SMU

Southern Methodist University

General Information

Undergraduate Catalog

2013–2014

NOTICE OF NONDISCRIMINATION

Southern Methodist University will not discriminate in any employment practice, educational program or educational activity on the basis of race, color, religion, national origin, sex, age, disability, genetic information or veteran status. SMU's commitment to equal opportunity includes nondiscrimination on the basis of sexual orientation and gender identity and expression. The Office of Institutional Access and Equity has been designated to handle inquiries regarding the nondiscrimination policies and may be contacted at Southern Methodist University, Dallas TX 75275; phone: 214-768-3601; email: accessequity@smu.edu.

BULLETIN OF SOUTHERN METHODIST UNIVERSITY

VOL. XCVII 2013–2014

Southern Methodist University publishes a complete bulletin every two years. The undergraduate catalog and the Cox, Dedman Law, Hart eCenter and Simmons graduate catalogs are updated annually. The Dedman College, Lyle, Meadows and Perkins graduate catalogs are updated biennially. The following catalogs constitute the General Bulletin of the University:

Undergraduate Catalog
Cox School of Business Graduate Catalog
Dedman College of Humanities and Sciences Graduate Catalog
Dedman School of Law Graduate Catalog
Hart eCenter Graduate Catalog
Lyle School of Engineering Graduate Catalog
Meadows School of the Arts Graduate Catalog
Perkins School of Theology Graduate Catalog
Simmons School of Education and Human Development Graduate Catalog

In addition, certain locations or programs provide their own schedules:

Continuing Education	SMU-in-Plano
J Term	SMU-in-Taos (Fort Burgwin)
SMU Abroad	Summer Studies

Every effort has been made to include in this catalog information that, at the time of preparation for printing, most accurately represents Southern Methodist University. The provisions of the publication are not, however, to be regarded as an irrevocable contract between the student and Southern Methodist University. The University reserves the right to change, at any time and without prior notice, any provision or requirement, including, but not limited to, policies, procedures, charges, financial aid programs, refund policies and academic programs.

Catalog addenda are published online at www.smu.edu/catalogs. An addendum includes graduation, degree and transfer requirements that do not appear in a specific print or online catalog but apply in that academic year.

Additional information can be obtained by writing to the Undergraduate Office of Admission or to the appropriate school (listed above) at the following address:

Southern Methodist University
Dallas TX 75275

Information also is available at www.smu.edu.

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2013

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Appendix i
Addendum ii

ACADEMIC YEAR 2013–2014

www.smu.edu/registrar/academic_calendar.asp

This calendar includes an addendum listing religious holidays for use in requesting excused absences according to University Policy 1.9. For religious holidays not listed, students should contact the Office of the Chaplain.

Graduate programs in the Cox School of Business, Perkins School of Theology, Dedman School of Law, and Department of Dispute Resolution and Counseling within the Simmons School of Education and Human Development have different calendars.

Fall Term 2013

April 8–26, Monday–Friday: Enrollment for fall 2013 continuing students for all undergraduates and for graduates in Dedman College, Lyle and Meadows.

May, July, August – TBA: Academic Advising, Enrollment and Orientation conferences for new first-year and transfer undergraduate students. Additional information about AARO is available from New Student Programs, Student Life Office, 214-768-4560, www.smu.edu/newstudent.

August 24, Saturday: Residence halls officially open at 9 a.m.

August 25, Sunday: Opening Convocation, McFarlin Auditorium.

August 26, Monday: First day of classes.

August 30, Friday: Last day to enroll, add courses or drop courses without grade record. Also, last day to file for graduation in December.

September 2, Monday: Labor Day. University offices closed.

September 11, Wednesday: Last day to declare pass/fail, no credit or first-year repeated course-grading options. Also, last day to request an excused absence for the observance of a religious holiday.

October 1, Tuesday: Early intervention grades due for first-year undergraduate students.

October 4–5, Friday–Saturday: Family Weekend.

October 9, Wednesday: Last day for continuing undergraduate students to change their majors before November enrollment.

October 14–15, Monday–Tuesday: Fall break.

October 25–26, Friday–Saturday: Homecoming Weekend.

October 27, Sunday: Midterm grades due for first-year and sophomore students.

October 28, Monday: 60 percent point of the term that federal financial aid has been earned if a student officially withdraws from SMU; prior to this date, a partial calculated return to federal programs will be required.

November 4–22, Monday–Friday: Enrollment for spring 2014 continuing students for all undergraduates and for graduates in Dedman College, Lyle and Meadows.

November 8, Friday: Last day to drop a course.

November 14, Thursday: Last day for December graduation candidates to change grades of Incomplete.

November 22, Friday: Students should file for May graduation. The last day to file is January 25, 2014.

November 26, Tuesday: Last day to withdraw from the University.

November 27, Wednesday: No classes.

November 28–29, Thursday–Friday: Thanksgiving holiday. University offices closed.

December 4–9, Wednesday–Monday: No final examinations or unscheduled tests or papers.

December 5, Thursday: Last day for oral/written examinations for December graduate degree candidates.

December 9, Monday: Last day of instruction.

December 10–11, Tuesday–Wednesday: Reading days.

December 12–18, Thursday–Wednesday: Examinations. (No examinations scheduled for Sunday.)

December 19, Thursday: Residence halls close at 10 a.m. for winter break. (December graduates should contact the Department of Residence Life and Student Housing.)

December 21, Saturday: Official close of the term and date for conferral of degrees. Also, December Commencement Convocation.

December 24–January 1, Tuesday–Wednesday: University offices closed.

December 25, Wednesday: Christmas Day.

January Interterm 2014

Note: *Some areas of instruction offer selected courses during the January interterm, December 19, 2013–January 15, 2014.*

January 1, Wednesday: New Year's Day. University offices closed.

J Term 2014 at SMU-in-Plano

January 6, Monday: First day of classes.

January 7, Tuesday: Last day to declare pass/fail.

January 14, Tuesday: Last day to drop/withdraw from the University.

January 15, Wednesday: Last class, including exam.

Spring Term 2014

November 4–January 24, Monday–Friday: Enrollment for spring 2014 continuing students for all undergraduates and graduates in Dedman College, Lyle and Meadows.

January – TBA: Academic Advising, Enrollment and Orientation conferences for new first-year and transfer undergraduate students. Additional information about AARO is available from New Student Programs, Student Life Office, www.smu.edu/newstudent, 214-768-4560.

January 1, Wednesday: New Year's Day. University offices closed.

January 14, Tuesday: Residence halls officially open at 9 a.m.

January 17, Friday: First day of classes.

January 20, Monday: Martin Luther King, Jr. Day. University offices closed.

January 24, Friday: Last day to enroll, add courses or drop courses without grade record. Also, last day to file for May graduation.

February 4, Tuesday: Last day to declare pass/fail, no credit or first-year repeated course-grading options. Also, last day to request an excused absence for the observance of a religious holiday.

February 24, Monday: Early intervention grades due for first-year undergraduate students.

March 8–16, Saturday–Sunday: Spring break.

March 26, Wednesday: Midterm grades due for first-year and sophomore students.

March 28, Friday: 60 percent point of the term that federal financial aid has been earned if a student officially withdraws from SMU; prior to this date, a partial calculated return to federal programs will be required.

April 2, Wednesday: Last day for continuing undergraduate students to change their majors before April enrollment.

April 7–25, Monday–Friday: Enrollment for summer 2014 and fall 2014 continuing students for all undergraduates and for graduates in Dedman College, Lyle and Meadows.

April 8, Tuesday: Last day to drop a course.

April 10, Thursday: Last day for May graduation candidates to change grades of Incomplete.

April 14, Monday: Honors Convocation, 5:30 p.m.

April 17, Thursday: Students should file for August or December graduation. Last day to file for August graduation is June 5. Last day to file for December graduation is the last day to enroll for fall 2014.

April 18, Friday: Good Friday. University offices closed.

April 20, Sunday: Easter Sunday.

April 25, Friday: Last day to withdraw from the University.

April 30–May 5, Wednesday–Monday: No final examinations or unscheduled tests or papers.

May 1, Thursday: Last day for oral/written examinations for graduate students who are May degree candidates.

May 5, Monday: Last day of instruction.

May 6, Tuesday: Reading day.

May 7–13, Wednesday–Tuesday: Examinations. (No examinations scheduled for Sunday.)

May 14, Wednesday: Residence halls officially close for nongraduating students.

May 16, Friday: Baccalaureate.

May 17, Saturday: Commencement.

May 18, Sunday: Residence halls officially close for graduating seniors.

Campus May Term 2014

Note: *Classes meet 4 hours a day, Monday–Friday.*

May 15, Thursday: First day of classes.

May 16, Friday: Last day to enroll or add courses. Also, last day to declare pass/fail or no credit or first-year repeated course-grading options.

May 26, Monday: Memorial Day. University offices closed.

May 27, Tuesday: Last day to drop/withdraw from the University.

May 30, Friday: Last day of classes.

June 5, Thursday: Last day to file for August graduation.

Note: Students planning to complete their degree requirements during the May term should complete an Application for Candidacy to Graduate (via the Student Center) for August degree conferral. Specific information is available from the student's academic degree counselor.

SMU-in-Taos May Term 2014

Note: *The following dates are applicable only for SMU-in-Taos. Permission of the SMU-in-Taos program is required for all enrollments.*

May 14, Wednesday: Travel day and arrival of students, 2–6 p.m.

May 15, Thursday: First day of classes.

May 30, Friday: Examinations.

May 31, Saturday: Departure of students.

Summer Term 2014

Summer term consists of three primary sessions: first session, second session and a full summer session. Each primary session has different deadline dates. There are also shorter and longer sessions to accommodate the particular needs of the various instructional units such as SMU Abroad, SMU-in-Taos and the Perkins School of Theology.

Full Summer Term Session 2014

Note: *Classes meet 2 hours, 15 minutes twice a week or 1 hour, 30 minutes three times a week.*

May 26, Monday: Memorial Day. University offices closed.

June 2, Monday: First day of classes.

June 5, Thursday: Last day to enroll, add courses or drop courses without grade record. Also, last day to file for August graduation.

June 11, Wednesday: Last day to declare pass/fail, no credit or first-year repeated course-grading options.

July 4, Friday: Independence Day. University offices closed.

July 17, Thursday: Last day for August graduation candidates to change grades of Incomplete.

July 24, Thursday: Last day to drop a course.

July 30, Wednesday: Last day to withdraw from the University.

August 4, Monday: Follows a Friday schedule.

August 5, Tuesday: Last day of instructions and examinations. Also, official close of the term and date for conferral of degrees.

First Summer Session 2014

Note: *Classes meet 2 hours a day, Monday–Friday.*

May 26, Monday: Memorial Day. University offices closed.

June 2, Monday: First day of classes.

June 3, Tuesday: Last day to enroll, add courses or drop courses without a grade record.

June 5, Thursday: Last day to declare pass/fail, no credit or first-year repeated course-grading options. Also, last day to file for August graduation.

June 24, Tuesday: Last day to drop a course.

June 25, Wednesday: Last day to withdraw from the University.

July 1, Tuesday: Last day of instruction and examinations.

SMU-in-Taos Summer I Session 2014

Note: *The following dates are applicable only for SMU-in-Taos. Permission of the SMU-in-Taos program is required for all enrollments.*

June 4, Wednesday: Arrival of students, 4–6 p.m.

June 5, Thursday: First day of classes.

June 6, Friday: Last day to enroll, add courses and drop courses without a grade record.

July 2, Wednesday: Examinations.

July 3, Thursday: Departure of students.

Second Summer Session 2014

Note: *Classes meet 2 hours a day, Monday–Friday.*

June 5, Thursday: Last day to file for August graduation.

July 4, Friday: Independence Day. University offices closed.

July 7, Monday: First day of classes.

July 8, Tuesday: Last day to enroll, add courses or drop courses without a grade record.

July 10, Thursday: Last day to declare pass/fail, no credit or first-year repeated course-grading options.

July 16, Wednesday: Last day for August graduation candidates to change grades of Incomplete.

July 28, Monday: Last day to drop a course.

July 30, Wednesday: Last day to withdraw from the University.

August 5, Tuesday: Last day of instruction and examinations. Also, official close of the term and conferral date.

SMU-in-Taos August (Summer II) Term 2014

Note: *The following dates are applicable only for SMU-in-Taos. Permission of the SMU-in-Taos program is required for all enrollments.*

August 5, Tuesday: Arrival of students, 4–6 p.m.

August 6, Wednesday: First day of classes.

August 7, Thursday: Last day to enroll, add courses or drop courses without a grade record.

August 21, Thursday: Examinations.

August 22, Friday: Departure of students.

Major Religious Holidays

(August 2013–August 2014)

The following list of religious holidays is for use in requesting excused absences according to University Policy 1.9. For religious holidays not listed, the instructor or supervisor may contact the Office of the Chaplain.

Christian

Christmas: December 25, 2013

Easter Sunday: April 20, 2014

Good Friday: April 18, 2014

Easter Sunday (Orthodox): April 20, 2014

Hindu

Janmashtami: August 28, 2013

Diwali: November 3, 2013

Dasera: October 14, 2013

Jewish*

Rosh Hashanah: September 5–6, 2013

Hanukkah: November 28–December 5, 2013

Yom Kippur: September 14, 2013

Pesach (Passover): April 15–16, 2014

Sukkot: September 19–20, 2013

Shavuot: June 4–5, 2014

Muslim

Ramadan: July 9–August 7, 2013

Ashura: November 14, 2013

Eid al Fitr: August 8, 2013

Mawlid an Nabi: January 13, 2014

Eid al Adha: October 15, 2013

Ramadan: June 28–July 28, 2014

Islamic New Year: November 4, 2013

Eid al Fitr: July 28, 2014

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* *All holidays begin at sundown before the first day noted and conclude at sundown on the day(s) noted.*

Course Abbreviations

Code	College/School	Description
ACCT	Cox	Accounting
ADV	Meadows	Advertising
AERO	Dedman	Aerospace Studies
AMAE	Meadows	Arts Management and Arts Entrepreneurship
ANTH	Dedman	Anthropology
APSM	Simmons	Applied Physiology and Sport Management
ARBC	Dedman	Arabic
ARHS	Meadows	Art History
ASAG	Meadows	Art, General Studio
ASCE	Meadows	Ceramics
ASDR	Meadows	Drawing
ASIM	Meadows	Digital and Hybrid Media
ASPH	Meadows	Photography
ASPR	Meadows	Printmaking
ASPT	Meadows	Painting
ASSC	Meadows	Sculpture
BA	Cox	Business Administration
BIOL	Dedman	Biological Sciences
BL	Cox	Business Law
BLI	Cox	Business Leadership Institute
BUSE	Cox	Business Economics
CCJN	Meadows	Journalism
CEE	Lyle	Civil and Environmental Engineering
CF, CFA, CFB	N/A	Cultural Formations, GEC
CHEM	Dedman	Chemistry
CHIN	Dedman	Chinese
CISB	Cox	Caruth Institute, Business
CLAS	Dedman	Classical Studies
COMM	Meadows	Communication Studies
CRCP	Meadows	Creative Computing
CSE	Lyle	Computer Science and Engineering
DANC	Meadows	Dance
DISC	Dedman	Discernment and Discourse
ECO	Dedman	Economics
EDU	Simmons	Education
EE	Lyle	Electrical Engineering
EMIS	Lyle	Engineering Management, Information and Systems
ENGL	Dedman	English
ENGR	Lyle	Engineering
ENSC	Dedman	Environmental Science
ENST	Dedman	Environmental Studies
ESL	N/A	English as a Second Language
ETST	Dedman	Ethnic Studies
FILM	Meadows	Film and Media Arts
FINA	Cox	Finance
FREN	Dedman	French
GEOL	Dedman	Earth Sciences
GERM	Dedman	German
HDEV	Simmons	Human Development Studies
HGAM	Hart	Hart Digital Game Development

Code	College/School	Description
HIST	Dedman	History
HRTS	Dedman	Human Rights
HUM	Dedman	Humanities
INS	Cox	Insurance
INTL	Dedman	International Studies
ITAL	Dedman	Italian
ITOM	Cox	Information Technology/Operations Management
JAPN	Dedman	Japanese
KNW	N/A	Ways of Knowing (UC)
LAAM	Dedman	Latin American Studies
LATN	Dedman	Latin
MATH	Dedman	Mathematics
MDVL	Dedman	Medieval Studies
ME	Lyle	Mechanical Engineering
MKTG	Cox	Marketing
MNO	Cox	Management and Organizations
MPED	Meadows	Music Pedagogy
MPSY	Meadows	Music Psychology
MREP	Meadows	Music Repertoire
MSA	Meadows	Meadows School of the Arts
MUAC	Meadows	Music, Accompanying
MUAS	Meadows	Music, Arts and Skills
MUCO	Meadows	Music, Conducting
MUED	Meadows	Music, Education
MUHI	Meadows	Music, History and Literature
MUPD	Meadows	Music, Piano Pedagogy
MURE	Meadows	Music, Recitals
MUTH	Meadows	Music, Composition and Theory
MUTY	Meadows	Music, Therapy
PERB	Meadows	Music, Class Instruction
PERE	Meadows	Music, Performance Ensembles
PHIL	Dedman	Philosophy
PHYS	Dedman	Physics
PLSC	Dedman	Political Science
PP	Dedman	Public Policy
PRW	Simmons	Personal Responsibility and Wellness
PSYC	Dedman	Psychology
RE	Cox	Real Estate
RELI	Dedman	Religious Studies
RMI	Cox	Risk Management and Insurance
ROTC	Lyle	Army ROTC
RUSS	Dedman	Russian
SCI	Dedman	Science
SOCI	Dedman	Sociology
SOSC	Dedman	Social Science
SPAN	Dedman	Spanish
SS	Lyle	Special Studies, Engineering
STAT	Dedman	Statistical Science
STRA	Cox	Strategy/Entrepreneurship
THEA	Meadows	Theatre
WELL	Simmons	Wellness
WGST	Dedman	Women’s and Gender Studies
WL	Dedman	World Languages and Literatures

THE VISION OF SOUTHERN METHODIST UNIVERSITY

To create and impart knowledge that will shape citizens who contribute to their communities and lead their professions in a global society.

THE MISSION OF SOUTHERN METHODIST UNIVERSITY

Southern Methodist University will create, expand and impart knowledge through teaching, research and service, while shaping individuals to contribute to their communities and excel in their professions in an emerging global society. Among its faculty, students and staff, the University will cultivate principled thought, develop intellectual skills and promote an environment emphasizing individual dignity and worth. SMU affirms its historical commitment to academic freedom and open inquiry, to moral and ethical values, and to its United Methodist heritage.

To fulfill its mission, the University strives for quality, innovation and continuous improvement as it pursues the following goals:

- Goal one: To enhance the academic quality and stature of the University.
- Goal two: To improve teaching and learning.
- Goal three: To strengthen scholarly research and creative achievement.
- Goal four: To support and sustain student development and quality of life.
- Goal five: To broaden global perspectives.

SOUTHERN METHODIST UNIVERSITY

As a private, comprehensive university enriched by its United Methodist heritage and its partnership with the Dallas Metroplex, Southern Methodist University seeks to enhance the intellectual, cultural, technical, ethical and social development of a diverse student body. SMU offers undergraduate programs centered on the liberal arts; excellent graduate and continuing education programs; and abundant opportunities for access to faculty in small classes, research experience, international study, leadership development, and off-campus service and internships, with the goal of preparing students to be contributing citizens and leaders for our state, the nation and the world.

SMU comprises seven degree-granting schools: Dedman College of Humanities and Sciences, Edwin L. Cox School of Business, Dedman School of Law, Bobby B. Lyle School of Engineering, Meadows School of the Arts, Perkins School of Theology, and Annette Caldwell Simmons School of Education and Human Development.

Founded in 1911 by what is now the United Methodist Church, SMU is nonsectarian in its teaching and is committed to the values of academic freedom and open inquiry.

At its opening session in 1915, the University had two buildings, 706 students, a 35-member faculty and total assets of $633.540.

Today, the University has more than 100 buildings, a total enrollment that has averaged more than 10,000 the past 10 years, a full-time faculty of 723 and assets of $2.2 billion – including an endowment of $1.2 billion (market value, May 31, 2012).

Offering only a handful of degree programs at its 1915 opening, the University presently awards baccalaureate degrees in more than 80 programs through five

undergraduate schools and a wide variety of graduate degrees through those and one professional school.

Of the 10,893 students enrolled for the 2012 fall term, 6,249 were undergraduates and 4,644 were graduate students. The full-time equivalent enrollment was 6,155 for undergraduates and 3,256 for graduate students.

Nearly all the students in SMU's first class came from Dallas County, but now 48 percent of the University's undergraduate student body comes from outside Texas. In a typical school year, students come to SMU from every state; from more than 90 foreign countries; and from all races, religions and economic levels.

Undergraduate enrollment is 51 percent female. Graduate and professional enrollment is 42 percent female.

A majority of SMU undergraduates receive some form of financial aid. In 2012–2013, 80 percent of first-year students received some form of financial aid, and 37 percent of first-year students received need-based financial aid.

Management of the University is vested in a Board of Trustees of civic, business and religious leaders – Methodist and non-Methodist. The founders' first charge to SMU was that it become not necessarily a great *Methodist* university, but a great *university*.

ACADEMIC ACCREDITATION

Southern Methodist University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Bachelor's, Master's, professional and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Southern Methodist University. Note: The commission is to be contacted only if there is evidence that appears to support an institution's significant noncompliance with a requirement or standard.

Individual academic programs are accredited by the appropriate national professional associations.

In Dedman College, the Department of Chemistry is accredited annually by the Committee on Professional Training of the American Chemical Society, and the Psychology Department's Ph.D. program in clinical psychology is accredited by the American Psychological Association.

The Cox School of Business is accredited by AACSB International, the Association to Advance Collegiate Schools of Business (777 South Harbour Island Boulevard, Suite 750, Tampa, Florida 33602-5730; telephone number 813-769-6500). The Cox School was last reaccredited by AACSB International in 2007.

The Dedman School of Law is accredited by the American Bar Association.

In the Linda and Mitch Hart eCenter, The Guildhall at SMU's Master of Interactive Technology is accredited by the National Association of Schools of Art and Design for the two specializations in art creation and level design.

The Lyle School of Engineering undergraduate programs in civil engineering, computer engineering, electrical engineering, environmental engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The undergraduate computer science program that awards the degree Bachelor of Science (B.S.) is accredited by the Computing Accreditation Commission of ABET. The undergraduate computer science program that awards the degree Bachelor of Arts (B.A.) is not accredited by a

Commission of ABET. ABET does not provide accreditation for the discipline of management science.

In the Meadows School of the Arts, the Art and Art History programs are accredited through the National Association of Schools of Art and Design, the Dance Division is accredited by the National Association of Schools of Dance, the Music Division is accredited by the National Association of Schools of Music, the Music Therapy program is approved by the American Music Therapy Association, and the Theatre program is accredited by the National Association of Schools of Theatre.

Perkins School of Theology is accredited by the Commission on Accrediting of the Association of Theological Schools (ATS) in the United States and Canada (10 Summit Park Drive, Pittsburgh, Pennsylvania 15275-1110; telephone number 412-788-6505) to award M.Div., C.M.M., M.S.M., M.T.S. and D.Min. degrees.

Accredited programs in the Simmons School of Education and Human Development include the Teacher Education undergraduate and graduate certificate programs, which are accredited by the State Board of Educator Certification (SBEC) and the Texas Education Agency (TEA). The undergraduate program is approved annually by TEA. The Learning Therapist Certificate program, which is accredited by the International Multisensory Structured Language Education Council, was last reaccredited in 2011.

SOUTHERN METHODIST UNIVERSITY GENERAL ADMISSIONS POLICY

Consistent with its vision and mission, SMU seeks to enroll students who have the potential for academic success and who will enrich the collegiate community. Through financial enablement, SMU will endeavor to ensure that cost of attendance will not be a barrier to achieving its goal of a diverse community. The rich variety of perspectives SMU seeks are those that result from differences in racial, ethnic, linguistic, socio-economic, geographic, educational and religious backgrounds; different life experiences, and talents in the arts or athletics. It is the policy of SMU to examine individually each prospective student's application for admission to determine the nature and extent of the applicant's potential to succeed and to enrich the community.

All first-year students, regardless of intended major, enter the University as SMU Pre-Majors and are advised through the University Advising Center. Students normally qualify for entry into a major and specific degree program during their sophomore year. Admission into any undergraduate degree program requires the completion of minimum academic standards determined by the school in which the program is based. The specific requirements for admission into each of SMU's undergraduate schools are outlined in the admission section of that school's information in this catalog.

FIRST-YEAR ADMISSION CRITERIA

Selection of applicants is based on several criteria: the high school curriculum, academic performance in the classroom, grade pattern, rank in class (if applicable), SAT and/or ACT scores, counselor and teacher recommendations, essay, behavioral record and extracurricular activities. Although no specific cutoff is applied to any single measure, generally a student who has both accomplished a strong academic record and exhibited a variety of noteworthy and personal achievements will gain, contribute and benefit most from the SMU experience. Matriculation to the University is contingent upon continuing academic achievement and completion of the high school diploma. The Admission Committee may rescind offers of admission for students whose academic, extracurricular or behavioral records are not consistent with information presented in the application for admission. As an independent institution, SMU has no limits on enrollment based solely on geography nor distinctions in tuition, fees or other costs based on the home state of the student. The University is open to applicants without regard to race, color, religion, national origin, sex, sexual orientation, age, disability or veteran status.

