance. The appeal must be made in writing to the Scholarship Advisory Committee. (Appeal applications are available in the Office of Scholarships and Student Financial Aid.) The Scholarship Advisory Committee will meet in mid-July and mid-August to review appeals for the fall semester and in early January for the spring semester. Appeals must be received in the financial aid office by July 1 for the July meeting and August 1 for the August meeting. You may contact the Office of Scholarships and Student Financial Aid for the deadline to submit appeals for the January meeting. The student will be notified of the decision as soon as possible after the Committee meets.

## Section XI: Reinstatement of Aid

If the appeal is not approved or if a student does not appeal, one of the following conditions must be satisfied before the student is eligible to receive aid again:

A student must attend TCU without the benefit of financial aid two full semesters during the regular academic year. In addition to maintaining the grade point average, the student must also satisfy the requirements of the "Schedule of Degree Requirements" (see Sections VI and VII) before aid is reinstated.

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A student can cease enrollment at TCU for two full semesters during the regular academic year. Assistance will be reinstated for one semester upon the student's re-entrance. Renewal of aid for the next semester will be based upon compliance with Sections I, II and III with the exception of subsection A on each section.

## Section XII

If an appeal or summer school work makes a student eligible for aid for the following year, the student will be considered for all aid for which he/she is eligible and for which funds are still available on the date eligibility is reinstated.

# Memberships and Accreditations

Among Other Memberships and Accreditations
Program-related Memberships and Accreditations

#### Overview

Evidence of TCU's educational standards lies in its accreditations and memberships.

Throughout the higher education system, numerous examining bodies-boards, agencies, commissions-attest annually the credibility of a university's education program. These bodies review and assess the worthwhileness of an institution's offerings.

TCU is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelor's, master's and doctoral degrees.

Phi Beta Kappa, the prestigious academic society in the liberal arts, approved TCU for membership in 1970. TCU is also approved for a chapter of Sigma Xi, the Scientific Research Society of North America.

#### **Among Other Memberships and Accreditations**

Alliance for Higher Education

American Association for Higher Education

American Association of Collegiate Registrars and Admissions Officers

American Association of University Professors

American Association of University Women

American College Health Association

American College Personnel Association

American Council on Education

American Council of Learned Societies

Association for Continuing Higher Education

Association of American Colleges and Universities

Association of College and University Housing Officers - International

Association of College and University Telecommunication Administrators

Association of College Unions International

Association of Fraternity Advisors

Association of Graduate Liberal Studies Programs

Association of Higher Education and Disabilities

Association of Higher Education Cable Television Administrators

Association of Independent Liberal Arts Colleges for Teacher Education

Association of Institutional Research

Association of Student Judicial Affairs

Association of Texas Colleges and Universities

Association of Texas Graduate Schools

Board of Higher Education of the Christian Church

College Entrance Examination Board

College Leadership Texas

College Placement Council

Consortium for Assessment and Planning Support

Consortium of College and University Media Centers

Council for the Advancement and Support of Education

Council of Church Boards of Education

Council of Colleges of Arts and Sciences

Council of Graduate Schools of the U.S.

Council on International Educational Exchange

**EDUCAUSE** 

Fulbright Association

Higher Education Datasharing Consortium

Independent Colleges and Universities of Texas Inc.

Institute of Asian Studies

Institute of European Studies

Institute of International Education

International Association of Campus Law Enforcement Administrators

International Council of Fine Arts Deans

International Leadership Association

National Academic Advising Association

National Association of College Activities

National Association for College Admission Counseling

National Association of College and University Business Officers

National Association of Colleges and Employers

National Association of Financial Aid Administrators

National Association of Foreign Advisors: Association of International Educators

National Association of Foreign Student Affairs

National Association of Independent Colleges and Universities

National Association of Student Financial Aid Administrators

National Association of Student Personnel Administrators

National Clearinghouse for Leadership Programs

National Council of Educational Opportunity Associations

National Council of University Research Administrators

National Intramural-Recreational Sports Association

National Orientation Directors Association

National Wellness Association

Network of Colleges and Universities Committed to the Elimination of Alcohol and Drug Abuse

North Central Texas Counseling Association

North Texas Consortium on Substance Abuse in Higher Education

Oak Ridge Associated Universities Inc.