High School Curriculum

High school curricula, including curricular rigor, academic performance in the classroom, elective choices and senior-year course load, in particular are considered in the admission review. Applicants should submit high school records with a *minimum* of 15 or more academic units. The recommended distribution for a minimum program is as follows: four units of English, three units of mathematics (algebra 1, plane geometry, algebra 2), three units of science (including two units of laboratory science), three units of social science and two units of a second language (a two-year sequence). American Sign Language may be used to satisfy the second

language requirement for those students with a documented language-based learning disability. Engineering applicants should have completed four years of math (including higher-level math beyond algebra 2) and a year each of chemistry and physics. **Note:** Students who are most successful in the admission process present credentials well in excess of the minimum requirements.

Home School Criteria

Home school and distance learning applicants are expected to complete the equivalent of the high school curriculum as outlined above and submit SAT and/or ACT scores. In addition, students must submit the Common Application Home School Supplement form, which indicates mastery of English, math and science in the home school curriculum and documents that the student has fulfilled their home state's requirements for high school graduation. A checklist of the home school requirements is available at www.smu.edu/admission/apply_home_school.asp. In addition to the above requirements, three SAT subject exams (to include English, literature, math and science) offered by the Educational Testing Service may be encouraged for students who have taken the majority of high school coursework at home. Home-schooled students are eligible for federal student aid for college if they have "completed a secondary school education in a home school setting that is treated as a home school or private school under State law" [Section 484(d)(3) of the Higher Education Act of 1965].

Application Timetable for First-Year Students

All prospective students must complete the application for admission and submit a $60 nonrefundable application fee. First-year candidates will be processed on the admissions calendar as follows:

Early Decision 1 (binding)
Application Deadline: November 1
Notification Date: By December 30

Early Action (nonbinding)
Application Deadline: November 1
Notification Date: By December 30

Early Decision 2 (binding)
Application Deadline: January 15
Notification Date: By March 1

Regular Decision (nonbinding)
Application Deadline: January 15
Notification Date: By April 1

Rolling Decision Applicants (space-available basis)
Application Deadline: March 15
Notification Date: Rolling after April 1

Note: The deadline for priority merit scholarship consideration is January 15.

Required Testing

SMU requires all applicants, except foreign citizens who attend secondary schools outside the United States, to submit SAT scores and/or scores from the ACT exam.

Students whose native language is not English and whose entire secondary education has not been in an English-medium school are required to submit one of the following:

- TOEFL English language proficiency exam score of 550 on the paper-based test or 80 on the Internet-based test.
- IELTS English competency test score of 6.5 on the academic test.
- Pearson Test of English score of 57.

Note: Special attention is given to the writing and reading subscores of the TOEFL.

Students can obtain additional information about the College Entrance Examination Board and its tests (SAT, SAT subject tests, TOEFL) by contacting their high school counselors or by contacting the board at PO Box 592, Princeton NJ 08540; www.collegeboard.org. Students can request further information about the ACT exam from their high school counselors or the ACT National Office, 2201 North Dodge Street, PO Box 168, Iowa City IA 52243; www.act.org.

Performing Arts Auditions/Visual Arts Consideration

In addition to meeting general University admission criteria, all first-year and transfer students who intend to major in the performing arts of dance, music or theatre must also satisfy a performance audition requirement as part of the admission process to the University. Students wishing to pursue the B.F.A. or B.A. in art must submit a portfolio of their work for faculty review to the Meadows School through the SlideRoom digital portfolio system (www.smu.slideroom.com). Information regarding audition and portfolio requirements and dates may be obtained by contacting the Office of Recruitment, Meadows School of the Arts, Southern Methodist University, Dallas TX 75275-0356; phone 214-768-3217. For students entering in the fall term, the audition and/or portfolio review is both an admission review and a review for artistic scholarships.

Performance auditions must be completed by the final published national or campus audition date, which normally is not later than March 15 prior to the entering fall term. Submission deadlines for art portfolios correspond with deadlines for SMU application submissions. Current deadlines are available on the Meadows School website at www.smu.edu/meadows. Transfer students entering degree programs within the Dance Division or Theatre Division may do so only in the fall term. Transfer students in the Division of Dance normally enter in the fall term; spring admission may be offered in exceptional cases. While music students may be considered for fall or spring, entry in the fall is encouraged as course sequencing for transfer students beginning in the spring could delay graduation.

Reserving a Place

All admitted students are required to submit a nonrefundable $550 deposit. Admitted students who did not apply under a binding decision plan must submit this deposit by the May 1 deadline to reserve a place in the class. Students admitted under a binding decision plan will be notified of their deposit deadline when they are admitted. This deposit includes a matriculation fee, advance tuition deposit and housing deposit. All first-year and second year students must live on campus unless permission is granted to live at home by the dean of Residence Life and Student Housing. Students granted permission to live at home submit a nonrefundable $450 deposit.

To facilitate advising and enrollment, students are required to submit their final high school transcript confirming graduation prior to enrolling.

Credit by Examination

Examinations Administered in High School

SMU grants credit and placement for scores of 4 or 5 on most Advanced Placement examinations taken in high school (see table below). Credit will be awarded only for exams taken while in high school. Students may not receive credit for an AP exam, an International Baccalaureate exam and a college course covering the same subject matter; i.e., the course equivalency will only be awarded once. Credit by examination granted at SMU is considered resident credit.

An official copy of test results must be sent from the testing agency to the University Registrar's Office for credit.

AP Examination	*Scores*	*Credits Awarded*	*Course(s) Credited*
American History	4, 5	6 hours	HIST 2311, 2312
Art	4, 5	3 hours	ASDR 1300, ASPH 1300, or ASPT 1300 (student's choice)
Art History	4, 5	6 hours	ARHS 1303, 1304
Biology	4, 5	8 hours	BIOL 1401, 1402
Chemistry	4, 5	8 hours	CHEM 1303/1113, 1304/1114
Computer Science A	4, 5	3 hours	CSE 1341
Computer Science AB	4, 5	3 hours	CSE 1341
Economics:			
Macro	4, 5	3 hours	ECO 1312
Micro	4, 5	3 hours	ECO 1311
English Lng/C or Lit/C	4, 5	6 hours	DISC 1311, 1312
Environmental Science	4, 5	3 hours	GEOL 1315
European History	4, 5	6 hours	HIST 2365, 2366
Government:			
American	4, 5	3 hours	PLSC 1320
Comparative	4, 5	3 hours	PLSC 1340
Human Geography	4, 5	3 hours	HUM 10XX (3 hours)
Languages (Lng or Lit):			
Chinese Lng/Culture	4, 5	16 hours	CHIN 1401, 1402, 2401, 2402
French	4, 5	16 hours	FREN 1401, 1402, 2401, 2455
German	4, 5	14 hours	GERM 1401, 1402, 2311, 2312
Japanese Lng/Culture	4, 5	16 hours	JAPN 1401, 1402, 2401, 2402
Latin	4, 5	14 hours	LATN 1401, 1402, 2311, 2312
Spanish	4, 5	15 hours	SPAN 1401, 1402, 2401, 2302
Mathematics:			
Calculus AB	4, 5	3 hours	MATH 1337
Calculus BC	3 if AB subscore of 4	3 hours	MATH 1337
Calculus BC	4	3 hours	MATH 1337
Calculus BC	5	6 hours	MATH 1337, 1338
Music Theory	4, 5	6 hours	FETC 10XX (6 hours)
Physics:			
Physics B	4, 5	6 hours	SCI 10XX (6 hours)
Physics C (Mech)	4, 5	3 hours	PHYS 1303
Physics C (E&M)	4, 5	3 hours	PHYS 1304
Psychology	4, 5	3 hours	PSYC 1300
Statistics	4, 5	3 hours	STAT 2331
World History	4, 5	3 hours	HUM 10YY (3 hours)

Notes

- Physics does not award placement credit for labs.
- Students enrolled in courses at SMU for which AP credit has previously been awarded will have the AP credit rescinded, and the grade in the course will count toward the student's SMU GPA. Students are responsible for knowing and reporting their AP scores to SMU to prevent duplicate enrollment.

College-Level Examination Program

SMU gives credit for CLEP subject examinations based on the specified minimum scores below:

CLEP Exam	*Score (out of 80)*	*Credits Awarded*	*Course Credited*
American Literature	60	3 hours	ENGL 3346
English Literature	60	3 hours	ENGL 3341
Macro Economics	60	3 hours	ECO 1312
Micro Economics	60	3 hours	ECO 1311

SMU Departmental Examinations

SMU also awards credit for departmental examinations offered in a variety of disciplines. Such SMU credit may not transfer automatically to other universities. Credit for examinations awarded by other institutions will not transfer to SMU.

World Languages

All students who intend to continue language study are required to take the world language placement examinations given during orientation. Scores on these examinations determine the world language competency of entering students so that they may be placed in classes appropriate to their level of achievement and degree program. Students may not enroll in a course below the level of their placement. When the student has successfully completed the course with a grade of *C* or above, the student will retroactively earn four to 16 term hours of University credit for the preceding courses in the beginning and intermediate levels of the language sequence. Students must enroll in the course for a letter grade (not pass/fail) for the course to serve as a basis for granting retroactive credit. Such credit counts toward graduation. Language courses taken at other institutions cannot be used as a basis for granting retroactive credit. Although students may earn retroactive credit in more than one language, the maximum aggregate credit involving more than one language allowed to count toward graduation is 16 term hours.

Physics

The department offers placement exams for PHYS 1303 and 1304 only. The placement exam, which must be taken in the first term that the student enrolls at SMU, is modeled from the final exam in the PHYS 1303 and 1304 courses. The Physics Department does not allow test credit for labs (e.g., PHYS 1105, 1106, 4211). The essential element of the lab is the hands-on experience; therefore, substitutes will not be accepted.

Mathematics

Math credit exams are offered for the four courses listed below and must be taken prior to initial enrollment. Calculators are not permitted on these exams, except for MATH 1307. Students interested in credit exams for courses beyond this level may contact the Mathematics Department.

MATH 1307 (3 credits) Introduction to Mathematical Sciences

MATH 1309 (3 credits) Introduction to Calculus for Business/Social Sciences
(suggested preparation = one full year of high school calculus)

MATH 1337 (3 credits) Calculus I
(suggested preparation = one full year of high school calculus)

MATH 1338 (3 credits) Calculus II

Computer Science

The Computer Science and Engineering Department offers a credit exam for CSE 1341 Principles of Computer Science I that must be taken prior to initial enrollment. This exam is NOT the IT waiver exam that satisfies the information technology requirement of the General Education Curriculum.

International Certificate Programs

SMU grants credit for the successful completion of the international certificate programs listed below. In certain cases, departmental examinations may be required as a part of the evaluation process.

1. *The International Baccalaureate.* Six to eight credits will be awarded for scores of 5, 6 or 7 on International Baccalaureate higher-level exams in transferable subjects, with a maximum award of 32 credits. Students will not be awarded credit for standard-level exams.

IB HL Examination	*Scores*	*Credits*	*Course(s) Credited*
Biology	5,6,7	8 hours	BIOL 1401, 1402
Chemistry	5,6,7	8 hours	CHEM 1303/1113, 1304/1114
Economics	5,6,7	6 hours	ECO 1311, 1312
History:			
Africa	5,6,7	6 hours	HIST 10XX, 10YY
Americas	5,6,7	6 hours	HIST 10XX, 10YY
Asia and Oceania	5,6,7	6 hours	HIST 10XX, 10YY
Europe and the Islamic World	5,6,7	6 hours	HIST 2365, 2366
Europe and the Middle East	5,6,7	6 hours	HIST 10XX, 10YY
Language A:			
English (A-1)	5,6,7	6 hours	DISC 1311, 1312
All other languages	5,6,7	8 hours	1401, 1402
Language B	5,6,7	8 hours	1401, 1402
English B	5,6,7	6 hours	LANG 10XX, 10YY
Mathematics	5,6,7	6 hours	MATH 1337, STAT 2331
Physics	5,6,7	6 hours	PHYS 1303, 1304
Psychology	5,6,7	6 hours	PSYC 1300, 10XX

2. *The General Certificate of Education A-Level (United Kingdom).* Six to eight credits will be awarded for grades of *A* and *B* on A-level exams in transferable subjects, with a maximum award of 32 credits. Credits will not be awarded for a grade of *C,* or for O-level and AS-level exams.
3. *The Baccalaureate (France).* Six to eight credits will be awarded for scores of 11 or above, with a maximum award of 32 credits.
4. *The Abitur (Germany).* Six to eight credits will be awarded for passing scores on each of the written exams in transferable subjects, with a maximum award of 32 credits. Credits will not be awarded for oral exams.
5. *The Italian Maturita (Italy).* For the *Maturita Tecnica, Classica, Scientifica* and/or *Linguistica,* credits will be awarded for scores of 6 or above in transferable subjects, with a maximum award of 32 credits.

Notes

- The Language A exam is typically taken in the native language of the student.
- Language B is a second, third or fourth language studied by the student.
- For "all other languages" under Language A and for Language B, the course prefix will match the world language completed.
- Physics does not award IB credit for labs.
- Students enrolled in courses at SMU for which IB credit has previously been awarded will have the IB credit rescinded, and the grade in the course will count toward the student's SMU GPA. Students are responsible for knowing and reporting their IB scores to SMU to prevent duplicate enrollment.

Concurrent Dual Credit/College Programs

Students may receive credit for college courses taken prior to graduation from high school if the courses meet the criteria for transfer work outlined in the Transfer Admission Criteria section of this catalog. Official college transcripts are required for all college-level work attempted, regardless of transferability.

TRANSFER ADMISSION CRITERIA

Selection of transfer applicants is based on several criteria, including academic curriculum, performance, grade patterns, activities and experiences. For all candidates who are not entering SMU directly from high school, the Admission Committee considers the rigor of the courses attempted. In particular, these applicants should have completed at least one course in English composition, a lab science, a math course beyond college algebra and a course pertaining to the intended major. The committee weighs overall academic performance as well as evidence of recent improvement. For some applicants, high school performance is also a factor. Candidates with fewer than 30 hours are considered on an individual basis and are required to submit additional information, as well as SAT and/or ACT scores and high school records. Although the average GPA of successful transfer applicants is considerably higher, applicants with a GPA below 2.700 (on a 4.000 scale) are not typically successful in gaining admission. Candidates with a transferable GPA below 2.000 are not competitive for admission to the University.

Competitive applicants for admission will have completed the equivalent of one of the following math courses: MATH 1307 Introduction to Mathematical Sciences, MATH 1309 Introduction to Calculus for Business/Social Sciences, MATH 1337 Calculus I, STAT 1301 Introduction to Statistics, STAT 2301 Statistics for Modern Business Decisions or STAT 2331 Introduction to Statistical Methods. Applicants

who have not completed one of these courses must have completed college algebra or a high school sequence of algebra 1, algebra 2 and plane geometry.

Students with more than 30 transferable hours may be admitted directly to the school of their intended major if the admission requirement of that school has been met. The specific requirements for admission into each of SMU's undergraduate schools are outlined in the admission section of that school's information in this catalog.

All transfer students who intend to major in dance, music or theatre must also audition. Art majors require the submission of a portfolio for consideration. Requirements and contact information are available in the First-Year Admission Criteria section under the heading Performing Arts Auditions/Visual Arts Consideration.

Transfer students following the General Education Curriculum who have not completed a two-year sequence of a single world language in high school or a one-year sequence of a single world language at the college level will be required to take two terms of a single world language at an accredited institution to commence no later than their third regular term after matriculation at SMU, regardless of intended major. American Sign Language will be used to satisfy the University's world language admission requirement for those students with a documented language-based learning disability that prevents learning a world language.

Prospective transfer students must complete an Undergraduate Application for Transfer Admission and submit a $60 nonrefundable application fee. An official academic transcript that includes the last completed term from each college or university attended must be sent to SMU Undergraduate Admission, PO Box 750181, Dallas TX 75275-0181. In addition, applicants must submit a Statement of Good Disciplinary Standing from their current college or university.

A final high school transcript or GED high school equivalency test results should be sent to the address above to confirm world language and math background. A high school transcript, including SAT or ACT scores, is required when less than 30 transferable hours have been earned. SAT or ACT exam results will not be required of students for whom five or more years have lapsed since high school or high school equivalent.

Transfer Credit

Regardless of the number of transferable credits completed elsewhere, University policy requires that of the 122 minimum required term hours for a degree, at least 60 hours must be SMU credits. That is, they must be earned in SMU courses, SMU credits or SMU-approved international programs.

No transfer credit is given for any correspondence course or work completed at a school that is not regionally accredited. Only grades of *C-* or better in comparable courses are transferable to SMU for accepted students. Vocational-technical courses, courses below college level, credit by examination earned at another college or university, and PE activity courses in excess of two hours do not transfer. For courses not taught at SMU locations or in SMU-approved international programs, free-elective transfer credit may be awarded for appropriate courses completed with a grade of *C-* or better at regionally accredited colleges or universities that meet SMU's academic standards.

If a transferable course is repeated due to a failing grade, all attempted hours and earned grade points will be used to calculate the transferable GPA. For repeated

courses with grades of *C-* or above, only the first attempt will be awarded credit. A grade of *W* (Withdrawn) will not be used to calculate the transferable GPA. A grade of *I* (Incomplete) will be calculated as *F*. A grade of *IP* (In Progress) for a current term is not calculated.

Note: For some majors requiring a subset of courses and specific GPAs for entry, the subset GPA is calculated using the first graded attempt of these courses, even if the course was later repeated.

Official college transcripts are required for all college-level work attempted, regardless of transferability. Transcripts must be received at SMU directly from the institution attended. A transcript issued to a student is acceptable provided it is received in a sealed, letterhead envelope with the institution's Office of the Registrar stamp. Transcripts must be dated fewer than three years prior to processing. Coursework from one institution that appears on an official transcript from another institution will not be accepted for transfer credit. An official transcript must be issued by each institution attended. Also, photocopies of transcripts provided by other institutions are not acceptable.

An online version of the transfer credit evaluation is available to transfer students prior to their enrollment.

International Transcript Credit

All international university transcripts must be accompanied by a professional evaluation and an official transcript, including an English translation if it is not in English, and course descriptions or syllabi. It is the student's responsibility to procure this evaluation and to assume financial responsibility for it. An exception to this requirement is an exchange agreement between SMU and an international institution that is modeled after the U.S. education system. Instituto Technologico y de Estudios Superiores de Monterrey is the only institution with which SMU currently has such an agreement. Because of the importance of this information, SMU accepts evaluations only from the following agencies of proven reliability:

AACRAO
One Dupont Circle, NW, Suite 520
Washington D.C. 20036
Telephone: 202-293-9161
Fax: 202-872-8857
Email: info@aacrao.org
www.aacrao.org

Foreign Credentials Service of America
1910 Justin Lane
Austin TX 78757-2411
Telephone: 512-459-8428
Fax: 512-459-4565
Email: info@fcsa.biz
www.fcsa.biz

International Academic Credential Evaluators Inc.
PO Box 2585
Denton TX 76202-2585
Telephone: 940-383-7498
www.iacei.net

Josef Silny & Associates Inc.
7101 SW 102 Avenue
Miami FL 33173
Telephone: 305-273-1616
Fax: 305-273-1338
Email: info@jsilny.com
www.jsilny.com

World Education Services Inc.
PO Box 745 Old Chelsea Station
New York NY 10113-0745
Telephone: 212-966-6311
Toll-free: 1-800-937-3895
Email: infor@wes.org
www.wes.org

The evaluations provided by the above agencies should include an explanation that the institution is recognized by the ministry of education in the student's home country and is generally considered to offer at least the equivalent of U.S. higher education credit. In addition, it should include an explanation of the credits, the grading system and course levels, as well as a course-by-course evaluation.

The expertise and reliability of a professional evaluation report is recognized worldwide and is likely to be accepted by other academic institutions, employers and state licensing boards. However, the report is not binding to SMU and will be considered a recommendation for SMU's independent decision of the credit to be given. Information and applications from the agencies are available online. For more information, students should contact the Office of Admission.

Application Timetable for Transfer Students

Summer term entry: All data due no later than March 15.
Fall term entry/scholarship consideration: All data due no later than April 1.
Fall term entry: All data due no later than June 1.
Space-available applicants: All data due no later than August 1.
Spring term entry: All data due no later than November 1.

Note: The deadline for priority scholarship consideration is April 1 for fall entry and November 1 for spring entry.

It is not recommended that an application be submitted on or near the deadline. Earlier application is strongly recommended, particularly for those students applying for financial aid or University housing.

Application processing begins in early February (for the summer and fall terms) and in early October (for the spring term) upon receipt of pertinent data, including each official transcript through the last completed term.

Reserving a Place

All degree-seeking admitted transfer students wishing to enroll at SMU are required to submit a $250 matriculation fee and a $200 advance tuition deposit to reserve a place in the academic program. This $450 fee and deposit should be sent to the Office of Admission. Space can be guaranteed only to those students who have submitted the fee and deposit by the deadline noted in the acceptance packet. **Note:** This $450 fee and deposit are nonrefundable. Students seeking financial aid should wait until they receive their financial aid award before submitting a deposit.

Note that admitted transfer students cannot enroll at SMU until their final transcript has been received and evaluated for transferability and a Good Standing Form has been received from their last institution. For this reason, transfer students entering for the fall term are discouraged from attending the second summer term at their current institution before matriculation to SMU.

Housing Deposit

Housing accommodations are offered on a space-available basis for new transfer students. Housing forms will be sent to interested transfer students once the student has been accepted. Students should complete and return the forms, along with the $100 housing deposit, to the Office of Admission.

INTERNATIONAL STUDENT ADMISSION

International citizens and U.S. passport holders studying outside the United States applying to SMU as first-year and transfer undergraduate students are expected to meet all requirements for admission.

For admission consideration, students for whom English is not the native language are required to submit a test score from an internationally recognized English language test such as explained in the Required Testing section of this catalog.

Students who are otherwise admissible but whose scores are slightly below those mentioned above will be required to successfully complete SMU's Intensive English Program prior to matriculation. Transfer students from U.S. institutions without an internationally recognized English language test score will be evaluated on the basis of college-level grades in English composition/rhetoric courses.

International transfer students who have completed college-level work at a university outside the United States are required to submit the following (in English or with an English translation):

- An official transcript.
- Course descriptions.
- Professional evaluation. (More information is found in the International Transcript Credit section of this catalog.)

The expenses to be incurred in attending the University are listed in the Financial Information section of this catalog. Additional costs that international students may expect include room and board during school holidays, travel expenses, international student insurance, and the international student fee (foreign passport holders only). Need-based financial aid is not available for international students, however, first-year international students will be considered for all available academic scholarships if their application is complete by the January 15 deadline. Transfer international applicants will be considered for all transfer scholarships for which they are eligible, provided the appropriate application deadline has been met.

When an international student has been admitted and provided adequate proof of sufficient financial funds, the International Center will issue the I-20 Certificate of Eligibility. The student will be required to produce the I-20, the Letter of Acceptance and proof of finances when applying at the U.S. embassy or consulate for a student visa.

All international students taking one or more credit hours must enroll in the University-offered health insurance plan unless they have a special waiver granted by the SMU Memorial Health Center.

ADMISSION CRITERIA FOR VETERANS

Veterans are required to meet undergraduate admission criteria of the University. More information is found online at www.smu.edu/registrar ("Veterans Affairs" link) and www.smu.edu/transfer ("Prospective Students" tab).

NONDEGREE STUDENTS

Nondegree-seeking students are applicants for admission who wish to enroll in University courses for credit, but who do not intend to pursue an SMU degree program. This category of students is normally limited to those who 1) are degree-seeking students in good standing and visiting from another four-year college or university, 2) have already earned a degree, or 3) are participants in special SMU

programs such as the Talented and Gifted, College Experience or concurrent enrollment programs. Nondegree students are admitted through the Division of Enrollment Services and are eligible to register – on a space available basis – in day and evening classes for which they have satisfied SMU's prerequisites. Admission as a nondegree-seeking student does not qualify a student for admission to a degree program at SMU. Admission applications are found at www.smu.edu/nondegree ("Prospective Students" tab) or may be obtained from the Division of Enrollment Services, Blanton Student Services Building, Southern Methodist University, PO Box 750181, Dallas TX 75275-0181; phone 214-768-4272.

READMISSION OF STUDENTS

If a student in good standing withdraws from SMU for one term, the student's file remains active and the student is able to register as though in continuous enrollment at the University (re-entry). Students who left on probation will return on probation. All holds must be cleared prior to enrollment. Re-entry students are responsible for meeting all financial aid, housing and advising deadlines.

After nonattendance for two or more regular (fall, spring) terms, students who formerly attended SMU, including those who have completed a degree, are required to submit an application for reinstatement or reactivation through the Division of Enrollment Services, Undergraduate Admission. The application is available at www.smu.edu/admission ("Apply" tab). Any student who has been suspended is also required to apply for reinstatement. Students who have been suspended are required to attach to their reinstatement application a statement indicating the reasons why they now are prepared to return to SMU. Although the Division of Enrollment Services facilitates the application process, an academic dean or the Committee on Academic Appeals determines reinstatement.

A student who has already earned an undergraduate degree at SMU and is seeking an additional undergraduate degree must apply for reactivation if the student has not attended SMU for two or more regular (fall, spring) terms.

Returning students are strongly advised to apply for reactivation or reinstatement at least 60 days prior to the start of the term of re-entry. Returning students should note that separate applications exist for financial aid and residence halls and that they should contact these offices as early as possible. The deadline for filing this application and supporting materials for domestic students is five business days prior to the first day of classes of the term of re-entry. International applicants must apply at least two weeks prior to the term of re-entry; however, they are encouraged to apply at least 60 days in advance in order to facilitate the immigration process. In addition, the availability of academic advising and courses may be limited immediately prior to and at the beginning of the term.

All students who return to SMU after any period of nonenrollment must forward official transcripts from each college or university attended since last enrolled at SMU. If five years have elapsed since the last term of enrollment at SMU, official transcripts from each college or university attended prior to SMU also must be forwarded to the Division of Enrollment Services.

Students should be aware of specific policies regarding transfer courses taken after matriculation to SMU (see Transfer Courses From Other Institutions in the Academic Records, General and Enrollment Standards section of this catalog). In addition, each college within SMU has specific policies regarding reinstatement,

reactivation, transfer credit and statute of limitations, so students should refer to their school's section of this catalog for that information.

ACADEMIC FORGIVENESS

SMU's academic forgiveness policy permits a student to have academic work taken 10 or more years prior to the term of admission or readmission forgiven. Forgiven hours will not be included in the GPA nor used for actions such as the determination of admission, academic probation, suspension, honors, scholarships and graduation. Students should see the Academic Records, General and Enrollment Standards section in this catalog for details of this policy. The academic forgiveness application is available through the Division of Enrollment Services.

FINAL MATRICULATION TO THE UNIVERSITY

In addition to the nonrefundable deposit (and housing application and deposit for those seeking on-campus housing), the following items are required for final matriculation to the University:

Immunizations. All students (undergraduate, graduate, part-time and full-time, to include international and IEP/ESL students) are required to have an SMU medical history form on file in the SMU Memorial Health Center before registration. To comply with SMU policy, all students must also submit to the health center immunization records that provide proof of immunization against measles, mumps and rubella. These MMR immunizations must be documented by a physician, public health record, military health record or school health record. Students will not be allowed to register without immunization compliance.

Students are encouraged to check their Access.SMU account for immunization status. Immunizations are available at the health center. Health history forms are available on the health center's website.

Meningitis Vaccination. Effective January 1, 2012, Texas state law requires that all new students under the age of 30 must provide documentation demonstrating they have been vaccinated against bacterial meningitis. The documentation must show evidence that a meningitis vaccine or booster was given during the five-year period preceding and at least 10 days prior to the first day of class of the student's first term. Students should provide the documentation at least 10 days before the first day of class. Students seeking exemption from this requirement due to health risk or conscience, including religious belief, should see the second page of the SMU medical history health form.

Health Insurance. To ensure that students have appropriate health care coverage, SMU requires all domestic students taking nine or more credit hours, both undergraduate and graduate, to have health insurance through either an individual/family plan or the University-offered plan. All international students taking one or more credit hours must enroll in the University-offered plan unless they have a special waiver granted by the SMU Memorial Health Center.

TUITION, FEES AND LIVING EXPENSES

A catalog supplement, the *Financial Information Bulletin,* is issued each academic year. It provides the general authority and reference for SMU financial regulations and obligations, as well as detailed information concerning tuition, fees and living expenses. The supplement can be accessed at www.smu.edu/bursar ("Financial Bulletin" link).

Continuing students registering must ensure that payment for the full amount of charges is posted to their account by the payment due date showing on their bill. The due dates are also published on the Bursar website.

Billing notifications are sent to the student's SMU email address and to the designated authorized payer(s) email address when a bill is generated. The billing notification will provide instructions on how to view the bill online through SMUpay. If notification is not received two weeks prior to the due date, the student and/or designated authorized payer(s) should contact the Office of the University Bursar.

Payments made in person or mailed must be received by the Office of the University Bursar, located on the first floor of the Laura Lee Blanton Student Services Building, no later than 4 p.m. on the payment due date. Payments made online via electronic check or credit card must be posted no later than 11:59 p.m. Central Standard Time on the payment due date. Students and/or those paying on behalf of the student who pay online automatically receive an electronic confirmation of payment; students and/or designated authorized payer(s) paying through other methods can also verify receipt of payment online.

Students enrolling after the payment due date must pay at the time of enrollment. Students whose accounts are not cleared by the payment due date or at the time of enrollment are subject to a late payment fee of $50 for balances between $250 and $999.99, and $150 for balances between $1,000 and $5,000. Balances over $5,000 are charged 3 percent of the outstanding balance, not to exceed $750. Also, after the monthly payment due date has passed, a 1.5 percent past due fee will be assessed on the unpaid student and/or miscellaneous account each month until the balance is paid. The enrollment of students whose accounts remain unpaid after the payment due date may be canceled at the discretion of the University. Students are individually responsible for their financial obligations to the University.

All refunds except federal parent PLUS loans, prepayment accounts, the SMU Monthly TuitionPay Payment Plan and international wires will be made payable to the student. International wires will be refunded by wire to the originating wire account less a $35 wire-processing fee. The PLUS loan borrower can request the refund to be processed to the student by submitting a Parent PLUS Release form, located on the Bursar website. If the refund is issued by check, the student may request, in writing, that the refund be sent to another party.

Any outstanding debts to the University will be deducted from the credit balance prior to issuing a refund check. Any outstanding debts to the University that include Title IV funds must have an Authorization to Credit Account form and/or an Authorization to Credit Account Parent form on file in order to transfer funds to cover current award year debts. Students need to sign the ACA form and the federal parent PLUS loan borrower needs to sign the ACAP form.

Any outstanding debts to the University that do not include Title IV funds will be deducted from the credit balance prior to issuing a refund. All other debts should be paid directly by the student.

A student whose University account is overdue or who in any other manner has an unpaid financial obligation to the University will be denied the recording and certification services of the Office of the Registrar, including the issuance of a transcript or diploma, and may be denied readmission until all obligations are fulfilled. The Division of Enrollment Services may stop the registration, or may cancel the completed registration, of a student who has a delinquent account or debt, and may assess all attorney's fees and other reasonable collection costs (up to 50 percent) and charges necessary for the collection of any amount not paid when due. Matriculation in the University constitutes an agreement by the student to comply with all University rules, regulations and policies.

Arrangements for financial assistance from SMU must be made in advance of registration and in accordance with the application schedule of the Division of Enrollment Services, Financial Aid. A student should not expect such assistance to settle delinquent accounts.

REFUNDS FOR WITHDRAWAL FROM THE UNIVERSITY

Note: No refunds are made without an official withdrawal. Policies for official withdrawal, including medical and mandatory administrative withdrawal, are found under Withdrawal From the University in the Academic Records, General and Enrollment Standards section of this catalog.

Reduction of tuition and fees is determined by the effective date of the withdrawal and is based on the schedule listed in the *Financial Information Bulletin*, which can be accessed online at www.smu.edu/bursar ("Financial Bulletin" link).

Note: For students receiving financial aid (scholarships, grants or loans), when the withdrawal date qualifies for reduction of tuition and fees charges, the refund typically will be used to repay the student aid programs first and go to the student/family last. Further, government regulations may require that SMU return aid funds whether or not the University must reduce its tuition and fees (based on the *Financial Information Bulletin*); hence, a student whose account was paid in full prior to withdrawal may owe a significant amount at withdrawal due to the required return of student aid. Therefore, students who receive any financial aid should discuss, prior to withdrawal, the financial implications of the withdrawal with the Financial Aid Advising Office.

Medical withdrawals and mandatory administrative withdrawals allow a prorated refund of tuition and fees.

PAYMENT PLAN OPTIONS

SMU Monthly Payment Plan

The SMU TuitionPay Payment Plan administered by Sallie Mae allows term charges to be paid in monthly installments. Students can enroll in a payment plan at http://tuitionpay.salliemae.com/smu ("Enroll Now" link). Sallie Mae consultants are available at 877-279-6092 to answer questions or help with the online enrollment process.

Annual payment plans are available in twelve-month, ten-month and eight-month formats. Term payment plans are available in four-month, five-month and six-month formats. The summer payment plan is three months.

SMU Prepayment Plan

The SMU Prepayment Plan (a single payment up front for all terms) allows families to avoid the effects of tuition and fee increases by paying for two, three or four years in one single payment at the current rate of tuition and fees. Questions should be addressed to the Division of Enrollment Services, Southern Methodist University, PO Box 750181, Dallas TX 75275-0181; phone 214-768-1096.

SCHOLARSHIPS, GRANTS AND OTHER AID

For many SMU students, scholarships and other aid make the cost of attending this distinguished private university no more taxing – and often less so – on their families' financial resources than attending a public university.

SMU strives to provide the financial assistance required for an undergraduate education to any student who is offered admission and who has been determined to have need for such assistance by the Division of Enrollment Services, Financial Aid.

More than 77 percent of all students receive some form of financial aid. SMU has a generous program of merit-based scholarships and grants. Students seeking to participate in federal work-study and student and parent loan programs must file the Free Application for Federal Student Aid at www.fafsa.gov.

Certain special SMU scholarship and grant programs offer awards to the following types of students:

- Entering first-year, transfer and continuing students with high academic achievement or with talent in the arts.
- National Merit finalists and certain International Baccalaureate Diploma recipients.
- Dependent children and spouses of ordained United Methodist ministers engaged in full-time, church-related vocations.
- Texas residents.

Primary consideration for merit scholarships and need-based financial aid will be given to the following:

1. *Entering first-year students who*
   a. Complete the Admission Application, with all supporting materials, by January 15.
   b. File the Free Application for Federal Student Aid (www.fafsa.gov) and the College Scholarship Service/PROFILE (profileonline.collegeboard.com) by February 15. (The FAFSA and CSS/PROFILE are required for need-based aid consideration.) To complete these applications, use the SMU Title IV school code 003613 and PROFILE school code 6660.
   c. Complete the SMU Application for Scholarships (which will be mailed after submission of the Admission application) and return it to SMU Division of Enrollment Services, Financial Aid.
2. *Transfer students who*
   a. Complete the Admission Application, with all supporting materials, by June 1.
   b. File the Free Application for Federal Student Aid (www.fafsa.gov) and the College Scholarship Service/PROFILE (profileonline.collegeboard.com) by June 1. (The FAFSA and CSS/PROFILE are required for need-based aid consideration.)
3. *Continuing students who*
   a. File the FAFSA (www.fafsa.gov), or the FAFSA Renewal, and the College Scholarship Service/PROFILE (http://profileonline.collegeboard.com) by April 15, after the parents' and students' income tax returns have been filed with the Internal Revenue Service.

Additional information is available from Division of Enrollment Services, Southern Methodist University, PO Box 750181, Dallas TX 75275-0181; 214-768-3417; enrol_serv@smu.edu; www.smu.edu/financial_aid.

SMU SATISFACTORY PROGRESS POLICY FOR FEDERAL, STATE AND INSTITUTIONAL FINANCIAL AID ELIGIBILITY

The Higher Education Act of 1965, as amended October 6, 1983, mandates that institutions of higher education establish minimum standards of "satisfactory progress" for students receiving federal financial aid. SMU updated its Satisfactory Academic Progress Policy when the U.S. Department of Education enacted regulations on program integrity in fall 2010. The standards given below are also used for state and institutional funds. Students who are enrolling for a fifth year of undergraduate studies and are seeking institutional financial assistance must provide a written appeal to the financial aid office and, as appropriate, must file financial aid applications (FAFSA and CSS/PROFILE) as well as obtain degree completion plans from their academic adviser.

Beginning fall 2012, an undergraduate student's formal satisfactory academic progress is measured at the end of each term until the student graduates. Qualitative measures and quantitative measures are taken.

Qualitative Measure. At the end of each term, a student must be making satisfactory academic progress measured by the student's cumulative GPA of 2.000 or better, which is the standard for graduation at SMU.

Quantitative Measure. *(updated for spring 2010)* At the end of each term, a student must be making satisfactory academic progress measured by determining if the student has earned 75 percent of the classes he/she attempted.

Status of Warning, Probation, Academic Plan and Disqualification. A status of *warning* will be assigned to a student the first time he or she fails to meet satisfactory academic progress, and the student will receive a letter regarding his or her status. A student will receive aid while on warning status. A student not deemed to be making satisfactory academic status at the end of the second term will receive a letter that explains what action is necessary to make an appeal. *Probation* will be assigned to a student who fails to meet satisfactory academic progress if the student has appealed and eligibility for aid has been reinstated. *Academic Plan* will be assigned to a student who needs more than one term to achieve satisfactory academic status. *Disqualification* will be assigned to a student no longer eligible for financial aid. A student who is denied federal aid funds due to not making satisfactory progress toward his or her degree goal according to this policy will have the right to appeal to the Financial Aid Appeals Committee.

VETERANS CERTIFICATION

The University Registrar's Office certifies veterans each term for their benefits under federal programs. More information regarding the certification process is available under Veterans in the Academic Records, General and Enrollment Standards section of this catalog and from the University Registrar's Office at www.smu.edu/registrar ("Veterans Affairs" link).

RESIDENCE ACCOMMODATIONS

The mission of the Department of Residence Life and Student Housing is to advance the goals and objectives of the University by creating residential communities that empower residents to value learning, citizenship and leadership. To support SMU's mission, goals and objectives, RLSH develops and sustains the residence halls and apartments as communities that support the broad range of student needs. To this end, RLSH seeks opportunities to promote an intellectual culture in residence halls that complements an already flourishing campus social culture. The University prides itself on offering a full living and learning experience for its resident students.

RLSH is responsible for the campus residential community, including all residence halls, approximately 40 SMU-owned apartments and 10 SMU-owned Greek chapter houses. This responsibility includes making sure that facilities are well maintained and that students have opportunities to grow personally and excel academically.

HOUSING POLICY FOR ALL STUDENTS

All incoming first-year undergraduate students are required to live on campus for two years. Exceptions may be granted at the discretion of the dean of RLSH to those students from Dallas/Fort Worth who plan to live with a parent or legal guardian in the primary residence of the parent or guardian. For housing purposes, the *two years* means the first two years of college and successful completion of 48 SMU credit hours. For 2013–2014, upperclass, transfer and graduate students are not required to live on campus but may apply on a space available basis.

Applications for Residence

Applications for on-campus housing for new undergraduate students are accepted when a student has been admitted to the University. New undergraduate students may apply for housing after paying the $550 University deposit to the Office of Undergraduate Admissions. After the deposit has been processed, new students will receive an email with instructions on how to log in to the housing application website to complete the application and housing license agreement. The $550 University deposit includes the advance tuition deposit, the matriculation fee and the advance housing deposit. These fees are nonrefundable.

New graduate students seeking on-campus housing should submit the completed application/contract, along with a check or money order for $100 to cover the advance housing deposit, to RLSH after acceptance into their graduate school program.

Priority of assignment is based on the date on which applications are received by RLSH. Notification of assignment will be made by RLSH. Rooms are contracted for the full academic year (fall and spring terms). Room charges for the fall term will be billed and are payable in advance of the term for students who register before August 1, and room charges for the spring term will be billed and are payable in advance of that term for students who register before December 1. Students who register after these dates must pay at the time of registration. Room charges for the full academic year will be due and payable should a student move from the residence hall at any time during the school year. Accommodations for shorter periods are available only by special arrangement with the dean of RLSH before acceptance of

the housing license agreement. It is important that applicants become familiar with the license agreement as it is a legally binding document.

RESIDENCE HALLS AND APARTMENTS

Undergraduate Residence Halls

First-year residence halls include Boaz, McElvaney, Smith and Perkins (Hilltop Scholars program). Four-class halls are designated for first-year, sophomore, junior and senior students, and include Cockrell-McIntosh, Mary Hay (fine arts community), Moore, Morrison-McGinnis, Peyton (fine arts community), Shuttles and Virginia-Snider (honors community) halls, as well as Daniel House (upperclass/transfer student community). All rooms are furnished with single beds, dressers, desks, chairs, and closets or wardrobes for clothes. Each student is expected to furnish a pillow, bed linens, bed covers, bedspreads, towels, mattress pad and study lamp. Mattresses in all buildings are 80 inches long (extra-long) twin size.

Upperclass, Graduate Student and Family Halls

Three halls are designated for upperclass students (sophomores and above), graduate students and students with families (married couples with or without children, or single parents with children). The Service House is a small upperclass hall with a thematic focus of community service. This hall is run in conjunction with the SMU Office of Community Engagement and Leadership. Martin Hall, an efficiency apartment hall, houses single undergraduate students. Hawk Hall, a one-bedroom-apartment facility, houses single graduate students, married students (graduate and undergraduate) with families and some senior undergraduates. Families with no more than two children may be housed in Hawk Hall.

SMU Apartments

The SMU Apartments adjoin campus and are located in the Highland Park Independent School District. All apartments are unfurnished, and tenants must be students (sophomores and above), faculty or staff. Availability is limited.

SPECIAL HOUSING NEEDS

Students having special housing needs because of a disability should contact the SMU Office of Disability Accommodations and Success Strategies in order to establish eligibility for accommodations. When applying for housing, students should also submit information to RLSH regarding a request for accommodations. DASS and RLSH will work together with the student on their specific situation to make necessary accommodations.

General Housing Information

In the residence halls, each room or apartment is equipped with a telephone, local telephone service, voice mail system, and Ethernet and wireless connections to the University's computer system. Renovated halls also have in-room cable television programming. All residence halls are air-conditioned, and rooms have individual climate control. The SMU Apartments are unfurnished, and telecommunication services (i.e., telephone, cable television, Internet connections) are not provided. Washing machines and dryers are located in all residence halls and adjacent to the SMU Apartments and Daniel House.

Undergraduate students living in traditional residence halls are required to participate in a meal plan offered by SMU Dining Services. Like the residence hall contract, the meal plan obligation is for the entire academic year and is billed and paid for on a term basis. Students living in Moore, Martin and Hawk halls as well as the Daniel House, Service House and SMU Apartments are exempt from the meal plan requirement. With the exception of Daniel House, Moore, Martin and Hawk, all residence halls are closed during the winter break between fall and spring terms. SMU Apartments are on 12-month leases and open throughout the term of the lease.

For more information, students should visit www.smu.edu/housing or contact the Department of Residence Life and Student Housing, Southern Methodist University, PO Box 750215, Dallas TX 75275-0215; phone 214-768-2407; fax 214-768-4005; housing@smu.edu.

Academic Records, General and Enrollment Standards

The standards herein are applicable to all students at the University and constitute the basic authority and reference for matters pertaining to University academic regulations and records management. Enrollment in the University is a declaration of acceptance of all University rules and regulations. A complete *University Policy Manual* is available at www.smu.edu/policy. Additional information regarding rules and regulations of the University can be found in this catalog.

GENERAL POLICIES

Confidentiality of Education Records

The Family Educational Rights and Privacy Act of 1974 is a federal law that grants students the right to inspect, obtain copies of, challenge, and, to a degree, control the release of information contained in their education records. The act and regulations are very lengthy, and for that reason, SMU has issued its own FERPA-based guidelines that are available at the University Registrar's Office FERPA website. Policy 1.18 of the *University Policy Manual* also discusses this law.

In general, no personally identifiable information from a student's education record will be disclosed to any third party without written consent from the student. Several exceptions exist, including these selected examples: 1) information defined by SMU as directory information may be released unless the student requests through Access.SMU Self-Service that it be withheld, 2) information authorized by the student through Access.SMU Self-Service may be released to those individuals designated by the student and 3) information may be released to a parent or guardian if the student is declared financially dependent upon the parent or guardian as set forth in the Internal Revenue Code. Additional information is available at www.smu.edu/ferpa.

Student File Number

The University assigns each student an eight-digit SMU identification number. The student should furnish the SMU ID number on all forms when requested, as this number is the primary means the University has to identify the student's academic records and transactions related to the records.

Name Change

A student who has a change in name must provide to the University Registrar's Office his or her Social Security card or the form issued by the Social Security Administration. A valid passport may also be used to complete a name change. Enrollment or records services for the student under a name different from the last enrollment cannot be accomplished without one of the above documents. All grade reports, transcripts and diplomas are issued only under a person's legal name as recorded by the University Registrar's Office.

Mailing Addresses, Telephone, Email Address and Emergency Contact

Each student must provide the University Registrar's Office with a current home address, telephone number and local mailing address as well as the name, address and telephone number of a designated emergency contact. Students enrolling at SMU authorize the University to notify their emergency contacts in the event of a situation affecting their health, safety, or physical or mental well-being, and to provide these contacts with information related to the situation.

Students are expected to keep current all their addresses and telephone numbers, including emergency contact details, through Access.SMU, the University's Web-based self-service system. Students may be prevented from enrolling if their information is insufficient or outdated. Changes to parent information should be reported by contacting records@smu.edu, and the email should include the student's full name and SMU student ID number.

The University issues all students an email address. Students may have other email addresses, but the University-assigned email address is the official address for University electronic correspondence, including related communications with faculty members and academic units (except for distance education students).

Official University correspondence may be sent to students' mailing addresses or SMU email addresses on file. It is the responsibility of students to keep all their addresses current and to regularly check communications sent to them since they are responsible for complying with requests, deadlines and other requirements sent to any of their mailing addresses on file or to their SMU email.

Cell Phones

The University requests that students provide cellular telephone numbers, as they are one means of communicating with students during an emergency. Cellular telephone numbers may also be used by University officials conducting routine business. Students who do not have cellular telephones or do not wish to report the numbers should provide this information to the University through Access.SMU Self-Service. Students may be prevented from enrolling if their cellular telephone numbers are not on file or if they have not declared "no cellular telephone" or "do not wish to report cellular number" in Access.SMU.

Ethnicity

SMU requires that a valid ethnic group category be on file for all students. SMU's policies and the Family Educational Rights and Privacy Act of 1974 protect the confidentiality and privacy of this information. A student's ethnic group category can be viewed in Access.SMU, Self-Service Student Center.

U.S. Citizens or Permanent Residents. Ethnicity is self-determined. Students of multiple ethnic backgrounds may select multiple ethnic group categories. If the ethnic group value is incorrect, the student should go to the University Registrar's Office in the Laura Lee Blanton Student Services Building and complete an Ethnic/Racial Category Update Form.

International Students Living in the U.S. While Attending School. Selecting an ethnic group category is not required unless the student becomes a U.S. citizen or permanent resident.

Transcript Service

A transcript is an official document of the permanent academic record maintained by the University Registrar's Office. The permanent academic record includes all SMU courses attempted, all grades assigned, degrees received and a summary of transfer hours accepted. Official transcripts and certifications of student academic records are issued by the University Registrar's Office for all students. Copies of high school records and transfer transcripts from other schools must be requested from the institutions where the coursework was taken.

Transcripts are $12.25 per copy. Additional copies in the same request mailed to the same address are $3.50. Additional copies mailed to different addresses are $12.25 a copy. PDF transcripts are $16.00 per email address and are available only for students who attended after summer 1996. **Note:** No incomplete or partial transcripts, including only certain courses or grades, are issued. Transcripts cannot be released unless the student has satisfied all financial and other obligations to the University. Instructions for requesting a transcript to be mailed or picked up on campus are available at www.smu.edu/registrar ("Transcript Requests" link). A student may request his or her official transcript through the online Access.SMU Student Center. Requests are processed through the National Student Clearinghouse. Telephone and email requests are not accepted. Students or their specified third party can pick up their transcripts at the University Registrar's Office, 101 Blanton Student Services Building. Transcripts may be delayed pending a change of grade, degree awarded or term grades.

SMU is permitted, but not required, to disclose to parents of a student information contained in the education records of the student if the student is a dependent as defined in the Internal Revenue Code.

Transcripts may be released to a third party as specified by the student on the Student's Consent for SMU to Release Information to Student's Specified Third Party form accessible at www.smu.edu/ferpa ("Forms" link).

Note: Chapter 675, S.B. 302. Acts of the 61st Texas Legislature, 1969 Regular Session, provides: *Section I.* No person may buy, sell, create, duplicate, alter, give or obtain; or attempt to buy, sell, create, duplicate, alter, give or obtain a diploma, certificate, academic record, certificate of enrollment or other instrument which purports to signify merit or achievement conferred by an institution of education in this state with the intent to use fraudulently such document or to allow the fraudulent use of such document. *Section II.* A person who violates this act or who aids another in violating this act is guilty of a misdemeanor and upon conviction is punishable by a fine of not more than $1,000 and/or confinement in the county jail for a period not to exceed one year.

Veterans

The University Registrar's Office certifies veterans each term for their benefits under federal programs, including the Yellow Ribbon Program. Most academic programs at SMU qualify for U.S. Department of Veterans Affairs benefits, making an SMU education accessible and affordable. Veterans are required to provide specific documents before they can be certified with the VA's Veterans Benefits Administration. Specific information regarding the certification process is available from the University Registrar's Office at www.smu.edu/registrar ("Veterans Affairs" link).

Final Examinations

Final course examinations shall be given in all courses where they are appropriate, must be administered as specified on the official examination schedule and shall not be administered during the last week of classes. Exceptions to the examination schedule may be made only upon written recommendation of the chair of the department sponsoring the course and with the concurrence of the dean of that school, who will allow exceptions only in accordance with guidelines from the Office of the Provost.

Academic Grievance and Appeals Procedures for Students With Disabilities

The University policy for academic grievance and appeals procedures for students with disabilities is available in the Office of Disability Accommodations and Success Strategies and the University Registrar's Office.

Classification of Students

A student's classification is determined by the number of hours earned or the degree-seeking status of the student:

First Year	0–29 term hours earned
Sophomore	30–59 term hours earned
Junior	60–89 term hours earned
Senior	90 or more term hours earned
Nondegree	not a candidate for a degree

Term Hour Loads

The unit of measure for the valuation of courses is the *term hour*, i.e., one lecture hour or three laboratory hours per week for a term of approximately 16 weeks (including final examinations). Usually, each lecture requires a minimum of two hours of preparation on the part of students. Most courses are valued for three term credit hours, i.e., three lecture hours per week and at least six hours of preparation.

A full-time load in the fall, spring and summer terms is 12 hours for undergraduates. Students who enroll for fewer than these minimum hours are designated part-time students. The normal undergraduate enrollment for each of the regular terms is 15 term hours. An undergraduate student enrolled in an engineering co-op course or enrolled for six hours of student teaching is considered a full-time student.

Cautionary Note: Federal financial aid agencies and some other agencies require a minimum number of hours of enrollment for full-time status and do not make exceptions for internship, co-op or student-teaching enrollments. Students on financial aid should consult a Financial Aid Office adviser regarding minimum enrollment requirements for their situation.