Prevention Providers Coalition, Tarrant County

Professional and Organization Development Network in Higher Education

Southwest Association of Colleges and Employers

Southern University Conference

Southwest Educational Development Laboratory

Texas Association for College Admission Counseling

Texas Association for Community Service and Continuing Education

Texas Association of Campus Law Enforcement Administrators

Texas Association of Institutional Research

Texas Campus Compact (Community Service and Service-Learning)

Texas College Counseling Association

Texas Counseling Association

Texas Leadership Consortium

Texas Space Grant Consortium

#### **Program-related Memberships and Accreditations**

Accreditation Board for Engineering and Technology (Department of Engineering) \*

Accrediting Council of Education in Journalism and Mass Communication (Department of Journalism)  $^{st}$ 

American Advertising Federation (Department of Journalism)

American Anthropological Association (Department of Sociology, Criminal Justice and Anthropology)

American Association of Colleges of Nursing (Harris School of Nursing) \*

American Association of Health, Physical Education, Recreation and Dance (Department of Ballet and Modern Dance)

American Association of Colleges for Teacher Education (School of Education)

American Association of Teachers of Spanish and Portuguese (Department of Spanish and Latin American Studies)

American Chemical Society (Department of Chemistry) \*

American College Dance Festival Association (Department of Ballet and Modern Dance)

American Council on the Teaching of Foreign Languages (Department of Spanish and Latin American Studies)

American Historical Association (Department of History)

American Mathematical Society (Department of Mathematics)

American Political Science Association (Department of Political Science)

American Speech-Language-Hearing Association (Department of Communication Sciences and Disorders) \*

American Sociological Association (Department of Sociology, Criminal Justice and Anthropology)

Association for Education in Journalism and Mass Communication (Department of Journalism)

Association for Theatre in Higher Education (Department of Theatre)

Association of Colleges and Schools of Education in State Universities and Land Grant Private Universities (School of Education)

Association of Departments of English (Department of English)

Association of Departments of Foreign Languages (Department of Modern Languages and Literatures and the Department of Spanish and Latin American Studies)

Association of Schools of Journalism and Mass Communication (Department of Journalism)

Association to Advance Collegiate Schools of Business (M. J. Neeley School of Business) \*

Board of Nurse Examiners for the State of Texas (Harris School of Nursing) \*

Broadcast Education Association (Department of Radio-TV-Film)

Commission on Accreditation for Allied Health Education Programs (Athletic Training Program) \*

Commission on Accreditation/Approval for Dietetics Education of The American Dietetic Association (Coordinated Program in Dietetics; Didactic Program in Dietetics) (Department of Nutritional Sciences) \*

Commission on Collegiate Nursing Education (Harris School of Nursing) \*

Computing Accreditation Commission of the Accreditation Board for Engineering and Technology(Department of Computer Science) \*

Council on Accreditation of Nurse Anesthesia Educational Programs (School of Nurse Anesthesia)

Council on Social Work Education (Department of Social Work) \*

Dance Council (Department of Ballet and Modern Dance)

European Teacher Education Network (School of Education)

Foundation for Interior Design Education Research (Department of Design, Merchandising, and Textiles) \*

Graduate Management Admission Council (M.J. Neeley School of Business, graduate programs)

Illuminating Engineering Society of North America (Department of Design, Merchandising and Textiles)

International Communication Association (Department of Communication Studies)

Latin American Studies Association (Department of Spanish and Latin American Studies)

Mathematical Association of America (Department of Mathematics)

Modern Language Association (Department of Modern Languages and Literatures and Department of Spanish and Latin American Studies)

Modern Language Association of America (Department of English)

Music Educators National Conference (School of Music)

Music Teachers National Association (School of Music)

National Association of Laboratory Schools (Starpoint School)

National Association of Schools of Music (School of Music) \*

National Communication Association (Department of Communication Studies)

National Council of Arts Administrators (Department of Art and Art History)

National Dance Association (Department of Ballet and Modern Dance)

National Dance Education Organization (Department of Ballet and Modern Dance)

Radio-Television News Directors Association (Department of Journalism)

Society of Professional Journalists (Department of Journalism)