Minimum and Maximum Course Loads

Minimum and maximum course loads allowed are based on the school of record. Each student should be fully aware that hours taken beyond 18 in any term will be charged to his or her student account.

SMU Pre-Majors. Students who have not yet declared a major and who wish to enroll for more than 18 hours must have the approval of their academic adviser and the University Advising Center.

Dedman College of Humanities and Sciences. Majors in Dedman College must have the approval of the dean to enroll for more than 18 credit hours.

Cox School of Business. B.B.A. students may enroll for more than 18 hours per term provided their cumulative grades (SMU, all-college/transfer and Cox GPAs) are 2.000 or above to show satisfactory progress toward completion of the degree.

Lyle School of Engineering. Students must have the approval of their academic adviser to enroll for fewer than 12 hours or more than 18 hours during a fall or spring term. Normally, a student must have a GPA of 3.000 or higher to enroll for more than 18 hours. An exception is made during the term in which a student is to graduate. Credit will not be allowed for more than 21 hours in a term.

Meadows School of the Arts. Students are not permitted to enroll during a fall or spring term for more than 18 hours unless their GPA for the preceding term is at least 3.000. During the term in which a student is to graduate, he or she may enroll for 19 hours (or nine hours for a summer session) regardless of the preceding term GPA. A student in the Meadows school cannot receive credit for more than 21 term hours in a term. A student with a GPA below 2.000 for the preceding term will not be permitted to enroll for more than 13 hours.

Simmons School of Education and Human Development. A student in the Simmons School with a declared major in applied physiology and sport management may enroll for up to 18 hours per term. A student may petition to take up to 21 credit hours in a term provided he or she meets the following criteria:

1. The student has a cumulative GPA of 3.000 or above and has demonstrated academic success while enrolled in 18 hours in prior terms.
2. The student needs to take the extra hour(s) in order to graduate at the end of the term in which he or she is enrolling.
3. The student has gained permission from his or her adviser.

Stop Enrollment/Administrative Withdrawal

Insufficient or improper information given by the student on any admission or enrollment form – or academic deficiencies, disciplinary actions and financial obligations to the University – can constitute cause for the student to be determined ineligible to enroll or to be administratively withdrawn.

Academic Forgiveness

A student can declare courses taken 10 or more years prior to the term of admission or readmission to be forgiven, which means the work is not included in the GPA or hours earned when determining admission, academic probation, suspension, honors and graduation. A student must request academic forgiveness at the time of admission or readmission. The student can select the term at which academic forgiveness starts. Academic forgiveness applies to all courses taken during or prior to that term, regardless of the grades earned. Academic forgiveness cannot be applied to only some courses for a term or to only selected terms within the forgiveness period. Once academic forgiveness is declared and the student has enrolled, academic forgiveness cannot be rescinded. Forgiven academic work taken at SMU remains on the permanent academic record, with a notation of "academic forgiveness" on the record. Currently enrolled students cannot request academic forgiveness. Transfer applicants must provide transcripts from all institutions attended, including those where all work may be forgiven.

Transfer Courses From Other Institutions

Credit may be awarded for college courses a student takes prior to matriculation at SMU, including courses a student takes before graduating from high school, if the courses meet the criteria for transfer work outlined in the Admission to the University, Transfer Admission Criteria section of this catalog. Credit may be denied for educational reasons.

Once students have matriculated at SMU, they may transfer no more than 30 hours to SMU from accredited colleges and universities.

To ensure in advance that a course taken at another college or university will transfer and that proper credit will be awarded, the student taking the course should obtain prior approval from the chair of the department and academic dean of the school at SMU that normally offers the course, the adviser, and the student's academic dean. Petitions for preapproval of transfer work are available in the schools' records offices. Students who fail to get prior approval for transfer work may petition later for transfer credit, but they have no assurance that credit will be awarded. In either case, permission may be denied for educational reasons.

Note: SMU schools have differing policies regarding the transferability of courses from two-year institutions, and with very few exceptions, postmatriculation transfer work must be completed at accredited, four-year institutions.

Official college transcripts are required for all college-level work attempted, regardless of transferability. Military transcripts are also required for students receiving VA benefits; more information is available at www.smu.edu/registrar ("Veterans Affairs" link). Students are responsible for making sure a transcript of all transfer work attempted is sent to the University Registrar's Office immediately following completion of the work.

Students who complete more than 30 transferable hours after matriculating can designate which of their courses apply to the 30-hour limit. Students may change the designation of the courses. Students should make these transfer-credit designations in consultation with their records offices.

ENROLLMENT POLICIES

Course Scheduling and Enrollment Cycles

When students enter their school of record and into a specific degree program, they are assigned an academic adviser. Students should consult with the adviser for course scheduling, schedule changes, petitions, degree requirements and other such academic concerns. Advisers normally will have established office hours. The academic dean's office or the school's records office monitors progress and maintains official degree plans for all students in a school. Students should schedule conferences with staff in the dean's office or the school's records office upon admission to a school and prior to their final term to ensure that they are meeting all University and graduation requirements.

Each fall, spring and summer term has an enrollment period during which the formal process of enrollment in the University is completed. Prior to each enrollment period, the University Registrar's Office will publish enrollment instructions.

To assist new and readmitted students in making a comfortable, satisfying transition to University academic life, programs of academic advising, enrollment and orientation are conducted prior to each term. Information concerning the programs is distributed by the Office of New Student Orientation and Student Support.

Each student is personally responsible for complying with enrollment procedures and for ensuring the accuracy of his or her enrollment. Students are expected to confirm the accuracy of their enrollment each term. Students who discover a discrepancy in their enrollment records after the close of enrollment for the term should immediately complete an Enrollment Discrepancy Petition. Petitions are to be submitted to the appropriate academic dean's office or records office within six months of the term in which the discrepancy appeared; contact information for submission of an Enrollment Discrepancy Petition can be viewed on the University Registrar's Office website at www.smu.edu/EnrollmentDiscrepancy. Petitions submitted later than six months after the discrepancy may not be considered.

Schedule Changes

The deadline for adding courses, dropping courses without grade record and changing sections for each enrollment period is listed on the Official University Calendar (www.smu.edu/registrar). Students are encouraged to seek assistance from their advisers when considering whether to add or drop a course. A student may drop a course with a grade of *W* (Withdrew) through approximately midterm by using the student Access.SMU Self-Service. The specific deadline is listed on the Official University Calendar.

After the deadline date on the Official University Calendar, the student may not drop a class. All schedule changes must be processed by the deadline date specified on the Official University Calendar. **Note:** Schedule changes are not complete for official University record purposes unless finalized in the University Registrar's Office.

Student-Athletes. Students must consult with the Athletic Compliance Office prior to dropping a course. In the consultation, the student will review the effects the drop might have on his or her athletic participation and financial aid. After the consultation, the Athletic Compliance Office will update Access.SMU Self-Service to allow the student to process the drop, if necessary. The consultation is advisory; students are responsible for their enrollment. For assistance regarding scholarships or other aspects of being a student-athlete, students should contact the Office of the Assistant Athletic Director for Student-Athlete Development.

International Students. Students must consult with the International Center prior to dropping a course. If dropping a course will cause the student to be enrolled in fewer than 12 hours, the student's immigration status could be affected. After the consultation, the International Center will update Access.SMU to allow the student to process the drop, if necessary. The consultation is advisory; students are responsible for their enrollment.

Students on Merit or Need-Based Financial Aid. Students should consult with their financial aid adviser prior to dropping a course. If dropping a course will cause the student to be enrolled in fewer than 12 hours, the student's financial aid status may be affected. After the consultation, the student may drop a course through Access.SMU Self-Service. The consultation is advisory; students are responsible for their enrollment. Questions regarding this procedure or financial aid should be directed to the Office of the Associate Financial Aid Director.

Withdrawal From the University

Note: Policies on refunds for withdrawal from the University are found in the Financial Information section of this catalog and in the *Financial Information Bulletin*, which can be accessed online at www.smu.edu/bursar ("Financial Bulletin" link). No refunds are made without an official withdrawal.

Students should be aware of the difference between a *drop* and a *withdrawal* and remember that they have different deadlines and separate financial policies. The deadlines for each are posted each term on the Official University Calendar at www.smu.edu/registrar. A *drop* occurs when a student removes one or more courses from his or her schedule and remains enrolled in at least one credit hour for the term. A *withdrawal* occurs when removing the course or courses will result in the student being enrolled in **zero** hours for the term.

If a student removes all courses from his or her schedule **prior to the first day of the term**, the transaction is considered a *cancellation* and does not result in financial penalty or impact the student's transcript.

A student who wishes to withdraw (resign) from the University before the end of a term or session must initiate a Student Petition for Withdrawal form and secure approval from his/her academic dean. The academic dean's office will then submit the form to the Office of the University Registrar. The effective date of the withdrawal is the date on which the Student Petition for Withdrawal is processed in the University Registrar's Office. Discontinuance of class attendance or notification to the instructors of intention to withdraw does not constitute an official withdrawal.

The enrollment of students who withdraw on or before the fifth day of regular classes as listed on the Official University Calendar will be canceled. Courses and grades are not recorded for canceled enrollments; however, the student will owe a portion of his/her tuition and fees. Additional information is available in the *Financial Information Bulletin*, which can be accessed online at www.smu.edu/bursar ("Financial Bulletin" link). A student who withdraws after the fifth class day will receive the grade of *W* in each course in which he or she enrolled.

Medical withdrawals and mandatory administrative withdrawals allow a prorated refund of tuition and fees and have conditions that must be met prior to reenrollment at SMU. Medical withdrawals can only be authorized by a licensed physician or psychologist counselor in the SMU Memorial Health Center. Mandatory administrative withdrawals can be authorized only by the vice president for student affairs. As a matter of University policy, and in compliance with federal regulations, retroactive medical withdrawals cannot be granted. The last day for a medical withdrawal is the last day of class instruction for the term from which the student is withdrawing.

Withdrawing students living in SMU housing must check out of the residence halls with the Department of Residence Life and Student Housing per established procedures.

Audit Enrollment (Course Visitor)

Students desiring to audit (visit) a class, whether or not concurrently enrolled for regular coursework, are required to process an Audit Enrollment Request Form. Forms are available at www.smu.edu/registrar ("Forms Library" link). Space must be available in the class. The following regulations are applicable:

1. Classroom recitation and participation are restricted; availability of course handouts, tests and other materials is restricted; no grade is assigned and no credit is recorded; no laboratory privileges are included.

2. The student's name does not appear on class rosters or grade rosters.
3. Regular admission and enrollment procedures are not conducted for auditors.
4. The audit fee is nonrefundable. Undergraduate students enrolled full time for any given term (12 hours for fall and spring, six hours per summer session, or 12 hours for the full summer term) may audit one three-hour course at no charge.
5. If credit is desired, the course must be enrolled for and repeated as a regular course, and the regular tuition must be paid.

No-Credit Enrollment

Enrollment for no credit is accomplished in the conventional manner of enrollment, with regular admission and enrollment procedures being required. The student pays the regular tuition and fees, participates in class activities, and receives the grade of *NC* upon completion of the coursework. The student must indicate in writing no later than the 12th day of classes (the fourth day during summer terms or sessions) that he or she wishes to take a course for no credit. Permission of the instructor or department is required for this type of enrollment, and the student is listed on class rolls. This enrollment is different from audit enrollments, for which no enrollment or grade is recorded. SMU Abroad students should also see the Grade Options for Courses Taken on SMU Abroad Programs section of this catalog.

Class Attendance

Regular class attendance is required. The instructor of each class announces at the beginning of the course policies regarding the effect of class attendance on the student's standing in the course. These policies may include dropping a student from the course for nonattendance after a certain number of absences. All reasons for absence should be submitted at once to the instructor.

The satisfactory explanation of absence may release a student from disciplinary action but does not relieve a student from responsibility for the work of the course during his or her absence. A student who misses an announced test, examination or laboratory period in a regular course of study and has the permission of the instructor may be given an opportunity to make up the work at the instructor's convenience. The instructor determines in all instances the extent to which absences and tardiness affect each student's grade.

Students may be dropped by a course instructor or academic dean for nonattendance or tardiness with a grade of *W* until the calendar deadline to drop. After the deadline, students must remain enrolled in the course.

Students may also be dropped by a course instructor for inappropriate classroom behavior. The instructor must submit the request by the University deadline to drop. After the deadline, the student must remain enrolled in the class and receive a final grade of *F*.

Students who miss two successive class meetings during the official add-drop period at the beginning of each term are subject to being dropped from the class. To avoid this possibility, students should contact the instructor or the department concerned immediately following such a series of absences.

A student who has a passing grade in a course at the time of the final examination, but who misses the examination and satisfies the dean that the absence was unavoidable, may secure from the dean permission to take the examination at a time convenient for the instructor.

Excused Absences for University Extracurricular Activities and Religious Holidays

Students who participate in officially sanctioned, scheduled University extracurricular activities should be given an opportunity to make up class examinations or other graded assignments missed as a result of this participation or related travel. The manner in which examinations or other assignments missed because of these activities are to be made up is left to the discretion of each individual faculty member. However, students should not be penalized in any way for these excused absences and should be informed by the instructor at the beginning of the term, preferably in writing, of the instructor's makeup policy. It is the responsibility of the student to make arrangements with the instructor prior to any missed scheduled examination or other missed assignment for making up this work, and to obtain any class notes or other course material missed due to absence prior to taking any subsequent examinations or submitting any subsequent graded assignments.

This statement of University policy applies for all students. To minimize the difficulties caused for both student-athletes and their instructors by excused absences due to University-sanctioned athletic activities or related travel, the Athletic Department shall 1) make available to all student-athletes and their academic advisers prior to registration a copy of the student's activity and travel schedule for the upcoming term, so as to facilitate the student's enrollment in class sections that will minimize activity and travel conflicts; and 2) require all student-athletes to provide a copy of that term's activity and travel schedule, and a copy of this Statement of University Policy, to each of their instructors at the first class meeting of the term.

Other University colleges and departments whose students will miss classes because of their participation in officially sanctioned, scheduled University extracurricular activities or related travel are encouraged to adopt similar procedures to minimize the difficulties caused by such absences.

A list of religious holidays for use in requesting excused absences is available on the Official University Calendar. Students must notify the class instructor in writing by the 12th day of the term of any such absences that will occur during that term. Accommodations are to be made without penalty. More information can be found in the *University Policy Manual*, available at www.smu.edu/policy.

Absence Due to Illness

SMU's Memorial Health Center does not provide documentation for granting excused absences from class. If students are absent for illness, they should talk to their professors about how they might catch up with the material missed. If students are seriously ill and require hospitalization or an extended absence, students should talk to their professors and the Office of Student Life to decide how to deal with the interruption in their studies. To facilitate communication with their professors about their absence, students may submit the Absence from Class Form available at www.smu.edu/healthcenter.

Interpretation of Course Numbers

Each SMU course has a four-digit course number. The first number indicates the general level of the course: 1 – first year; 2 – sophomore; 3 – junior; 4 – senior; 5 – senior or graduate; 6, 7, 8, 9 – graduate. The second digit specifies the number of credit hours ("0" for this digit denotes no credit, one-half hour of credit, or 10–15

hours of credit; for theology courses, a "1" denotes one or one and one-half hours of credit). The third and fourth digits are used to make the course number unique within the department.

GRADE POLICIES

The student's grades are available to the student through Access.SMU Student Center.

Grade Scale

The grade of a student in any course is determined by the instructor of the course. The following grades are authorized for recording on the student's official undergraduate academic record maintained by the University Registrar's Office.

Grades	*Description*	*Grade Points per Term Hour*
A	Excellent Scholarship	4.000
A-	Excellent Scholarship	3.700
B+	Good Scholarship	3.300
B	Good Scholarship	3.000
B-	Good Scholarship	2.700
C+	Fair Scholarship	2.300
C	Fair Scholarship	2.000
C-	Fair Scholarship	1.700
D+	Poor Scholarship	1.300
D	Poor Scholarship	1.000
D-	Poor Scholarship	0.700
F	Fail	0.000
P, CR	Pass, Credit	*
I	Incomplete	*
NC	No Credit Received	*
X	No Grade Received in Registrar's Office	*
WP/W	Withdrawal Passing/Withdrew	*

* *Grades not included in GPA*

Grade of F, D or W

Failing is graded *F*. If the student's work is incomplete, poor quality and not acceptable, a grade of *F* will be given. After such a grade, credit may be obtained only by repeating the course.

The grade of *D* represents performance below average expectations. Students receiving a *D* in a course that is a prerequisite to another course should consult with their advisers about repeating the course so that they will be adequately prepared for work in the following course.

The grade of *W* cannot be recorded unless completion of the official drop or withdrawal process has occurred by the applicable deadline *during the term of enrollment*. Only the grade of *W* may be recorded if the student has officially dropped courses from the schedule or withdrawn (resigned) from the University. The grade of *W* may not be revoked or changed to another grade because the act of officially dropping/withdrawing is irrevocable.

Grade of Incomplete

A student may temporarily receive a grade of Incomplete (*I*) if at least 50 percent of the course requirements have been completed with passing grades, but for some justifiable reason acceptable to the instructor, the student has been unable to complete the full requirements of the course.

At the time a grade of *I* is given, the instructor must stipulate in writing to the student and to the University Registrar's Office the requirements and completion date that are to be met and the final grade that will be given if the requirements are not met by the completion date.

The maximum period of time allowed to clear the Incomplete is 12 months. If the Incomplete grade is not cleared by the date set by the instructor or by the end of the 12-month deadline, the grade of *I* will be changed to the grade provided by the instructor at the time the Incomplete was assigned or to a grade of *F* if no alternate grade was provided.

The grade of *I* is not given in lieu of a grade of *F* or *W*, or other grade, each of which is prescribed for other specific circumstances.

The grade of *I* in a course does not authorize a student to attend or enroll in the course during a later term. Graduation candidates must clear all Incompletes prior to the deadline on the Official University Calendar, which may allow less time than 12 months. Failure to do so can result in removal from the degree candidacy list and/or conversion of the grade of *I* to the grade indicated by the instructor at the time the grade of *I* was given.

Grade Options for Courses Taken on SMU Abroad Programs

Effective fall 2010, courses taken on SMU Abroad fall and spring term programs may not be taken on a no-credit or pass/fail basis. The only exception to this policy is for courses designated by SMU's academic departments with no credit or pass/fail as their only grading basis option.

For courses taken on SMU Abroad summer programs and during J Term, students may not petition for a grade of *NC* (No Credit), but may petition for courses to be graded on a pass/fail basis. Students must petition approval for the pass/fail option from the program director and the faculty member teaching the course. The deadline to complete the Undergraduate Pass/Fail Option Declaration Form to petition for a course taken on an SMU Abroad summer program is the fourth day of classes and no later than the second day of classes for J Term. Forms are available in the academic dean's office.

Grade Point Average

A student's grade point average (cumulative GPA) is computed by multiplying the term hours of each course attempted by the grade points earned in the particular course and then dividing the total number of grade points by the total number of hours attempted, excluding those hours for which grades are shown with an asterisk on the grade chart. The GPA is truncated, not rounded, at three decimal places.

Grade Changes

Changes of grades, including change of the grade of *I*, are initiated by the course instructor and authorized by the academic chair and by the academic dean of the school in which the course was offered. If a student requests a grade change, the instructor may ask the student to provide the request as a written petition, which

may become an official part of any further process at the instructor's discretion. Changes of grades may be made only for the following authorized reasons: to clear a grade of *I*, to correct a processing error or to reflect a re-evaluation of the student's original work. A change of grade will not be based on additional work options beyond those originally made available to the entire class.

Changes of grades of *I* should be processed within a calendar year of the original grade assignment. Other changes of grades must be processed by the end of the next regular term. No grade will be changed after 12 months or after a student's graduation, except in cases where a grade is successfully appealed – provided that written notice of appeal is given within six months following graduation – and in extenuating circumstances authorized by the academic dean and approved by the University Registrar's Office.

Grades for Repeated Courses

Students who enter the University directly from high school may repeat up to three courses for which grades of *D+* or lower were received, provided these courses were completed before or during a student's first two consecutive regular terms following matriculation (regardless of the student's enrollment or withdrawal). The grade from the repeated course, even if lower, will be the grade used to calculate the student's GPA. A course may be repeated only once under this policy, and it must be repeated within the next two regular terms (regardless of the student's terms of enrollment or withdrawal, but not counting a term of academic suspension) following the term in which the course was initially taken. Exceptions to the two-term restriction may be requested from the University Registrar's Office if the course is not taught again within that period. Students who are disciplinarily suspended may petition for an extension. The student must declare to his or her academic dean by the 12th day of classes which courses he or she will repeat under this policy. Only the repeated course and not the initial credit hours count toward the number needed for graduation. Both the initial and the second grades are shown on the student's permanent academic record. Academic standing, as determined by the initial grade, stands. Students are cautioned that for some purposes, such as admission into an academic program, both grades or only the initial grade may be used.

In all other cases, students will be allowed to repeat courses according to the following rules: Both the initial and the second grades will be recorded on the student's permanent academic record. Both grades will be included in the calculation of the GPA and in the determination of academic probation, suspension, dismissal, honors and graduation. Only the repeated course and not the initial credit hours count toward the number of hours needed for graduation.

The courses a student can repeat are determined by the school of record:

Dedman College of Humanities and Sciences. Students can repeat courses in which the original grade was *D+* or below. Other requests to repeat courses can be made by petition in consultation with the academic adviser/department through the Dedman Office of Records and Academic Services.

Cox School of Business. Students can repeat only those courses in which the original grade was a *D+* or below.

Lyle School of Engineering. Students can repeat courses in which the original grade was a *C-* or below. Such courses can be repeated only once.

Meadows School of the Arts. Students can repeat courses in which the original grade was a *C*- or below. Such courses can be repeated only once.

Simmons School of Education and Human Development. Students majoring in applied physiology and sport management can repeat a course once in which the original grade was a *D*+ or below. Students in the Department of Teaching and Learning must repeat a required teacher education course if they earn below a grade of *C*. All other undergraduate students in the Simmons School may repeat a course once if the original grade was a *C*- or below.

Pass/Fail Option

Students may take one course per term on a pass/fail basis. The maximum total credit with a grade of Pass that may count toward a degree is 12 hours. SMU Abroad students should also see the Grade Options for Courses Taken on SMU Abroad Programs section in this catalog.

A student must indicate intention to take a course pass/fail no later than the 12th day of classes (the fourth day of classes in summer sessions; the second day of classes in intersession terms) by filing a form available in the academic dean's office. After the 12th day of classes (the fourth day of classes in summer sessions; the second day of classes in intersession terms), students may not change their pass/fail declaration back to a letter grade. If a department grades a course pass/fail for all students by departmental policy, a declaration by the student is not required. A failed course cannot be repeated on a pass/fail basis, except for those courses designated as pass/fail-only courses.

Students should consult with their advisers before declaring the pass/fail option for any course, as some courses may not be taken pass/fail. In general, elective courses may be taken on a pass/fail basis. With the exception of courses only offered on a pass/fail basis, courses required to fulfill the University Curriculum may not be taken pass/fail. Courses in the academic majors and minors also are excluded; however, in some programs, courses may be taken pass/fail after the minimum program requirements have been met. SMU schools may have different pass/fail policies for major and minor courses; students should see the academic requirements in each school's section of this catalog for information on pass/fail grading. There may also be other courses required to meet certain professional accreditation standards or entrance requirements, such as teacher preparation and preprofessional studies, that may not be taken pass/fail by a particular student. The departments or advisers concerned with these requirements will make these exclusions known to the students.

Under the pass/fail option, pass *(P)* grades are *A*, *B* and *C* (including *C*-); failing (*F*) grades are *D*+, *D*, *D*- and *F*. A student who declares pass/fail is not entitled to know the regular letter grade, and a pass/fail grade cannot be changed to a regular letter grade (or vice versa) after the pass/fail grade has been assigned. The grade of *P* is not calculated in the GPA, although the credit hours are included in the total number of hours earned. The grade of *F* is calculated in the GPA.

Grade Appeals

A student who feels that an assigned grade is other than the grade earned must first discuss the matter with the course instructor to determine if the discrepancy is caused by error or misunderstanding. At the time of the initial discussion, the student may be asked to provide a written petition requesting the change of grade.

A student who is not satisfied by the instructor's decision on a request for a grade change, and who maintains that the original grade was capriciously or unfairly determined, may appeal to the chair of the department in which the course was offered (or, in the case of a nondepartmental course, to a faculty agent designated by the dean of the school offering the course). After discussing the matter with the student, and bearing in mind that the final authority in matters of academic judgment in the determination of a grade rests with the course instructor, the chair (or faculty agent) will consult with the course instructor, who will subsequently report to the student the disposition of the appeal.

A student who is not satisfied by the disposition of the appeal may appeal the decision to the dean of the school offering the course. The dean will take action as he or she deems appropriate. A student may appeal the dean's decision to the provost. In their actions, the dean and the provost must respect the principle that the determination of a grade rests with the course instructor.

Grade Forgiveness

SMU's policy for omitting courses from a student's GPA is found under Academic Forgiveness in the General Policies section of this catalog.

ACADEMIC ADVISING AND SATISFACTORY PROGRESS POLICIES

Academic Advising

Academic advising is an important process for each undergraduate student at SMU. Each student must meet with his or her assigned academic adviser prior to enrolling for an academic term. At this meeting, the adviser will assist the student in planning majors and minors, understanding the Degree Progress Report, and scheduling courses that will count toward graduation requirements. After the initial required advising session, the student is encouraged to seek assistance from the adviser when considering whether to add or drop courses.

For an effective advising relationship, the student must be prepared when meeting with the adviser. The student must initiate the advising appointment. Prior to the meeting, the student should obtain through Access.SMU a Degree Progress Report that provides detailed information concerning completion of degree requirements. The student should also be familiar with different academic programs of interest. The adviser will give assistance to the student, but the student has the final responsibility for the accuracy of the enrollment, the applicability of courses toward the degree requirements, and his or her academic performance.

Students are assigned an academic adviser by their academic dean's office or records office. A student who enrolls without first meeting with his or her assigned academic adviser may be subject to sanctions including, but not limited to, cancellation of the term enrollment and restriction from the self-service enrollment functions.

Mandatory Declaration of Major

Students officially declare their major when they have made a firm choice and when they have met the specific program entrance requirements for their intended school and department. For most students, the declaration of the major occurs in the sophomore year. Students are expected to qualify for and to declare a major no later than upon completion of 75 term hours, including credits by examination and transfer credits, in order to continue their studies at SMU.

Change of Academic Program

Undergraduate students who desire to change their academic program – that is, transfer from one school to another within the University, change their degree objective, change their major or change their minor – should first notify the academic dean's office or records office of the school in which they are currently enrolled. Students can change their academic program at any time during a term. The program change is effective on the date received, approved and processed. However, changes should be made at least three weeks prior to enrollment for a term for the change to be effective for that enrollment.

A nondegree visiting student who wishes to be admitted to an undergraduate program offered by a school of the University must meet all standard University admission requirements.

Concurrent Degree Programs

Students can simultaneously earn two degrees from two schools of the University with approval of the academic dean of each school. The requirements for each degree must be met. Students should meet with advisers in both schools at an early date to prepare a proposed plan of study and to complete the processing of all necessary forms.

Leave of Absence

A leave of absence is a temporary leave from the University – a kind of "time out" – that may be necessary during an academic career. Students may elect to take leaves of absence for a variety of reasons, including 1) medical reasons due to accident or illness, 2) family crises or other personal situation that requires an extended absence from school, 3) financial issues that may take time to resolve, and 4) academic difficulties that may best be handled by taking time to refocus on college work.

Typically, a leave of absence is for one term or one academic year. A student may extend a leave of absence by contacting his or her academic department representative. The process to return to SMU after a leave-of-absence period can be an easy one, especially if the student has gone through the steps to file for a leave of absence and planned ahead for the return. Following SMU's leave-of-absence guidelines helps 1) assure that the degree requirements per the catalog of record when the student initially matriculated at SMU still apply upon return, 2) assist with financial aid processing, and 3) provide the support needed to successfully return to SMU and finish the degree.

The SMU Leave of Absence Policy provides students with a formal process to "stop out" of SMU for either voluntary or involuntary reasons. Typically, *a leave of absence* is for a temporary departure from the institution; however, *intended permanent withdrawals* from SMU will also be processed under the Leave of Absence Policy.

In addition, students who are participating in study-away programs that do not fall under the auspices of SMU should complete the Leave of Absence Form. The completion of this process will assist all respective offices at SMU to create and monitor a formal, centralized record of the status for all students who are not enrolled. The Leave of Absence Form and Leave of Absence Policy are available at www.smu.edu/registrar ("Current Students" link).The *University Policy Manual* is available at www.smu.edu/policy.

The first step to effect a leave of absence is for the student to arrange an appointment to meet with his or her academic adviser, who will then assist the student with the process.

Academic Progress

The University sets the goal and expects that all undergraduate students will make regular and satisfactory progress toward their degrees. There are three categories that may apply when an undergraduate student is not making satisfactory academic progress: 1) academic probation, 2) academic suspension or 3) academic dismissal. This policy sets out the standards and procedures for each of these categories. In addition, a student who has been suspended may seek academic reinstatement under the standards set out in this policy.

Definitions: Academic Probation, Academic Suspension, Academic Reinstatement and Academic Dismissal

Academic Probation. Academic probation is a serious warning that the student is not making satisfactory academic progress. A student on academic probation is still eligible to enroll and is considered in good standing for enrolling in classes and for certification purposes. Academic probation is not noted on the permanent academic record; however, a student on academic probation may be subject to certain conditions during the period of probation and will be subject to academic suspension if he or she does not clear academic probation. For academic probation periods and guidelines, students should see the Academic Probation sections below under the appropriate school of record.

Academic Suspension. Academic suspension is an involuntary separation of the student from SMU. Academic suspension is for at least one regular term. The term of suspension might be for a longer period depending on the policy of the school of record or the terms of the individual student's suspension.

The status of academic suspension is recorded on a student's permanent academic record. While on academic suspension, a student is not in good academic standing for certification purposes and is not eligible to enroll at SMU. Students who have served their suspension and who are eligible to return may not enroll for any intersession terms.

Credits earned at another college or university during a term of suspension may not be applied toward an SMU degree. A grade point deficiency must be made up through enrollment at SMU.

Academic Reinstatement. A student who has been on academic suspension once may apply for reinstatement to SMU. If reinstated, the student may enroll in classes, and he or she is considered in good academic standing for purposes of certification. A student who is reinstated remains on academic probation until the conditions of academic probation are satisfied.

Academic Dismissal. A second suspension that is final results in an academic dismissal from the University. Academic dismissal is final, with no possibility of reinstatement or readmission. Academic dismissal is recorded on the student's permanent academic record.

Academic Probation. For all undergraduate students, a student will be placed on academic probation if he or she fails to meet the following:

1. Effective summer 2012, for a student who enters SMU directly from high school or enters SMU with fewer than 15 transfer hours, the student fails to complete the Discernment and Discourse sequence and/or the Quantitative Foundation requirements of the University Curriculum after the completion of 60 units earned as SMU credit
   OR
2. For a continuing student who entered SMU directly from high school or entered SMU with fewer than 15 transfer hours, the student fails to complete the written English and Mathematical Sciences Fundamentals of the General Education Curriculum after the completion of 45 units earned as SMU credit
   OR
3. For a part-time student or a student transferring more than 15 hours, the student fails to complete the written English and/or Mathematical Sciences Fundamentals of the General Education Curriculum after completion of 15 units through enrollment at SMU.

Academic Suspension. For all undergraduate students, a student will be placed on academic suspension if he or she fails to meet the following:

1. Effective summer 2012, for a student who enters SMU directly from high school or enters SMU with fewer than 15 transfer hours, the student fails to complete the Discernment and Discourse sequence and/or the Quantitative Foundation requirements of the University Curriculum after the completion of 75 units earned as SMU credit
   OR
2. For a continuing student who entered SMU directly from high school or entered SMU with fewer than 15 transfer hours, the student fails to complete the written English and Mathematical Sciences Fundamentals of the General Education Curriculum after the completion of 60 units earned as SMU credit
   OR
3. For a part-time student or a student transferring more than 15 hours, the student fails to complete the written English and/or Mathematical Sciences Fundamentals of the General Education Curriculum after completion of 30 units through enrollment at SMU.

SMU Pre-Majors

Academic Probation. For SMU Pre-Majors, once a student's cumulative SMU GPA falls below 2.000, the student is placed on academic probation at the beginning of the next enrolled term (fall, spring or summer). The student has the next two enrolled regular terms (fall, and spring) and the first summer term following the probation start date to raise his or her cumulative SMU GPA to at least a 2.000. A student has the opportunity to enroll only for one summer term while on academic probation. The summer term must be at SMU. A student on academic probation cannot enroll in any intersession terms: J Term (January), May term or August term.

When the student is placed on academic probation because his or her cumulative SMU GPA is below 2.000, then the student will be assigned to a designated proba-

tion counselor. Before beginning his or her next term at SMU, the student will be required to complete a self-assessment and share this self-assessment with the probation counselor, who will then work with each student to determine the appropriate academic interventions. These academic interventions can include, but are not limited to, the following:

1. Re-evaluation of course enrollments and pre-major objectives.
2. Biweekly academic counseling sessions with the probation counselor (or his or her designee).
3. Enrollment in courses, such as HDEV 1110 O.R.A.C.L.E. or HDEV 1111 Success Strategies, aimed at improving academic performance.
4. Appropriate medical and/or psychological assessment-evaluation, including assessment-evaluation as to the need for drug or alcohol education.
5. Participation in tutoring and/or study skills workshops.

The student will sign a contract that stipulates the agreed-upon academic interventions.

Academic Suspension. If a student does not achieve a cumulative SMU GPA of at least a 2.000 according to the stipulations stated above, then he/she will be placed on academic suspension. A student is suspended effective the first day of the next term (fall, spring or summer), and the suspension period includes a minimum of one regular term (fall or spring). Credits earned at another college or university during a term of suspension may not be applied toward an SMU degree. A grade point deficiency must be made up at SMU.

A student may petition to the University Committee on Academic Petitions for an additional, consecutive probationary term if the term GPA during the student's probationary period indicates academic improvement and if the student has undergone all academic recovery efforts agreed upon in the contract with the probation counselor.

As soon as possible after the student is placed on academic suspension, the student should contact the probation counselor if he/she has any desire or intent to seek reinstatement after the period of academic suspension. The probation counselor will work with the student to determine appropriate conditions that the student should satisfy to be eligible for reinstatement. These conditions might include the completion of coursework with a certain minimum GPA; however, reinstatement is not guaranteed.

Academic Reinstatement. A student who has been academically suspended once may apply for academic reinstatement to the University. Reinstatement to the University is not guaranteed. A student is not eligible to request reinstatement until the end of the time period of academic suspension. The request for reinstatement should be submitted to the University Committee on Academic Petitions, which will make a decision on the request. Ordinarily, the decision whether to grant reinstatement will be based primarily on whether the student has satisfied the conditions set out for the period of academic suspension.

A student who is reinstated after academic suspension has two regular enrolled terms (fall and spring) in which to earn a cumulative SMU GPA of at least a 2.000. A student will return on academic probation and may not be reinstated for a summer term. Students who do not earn a cumulative SMU GPA of at least a 2.000 within two regular terms (fall and spring) after having been academically suspended will be permanently dismissed.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Dedman College of Humanities and Sciences

Academic Probation. Students who have a declared major in Dedman College and whose cumulative SMU GPA falls below 2.000 are placed on academic probation. Academic probation is for a minimum of one regular term (excluding interterms and summer sessions). The dean may impose special conditions in exceptional probationary situations. Students are removed from academic probation status when they achieve a cumulative GPA of 2.000 or higher.

Academic Suspension. Declared Dedman students whose cumulative GPA remains below 2.000 in any regular term following a term of academic probation will be suspended. Suspension is for a minimum of one term, not counting interterms or summer sessions. Credits earned at another college or university during a term of suspension may not be applied toward an SMU degree. A grade point deficiency must be made up through enrollment at SMU.

Students who have been suspended from another school on campus are also subject to suspension from Dedman College.

Reinstatement on Probation Following Suspension. Students who have been suspended once may apply for reinstatement to the University, but reinstatement is not guaranteed. In certain cases, prescribed conditions, including the completion of coursework elsewhere, must be met before a student will be approved for reinstatement. Students who have been reinstated to the University following suspension remain on probation and are normally allowed two regular terms within which to make up their academic deficiencies and return to good standing. However, special conditions for the first term may be set in individual cases.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Cox School of Business

Academic Probation. A student will be placed on academic probation following the term in which the lowest of the SMU term GPA, cumulative GPA or business GPA (if at least nine business credit hours taken) falls below 2.000. A student on probation may enroll for a maximum of 12 credit hours in the term of probation (fall, spring or summer) and will not be allowed to enroll for an internship or directed study. A student on academic probation must enroll in and successfully complete a minimum of nine credit hours per term, with no more than three credit hours of free elective credit that is unrelated to the student's declared major, declared minor or University requirements. Also, the student must earn a minimum 2.000 GPA in every term in which the student takes classes. To be removed from probation, a student must successfully complete all of the following: 1) meet with the director of academic advising for the B.B.A. Program or a designee at appropriate intervals during the term, to be determined by the director; 2) attend the Altshuler Learning Enhancement Center, follow recommendations established by the L.E.C. director and attend an L.E.C. Time Management Workshop; 3) successfully complete a minimum of nine hours in the term of probation; and 4) raise the SMU term GPA, cumulative GPA or business GPA to at least 2.000 at the end of the term. Students who do not meet the requirements of probation within the first three weeks of the regular term will not be removed from probation even if the GPA rises to 2.000 or above. For the purposes of

probation, May term, first summer session, second summer session, full summer session and August term will be considered one term. A course taken in the January term will not affect probation status.

Academic Suspension. A student on academic probation who fails to maintain an SMU term GPA, cumulative GPA or business GPA of 2.000, or who fails to complete successfully a minimum of nine credit hours in the term of probation, will be suspended. A student who has been suspended must petition the director of the B.B.A. Program of the Cox School for reinstatement, but this petition will not be considered until the student has been suspended for at least one full term (summer sessions excluded). For example, a student suspended at the end of the spring term may petition for reinstatement for the beginning of the next spring term, but no sooner.

Reinstatement on Probation Following Suspension. Petitions for reinstatement must set forth clearly the reasons for the previous unsatisfactory academic record and must delineate the new conditions that have been created to prevent the recurrence of such performance. Each petition is considered individually on its own merits. After consideration of the petition and perhaps after a personal interview, the student may be reinstated on academic probation if the suspension was the student's first. Reinstated students will be required to meet with an L.E.C. counselor during the first week of classes and follow through on recommendations from that meeting, and they must meet all other requirements of academic probation.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Failure at Other Colleges. Students who are on academic probation or academic suspension from other colleges will not be admitted to the Cox School of Business until they are no longer on probation or suspension with their home school. Students who have received academic suspension twice from any college or university will not be admitted to the Cox School. Failure to disclose any such suspensions will be grounds for dismissal from the Cox School.

Lyle School of Engineering

Academic Probation. A declared Lyle student whose SMU term or cumulative GPA falls below 2.000 may be placed on academic probation. The minimum period of probation is one term. The student remains on probation until the overall GPA is 2.000 or better or until he or she is suspended. A student on probation may enroll in a maximum of 13 credit hours per term during the term(s) of probation, but the student is not allowed to serve as an officer of any organization representing either the Lyle School of Engineering or SMU. The student on probation may not participate in any extracurricular activities that might interfere with or detract from academic efforts.

Academic Suspension and Reinstatement on Probation Following Suspension. A student on probation who fails to maintain a GPA of at least 2.000 during an academic term will be suspended. A student who has been suspended may petition the dean for reinstatement, but this petition will not be considered until the student has been suspended for at least one full term. For example, a student suspended at the end of the spring term may petition for reinstatement for the beginning of the next spring term, but not sooner. Petitions for reinstatement must set forth clearly the reasons for the previous unsatisfactory academic record and must delineate the new conditions that have been created to prevent the recurrence of such perfor-

mance. Each petition is considered individually on its own merits. After consideration of the petition and perhaps after a personal interview, the student may be reinstated on academic probation if the suspension was the student's first.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Meadows School of the Arts

Academic Probation. A declared Meadows student who fails to maintain an SMU cumulative or term GPA of 2.000 in a regular term will be placed on academic probation for the following regular academic term. A student on academic probation may enroll for a maximum of 13 term hours and must achieve a term and cumulative 2.000 GPA at the end of the term.

Note: A student who fails to meet divisional artistic standards may be placed on artistic probation at any time.

Academic Suspension and Reinstatement on Probation Following Suspension. A student who fails to meet the terms of academic probation will be suspended for one regular academic term, after which the student may apply for reinstatement. A student may petition the associate dean for academic affairs for reconsideration, and the student may be reinstated on academic probation.

A student who fails to meet divisional artistic standards may be suspended from the division at any time.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Simmons School of Education and Human Development

Academic Probation. Declared Simmons School students whose cumulative SMU GPA falls below 2.000 are placed on academic probation. Academic probation is for a minimum of one regular term (excluding intersessions and summer sessions). The dean may impose special conditions in exceptional probationary situations. Students are removed from academic probation status when they achieve a cumulative GPA of 2.000 or higher.

Academic Suspension. Declared Simmons School students whose cumulative GPA remains below 2.000 in any regular term following a term of academic probation will be suspended. Suspension is for a minimum of one term, not counting intersessions or summer sessions. Credits earned at another college or university during a term of suspension may not be applied toward an SMU degree. A grade point deficiency must be made up through enrollment at SMU. Students who have been suspended from another school on campus are also subject to suspension from the Simmons School.

Reinstatement on Probation Following Suspension. Students who have been suspended once may apply for reinstatement to the University, but reinstatement is not guaranteed. In certain cases, prescribed conditions, including the completion of coursework elsewhere, must be met before a student will be approved for reinstatement. Students who have been reinstated to the University following suspension remain on probation, and they are normally allowed two regular terms within which they can make up their academic deficiencies and return to good standing. However, special conditions for the first term may be set in individual cases.

Academic Dismissal. A second suspension is final, resulting in dismissal from the University with no possibility of readmission.

Academic Petitions and Waivers

Petitions and/or requests for waivers concerning University requirements, graduation requirements and the evaluation of transfer work should be submitted to the dean's office or records office of the student's school of record. Additional information is found under Grade Appeals in the Grade Policies section of this catalog.

Petitions and/or requests for waivers concerning a major or a minor should be submitted to the appropriate department chair or program coordinator/director for consideration.

SMU Credit Requirement

University policy requires that of the 122 minimum required term hours for an undergraduate degree, at least 60 hours must be earned as SMU credit. In other words, 60 hours must be completed through enrollment at SMU's Dallas campus, SMU-in-Plano, SMU-in-Taos, SMU Abroad programs and/or in SMU-approved international programs, and/or by test and other credits awarded by SMU departments as SMU courses. Credit hours earned in venues not listed above that are applied toward the 122 minimum will be recorded as transfer credits.

Therefore, regardless of the number of transferable credits completed elsewhere, to receive an SMU undergraduate degree, students must earn 60 credit hours through enrollment at SMU.

Of the 122 minimum required term hours for an undergraduate degree, only two hours may be Personal Responsibility and Wellness courses.

For further degree requirements, students should refer to the individual school sections of this catalog.

Transfer Coursework

The policy for transfer coursework is found under Transfer Courses From Other Institutions in the General Policies section of this catalog.

GRADUATION POLICIES

Apply to Graduate

Students must file an Application for Candidacy to Graduate with their academic dean's office or records office at the beginning of the term in which they will complete all degree requirements. Applications should be filed by the deadline date on the Official University Calendar.

Students who file an application after the published deadline may be required to pay a nonrefundable late fee. Late applications may be denied after the start of the next term, and the Application for Candidacy to Graduate applied to the next conferral date. Students taking coursework at another institution and transferring the course(s) back to SMU are responsible for ensuring that the University Registrar's Office receives their official transcript in order for their degree to be conferred for the anticipated graduation term.

SMU has three degree conferral periods for most programs: fall (December), spring (May) and summer (August). Students who complete their degree requirements during a J Term (January) intersession, May term or August term will have their degrees conferred at the conclusion of the following conferral term.

Commencement Participation

An All-University Commencement Convocation is held in May for students on schedule and enrolled to complete degree requirements during the spring term.

Students on schedule and enrolled to complete all degree requirements during the following summer session may also participate in the University Commencement Convocation, although their degrees will not be conferred until August. Students may also participate in departmental or school ceremonies following the University commencement according to the policies of the departments or schools.

An All-University Graduation Ceremony is held each December for students completing degree requirements during the fall term. Students who completed degree requirements during the previous summer session may also participate. Students on schedule and enrolled to complete all degree requirements during the following J Term (January) intersession may also participate in the December graduation ceremony, although their degrees will not be conferred until May.

A student may participate once in either the May All-University Commencement Convocation or the December graduation ceremony for a given degree, but not both.

To participate in a ceremony, a student must file with their academic dean's office or records office an Application for Candidacy to Graduate or Intent to Participate Form.

Degree Honors

There are three classes of graduation honors: summa cum laude, magna cum laude and cum laude. The awarding of graduation honors will be determined by minimum GPAs announced at the beginning of each academic year for each of the five undergraduate schools – Dedman, Cox, Lyle, Meadows and Simmons. The minimum GPAs generally will represent the top 5 percent, 10 percent and 15 percent of graduates in the school. Students earning a degree with majors in two or more schools will receive the highest degree honors for which they are eligible.

The minimum GPAs for each school will be determined by pooling all graduates in the school from the previous three academic years and determining the GPAs in each school that represent the top 5th, 10th and 15th percentiles. The GPA used is the lower of the student's SMU cumulative GPA and all-college GPA (this includes transfer work) and includes undergraduate coursework only.

The minimum graduation honors GPAs for students graduating during the 2013–2014 academic year will be announced in October 2013. Students may obtain information about minimum GPAs required in past years from their academic schools or online at www.smu.edu/registrar ("Academic Records" link).

Separate from earning graduation honors, students who have completed the requirements of the University Honors Program may earn honors in the liberal arts. Departmental distinction may also be awarded in Dedman College of Humanities and Sciences, Lyle School of Engineering, Meadows School of the Arts, and Simmons School of Education and Human Development; the Cox School of Business awards the honors in business distinction to students who have successfully completed the requirements for the Cox B.B.A. Honors Program These honors require completion of requirements prescribed by the department or school. Further information may be obtained from the individual departments and schools.

Statute of Limitations for Degree Plans

A student who has been readmitted to the University following an absence of more than three years will be expected to meet all current requirements for graduation.

UNIVERSITY-WIDE REQUIREMENTS

In keeping with the University's educational mission, all undergraduates are required to complete a program of study that emphasizes the values of what historically has been known as a liberal education – namely, learning to read, write and think critically and acquiring a basic understanding of human society in all its dimensions. The courses and experiences included in this program of study provide a solid and broad education that will equip students to compete and adapt to the rapidly changing contemporary world and complement more focused study in the major.

First-time, first-year undergraduate students who enter the University in the 2012–2013 academic year will complete all requirements of the *University Curriculum*.

All other undergraduate students will complete the requirements of the *General Education Curriculum*.

Rather than a checklist of requirements, both the UC and the GEC should be viewed as individual parts of the larger process of becoming a broadly educated person. Students should consider how each of these components contributes to that objective. The list of all UC and GEC courses available each term can be accessed at www.smu.edu/registrar.

THE UNIVERSITY CURRICULUM

The motto of Southern Methodist University, *Veritas Liberabit Vos* ("the truth shall set you free"), epitomizes the ideals of an SMU education and is the fundamental principle for the University Curriculum. The wisdom to acquire and critically reflect on existing knowledge and the insight and capacity to create new knowledge – the hallmarks of an educated person – exemplify the characteristics SMU seeks to instill in its students.

The University Curriculum consists of three main coursework components (**Foundations, Pillars** and **Capstone**) combined with **Proficiencies and Experiences**, and UC requirements can be met through any part of the student's undergraduate career, including work in the major or minor, elective courses, or approved activities.

The number of courses and/or credit hours required to complete the University Curriculum will vary according to the individual student's academic background, preparation, major and curricular choices. The list of UC courses will vary by term, especially with respect to identified and approved Proficiencies and Experiences. Students are advised to work closely with divisional/departmental and University advisers in navigating the UC requirements and planning their coursework each term.

SUMMARY OF UNIVERSITY CURRICULUM REQUIREMENTS

Note: Applies *only* to first-time, first-year undergraduates who enter the University in summer 2012 or later.

University Curriculum Foundations

In today's rapidly changing world, a university education must provide students in all majors with the tools to embark on a lifetime of learning. UC Foundations courses assure that students read and write critically, possess basic quantitative reasoning skills, understand the concepts of lifelong personal responsibility and well-

ness, and explore how different academic disciplines define and create knowledge. Because these skills are essential for a successful college experience, UC Foundations courses should be completed within a student's first four terms of enrollment.

Discernment and Discourse

The University Curriculum foregrounds academic reading, writing and oral expression in the Discernment and Discourse sequence. The Discernment and Discourse sequence introduces students to academic thought and communication in seminars that allow students to work closely with faculty in small classes. All seminars share the goal of assisting students in the development of critical reading, expository and analytical writing, oral communication, and research protocols.

Most students will satisfy this requirement by taking DISC 1312 in the fall and DISC 1313 in the spring. Students scoring lower than a 550 on the SAT Critical Reading or 24 on the ACT English section will begin in DISC 1311. Students scoring at or above 550 (SAT Critical Reading) or 24 (ACT English) will begin in DISC 1312. Students scoring a 4 or 5 on the Advanced Placement Test and students scoring 5, 6 or 7 on the IB exam will place out of DISC 1312 and begin with DISC 1313. Students participating in the University Honors Program satisfy this requirement with DISC 2305 and 2306 in the fall and spring of their first year. Each term, students must be enrolled in and may not drop Discourse and Discernment until they have completed the requirement. A minimum grade of *C-* is required to pass each course.

DISC 1311 (3). FOUNDATIONS OF WRITTEN AND ORAL DISCOURSE. The class gives students practice in the reading, writing, and analytical skills necessary for the successful completion of DISC 1312 and 1313. Students approach writing as a process of drafting, revising, and editing, and they work on sentence-level and paragraph-level writing skills as they build toward essay-length writing projects. Students must earn a C- or better.

DISC 1312 (3). INTRODUCTION TO ACADEMIC DISCOURSE. This course introduces students to a variety of discipline-based modes of inquiry and expression. The texts students read and create employ and exemplify the principles of academic discernment and discourse. Students must earn a C- or better. *Prerequisite:* DISC 1311 or one of the following test scores: 550 on the SAT Critical Reading or 24 on the ACT English section.

DISC 1313 (3). INQUIRY SEMINAR. This course is a topic-based seminar through which students continue to develop their critical reading and writing skills, employing analysis, evaluation, synthesis, and/or integration, while learning to employ research protocols for the various discipline or disciplines represented in the course. Students must earn a C- or better. *Prerequisite:* DISC 1312.