Southern Association of Colleges and Schools, Commission on Elementary and Middle Schools (Starpoint School)\*

Southern Association of Independent Schools (Starpoint School)\*

Southwest Commission on Religious Studies (Department of Religion)

Southwest Theatre Association (Department of Theatre)

Speech Communication Association (Department of Communication Studies)

State Board of Educator Certification (School of Education)

Texas Association of Colleges for Teacher Education (School of Education)

Texas Association of Music Schools (School of Music)

Texas Educational Theatre Association (Department of Theatre)

Texas Independent School Consortium (Starpoint School)

Texas Music Education Association (School of Music)

Texas Non-Profit Theatres (Department of Theatre)

United States Institute for Theatre Technology (Department of Theatre)

\* Accrediting Agency

# Milestones of TCU History

#### Overview

#### 1873

Founded as AddRan Male and Female College, Thorp Spring, Texas. Addison Clark, president (until 1899).

#### 1889

Property given to the Christian Churches of Texas, name changed to AddRan Christian University; J. J. Jarvis president of the board (until 1895).

#### 1895

Moved to Waco, Texas, December; Col. J. Z. Miller, president of board (until 1899).

#### 1899

T. E. Shirley, president of board (until 1909).

#### 1902

Named changed to Texas Christian University; E. V. Zollars, president (until 1906).

#### 1906

Clinton Lockhart, president (until1910).

#### 1909

T. E. Tomlinson, president of board (until 1917).

#### 1910

Main building at Waco destroyed by fire, March 22; the University moved to Fort Worth with classes in downtown buildings, September.

#### 1911

Frederick Kershner, president (until 1915); school opened on present campus with Main Building, Jarvis and Goode Halls, September; first endowment received, \$25,000, from L. C. Brite.

#### 1912

Fort Worth Medical College adopted as medical department; charter member of the Association of Texas Colleges.

#### 1913

Original Clark Hall completed.

## 1914

Brite College of the Bible founded, Brite Hall erected.

### 1915

School of Law added, E. R. Cockrell, principal.

### 1916

E. M. Waits, president (until 1941); S. J. McFarland, president of the board (until 1927).

## 1918

Medical College closed due to rising costs.

### 1920

Endowment of \$300,000 attained; School of Law closed.

### 1921

Gymnasium building completed; recognition by and aid from General Education Board; elected to membership in the Association of American Colleges.

### 1922

Elected to membership in Southern Association of Colleges and Schools, including accreditation; became member of the Southwest Athletic Conference.

### 1923

Jubilee celebration of fiftieth anniversary; \$500,000 endowment achieved; the Mary Couts Burnett Trust received.

### 1925

Mary Couts Burnett Library opened.

### 1926

Graduate School organized, first fieldhouse built.

### 1927

Van Zandt Jarvis, president of board (until 1940).

### 1928

University placed on approved list of Association of American Universities.

### 1930

New stadium erected on West Campus; University placed on approved list of American Association of University

Women.

#### 1935

University became charter member of the Southern University Conference.

Evening College made distinct administrative unit.

#### 1938

School of Business organized.

#### 1939

Silver anniversary of Brite College of the Bible celebrated.

R. H. Foster, president of board (until1941).

M. E. Sadler, president (until 1959, when became chancellor until 1965); L. D. Anderson, president of board (until 1954); Brite College accredited by American Association of Theological Schools.

#### 1942

Foster Dormitory completed.

University reorganized into seven schools and colleges.

Harris College of Nursing added as eighth academic unit.

#### 1947

Tom Brown Dormitory, E. M. Waits Dormitory completed.

Jubilee celebration of seventy-fifth anniversary of University; \$5,000,000 endowment achieved; stadium enlarged to 33,500 capacity.

Ed Landreth Hall and auditorium (Fine Arts) completed.

TCU Summer School in Mexico established at Monterrey Tech.

## 1952

Winton-Scott Hall of Science completed.

Stadium enlarged to 37,000 capacity; old fieldhouse burned.

Religion Center completed; Milton Daniel, chairman of board (until 1958).

Brown-Lupton Student Center, Pete Wright Dormitory completed; Jarvis Dormitory renovated.