DISC 2305 (3). HONORS HUMANITIES SEMINAR I. Insights from literature, linguistics, philosophy, psychology, and science that became major modes of interpreting the world in the 20th century and that define what constitutes knowledge in the 21st century. Open only to students in the University Honors Program.

DISC 2306 (3). HONORS HUMANITIES SEMINAR II. A study of ethical questions derived from history, literature, psychology, and philosophy that focuses on what constitutes a meaningful life. The course also explores historical challenges to the bases of ethics. *Prerequisite:* DISC 2305.

Quantitative Foundation

Quantitative reasoning refers to the ability to understand, evaluate and use quantitative information. Quantitative information takes many forms, and quantitative reasoning skills span a vast spectrum from basic numerical manipulations to advanced statistics and mathematics. One three-credit course is required to ensure that students possess these necessary skills. Students scoring a 4 or 5 on the Calculus AB, Calculus BC or Statistics Advanced Placement tests will place out of this require-

ment. Math placement testing is also available through SMU's mathematics departmental examinations. The list of UC Quantitative Foundation courses offered per term can be accessed at www.smu.edu/registrar.

Personal Responsibility and Wellness

All students complete this requirement by completing two one-credit courses. Taken during the first year, PRW1 introduces students to the University and explores three sets of issues: 1) the role of personal responsibility in coping with college and life's other transitional periods; 2) challenges and opportunities such as managing time and stress, benefiting from diversity and autonomy, dealing with pitfalls related to alcohol and drugs, and exploring resources and activities on campus; and 3) personal finance decisions while at SMU and later in life, including managing money, using credit cards and making major purchases.

In PRW2 (physical fitness courses), students work with instructors to establish personal goals and fitness plans for the term. A variety of individual and group fitness courses will be available, with each course containing core objectives and student-learning outcomes based on health-related fitness components. Grades will be given based on attendance, understanding of training/health principles and satisfactory improvement toward the goals that students set for themselves. The list of PRW courses available per term can be accessed at www.smu.edu/registrar.

Ways of Knowing

KNW courses cross disciplines, exploring how natural scientists, social scientists, humanists, artists, engineers, and professionals in business and education address important issues. Taught collaboratively by faculty members from different disciplines and organized around a major topic or "big question," KNW courses develop students' understanding of the multiple approaches whereby different disciplines define, acquire and create knowledge, including the ethical considerations involved. Students are required to complete one KNW course. The list of KNW courses available per term can be accessed at www.smu.edu/registrar.

University Curriculum Pillars

The UC Pillars component is a constellation of five two-course sequences that introduce students to the primary ways in which intellectual traditions have organized and constructed knowledge. Each UC Pillar, except for the Pure and Applied Science Pillar, requires an introductory course that covers origins, critical analysis and important issues, and then a second course that, typically, will be of a more focused or advanced nature. Courses may satisfy requirements of more than one UC Pillar, and courses taken to satisfy UC Pillar requirements may also count toward the student's major. Any UC Pillars course may also be designated as satisfying one of more of the required UC Proficiencies and Experiences. The list of UC Pillars courses available per term can be accessed at www.smu.edu/registrar.

Creativity and Aesthetics

To develop an understanding of and appreciation for the creative impulse in a variety of artistic, cultural and historical contexts, graduates of SMU will be able to identify, explore and explain concepts fundamental to the visual, literary and performing arts through critical analysis, performance or the act of personal creation.

This Pillar also seeks to expose students to the fundamental role that creativity plays in maintaining a robust, adaptive and prosperous society. To this end, students take two courses from the Creativity and Aesthetics Pillar.

Historical Contexts

To understand societies in the contemporary world and the forces that have shaped them, graduates of SMU will be able to identify and analyze problems, events, and documents or artifacts from the past and know how to situate them in their appropriate social, political, economic and cultural contexts. To this end, students take two courses from the Historical Contexts Pillar.

Individuals, Institutions and Cultures

To understand complex social systems, graduates of SMU will have explored contemporary efforts to document and analyze the interaction of individuals, cultures and institutions that shape economic, political and social experiences. To this end, students take two courses from the Institutions and Cultures Pillar.

Philosophical and Religious Inquiry and Ethics

To explore the human condition, graduates of SMU will have engaged in probing inquiry of philosophical, religious, or ethical issues and questions. This inquiry also serves as the basis for thoughtful choice and action. To this end, students take two courses from the Philosophical and Religious Inquiry and Ethics Pillar.

Pure and Applied Sciences

To be active, engaged citizens in a global society, graduates of SMU will be able to participate in scholarly discourse in science and engineering and to understand the implications of these disciplines. Students should be aware of the meaning and methods of science and engineering, and of the ways that both disciplines have shaped and continue to shape the world. To achieve this goal, students must take two courses in the Pure and Applied Science Pillar: either two introductory courses with laboratory experiences, or one introductory course with a laboratory experience and one more advanced course.

Proficiencies and Experiences

To prepare SMU graduates for both career development and lifelong learning, the UC requires all undergraduates to develop and refine writing, quantitative reasoning, oral communication and information literacy skills beyond the introductory level provided through Foundations courses. The UC also encourages all undergraduates to apply curricular knowledge to the diverse, global communities in which they will live and work. The following UC Proficiencies and Experiences, required of all undergraduate students, may be met through credit-bearing coursework or approved, noncredit activities that have been identified as meeting that requirement.

Writing

In addition to Discernment and Discourse coursework, all students will take two WRIT courses in which they compose coherent, well-supported and carefully edited essays and reports suitable for a range of different audiences and purposes.

Quantitative Reasoning

In addition to Quantitative Foundations coursework, all students will take one QR course in which quantitative reasoning skills are central to course content, delivery and evaluation.

Information Literacy

All students will take two IL courses in which they learn how to select and use the appropriate research methods and search tools for needed information and how to evaluate sources for quality of information for the given information need.

Oral Communication

All students will learn how to select and use appropriate forms of evidence in a public presentation, design verbal messages to suit particular audiences and purposes, and use visual cues to enhance a public presentation. Students can use both coursework and sustained, reflected upon activities to fulfill the UC's two OC requirements.

Community Engagement

All students will learn how to demonstrate the analytical and practical skills necessary for engaged, informed citizenship by applying academic learning to address specific needs in a community. Students can use both coursework and sustained, reflected upon activities to fulfill the UC's one CE requirement.

Human Diversity

All students will be able to demonstrate an understanding of the historical, cultural, social or political conditions of identity formation and function in human society, with respect to race, ethnicity, gender or societies in the developing world. Students can use both coursework and sustained, reflected upon activities to fulfill the UC's one HD requirement.

Global Engagement

All students will engage with other societies and cultures, demonstrating an understanding of the material culture, underlying values, beliefs or practices that are central to the culture(s) being visited or studied. Students can use both coursework and sustained, reflected upon activities to fulfill the UC's one GE requirement.

Second Language

All students who matriculate with less than the equivalent of four terms' college-level, second language proficiency will improve their second language proficiency by at least the equivalent of two terms' college-level instruction. (Students who come in with three terms' proficiency will be required to complete only one additional term.) Students can continue a language they have previously studied or complete two terms in a new language. Students' initial course placement and eventual proficiency assessment will be determined by language-specific exams designed and/or approved by SMU faculty. Students may fulfill the SL proficiency through coursework or through such means as 1) being literate in a native language other than English; 2) matriculating with AP scores of 4 or 5 on a language exam; 3) developing the necessary incremental proficiency through using the language in research,

community service or internships abroad; and 4) studying the language online, ideally using recommended learning materials.

A list of courses offering opportunities for fulfilling UC Proficiencies and Experiences available per term can be accessed at www.smu.edu/registrar. Students should see their adviser or the Office of the University Curriculum/GEC for approved noncredit activities that satisfy proficiencies.

Capstone

Each student's undergraduate career culminates in a Capstone experience requiring the student to contribute to the "pool of knowledge" either by synthesizing and integrating a body of work within a chosen area of study or by taking an upper-level course that emphasizes an inter- or multi-disciplinary way of knowing. Providing undergraduates with an opportunity for reflection and sustained focus, this experience will employ skills, knowledge and methodologies taught throughout the undergraduate career. The Capstone can take the form of a course, a departmental or honors thesis, a senior project, a senior performance, an interdisciplinary project, or an internship combined with a paper that requires students to analyze, report on and reflect upon the experience. Capstones may also fulfill departmental or other program requirements, as determined by the degree-granting department or program. A list of courses offering UC Capstone opportunities available per term can be accessed at www.smu.edu/registrar. Students should see their adviser for approved noncredit activities that satisfy the Capstone requirement.

University Curriculum Protocols

1. Credit earned by examination may be used to fulfill requirements in the Foundations, Pillars (level one), and Second Language Proficiency categories.
2. With the exception of courses that are offered only with pass/fail grading, courses taken to fulfill UC requirements may not be taken pass/fail.
3. Following SMU matriculation, students must meet UC Foundations requirements through SMU coursework.
4. PRW1 should be completed during the first 30 hours of undergraduate work. The Ways of Knowing requirement should be completed within the first 60 hours of undergraduate work.
5. A minimum grade of *C-* is required in all DISC-sequence courses.
6. Students may petition for an individual exception to a UC requirement, typically by requesting consideration of a course transferred from another regionally accredited institution. All UC student petitions for substitution must include concrete assessment evidence that the proposed alternative course or experience satisfies the specific Student Learning Outcomes associated with the requirement. The petition is then vetted by the student's academic adviser and reviewed by SMU departments where appropriate before it is submitted to the associate dean for the Office of the University Curriculum/GEC or the assistant dean for the University Curriculum for approval consideration. Appeals may be made to the Committee on Academic Petitions.

7. Probation and suspension rules related to the Foundations components of the UC are as follows:
   a. Academic Probation
      - A student who enters SMU directly from high school or enters SMU with fewer than 24 transfer hours will be placed on academic probation if he or she fails to complete either the Discernment and Discourse sequence or the Quantitative Foundation requirement of the UC after the completion of 60 units earned as cumulative credit.
      - Students must be continuously enrolled in the appropriate Discernment and Discourse course each term until completion of the Foundations requirement. Students who do not enroll in the appropriate DISC course each term will be subject to academic probation. However, certain students who begin their writing requirements with DISC 1313 may defer their initial enrollment for one term, if approved by the associate dean for general education in consultation with the director of the Discernment and Discourse Program. Students may not drop these courses; if they do, the *W* grade will be changed to a grade of *F*.
   b. Academic Suspension
      - A student who enters SMU directly from high school or enters SMU with fewer than 24 transfer hours will be a candidate for academic suspension if he or she fails to complete either the Discernment and Discourse sequence or the Quantitative Foundation requirement of the UC after the completion of 75 units earned as cumulative credit.

SUMMARY OF GENERAL EDUCATION CURRICULUM REQUIREMENTS

Note: Does *not* apply to first-time, first-year undergraduate students who enter the University in the 2012–2013 academic year; applies *only* to continuing students and students who enter the University in 2012–2013 as transfer students.

	Credit Hours
Fundamentals	
1. Written English	6
2. Mathematical Sciences	3
3. Information Technology	3
Wellness	2
Science/Technology	6
(at least 3 hours must be in a natural science)	
Perspectives	15
Cultural Formations	6
Human Diversity (3 cocurricular hours)	
	41

For exemptions and exceptions to the General Education requirements, students should see Exemptions and Exceptions in this section of the catalog.

Fundamentals (12 hours)

Fundamentals courses assure that students read and write critically, possess basic mathematical skills, and are familiar with information technology and its place in contemporary society. In today's rapidly changing world, a university education must provide students with the tools to embark on a lifetime of learning. In addition, such skills are essential for a successful college experience. Therefore, the 12 required term hours in Fundamentals should ideally be completed within the first year.

Written English (Six hours)

Students scoring a 4 or 5 on the Advanced Placement Test will place out of DISC 1311 and 1312. Transfer students who have not completed the written English requirement must be enrolled in each term and may not drop an appropriate writing course until completing the written English requirement. A minimum grade of *C-* is required to pass each course. The list of written English courses offered per term can be accessed at www.smu.edu/registrar.

Mathematical Sciences (Three hours)

Three hours of coursework in mathematical sciences is required to ensure that students possess the necessary skills in mathematics and quantitative reasoning. The list of courses offered per term can be accessed at www.smu.edu/registrar. Class descriptions are in the Mathematics and Statistical Science sections of this catalog.

Information Technology (Three hours)

Any course from this category will introduce students to emerging information technologies and familiarize them with the design and operation of personal computers and networked systems, the fundamentals of computer programming, and the use of important software applications. Each of these courses must also include components on the impact of computers on society and on ethics and information. The list of IT courses offered per term can be accessed at www.smu.edu/registrar. Class descriptions are available in the engineering section of this catalog.

Wellness: Choices for Living (Two hours)

The Choices for Living courses reflect the University's philosophy that a well-rounded education enhances the physical and mental well-being of the student. They help students become more aware of the comprehensive nature of wellness; provide techniques to help students respond positively to any imbalances in their lifestyle; familiarize students with campus wellness facilities, equipment and services; foster a lifetime of physical activity and physical fitness; and provide opportunities and promote action in a variety of wellness areas. Each student must complete a Choices I and Choices II class as part of the General Education Curriculum. The list of Wellness courses offered each term can be accessed at www.smu.edu/registrar.

Science and Technology (Six hours)

In today's world, students should be aware of the meaning and methods of science and technology, and the ways that both have shaped the world around us. To assure this is the case, students must take two courses in science and technology: at least one must be from the courses listed in Category A below, and no more than one may be from the other science and technology courses designated in Category B. Each course must include a minimum of four contact hours per week, at least one of which

must be a lab. The list of science and technology courses offered per term can be accessed at www.smu.edu/registrar. For class descriptions, students should see the anthropology, biology, chemistry, Earth sciences, engineering or physics sections of this catalog.

A. Fields of biology, chemistry, civil and environmental engineering, Earth sciences, and physics (three to six term hours required).

B. Other science and technology fields (zero to three term hours required).

Perspectives (15 hours)

Interpretation of contemporary society requires an understanding of how different disciplines in the Western intellectual tradition have organized and constructed knowledge. Perspectives courses have two objectives: to illustrate the evolution and contingent nature of knowledge and what is considered to be knowledge, and to provide students with a broad intellectual framework in which they may consider or identify their major field(s) of study.

Perspectives courses must be introductory in nature and either fundamental to, or otherwise characteristic of, their disciplines. Moreover, they must meet the same pedagogical standards typically required of courses in their respective departments, divisions and schools. They must be critical in approach and introduce students to primary sources. Where appropriate, they must be writing-intensive. Finally, they must be interactive, a requirement that may be fulfilled in a variety of ways (see General Rules Items 12 to 15), ideally by the end of the second year. The list of courses offered per term can be accessed at www.smu.edu/registrar.

Group I: Arts (Three hours)

A category that introduces students to the practice or study of various arts of expression, performance and communication and their traditions.

Group II: Literature (Three hours)

A category that presents the roles, functions and traditions of the imagination within a variety of national traditions.

Group III: Religious and Philosophical Thought (Three hours)

A category that introduces students to the practices of thought, reflection, criticism and speculation in matters of belief, value and knowledge.

Group IV: History and Art History (Three hours)

A category that introduces students to the study of events and processes within time by stressing a contextual analysis of the voices and artifacts of the past through primary and secondary sources. This category also offers credible accounts and explanations of the actions and intentions of the people of the past.

Group V: Politics and Economics (Three hours)

A category that introduces students to the applications of scientific methods to the study of institutional practices of transaction, organization and rule.

Group VI: Behavioral Sciences (Three hours)

A group of courses (anthropology, sociology, psychology) that introduces students to the scientific study of human thought, behavior and records of human cultural organization.

Cultural Formations (Six hours)

Although the academic disciplines outlined in the preceding Perspectives categories educate students in the ways individual fields of knowledge in the Western tradition attempt to understand human society, the investigation of many topics requires a combination of disciplinary approaches. Such inter- or multidisciplinary ways of knowing and comprehension reach beyond the boundaries of a single field. Cultural Formations (CF, CFA, CFB) courses allow students the opportunity to study interdisciplinary approaches to knowledge within the humanities and the social sciences and within the natural sciences when related to the humanities or social sciences. CF courses value new and unusual combinations of study and are intended to encourage faculty innovation and creativity.

CF courses go beyond disciplinary training to develop awareness of the complex formations of values, traditions and institutions that constitute cultures, and to examine the paradoxes such formations pose. These courses have three major purposes: 1) to introduce students to broad maps of human culture and to the fact that they, as the heirs of all that has gone before, need to assess a long past and a global present; 2) to reveal the interrelatedness of problems of knowledge amid shifting intellectual boundaries; and 3) to make points of reference along those boundaries and so begin to form intellectual communities that embrace the varied schools and disciplines at SMU.

CF courses are interdisciplinary. These courses explore how the approaches and materials of more than one discipline can be brought to bear on the study of complex social, cultural and institutional formations. Teaching in teams is often used to realize these interdisciplinary goals. Courses are also broad in scope – whether historically over time or more immediately in the contemporary world. They may include emphasis on global awareness, interculturalism and ethnic diversities as well as engage problems of ethics and value. CF courses are critical in approach, writing-intensive and focused on primary sources.

Students must complete two CF courses between their sophomore and senior years. The list of CF courses is also online at www.smu.edu/registrar.

Human Diversity Cocurricular Requirement (Three hours)

One Human Diversity cocurricular course (three term hours) dealing with non-Western and/or race-, ethnicity-, or gender-related issues must be completed by every graduating student. This requirement may be satisfied by any course within the University's undergraduate curriculum, including courses in Perspectives and Cultural Formations, as long as that offering is designated as a Human Diversity course. The list of Human Diversity courses offered per term can be accessed at www.smu.edu/registrar.

Exemptions and Exceptions

The Council on General Education recognizes two broad categories of exemptions to General Education requirements: individual exceptions and formal exemptions. Students may petition for an individual exception to a General Education require-

ment, normally with the substitution of a specific alternative course to satisfy that requirement. All General Education student petitions must be approved by the student's academic adviser and the associate dean for General Education. Appeals may be made to the Committee on Academic Petitions.

The Council on General Education has approved formal exemptions that apply to specific groups of students, as follows:

1. Beginning with fall 1997 entry, any student who matriculates with 42 or more term credit hours in transfer will be exempt from any six (6) hours from the combination of Perspectives and Cultural Formations. Transfer students majoring in any engineering program who have already satisfied the Perspectives/Cultural Formations requirement on entering the University are exempt from the Human Diversity cocurricular requirement. Additionally, transfer students majoring in an engineering program who have completed a yearlong course, both terms of which satisfy the same single Perspectives category, will be allowed to count that sequence toward two different Perspectives categories. This exception may extend to, at most, two yearlong courses so long as a minimum of three Perspectives categories is satisfied overall.
2. When the total number of hours required to satisfy the General Education and major requirements for a single major, along with the major's supporting course requirements, exceeds 122 term credit hours, students in such majors will be exempt from three (3) hours of Perspectives and an additional three (3) hours taken from either Perspectives or Cultural Formations. Free electives – courses that do not satisfy any General Education, major, or supporting course requirements – are not included in this calculation. Majors that qualify for this exemption are:
    a. Lyle School of Engineering B.S. in computer engineering degree.
    b. Lyle School of Engineering B.S. in computer science degree with a premedical specialization.
    c. Lyle School of Engineering B.S. in electrical engineering degree.
    d. Lyle School of Engineering B.S. in environmental engineering degree.
    e. Lyle School of Engineering B.S. in civil engineering degree.
    f. Lyle School of Engineering B.S. in mechanical engineering degree.
    g. All Meadows School of the Arts majors leading to the Bachelor of Music degree.
    h. All Meadows School of the Arts majors leading to a Bachelor of Fine Arts degree in art, dance or theatre.
3. Students graduating with an undergraduate engineering degree from the Lyle School of Engineering who take a second major in a Dedman College program leading to a B.S. degree will be allowed to fulfill the General Education requirements for the Dedman College program using the same General Education requirements that apply to the engineering degree alone. In particular, all individual and formal General Education requirement exemptions that are allowed for the engineering program (see qualifying degrees in Item 2 above) will be allowed for the Dedman College program.

4. Each student may qualify for one six-hour exemption. For example, if a student transfers in with 42 or more credit hours, qualifying for a six-hour exemption, and then also declares an engineering or fine arts major that qualifies for a six-hour exemption, the student may only receive a six-hour total exemption.

Rules

1. Credit earned by examination may be used to fulfill requirements in the Fundamentals, Science/Technology and Perspectives categories.
2. With the exception of Wellness, courses taken to fulfill General Education requirements may not be taken pass/fail.
3. With the exception of the cocurricular component, a single course may satisfy only one General Education requirement.
4. Following SMU matriculation, students must meet the written English, mathematical sciences and information technology Fundamentals requirements through SMU coursework.
5. Probation and suspension rules related to the Fundamentals component of the General Education Curriculum (applicable to all undergraduate students) are as follows:
   a. Academic Probation: For all part-time students and students transferring more than 15 hours, a student will be placed on academic probation if he or she fails to meet the following:
      - The student fails to complete the written English and mathematical sciences Fundamentals of the General Education Curriculum after completion of 15 units earned as SMU credit.
      - Students must be continuously enrolled in the appropriate English course each term until completion of the written English Fundamentals requirement. Students who do not enroll in the appropriate English course each term will be subject to academic probation. However, certain students who begin their writing requirements with ENGL 1302 may defer their initial enrollment for one term. Students may not drop these courses; if they do, a *W* grade will be changed to an *F*.

   b. Academic Suspension: A part-time student or a student transferring more than 15 hours will receive academic suspension if the student fails to complete the written English and mathematical sciences Fundamentals of the General Education Curriculum after completion of 30 units earned as SMU credit.
6. A minimum grade of *C-* is required in each written English Fundamentals course.
7. A student who uses a writing-intensive departmental course to satisfy the written English requirement beyond ENGL 1302 may not also use that course to satisfy the Perspectives or Cultural Formations requirements.
8. Ideally, the science and technology requirement should be completed within the first 90 hours of undergraduate work.
9. Cultural Formations courses will carry CF, CFA or CFB numbers and may also carry departmental numbers. However, if such a course is taken with a de-

partmental number, it will not be given Cultural Formations credit. Similarly, a course taken with a CF number will not also count as a departmental course.

Note: The departmental colisting of a CF course may not receive Perspectives credit. Cultural Formations and Perspectives are mutually exclusive categories; one cannot count for the other.

10. CF courses must be taken through enrollment at SMU on the Dallas campus, at SMU-in-Plano or SMU-in-Taos, or through the SMU study abroad programs. Courses transferred from other institutions may not receive CF credit under any circumstances.
11. Students must complete two Cultural Formations courses between their sophomore and senior years.
12. The Perspectives requirement may NOT be satisfied by courses in the department or program of the student's major, by courses applied to fulfill requirements for a student's interdisciplinary major or by the colisting of a CF course (see Item 9 above). ("Program" here refers to division, center, school or other academic unit designated for a course of study in the University catalog.)
13. A Perspectives course may double count toward a student's minor or second major.
14. No single course may be listed in more than one Perspectives category.
15. No department or program may list its courses in more than one Perspectives category. ("Program" here refers to division, center, school or other academic unit designated for a course of study in the University catalog.)

ALTSHULER LEARNING ENHANCEMENT CENTER

www.smu.edu/alec

The Altshuler Learning Enhancement Center is designed to help students become more independent, self-confident and efficient learners. In addition, it is designed to help students respond effectively to specific academic challenges, to articulate and attain their own educational goals, and to succeed at any level of the undergraduate curriculum.

Overview of Services

Each year, approximately 32–35 percent of SMU's undergraduate students take advantage of L.E.C. programs, courses and services, including 61 percent of all first-year students and 52 percent of all freshmen and sophomore students. All L.E.C. offerings are available at no cost to full-time undergraduate students. Some services are available by appointment; others are available on a drop-in basis. Students may be referred to the L.E.C. by their advisers, faculty or resident assistant, but most students choose to come on their own.

Tutoring Services. The L.E.C. offers subject-specific tutoring in most first- and second-year courses. Tutorials are offered in individual, small-group and review session formats. The tutor schedule changes regularly, and updates can be found on the L.E.C. website.

Writing Center. English department faculty members assist students at any stage of the writing process – from planning a draft to learning from previously graded papers.

Workshops. Each fall, the L.E.C. offers approximately 40 study strategy workshops; in the spring, approximately 20 are offered. Among the topics covered are note taking, time management, test-taking strategies and textbook study-reading.

O.R.A.C.L.E. (Optimum Reading, Attention, Comprehension and Learning Efficiency). Each academic year, hundreds of SMU students take this one-credit course to develop advanced reading and learning techniques. Students can register for O.R.A.C.L.E. at the same time they register for their other courses. O.R.A.C.L.E. is listed as HDEV 1110 in the Simmons section of this catalog. Every fall, sections are reserved for pre-med students and students with documented learning differences.

Success Strategies. This one-credit course helps students to develop strategies for creating success in their academic, professional and personal lives by learning study skills and exploring campus resources to succeed at SMU. This course is designed for students on academic probation or those who are dissatisfied with their grades. Students can register for this for course, listed as HDEV 1111 in the Simmons section of this catalog, when they register for their other fall or spring classes.

Academic Counseling. Full-time staff members are available to work individually with students on study strategies. Some specialize in working with students with learning differences or students on academic probation.

Disability Accommodations and Success Strategies. Housed within the L.E.C., DASS offers comprehensive disability services for all SMU students with disabilities. Services include classroom accommodations and physical accessibility for all students with a learning disability and/or attention deficit hyperactivity disorder, as well as other conditions such as physical, visual, hearing, medical or psychiatric

disorders. For undergraduate students, academic coaching is available in the areas of transitioning, learning strategies instruction, educational planning and self-advocacy. For accommodations, it is the responsibility of the undergraduate and graduate students themselves to establish eligibility through this office. Students must provide 1) appropriate current documentation in keeping with SMU's documentation guidelines, and 2) a request indicating what kind of assistance is being sought, along with contact information. More information is available online at www.smu.edu/alec/dass.