TCU-Amon G. Carter Stadium expanded to 47,000 capacity. Ranch Management Program established.

Dan D. Rogers Hall (School of Business) completed; Milton E. Daniel and Colby D. Hall Dormitories completed.

Lorin A. Boswell, chairman of board (until 1969); estate of Milton E. Daniel left in trust to University; Mary Couts Burnett Library enlarged; Sherley Dormitory completed, new Clark Dormitory built on site of Goode Hall; Bailey Building (old Brite Hall) renovated for School of Education.

## 1959

First Ph.D. programs approved; title of chief administrative officer changed from President to Chancellor.

M. E. Sadler Hall (administration and classrooms) completed on site of original Clark Hall; first students enrolled in Ph.D. programs in physics and psychology.

Dave Reed Hall (old Administration Building) rebuilt for classrooms, faculty offices, second cafeteria; sale of adjacent Worth Hills Golf Course to the University approved by voters of the city.

Daniel-Meyer Coliseum built, seating 7,166; Ph.D. programs in English and mathematics inaugurated; University elected to membership in College Entrance Examination Board and as a sponsor of the Oak Ridge Institute of Nuclear Studies; Computer Center put into operation; Institute of Behavioral Research established.

Worth Hills Golf Course acquired for future expansion; Brown-Lupton Health Center completed; Ph.D. program in

chemistry begun.

#### 1964

Five residence halls and cafeteria completed on Worth Hills property.

#### 1965

Ph.D. program in history inaugurated; endowment of over \$27,000,000 reached; Dr. M. E. Sadler retired as Chancellor (July 1); Dr. James M. Moudy elected Chancellor and inaugurated Nov. 19.

#### 1966

Approved faculty leaves with pay; authorized creation of "The TCU Press;" received \$3.4 million matching grant from Sid W. Richardson Foundation toward construction of Science-Research Center.

#### 1967

Named School of Business "M. J. Neeley School of Business;" began participation in TAGER (The Assn. for Graduate Education and Research in North Texas) TV network; approved formation of a Faculty Assembly and Senate; Brown-Lupton Student Center expanded.

#### 1968

Adopted new academic calendar with fall term ending before Christmas; established Pastoral Care and Training Center.

#### 1969

Dr. M. J. Neeley chairman of board (until 1972); approved "New Century" program and goal; Leo Potishman Tennis Center completed; Bellaire North and Princeton House apartments purchased for student housing.

#### 1970

Completed Sid W. Richardson Physical Sciences Building, Annie Richardson Bass Building for Harris College of Nursing and Home Economics and a new living-learning residence hall (named during 1971-72 session for Dr. and Mrs. Solomon Brachman); Phi Beta Kappa Chapter established February 24.

#### 1971

Completed Cyrus K. and Ann C. Rickel Health and Physical Education Building and new women's residence hall (named during 1972-73 session for Mary Lipscomb Wiggins); formed Centennial Commission to plan 100th year observance during 1973; Friends of the Texas Christian University Libraries organized January 28; Tom Brown Hall renovated and refurnished.

#### 1972

Administration reorganized into two major areas: academic and support, each headed by a vice chancellor; Theodore P. Beasley elected chairman of board; Waits and Milton Daniel Halls renovated and refurnished.

#### 1973

Celebrated centennial year; \$35 million achieved during New Century campaign for capital, operating and endowment funds; "Old Gym" remodeled for Division of Ballet, "Little Gym" as annex for Department of Art.

## 1974

William C. Conner elected chairman of board; Chancellor J. M. Moudy received grant from the Danforth Foundation for leave of absence during spring semester, Vice Chancellor and Provost Howard G. Wible named Acting Chancellor during that time.

### 1975

Miller Speech and Hearing Clinic building completed.

### 1976

Mary Potishman Lard Tennis Center completed for public and University use; third floor added to Annie Richardson Bass Building.

### 1977

Addison and Randolph Clark Society established to recognize donors of \$1,000 or more annually; Texas Growth Companies Endowment Fund established.

### 1978

Ground broken for J. M. Moudy Building for Visual Arts and Communication (dedicated March 26, 1982); new building for Starpoint School completed.

## 1979

Graduate program re-organized by school and college, replacing Graduate School; Bayard Friedman elected chairman of board; Martin-Moore Hall named; Dr. James M. Moudy retired as chancellor, succeeded on Sept. 5 by Dr. William E. Tucker (inaugurated April 16, 1980).

### 1980

Brite Divinity School passes \$7.5 million goal of its first fund-raising campaign; goal of \$10 million to expand library achieved.

### 1981

Library collection passes one million items; \$5 million endowment for financial aid received from Theodore and Beulah Beasley Foundation.

### 1982

The 40,000th graduate received a degree at summer commencement; addition almost doubling size of the library occupied (dedicated March 25, 1983).

## 1983

Endowment reaches and passes \$100 million for first time; appointments made to The 1990s Project: A Commission on TCU and the Future; Chancellor William E. Tucker elected to two-year term as moderator of the Christian Church (Disciples of Christ).

#### 1984

Expansion of building for M. J. Neeley School of Business approved; suggestions received from The 1990s Project; football team gains national attention and plays in Bluebonnet Bowl.

#### 1985

Limitations placed on freshman, transfer enrollments; duties of vice chancellor for admistrative services and student affairs divided among two positions as fifth vice chancellor is added.

#### 1986

Construction of new residence hall approved.

#### 1987

Groundbreaking for Tandy Hall expansion of M.J. Neeley School of Business and Moncrief Hall, a new residence hall; School of Fine Arts re-named College of Fine Arts and Communication; new University Curriculum Requirements approved.

#### 1988

Academic Services Center put into full operation; Moncrief Hall dedicated.

#### 1989

Tandy Hall dedicated; endowment passes \$200 million.

#### 1990

John Roach elected chairman of board; 50,000th graduate receives degree; more than \$3 million in gifts assure permanence of Ranch Management Program; priorities for academic initiatives in the 1990s include a program in engineering, stronger focus on Ph.D. programs, strengthened international study opportunities for faculty and students.

#### 1991

Master plan for the physical campus completed and approved; central dining hall renovated for \$2.2 million.

#### 1992

First freshmen admitted to new engineering program; Winthrop Rockefeller Building for Ranch Management completed (dedicated January, 1993); first "global theme semester" held and student exchange with Universidad de las Americas - Puebla approved; \$15 million bequest from estates of B.M. and Frances Britain received.

#### 1993

Board of Trustees approve planning of a comprehensive fund-raising campaign, the first in a quarter century; endowment passes \$400 million.

### 1994

The Walsh Complex, a \$2.5 million expansion of the athletics weight training and rehabilitation center, is built; when the Southwest Conference acts to disband after 1995, TCU joins the Western Athletic Conference, then wins the SWC football co-championship and plays in Independence Bowl; The Next Frontier Campaign is publicly announced with a \$100 million goal, with \$61 million raised or committed during the "silent phase" of the five-year campaign.

## 1995

Ground is broken for the \$6 million Dee J. Kelly Alumni and Visitors Center (dedicated at Homecoming 1996); computer/information technology extended to all residence hall rooms; pre-enrollment "Frog Camp" becomes integral to freshman program.

## 1996

First class of engineering students awarded degrees; faculty expanded by ten primarily to enhance freshman seminar program; ground broken for \$11.5 million F. Howard and Mary D. Walsh Center for the Performing Arts; renewal/reconfiguration of residence halls approved.

## 1997

The combined TCU/Brite endowment exceeds \$750 million after completion of the five-year Next Frontier Campaign which raised more than \$126 million; Pete Wright Hall razed to make way for the Tom Brown/Pete Wright residential community, completed in 1998; the Department of Engineering receives accreditation; TCU establishes partnership with Columbia University to send students to Biosphere II.

## 1998

The Mary D. and F. Howard Walsh Center for Performing Arts dedicated; the TCU London Centre, the University's first permanent oversees facility, opens its doors to the first class of students in the fall; Chancellor William E. Tucker retires after 19 years of service, paving the way for the University's ninth chancellor, Michael R. Ferrari; the department of music renamed the School of Music and becomes one of the country's few all-Steinway schools. TCU defeats USC in the Sun Bowl, 28-19.