SMU LIBRARIES

www.smu.edu/libraries

Service to Southern Methodist University students, faculty and staff is the primary goal of all libraries at SMU. The libraries of the University contain nearly four million volumes. The fully interactive Web-based library catalog system provides access to bibliographic records of materials housed in all SMU libraries and hypertext links to other databases, digitized collections and relevant websites. All SMU libraries offer wireless Internet access.

SMU libraries rank first in total volumes held among non-Association of Research Libraries universities in the United States. The SMU libraries comprise the largest private research library in Texas and rank third in the state in total volumes, after the University of Texas at Austin and Texas A&M University. SMU libraries are one of the greatest assets of the University. The University's library system is divided into a number of different units:

1. **Central University Libraries** (reporting to the Office of the Provost).
2. **Underwood Law Library** (reporting to Dedman School of Law).
3. **Bridwell Library** (reporting to Perkins School of Theology).
4. **Business Information Center** (reporting to Cox School of Business).

The Business Information Center

www.cox.smu.edu/bic

The Business Information Center, the Cox School's business library, is located in room 150 of the Maguire Building. The mission of the business library is to provide the SMU community with authoritative business information, regardless of format; support the integration of information and technology into the curriculum; and act as a center for research and development for state-of-the-art information technology applications in the business education field. In support of this mission, students, faculty and staff have access to course-specific in-class instruction sessions, open enrollment research workshops and reference assistance from dedicated business librarians to enhance their use of current business news and financial, industry and market data from premier providers. The business library offers the SMU community the Kitt Investing and Trading Center; both quiet and group study areas; individual and group computer areas consisting of 70 computer workstations; a multimedia studio; a group presentation practice room; a periodicals area; facility-wide wireless access; more than 500 electronic resources; and a variety of print resources, including the Hillcrest Foundation International Resource Library, the Edwin L. Cox Business Leadership Center Resource Collection, the Maguire Energy Institute Resource Collection and the BBA Career Services Collection. Librarians are available all hours that the business library is open, providing research assistance in person and virtually via email and telephone.

Bridwell Library

www.smu.edu/bridwell

Bridwell Library, primarily serving the faculty and students of the Perkins School of Theology, is the University's principal research resource for the fields of theology and religious studies. It offers a print collection of more than 370,000 volumes and 1,200 current periodical titles, and it provides access to a wide array of digital books, journals and databases. Among the library's special collections are significant holdings in early printing, English and American Methodism, theology, religion, and the book arts. The interpretation of these collections is accomplished through class instruction, lectures, publications and exhibitions. Reference librarians are available to help students discover and use the many resources of Bridwell Library.

Underwood Law Library

library.law.smu.edu

Underwood Law Library, one of the 30 largest law libraries in the country and the largest private law library in the Southwest, houses more than 650,000 volumes and primarily serves the faculty and students of the Dedman School of Law. The collection includes state and federal legislative, judicial and administrative materials; law periodicals; law treatises; U.S., international and foreign documents; and U.S. government documents relating to the legal profession. Strengths of the collection are in taxation, securities, corporate law, labor law, air and space law, commercial and banking law, constitutional law, and law and medicine. The Kay and Ray Hutchison Legal Resource Learning Center in the Underwood Law Library is a computer learning lab located on the third floor.

Central University Libraries

www.smu.edu/cul

The largest of the SMU library units is Central University Libraries with holdings of more than 3 million volumes, including 900,000 e-books. CUL comprises the Fondren Library Center, the Hamon Arts Library, the DeGolyer Library and the University Archives, the Institute for the Study of Earth and Man Reading Room, the Emily C. Norwick Center for Digital Services, and the Fort Burgwin Library at the SMU-in-Taos campus in New Mexico. CUL also supports SMU programs at the SMU-in-Plano campus.

Fondren Library Center, with nearly two million volumes of books, government publications and bound journals, serves students and faculty in the areas of humanities, social sciences, business, education, science, and engineering. Its Information Commons provides a single location within the library where students can use print and online resources, as well as the latest computer software and technology, to prepare their assignments. The Information Commons also offers staff and resources to assist students with media-intensive products as well as the latest in touch computing technology. Fondren Library is a selective depository for government information resources and has large electronic collections of retrospective periodicals and special collections in the humanities, sciences, and social sciences. It houses the Foscue Map Library, the University's map collection, which includes more than 260,000 topographic and geologic maps and aerial photographs.

Strengths of the Fondren Library include, but are not limited to, classical studies, late 18th- and early 19th-century English literature, American history, Texas history,

contemporary biography and literature, anthropology, political science, economics, and other social sciences. Fondren Library also provides reading materials placed on reserve by classroom faculty and access to holdings from other libraries nationwide via interlibrary loan, as well as a collection of 9,000 current and classic DVDs.

The **Hamon Arts Library,** adjoining the south side of the Owen Arts Center of the Meadows School of the Arts, serves students and faculty in the areas of visual art, art history, cinema, communications, dance, music and theatre. With more than 200,000 volumes of books, sound recordings and video recordings, the library's collections support the Meadows curriculum and are particularly strong in European and American arts. The library also provides conference room facilities; group audio-visual study and presentation rooms; and public computers for research, study and arts-specific software projects. The following two special collections units are administered by Hamon Arts Library.

The **Jerry Bywaters Special Collections'** focus on the cultural history of the American Southwest. Visual arts holdings include archival materials and works of art on paper documenting the careers of artists such as Jerry Bywaters, Otis and Velma Davis Dozier, E.G. Eisenlohr, Octavio Medellin, Olin Travis, and Janet Turner as well as correspondence of 19th-century French painter Rosa Bonheur. Performing arts holdings include two Japanese *gigaku* masks dating from the seventh to the 10th centuries, the papers of Oscar-winning actress Greer Garson, and materials documenting the careers of longtime SMU music faculty members Paul van Katwijk and Lloyd Pfautsch.

The **G. William Jones Film and Video Collection,** founded in 1970, holds more than 10,000 films and videos on a wide array of subjects and in all formats. The Jones Collection is best known for its Tyler, Texas, Black Film Collection and for the Sulphur Springs Collection of prenickelodeon films.

DeGolyer Library is a noncirculating special collections branch of CUL that contains nearly 150,000 volumes. In addition to rare books, it holds nearly 2,500 separate manuscript collections, 750,000 photographs and negatives, 2,000 newspaper and periodical titles, 3,000 maps, and an extensive collection of ephemera that includes the largest collection of Texas bank notes in the country. The DeGolyer Library is open to all students and faculty. Great strengths of the DeGolyer Library include early voyages and travels, especially those accounts bearing on the European discovery and exploration of the New World. The collection of Western Americana is numbered among the finest in the country. For example, the Lawrence T. Jones III Texas Photography Collection is an unrivalled source of over 5,000 early images of the land and people of the state, from the 1840s to the 1920s. The library also has exceptionally well-developed collections in the fields of business history, such as the JCPenney archives, the Stanley Marcus Collection and the Belo archives (parent company of the *Dallas Morning News* and other media outlets). Transportation history, in particular the history of railroads, is another great strength of the library. DeGolyer's holdings in the history of science and technology, which include the Texas Instruments archives, also have much to offer the researcher. Literary collections cover a respectable range of English and American authors and literary genres, from a 16th-century edition of Chaucer's *Canterbury Tales* to dime novels and comic books. Literary manuscripts include the papers of playwright Horton Foote and the archives of the *Southwest Review,* SMU's literary quarterly. DeGolyer collections also afford numerous opportunities for interdisciplinary research in such

fields as American studies, Southwestern studies, women's studies, popular culture, the history of photography, and the history of the book.

The **University Archives,** part of the DeGolyer Library, are the official repository for SMU administrative and historical records of the University. The archives contain manuscripts, photographs, publications, records, and artifacts documenting the establishment and growth of the University. SMU administrators, faculty, local historians and media representatives are its principal users, but students and visiting scholars often use its materials for a variety of research projects.

The **ISEM Reading Room,** located in Heroy Hall, serves students and faculty of the Institute for the Study of Earth and Man. It contains nearly 10,000 volumes with a wealth of information relating to anthropology and geological and geophysical sciences.

The **Norwick Center for Digital Services,** located in the staff-access-only area of the Fondren Library Center, focuses on digitizing library collections for increased access via the digitalcollections.smu.edu website. The center features state-of-the-art hardware and software. The center also supports the SMU Digital Repository (digitalrepository.smu.edu) and provides a variety of customer-specific digital services to the SMU campus at large.

The **Fort Burgwin Library,** located in Taos, New Mexico, and serving students and faculty in the SMU-in-Taos program, is focused on the history, literature, cultures and environment of New Mexico and the Southwest. Fort Burgwin Library contains approximately 9,000 books and a small collection of journals and maps. It houses the Fred Wendorf Information Commons, a state-of-the-art computer facility and library constructed in 2004.

SCHOLARS' DEN

The Scholars' Den is a gathering space for members of the various scholar communities at SMU. The mission of the Scholars' Den is to foster scholarship and community among its member groups by providing a hospitable place to study and hold scholarly events. Located in Clements Hall, the Den features group meeting space, study areas and informal lounges where students can gather to collaborate on academic and extracurricular projects.

LABORATORIES AND RESEARCH FACILITIES

The University provides laboratories and equipment for courses in accounting; anthropology; art; biology; chemistry; languages; earth sciences; communication arts; psychology; physics; health and physical education; dance; music; theatre; statistics; and civil, computer, electrical, environmental and mechanical engineering. Additional University facilities not listed below are described in sections for the individual schools.

The **Lyle School of Engineering** is home to several state-of-art laboratories and research facilities. For more information, see the Lyle School of Engineering Departmental Facilities and Computer Facilities sections in this catalog.

The teaching laboratories of the departments of Biological Sciences, Chemistry, Earth Sciences and Physics are housed in the **Fondren Science Building** and in the **Dedman Life Sciences Building.** Virtually all teaching laboratories and support facilities in the buildings have been remodeled and updated. Students have access to a wide array of specialized instrumentation and laboratory equipment fundamental to studies in the natural sciences, including spectrophotometers, high-performance

liquid chromatographs, scintillation counter, fluorescence-activated cell sorter, scanning laser confocal microscope, electron resonance spectrometer, X-ray diffractometers, mass spectrometers and an atomic absorption spectrometer. Advanced undergraduate research is also supported by tissue culture and animal care facilities, as well as through several departmental computer laboratories.

The **N.L. Heroy Science Hall** houses the departments of Anthropology, Earth Sciences, Sociology and Statistical Sciences, as well as the Institute for the Study of Earth and Man. The **Institute for the Study of Earth and Man** was created in 1966 by a gift from W.B. Heroy, Sr. Its purpose is to support research at the interface of humans, Earth and the environment.

The **Department of Earth Sciences** operates several unique laboratories, including the following:

The **Dallas Seismological Observatory,** established by the Dallas Geophysical Society and maintained and operated by the University, monitors remote seismic and infrasound stations in the western United States. The Lajitas array in Southwest Texas is used to test technology designed to detect small earthquakes from great distances. SMU operates seismic and infrasound arrays in Nevada and overseas locations. Data collected by the observatory are available to the faculty and advanced students who wish to undertake basic research in seismology, tectonics or infrasound.

The **Ellis W. Shuler Museum of Paleontology** houses research and teaching collections of fossil vertebrates, invertebrates and plants. The museum supports opportunities for advanced study of fossil faunas and floras and their evolutionary, climatic and paleoecologic significance. The collection, which specializes in vertebrate paleontology and paleobotany, includes more than 150,000 fossils. The research perspective is global, with particular strengths in advanced imaging techniques and interdisciplinary studies. Students participate in research on the collections, and many are employed in the museum's fully equipped preparation laboratories.

The **Pollen Analysis Laboratory** serves SMU research projects focused on the reconstruction of past vegetation, past climate and paleoecology at localities around the world. The facility includes two fume hoods, glassware, centrifuges, scales, a convection oven, and storage space necessary for the dry and wet processing of sediment samples for their pollen content. The laboratory is also used for the processing of fossil plant cuticle. Microscopic analysis of the resulting pollen-sample residues and cuticle slides takes place in a separate laboratory housing transmitted light and epifluorescence microscopes, a comparative collection of modern pollen, and a small paleobotany and palynology research library. Work in this laboratory is often supplemented by facilities in the SEM laboratory (described below).

The **Geothermal Laboratory** is the focus of an extensive, worldwide program of research in the thermal field of the Earth. Special topics of concentration include characterization and location of geothermal energy resources and research in the thermal fields of sedimentary basins. Mapping of the temperatures and heat flow of the crust has been completed for North America and is part of the website www.google.org/egs. Specialized equipment for the measurement of thermal conductivity of rocks and for the measurement of accurate, precise temperature

logs in deep wells is available for research purposes. Services are provided to other institutions and research centers on a contractual basis.

The **Hydrothermal Laboratory** contains equipment to reproduce the pressures and temperatures existing to mid-crustal depths. It contains two extraction-quench sampling bombs that permit withdrawal of solution during the progress of a run to pressures of 3 kbar and temperatures of 750 degrees Celsius. There are also 10 cold-seal reaction vessels. In addition, 1-atm furnaces are available that can be used to temperatures of 1400 degrees Celsius.

The **Stable Isotope Laboratory** is a general research facility available to support both academic and student research at the University and in other research centers. The laboratory contains three automated gas-source, magnetic-sector isotope ratio mass spectrometers as well as vacuum extraction lines for converting natural materials (solids, liquids) into gases suitable for measuring the isotope ratios of hydrogen, carbon, nitrogen and oxygen at natural abundance.

The **Variable Pressure Scanning Electron Microscope Laboratory** contains a Zeiss SMT 1450 VPSE SEM used for generating electron photomicrographs with 5-nm resolution. The SEM is open to researchers and students from the departments of Earth Sciences, Environmental Sciences, Engineering and Chemistry. The facility is also equipped with an Edax energy dispersive X-ray system for quantitative determination of chemical compositions of the imaged materials.

The **X-ray Diffraction Laboratory** houses a Rigaku Ultima III diffractometer for the X-ray identification of materials with a crystalline structure and is open to researchers and students from the departments of Anthropology, Chemistry, Earth Sciences, Environmental Sciences and Engineering.

The **X-ray Fluorescence Laboratory** houses a Thermo Scientific ARL PERFORM'X X-ray fluorescence spectrometer. XRF analysis is a widely used analytical technique to determine the elemental composition from sub ppm to 100 percent of a wide range of samples, both solids and liquids, with easy sample preparation and nondestructive analysis. The lab and its sample preparation tools are available to researchers and students working in geological, environmental and material sciences.

The **TEM Microscopy Laboratory** houses a Leo 906 transmission electron microscope, which was donated to SMU by the Texas Scottish Rite Hospital for Children in Dallas.

The **Nuclear Magnetic Resonance Spectrometer Laboratory** houses a 500 MHz JEOL NMR spectrometer and a 400 MHz Bruker NMR spectrometer, which are available to students and researchers. These instruments are the research progenitors of medical MRI scanners, capable of scanning 1H, 13C, 31P and many other nuclei.

SMU-in-Taos, Fort Burgwin, is located 10 miles south of Taos, New Mexico, at an elevation of 7,500 feet. The facility includes classrooms, laboratories, offices, a computer center and a library, as well as living accommodations for students and faculty. The Fort Burgwin archaeology curation facility houses more than one million archaeological specimens from research projects conducted by SMU faculty and students. Northern New Mexico offers a multiplicity of research opportunities for both natural and social scientists. Pot Creek Pueblo, located on the fort's property, is one of the largest prehistoric archaeological sites in the Taos region.

MUSEUM

The **Meadows Museum,** founded by the late philanthropist Algur H. Meadows and located at 5900 Bishop Boulevard, houses one of the finest and most comprehensive collections of Spanish art in the world, as well as selected masterpieces of modern European sculpture, from Rodin and Maillol to David Smith and Claes Oldenburg. The permanent collection of 670 objects includes paintings, sculpture, decorative arts and works on paper from the Middle Ages to the present. Artists represented include El Greco, Velázquez, Ribera, Zurbarán, Murillo, Goya, Picasso and Miró. The Meadows Museum hosts a regular program of loan exhibitions each year in its temporary exhibition galleries and sponsors an active program of public lectures, tours, films, concerts and symposia, as well as children's art programs and family days throughout the year. Museum collections are often used by SMU faculty in their courses. The museum membership program includes exhibition previews, tours of private collections and opportunities for travel. Docent tours of the collection are available to school, University and adult groups. The Meadows Museum, in addition to its collection, houses a museum store and special event rooms. Additional information is available at www.meadowsmuseumdallas.org.

Office of Information Technology

The Office of Information Technology, located in Fondren Library West, is responsible for providing computing and communications services in support of academic and administrative functions for students, faculty, staff, alumni and patrons of the University. These services include an SMU email account, access to enrollment and financial data online, Internet access, telephone services, Web-based services, technical support, and a variety of software and hardware discounts.

SMU offers high-speed network connections throughout campus. Students can take advantage of both wired and wireless connections throughout all areas of the residence halls. Wireless coverage also extends throughout the campus in most classrooms, libraries, common areas and several outdoor locations. In addition to on-campus Internet connections, OIT provides off-campus access to resources via a virtual private network connection.

All students receive an SMU email account, which remains active throughout their enrollment at the University. The email account may be accessed online via webmail.smu.edu. In addition, students have access to a variety of Web-based services, e.g., Access.SMU, personal Web space, network storage space and academic applications such as the Blackboard Course Management System. All academic information, including grade history, financial information, transcripts and class registration, is available through the Access.SMU system.

The IT Help Desk provides technical support for most computing issues from 8 a.m. to 6:30 p.m. Monday through Thursday, and from 8 a.m. to 5:30 p.m. on Friday. Evening and weekend support are available from our student staff via walk up or chat. Both phone and in-house support is available for on- and off-campus connectivity issues. The Help Desk also offers phone support for the Microsoft Office Suite and other common applications.

Although most students have their own computers, there are a number of public computer labs available for use. Almost all of the labs contain both Mac and PC workstations and support a variety of programs. There is also 24-hour computer access available in the Hughes-Trigg Student Center.

OIT also provides on-campus telephone and voicemail services for on-campus residents and discounts on cellular services, which students may obtain at any time throughout the year.

For additional information on services provided by IT, students should visit www.smu.edu/help or call the Help Desk: 214-768-HELP (214-768-4357).

ACADEMIC PROGRAMS

SMU offers degrees in five undergraduate and graduate schools and three graduate professional schools: the Dedman College of Humanities and Sciences, the Edwin L. Cox School of Business, the Dedman School of Law, the Linda and Mitch Hart eCenter, the Bobby B. Lyle School of Engineering, the Algur H. Meadows School of the Arts, the Joe and Lois Perkins School of Theology, and the Annette Caldwell Simmons School of Education and Human Development. The University offers a range of distinguished graduate and professional programs, but since its beginnings in 1915, SMU has particularly committed itself to the concept of a liberal arts undergraduate education. All SMU undergraduate degree programs reflect this commitment by encouraging students to combine broad, interdisciplinary inquiry with in-depth study in a particular field of interest.

PREFACE TO THE CURRICULUM

SMU's philosophical basis for the undergraduate curriculum is the steadfast belief that the liberal arts found and inform all the goals of higher education. The Master Plan of 1963 articulates the University's educational commitment as follows: "The essence of the educational philosophy which undergirds the Master Plan is that professional studies must rise from the solid foundation of a basic liberal education. The aim of this University, in other words, is to educate its students as worthy human beings and as citizens, first, and as teachers, lawyers, ministers, research scientists, businessmen, engineers, and so on, second. These two aims – basic and professional education, general and special, cultural and vocational (in the best sense) – will not be separated in the program of this University. It is this University's belief that they should not be, for the well-educated person is indeed a whole human being. His or her intelligence and practical interests interact in all of his or her major activities. The courses and teaching of Southern Methodist University will be so designed that these general and special aims are carried out concurrently and in relation to each other. In this way, it is SMU's aim that every graduate be truly a well-educated person."

SMU students choose from among 103 degrees in 91 fields offered by the five undergraduate schools. In addition, recognizing the increasingly fluid nature of knowledge, SMU requires students to take courses in both disciplinary and inter- or multi-disciplinary studies.

The undergraduate curriculum at SMU seeks to accomplish two interrelated goals: to provide a carefully constructed educational experience to be shared and valued by all undergraduates, and to offer students the opportunity to explore a wide variety of frontiers and vistas that will challenge and encourage further intellectual investigation not only during their years on campus but also for the rest of their lives. With these goals in mind, SMU has developed an undergraduate curriculum to reflect the depth and breadth of its educational objectives. A student's undergraduate years should ideally echo his or her first years of life in one critically important way: During those first years, intellectual vistas expand exponentially every day. A similar expansion and enrichment should occur during the student's undergraduate years. SMU encourages its students to take every advantage of the exceptional opportunities before them. The SMU curriculum provides the frame within which such life-enhancing experience can, and should, take place.

BACCALAUREATE DEGREE PROGRAMS

Dedman College of Humanities and Sciences
Bachelor of Arts
Bachelor of Humanities
Bachelor of Science
Bachelor of Social Sciences
Cox School of Business
Bachelor of Business Administration
Lyle School of Engineering
Bachelor of Science
Bachelor of Science in Civil Engineering
Bachelor of Science in Computer Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Environmental Engineering
Bachelor of Science in Mechanical Engineering
Meadows School of the Arts
Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Music
Simmons School of Education and Human Development
Bachelor of Science
(emphasis in applied physiology and enterprise *or* emphasis in sport management)

For the degrees available in specific fields of study, students should consult the appropriate school's section in this catalog.

HONORS PROGRAMS

www.smu.edu/univhonors

The University offers a variety of honors and distinction programs to encourage scholastic achievement and creativity among its very best students.

The **University Honors Program**, the largest of these special programs, is open to students of all majors across campus. The program is designed to prepare honors students to meet the challenges of rapid change and take advantage of the possibilities this dynamic world presents. To this end, the program emphasizes the values of a liberal arts education, namely, the ability to read, write and think critically, and the acquisition of a basic understanding of human society in all its dimensions. Along with these time-honored objectives, the program provides exceptional opportunities for international study and the exploration of topics across disciplines.

The University Honors Program focuses on University Curriculum courses, which are taken over the course of a student's career at SMU. Students begin with a two-term, first-year honors humanities seminar that explores and encourages critical reflection about several major concepts and works of literature that have shaped the modern world. The first term course is DISC 2305 and the second is DISC 2306. Classes are small, with 15 or fewer students. Students in these small honors sections occasionally meet together as a larger group. Out of such encounters an honors community emerges. Designed to be broad and introductory, and drawing on

material from the past and present, these offerings explore the way different disciplines raise questions and construct knowledge about the human experience.

In addition to the first-year honors humanities sequence, students are also asked to take at least three honors seminars (Pillars courses or interdisciplinary Ways of Knowing courses) from among the exciting honors offerings.

In the senior year, the honors experience culminates with a senior capstone project or thesis (for most students, done within the major), along with a one-credit course that brings students together in small peer groups in which 15 students and the professor discuss the process of writing and/or constructing this substantive project. Before the end of this final term, each student will publicly present his or her work to the honors community.

The University Honors Program seeks to create an intellectual community of students and faculty that extends far beyond the classroom. Beginning with several orientation activities designed specifically for honors students, special events throughout the year provide occasions for coming together. Honors students and faculty are encouraged to attend periodic dinners, programs, seminars and book discussions that are often organized around scholars, artists or other distinguished visitors to the campus. Honors students benefit, too, from the sense of solidarity found in campus venues dedicated especially to them, including optional community living and the Scholars' Den. The program also takes advantage of the exciting world of the Dallas/Fort Worth Metroplex. Visits to museums, studios, theatres and live-music venues allow students to experience the myriad opportunities for learning that only a large urban center can provide. At the same time, the University Honors Program at SMU is not segregated from the larger world of the campus. Honors students interact with their fellow students in nonhonors classes; in the student center; on the playing fields; and in the numerous student governing, social, preprofessional, political, cultural and social organizations that enhance student life at SMU.

The University is committed to providing both attention and resources to the University Honors Program. Enrollment in honors courses is limited, and only the most creative intellects participate in the program.

Entrance to the University Honors Program is by invitation prior to matriculation or by application after at least one term of coursework at SMU. At the end of their undergraduate years, students who maintain a 3.000 GPA in their honors courses and at least a 3.300 overall GPA receive a diploma inscribed with the designation "Honors in the Liberal Arts" in recognition of their intellectual achievements.

More information about the University Honors Program is available on the website (www.smu.edu/univhonors) or from the director, Dr. David D. Doyle, Jr. (ddoyle@smu.edu).

The **Richter Research Fellowship Program**, another significant element in the honors academic experience, allows undergraduates to travel and conduct independent research under the supervision of a faculty adviser. All honors students who have completed their second year are eligible to apply. Often this research work is connected to a student's senior honors capstone or distinction project, although that is not a requirement to apply for the fellowship. Richter projects have included researching literacy in Ghana, education for non-native English speaking children in rural California, environment–government correlation in Fiji, and women's reproductive health in Ethiopia. The Richter Fellowships are available only to those students who are members of the University Honors Program.

Department and Division Honors. In addition to the University Honors Program, individual schools, departments and divisions of the University offer honors or distinction programs to exceptional students in their upperclass years. The strongest SMU students are encouraged to participate in both of these programs – at the University level (the University Honors Program) and the departmental level. Depending on the major, such students take a series of honors courses and seminars in their departments or divisions. Many departments and divisions also frequently offer internships and research programs to upperclass students majoring in their fields. Such activities provide practical experience and specialized training within the major. Students completing honors or distinction programs within their departments or divisions graduate with the designation "Department Honors" or "Division Honors." More information on these programs can be found under the individual department and division listings in this catalog.