### 1999

Tom Brown/Pete Wright Residential Complex, housing upperclassmen in apartment style quarters, opens in January; work begins on the William E. and Jean Jones Tucker Technology Center; Commission on the Future of TCU kicks off in fall; Lowdon track is dedicated; ground is broken for 35,000 square-foot Justin Athletics Center; Frogs beat East Carolina 28-14 in the Mobile Alabama Bowl; Trustees approve an aggressive program to improve classroom technology and hire 21 new faculty.

### 2000

Schools and colleges reorganized from five to seven--AddRan College of Humanities and Social Sciences, M.J. Neeley School of Business, the College of Communication, the School of Education, the College of Fine Arts, the

College of Health and Human Sciences, and the College of Science and Engineering; the James A. Ryffel Entrepreneurship Center established; TCU parents Steve and Sarah Smith donate \$10.5 million for an entrepreneurship facility, the largest private gift in University history; Brite's Leibrock Village dedicated; Running back LaDainian Tomlinson becomes the third Frog to run for the Heisman, placing 4th in the nation in the final vote and earning the Doak Walker Award; Frogs end with an 10-2 football season and go to their third consecutive bowl game -- the Mobile Alabama Bowl; In November, the university signs an agreement with the Universidad de las Americas in Puebla, Mexico, allowing students from both universities to earn degrees in communication from both institutions simultaneously.

#### 2001

Spring closes the most successful athletics program in school history as the University leaves the Western Athletic Conference and joins Conference USA; In February, TCU Board of Trustees approved a new flat-rate pricing structure that better aligns TCU with other prominent private universities and reflects the value of the complete "TCU Experience"; Gary Patterson becomes the 29th head coach in the history of the TCU football program and takes the Horned Frogs their 4th consecutive post-season appearance -- The galleryfurniture.com Bowl; Harris School of Nursing launches an online master's degree to allow RNs with a bachelor of science degree to complete their master's in two years, and RNs with a associate of arts degree to complete the program in three; the women's basketball team wins the WAC regular season title and post-season tournament, earning the Lady Frogs their first-ever appearance in the NCAA Tournament; In May, the James A Ryffel Center for Entrepreneurial Studies sponsors the first-ever Entrepreneurial Summit, a networking and idea-sharing event; Construction begins on the Sarah and Steve Smith Entrepreneurs Hall; M.J. Neely School of Business launches a Center for Supply and Value Chain Studies; Men's Head Basketball Coach Billy Tubbs announces he will step down at the end of the season. He compiles a 156-95 record including a regular season WAC division title in eight seasons; Mary Couts Burnett Library expands its computer lab to 100 computers and adds Bistro Burnett, a coffee bar in the library's foyer; The University begins a three-year \$30 million plan to upgrade about 80 classrooms and laboratories with new lighting, ceilings, furniture and audio-visual equipment and renovate several residence halls.

#### 2002

The M.J. Neely School of Business makes plans for the Luther King Capital Management Center for Financial Studies; The School of Education announces a Center for Urban Education that will form a coalition of teachers, principals and TCU faculty and students to turn neglected inner-city schools into thriving environments; Mary Couts Burnett Library establishes Information Commons, a combination reference help desk and computer troubleshooting center; Construction begins on 2,220-seat Lupton Stadium, the new home for the baseball team; William E. and Jean Jones Tucker Technology Center opens for engineering, computer science and mathematics; Neil Dougherty becomes the 18th head coach in the history of TCU men's basketball; a School of Anesthesia opens within the College of Health and Human Sciences; the football team wins it's fifth consecutive bowl game, beating Colorado State 17-3 in the Liberty Bowl in Memphis, Tenn., and ending the season 10-2 with a No. 22 ranking.

#### 2003

The Steve and Sarah Smith Entrepreneurs Hall opens; Victor J. Boschini Jr. becomes TCU's 10th leader when he takes office as chancellor; Chancellor Michael R. Ferrari retires after leading the University for five years; D. Newell Williams becomes the eighth president of Brite Divinity School; Monnig Meteorite Gallery opens; Baseball Coach Lance Brown, TCU's all-time winningest coach, retires after 17 years and 517 victories, Jim Schlossnagle is named his successor; the freshman class was the largest and smartest group ever at 1,596 with an average SAT of 1168; the Frogs lost to Boise State 34-31 in the Inaugural Fort Worth Bowl after an 11-1 season pushed them into the national media spotlight with talk of a BCS game if they went undefeated; tuition rose to \$19,700, a 11.9 percent increase; Vision in Action: Planning TCU's Future was launched to develop a long-range strategic plan; purple gowns were instituted for graduation.

# Mission, Vision and Values

#### MISSION

TCU educates individuals to think and act as ethical leaders and responsible citizens in the global community.

#### VISION

Our vision is to be a prominent private university recognized for our global perspective, our diverse and supportive learning community, our commitment to research and creative discovery, and our emphasis on leadership development.

#### VALUES

TCU values academic achievement, personal freedom and integrity, the dignity and respect of the individual, and a heritage of inclusiveness, tolerance and service.

## Our Heritage, Philosophy and Goals

Texas Christian University, founded in 1873, has grown from a small school on the cattle frontier to a major center of independent higher education in a dynamic city. As agents of change in our time as our predecessors were in theirs, we¿¿faculty, staff, students, and trustees¿¿are united in striving for the constant improvement of the University.

A community dedicated to learning, the University affirms its commitment to rationality, objectivity, diversity, freedom of inquiry, creativity, and civility. TCU is committed as well to the preservation, appraisal, and transmission of knowledge and wisdom and to the discovery of new ideas and knowledge by which the understanding of truth may be extended or corrected.

An independent and self-governing institution, TCU attests that a representative democracy provides the context within which free inquiry may best be protected and encouraged; and the University acknowledges that independent higher education can thrive only in an economic system which prompts and rewards individual initiative. TCU has an historical and intentional connection with a religious body, the Christian Church (Disciples of Christ), that embraces pluralism, rejects sectarian narrowness, encourages a reasoned faith, and affirms the rights of informed individual conscience in religious preference. The University welcomes students, faculty and staff of all religious faiths and takes pride in the diversity of its academic community.

Much of the knowledge students seek is related to their specific career goals. The University, however, regards as essential the advancement and communication of general knowledge which enables students to understand the past, to comprehend the natural and social order, to search for the good and the beautiful, and to integrate knowledge into significant wholes.

Education fosters the capacity for rational decision-making, creative thinking and expression, and responsible living. Though knowledge may be treated as ethically neutral, we believe that questions of value are vital and that the exploration of the moral and religious dimensions of human existence is basic to the love of wisdom. At the center of the educational endeavor are people. Affirming the incalculable worth of each individual, TCU seeks to be a caring community, encouraging close working relationships among all members of the University and challenging students, faculty and staff alike to high achievement. In such a setting, the enhancement of mental, physical and spiritual gifts contributes to the integration of the self and to the enrichment of the community and humankind.

TCU provides undergraduate and graduate instruction in a vital and inviting residential setting for learning and living.

We intend to maintain and establish only undergraduate and graduate programs that are aimed toward excellence, the well-being of students and the wholeness of the University. We believe there must be a general compatibility among the values and daily practices of the University and its several units.

Among our many goals are the following:

- To conduct curricular and co-curricular activities designed to fulfill the mission and vision of the University.
- To foster undergraduate and graduate studies of excellent quality.
- To provide faculty and staff of high qualification and dedication.
- To expect and encourage excellent teaching and fruitful creativity and research.
- To preserve and contribute to knowledge by aiding in its organization, storage, retrieval, and dispersal; and to use appropriate technology to this end.
- To employ admission, advising, and retention policies that will enable qualified and dedicated students to enter and to pursue successfully their collegiate work.
- To provide a variety of support services that will enhance the educational experience of all students.
- To promote the development of mature individuals who respect others, who cherish a free and just society, and who are prepared to act as responsible citizens, literate, broadly informed, self-educating, appreciative of arts and of the fruitful uses of leisure, and capable of both entering and changing careers.
- To support co-curricular as well as curricular opportunities for an informed understanding of religious
- To contribute to the quality of life, work and leisure of citizens in the surrounding metropolitan area through regular instructional programs, continuing education, cultural and intellectual events, research, and through participation of faculty and staff in civic, religious, and other affairs;
- To earn the growing support from those who share the conviction that strong, independent institutions of higher learning are necessary to the continuation of a free society.

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