The following is a list of schools with honors programs and departments that offer honors within the major, with a general overview of the programs:

Dedman College	
Anthropology	Significant independent research paper
Biochemistry	Independent reading, research and a senior thesis
Biological Sciences	Independent reading, research and a senior thesis
Chemistry	Independent research project and a senior thesis
Economics	Rigorous independent project under direction of a faculty sponsor
English	ENGL 5310, followed by EITHER an independent study in which the student writes a senior thesis OR a graduate seminar; a minimum of 36 hours in the major
History	Major research project and thesis, and an oral defense before a faculty committee
Intl and Area Studies	Senior thesis and an oral exam on the topic of the thesis
Markets and Culture	SOCI 4396, distinction thesis, and an oral examination by faculty
Medieval Studies	Distinction paper (with original research), an oral exam or a review by a distinction committee
Philosophy	Substantial writing project under the guidance of a department faculty member
Physics	Independent reading, research and a senior thesis (under the direction of a department faculty member) that will be presented to a faculty committee
Political Science	Distinction thesis, oral exam and two advanced courses related to the topic of the thesis
Psychology	Departmental distinction program
Religious Studies	Directed research tutorial followed by an independent studies course and a senior thesis
Sociology	Original research (based on a topic covered in a 3000- or 4000-level course) and a journal-length article written under the supervision of a departmental faculty member, who then determines if distinction is to be awarded
World Languages	Two extra courses beyond the major requirements; at least one must include a major research paper
Cox School of Business	
B.B.A. Honors Program	Must have completed 18 hours of business honors courses (12 hours at the junior/senior level) with a 3.500 business honors GPA

Lyle School of Engineering	
Computer Science and Engineering	Departmental distinction program
Electrical Engineering	Departmental distinction program
Meadows School of the Arts	
Art History	Individual research project, defended before a committee
Communication Studies	6 hours of COMM honors courses and an honors thesis
Film and Media Arts	Thesis project
Journalism	12 hours of honors journalism and an honors thesis
Simmons School of Education and Human Development	
Applied Physiology and Wellness	Departmental distinction program

ENGAGED LEARNING

www.smu.edu/engagedlearning

SMU recognizes that students have enhanced academic experiences when they actively engage in research, service, internships and other creative, entrepreneurial activities that are related to their studies. Through the Engaged Learning program, students learn beyond the classroom as they bring their disciplinary training and intellectual capital to bear on real-world issues in real-world settings and cultivate professional skills related to their chosen fields.

Students develop their own independent learning projects or participate in engaged learning activities offered by various departments, offices and programs throughout the University. Students who are working on capstone-level projects have the opportunity to propose their work as an Engaged Learning project. Such projects are student-driven, linked to the students' education and exceed regular classroom work. SMU supports Engaged Learning projects through a grants program and notes project titles on students' transcripts under the heading "Engaged Learning, SMU's most prestigious undergraduate engagement program."

Projects typically span two academic years. Students apply during the annual November 15–February 15 application cycle, work on their projects through the summer and fall, present their findings at the Engaged Learning Forum held in the term of graduation, and turn in project reports, suitable for publication, by April 15 for May graduates or November 30 for December graduates. The Office of Engaged Learning provides structure and guidance throughout.

More information about Engaged Learning is available on the website or from the Engaged Learning staff (engagedlearning@smu.edu).

ACADEMIC ADVISING FOR SMU PRE-MAJORS

Through the University Advising Center, every student entering SMU as a first-year or pre-major transfer student collaborates with a professional academic adviser. Advisers help students acquire the skills to plan their majors and minors, schedule courses, and resolve academic problems that may arise. Computerized Degree Progress Reports provide students with detailed information concerning completion of degree requirements. The Advising Center has received national recognition for its innovative programs and outstanding staff.

ACADEMIC ADVISING FOR MAJORS

After completing 24 term hours and meeting other program admission requirements, students transfer their records to an adviser in the school that houses their major field of study. Those who elect study in the humanities, sciences or social sciences enter Dedman College of Humanities and Sciences. Others, depending on their qualifications and interests, may enter the Cox School of Business, Lyle School of Engineering, Meadows School of the Arts, or Simmons School of Education and Human Development. The University requires students to declare a major for which they qualify upon completion of 75 term hours, including credit by examination and transfer work. Upon declaration into a major in one of the schools, students work with a major adviser familiar with the field of study.

ENGLISH AS A SECOND LANGUAGE PROGRAM

www.smu.edu/esl

Students whose first language is not English may encounter special challenges as they strive to function efficiently in the unfamiliar culture of an American university setting. The Office of the University Curriculum/GEC offers the following ESL resources to students from all schools and departments of SMU. Students may apply on the ESL website. Students enrolling in 2000-level Intensive English Program courses should download an application package via the IEP link on the website. More information about the ESL Program is available on the website or from the director, John E. Wheeler (jwheeler@smu.edu).

The Courses (ESL)

ESL 1001 (0). ESL COMMUNICATION SKILLS. The goal of this course is to improve ESL students' oral and aural interactive skills in speaking, giving presentations, pronunciation, listening, and American idiomatic usage so that they may become more participatory in their classes and integrate more readily with their native English-speaking peers. It is designed to meet the needs of undergraduate and graduate students who may be fully competent in their field of study yet require specialized training to effectively communicate in an American classroom setting. The course is free of charge, noncredit bearing, and transcripted as pass or fail. *Prerequisite:* ESL Program approval required.

ESL 1002 (0). ESL COMMUNICATION SKILLS II. Building on skills developed in ESL 1001, students make use of their knowledge and practice to explore various aspects of American studies. In addition to speaking and presentation skills, reading and writing are also exploited as a means for students to gain a deeper understanding of American culture, customs, attitudes, and idiomatic use of the language. The course is noncredit and no-fee, and is transcripted as pass or fail. ESL 1001 is recommended as a precursor but is not a prerequisite. *Prerequisite:* ESL Program approval required.

ESL 20XX (0). INTENSIVE ENGLISH PROGRAM. All 2000-level ESL courses are exclusive to the Intensive English Program. This multilevel, yearlong program is designed to prepare students and professionals for academic success at the university level. The course of study consists of English for academic purposes, TOEFL-related skills, and American culture. It is open to currently enrolled and newly incoming students, as well as to those not affiliated with SMU. On-campus housing and meals are available during the 6-week summer term. This is a noncredit, nontranscripted program, and separate tuition fees are charged. *Prerequisite:* ESL Program approval required.

ESL 3001 (0). ADVANCED GRAMMAR FOR WRITERS. This course helps students develop their grammar and writing skills within the context of academic readings. Problem areas of English grammar and style are explored through periodic assignments, research documentation methods, and a final research project. The course is free of charge, noncredit bearing, and transcripted as pass or fail. *Prerequisite:* ESL Program approval required.

ESL 3002 (0). ADVANCED ACADEMIC WRITING. Building on principles of grammar and style covered in ESL 3001, this course helps students further improve the writing skills needed for their particular academic careers, using academic texts as a basis for out-of-class writing assignments and a final research project. The course is free of charge, noncredit bearing, and transcripted as pass or fail. *Prerequisite:* ESL Program approval required.

ESL 4001 (0). ESL PRONUNCIATION SKILLS. Students improve their pronunciation by focusing on sentence stress, rhythm, intonation, and body language while learning to mimic American speech patterns. With the instructor's assistance and extensive individual feedback, students develop personal strategies and exercises to become more aware of their own weaknesses. The course is free of charge, noncredit bearing, and transcripted as pass or fail. *Prerequisite:* ESL Program approval required.

DISC 1311 (3), 1312 (3), 1313 (3). ESL DISCERNMENT AND DISCOURSE. The ESL sequence of Discernment and Discourse aims to provide students with the tools they need to successfully complete writing assignments required of them during their University coursework. The ultimate goal is to bring students' analytical reading and writing skills in line with the standards expected of their native English-speaking peers. Explores the principles of effective writing that are taught in regular rhetoric classes and also gives students extra practice in vocabulary development, grammar skills, standard American English pronunciation, and conversational fluency. The DISC 1313 courses are specially designed around themes that are pertinent to the realities and experiences of non-native speakers of English. ESL sections of D&D grant students the same amount of credit as do regular D&D classes, and "ESL" will not appear on the transcript. *Prerequisite:* ESL Program approval required.

Conversation Buddy Program

Once at the beginning of each term, all students are notified via campus email of this opportunity to practice their language skills in an informal, one-on-one setting outside the classroom for one to two hours a week. Participation in this program is an option available for students enrolled in a Personal Responsibility and Wellness class to partially fulfill the out-of-class corequirements of the class; students should talk to their instructor for details. Applications for a Conversation Buddy are available via email to smithjr@smu.edu.

ESL Self-Study Lab

A collection of self-study materials is available for self-study use at the Fondren Library Information Commons. Students will find materials to help them improve their pronunciation, listening, vocabulary and grammar skills.

SMU ABROAD

www.smu.edu/abroad

Study abroad is truly part of an SMU education. SMU Abroad programs include term and academic year abroad; SMU faculty-led summer programs; on-campus fall and spring courses, with international study tours as part of the curriculum; international internships; research, service and volunteer opportunities; and cultural programs. SMU Abroad offers opportunities for students, faculty and staff to encounter diverse global communities and intellectual traditions through the program's international partnerships and initiatives. SMU Abroad programs also enhance the University's curriculum.

SMU Abroad serves the University by developing, managing and evaluating SMU's international undergraduate programs, including providing quality support services during and after the experience abroad.

Courses taken through SMU Abroad programs, once approved, count as SMU credit and are applicable toward degree requirements. The language of instruction in

most programs is English. Students in good standing at SMU and other universities may participate in SMU Abroad programs. A minimum GPA of 2.700 is required for most term programs, and between 2.500 and 3.000 for summer programs. The University reserves the right to recall students or to close international programs whenever it determines that the health or safety of its students may be at risk.

A list of SMU Abroad programs and courses is below, and an updated list of approved courses is available on the website.

SMU Abroad Term and Academic Year Programs

SMU-in-Australia. Students study in Perth, Western Australia, during the fall or spring term in a program offered in cooperation with Curtin University of Technology. The program includes an Asia study tour, and students participate in either a community service program or an internship during the term.

SMU-in-Cairo. Students study in Cairo, Egypt, during the fall or spring term in a program offered in cooperation with the American University in Cairo. The program offers courses in such disciplines as the arts, business, engineering, humanities and social science.

SMU-in-Copenhagen. Through DIS, the Danish Institute for Study Abroad, SMU students study for one or two terms in Copenhagen, Denmark. Courses are offered in environmental studies, humanities, international business and medical practice and policy. All courses are taught in English.

SMU-in-Japan. SMU students live and study for a Japanese academic year (October–July) through a well-established exchange program with Kwansei Gakuin University near Osaka, Japan. Students enroll for specially designed courses taught in English and Japanese. Students should have completed a minimum of one year of college Japanese language courses.

SMU-in-Spain. The University has a well-established program in Madrid. Participants in SMU-in-Spain should have completed four terms of college-level Spanish. Orientation trips and cultural events are an integral part of this program. Participation in the program for a full academic year is recommended, but students may attend the fall or the spring term.

SMU-in-Switzerland. In collaboration with Franklin College in Lugano, Switzerland, students study liberal arts courses with an emphasis on cross-cultural perspectives.

SMU-Affiliated Provider Term Programs

SMU partners with well-established study abroad providers worldwide. Programs are regularly updated; students should contact the Study Abroad Office located in the International Center for current information.

Bard College. The Bard College Institute for International Liberal Education offers students an international liberal arts education within a network of partner institutions. SMU's approved program is at the University of Witwatersrand in South Africa.

BCA Abroad. Since 1962, thousands of college students across the United States have participated in BCA programs. SMU-approved programs are offered in Austria, Belgium, France, Germany, Ireland, Mexico, New Zealand and Spain.

CAPA. CAPA International Education combines theme-based learning with cultural events that connect the classroom to the local environment. Through CAPA, SMU offers summer internship programs in London and in Sydney, Australia.

CET Academic Programs. CET programs integrate students into their overseas communities and lead them to create lasting relationships with their local hosts. SMU-approved programs are offered in China, Czech Republic, Spain and Vietnam.

Council on International Educational Exchange. CIEE offers SMU-approved programs in Argentina, Belgium, Botswana, Brazil, Costa Rica, the Dominican Republic, Ghana, Hungary, India, Italy, Japan, Korea, Mexico, Nicaragua, Peru, Poland, Russia, Senegal, South Africa, Sweden, Tanzania and Turkey.

EUSA. EUSA is a not-for-profit academic internship organization that implements customized, academically-directed internship programs on behalf of colleges and universities. SMU's approved business internship with EUSA is in London.

Institute for International Education of Students. One of the nation's oldest, study abroad providers, IES Abroad enrolls more than 5,000 students annually. SMU-approved programs are offered in Argentina, Australia, Austria, Chile, Ecuador, France, India, Morocco and New Zealand.

Institute for Study Abroad, Butler University. IFSA-Butler provides quality study abroad opportunities, plus academic and personal support services, for qualified North American undergraduates. SMU-approved programs are offered in Costa Rica, England, Ireland, Wales and Scotland.

School for Field Studies. SFS combines hands-on environmental studies with scientific research. SFS students work with communities to discover practical ways to manage their natural resources. SMU-approved programs are offered in Kenya and Costa Rica.

SMU Abroad Summer Programs

SMU-in-Bali: Arts, Culture and Music. This program is a three-week arts immersion experience. Classes are held at Dewangga Bungalows near Ubud, the cultural center of Bali.

SMU-in-China: Business. This program offers a three-week partnership with the Chinese University of Hong Kong, which introduces SMU Cox undergraduate business students to China's contemporary economic, political and business environment. Knowledge of the Chinese language is not necessary for this program.

SMU-in-China: Language. This program provides students with full linguistic and cultural immersion while exploring the richly historic city of Beijing. It offers two intensive language courses in modern Chinese at the intermediate level and advanced level.

SMU-in-Costa Rica: Spanish Language and Latin American Culture. This is an intensive, five-week program in the college town of Heredia. Students will have the opportunity to immerse themselves in the Spanish language and Latin-American culture of Costa Rica, and to explore the town's coffee plantations, tropical forests and volcanic national parks.

SMU-in-Edinburgh: Media Arts and Creative Computing. This program focuses on data visualization and interactive media development and design, allowing students to combine both recorded data and computer-generated imagery and sound to create a personal visualization of the city of Edinburgh in a world-class venue for digital art and performance.

SMU-in-Germany: Culture, History and Music. This summer program is designed to combine the study of the German language with the study of German history and culture and/or music conducting at the Bauhaus in Weimar, one of Germany's most beautiful and culturally rich cities.

SMU-in-Italy: Archaeology. This program gives students the opportunity to excavate in Poggio Colla, one of the most beautiful and historically important valleys of Tuscany, near the modern town of Vicchio. The excavation site was inhabited by the Etruscans between the seventh and second centuries B.C. Students will be introduced to the principles of archaeological field methods and to Etruscan civilization through lectures and field experience.

SMU-in-Italy: Arts and Culture. This program emphasizes the study of art history, cinema and studio art. Students live and study in Orvieto, a beautiful medieval hill town in Umbria. Through field trips, students have the opportunity to compare life in different urban settings, including Orvieto, Florence and Rome. Knowledge of the Italian language is not necessary for this program.

SMU-in-Jamaica: Music Therapy. This program, offered every three years, trains music therapy students and clinicians to work with diverse client populations using techniques and methodologies drawn from the diverse global music therapy community. Students learn about Jamaican music and culture, with a strong emphasis on Afro-Caribbean drumming, dancing and singing.

SMU-in London: Arts. This program provides students with the chance to participate in the street experience provided by cultural and political societies, and to experience musical, theatrical and cultural events in the vibrant city of London.

SMU-in-London: Communications. Taking advantage of London as an international center of politics, commerce and culture, this program enables students to select two courses in the field of communications. Field trips have included excursions to Bath, Brighton and Scotland.

SMU-in-Lugano: Italian Language. This is an intensive program of Italian language, culture and travel intended for beginning, intermediate and advanced students who wish to combine their study of the Italian language with Italian history and culture. The beautiful city of Lugano is in the Italian-speaking southern part of Switzerland.

SMU-in-Madrid: Advanced Spanish, Literature and Culture. This five-week immersion program held during SMU's first summer session is recommended for students who have completed SPAN 2302 and for advanced or bilingual students with a strong interest in Spanish culture and literature.

SMU-in-Morocco: Language. This is a program for students who wish to combine their study of the Arabic language with exposure to the rich culture and history of the cities of Morocco.

SMU-in-Moscow: Language and Culture. This is a program for students who wish to combine their study of the Russian language with the study of Russian history and culture. The course includes weekly excursions in Moscow and surroundings, as well as trips to St. Petersburg, Tula and Yasnaya Polyana.

SMU-in-Oxford. Students and faculty live and study in the quadrangles of University College, Oxford's oldest college. Each student takes two courses: one discussion course taught by SMU faculty and one tutorial taught by British faculty. An introduction to England is provided through trips to London, Stratford-upon-Avon and other places of interest.

SMU-in-Paris: History. Paris, at the crossroads of Europe, is the setting for this program. Focusing on French culture from a global perspective, the program takes participants to famous sites such as the Louvre, Notre Dame and the Eiffel Tower, and includes the extraordinary wealth of lesser known museums and landmarks. Knowledge of the French language is not necessary for this program.

SMU-in-Prague. The focus of this program is business management. It provides students with new perspectives on cross-cultural management and the impact of Europe's economy on today's business.

SMU-in-South Africa: Culture and Literature. Offered at the University of Kwazulu-Natal in Durban, this program brings to life the history and culture of one of the most dynamic countries in Africa. Classes include one on the history of South Africa and another centered on a unique musical theatre production.

SMU-in-the South of France: Language. This intensive French language program is based in Cannes, on the Mediterranean coast. The exceptional beauty of this part of southern France is complemented by its numerous cultural attractions. The program focuses on three language-learning levels: beginning, intermediate and advanced.

WHU Summer Institute: Business, Political and Cultural Environment in Europe. This two-week program for undergraduate students is offered at the WHU-Otto Beisham School of Management in Vallendar, Germany. The program focuses on recent shifts in the European business climate, including trade and monetary integration, innovation management, and competition in European markets.

Internships: Beijing. This opportunity abroad for Cox B.B.A. students is a full-immersion experience through work placement with SMU alumni and network professionals. Students are placed into a professional internship with a company working globally in China, and they must keep weekly journal entries and write a final paper in order to receive business credit.

Internships: London Business. This opportunity abroad for Cox B.B.A. students is offered in collaboration with EUSA, a nonprofit organization with internship programs in Europe and North America. Students are placed into a professional internship, take two courses, and receive business and political science course credit.

Internships: London Communications. This opportunity abroad for Meadows communication studies, advertising, journalism, and film and media students is offered in collaboration with CAPA, a nonprofit organization with internship programs in Europe and Asia. Students are placed into a professional internship, take two courses, and receive internship credit in the major and political science course credit.

Internships: Sydney. This opportunity abroad for all students of all majors is offered in collaboration with CAPA, a nonprofit organization with internship programs in Europe and North America. Students are placed into a professional internship, take two courses, and receive internship and political science course credit.

Note: Summer programs are subject to cancellation if not fully subscribed. More information is available from the International Center, SMU Abroad, Southern Methodist University, 6185 Airline Road, Suite 216, Dallas TX 75275-0391; phone 214-768-2338; www.smu.edu/abroad.

SMU Abroad Approved Courses

The list of courses approved for SMU credit is updated continually and posted on the SMU Abroad website. These courses require approval by the appropriate academic department. Not all courses are offered every term. Course approval procedures are available on the SMU Abroad website.

SMU-IN-PLANO AND J TERM PROGRAM

www.smu.edu/plano

In fall 1997, SMU opened a campus in Plano's Legacy Business Park with three well-defined goals: 1) to extend SMU's resources to meet the educational needs of residents in rapidly growing Collin County and beyond, 2) to make enrollment in graduate-level programs more convenient for working professionals, and 3) to collaborate with area businesses by offering programs to serve the training needs of their employees, as well as to provide corporate meeting space.

In January 2010, the SMU-in-Plano campus began hosting SMU's **J Term** program, a two-week, mini-term for undergraduates. This concentrated program allows motivated students to enroll in one three-credit-hour course and productively use this time prior to the start of the spring term to pursue or even accelerate their academic goals. For updated information, students should visit www.smu.edu/jterm.

In addition to hosting the J Term program, SMU-in-Plano serves more than 800 adult students each year (excluding enrollment in noncredit courses) through a variety of full-time, evening and weekend programs leading to Master's degrees and/or professional certificates in business administration, counseling, dispute resolution, liberal studies, education and learning therapies, engineering, and video game technology (The Guildhall at SMU). During the summer, nearly 2,000 children participate in a variety of programs designed to enhance their academic skills. The campus also provides important outreach services to the surrounding Collin County communities; these services include the Mediation and Arbitration Center, the Diagnostic Center for Dyslexia and Related Disorders, and the Center for Family Counseling.

Conveniently located about one mile south of the intersection of state Highway 121 and the Dallas North Toll Road, SMU-in-Plano sits in the shadows of the international corporate headquarters of Hewlett Packard, Frito Lay, JCPenney, Pizza Hut and several others. Originally the training facility for EDS (now HP), the campus is set on 16 landscaped acres and consists of four buildings with nearly 200,000 square feet of classroom space. An additional nine acres adjacent to the facility gives SMU-in-Plano room to grow in the future.

More information is available online or through the SMU-in-Plano office: 5236 Tennyson Parkway, Building 4, Plano TX 75024; 972-473-3400.

SMU-IN-TAOS

www.smu.edu/taos

The University maintains an academic campus at Fort Burgwin, located 10 miles southeast of Taos, New Mexico. SMU-in-Taos is open for summer study, offering courses in the humanities, natural and social sciences, business, performing and studio arts, as well as archaeological research.

Students are housed in small residences called casitas. Each residence has separate dorm rooms, complete lavatory and shower facilities, and a large study area with fireplace. Classrooms, offices, an auditorium, dining hall, library, computer lab and laundry facilities also are located on campus.

The campus is home to historic Fort Burgwin. Pot Creek Pueblo, one of the largest prehistoric sites in the northern Rio Grande Valley, is also located on the property. This site is one of the ancestral homes of modern-day Taos and Picuris pueblos, and was occupied from A.D. 1250 to 1350.

Historic Fort Burgwin was originally established in 1852. The fort served many purposes, chief among them to protect area settlers, prior to its abandonment in 1860, just before the Civil War. Reconstructed, the fort now serves as office and classroom space for campus academic programs.

Three summer terms are regularly offered in Taos: a May term, June term and August term. May and August are short, intense terms in which students may take up to four credit hours. The June term is a longer, more traditional summer term that allows students to take up to nine hours of coursework. Course offerings vary year-to-year and are designed to be relevant to the Southwest. Courses are heavily field trip oriented to take advantage of the campus's proximity to important northern New Mexico cultural sites.

Literature describing the campus and its programs is available by contacting the SMU-in-Taos Office, Southern Methodist University, PO Box 750145, Dallas TX 75275; phone 214-768-3657. Course descriptions and additional information can be found online or obtained via email (smutaos@smu.edu).

RESERVE OFFICERS' TRAINING CORPS

Aerospace Studies: Air Force ROTC

Air Force ROTC courses are not offered on the SMU campus; however, students at SMU who wish to earn appointments as commissioned officers in the U.S. Air Force may participate in the Air Force general military course and professional officer course through the University of North Texas in Denton. The Air Force ROTC program develops skills and provides education vital to the career officer. Active-duty Air Force personnel provide all instruction and program administration. Students who participate in the UNT Air Force ROTC program are responsible for their own travel and other physical arrangements.

The program is open to all students. First-year students may enroll in the four-year program, and students with at least three undergraduate or graduate academic years remaining may apply for the two- or three-year program. Scholarships, available to qualified students, provide full tuition, fees, textbook allowance and a monthly tax-free subsistence allowance ranging from $300 to $500. National competition is based on SAT or ACT test results, Air Force Officer Qualifying Test results or college academic records, and extracurricular and athletic activities. Uniforms and textbooks for Air Force ROTC courses are issued at no cost to cadets.

Students register for the aerospace studies courses at the same time and in the same manner as they register for other SMU courses. The Air Force ROTC courses are fully accredited and may be taken as electives in most academic majors. Successful completion of degree requirements and the Air Force ROTC program can lead to a commission as a second lieutenant in the United States Air Force. Students with at least six months of active military service may be granted waivers on a portion of the general military course.

For more information, students should contact Air Force ROTC, University of North Texas, PO Box 305400, Denton TX 76203; 940-565-2074; det835@unt.edu.

Army ROTC

Army ROTC courses are not offered on the SMU campus; however, students can participate in the Army ROTC program at the University of Texas at Arlington by enrolling as they enroll for other SMU courses. Further program information and

application procedures may be obtained by contacting the UTA Department of Military Science at 817-272-3281. Students who participate in the UTA Army ROTC program are responsible for their own travel and other physical arrangements.

Army ROTC offers students the opportunity to graduate as officers and serve in the U.S. Army, the Army National Guard or the U.S. Army Reserve. Army ROTC scholarships are awarded on a competitive basis. Each scholarship pays for tuition and required educational fees and provides a specified amount for textbooks, supplies and equipment. Each scholarship also includes a subsistence allowance of up to $1,000 for every year the scholarship is in effect.

Students can enroll in the Army ROTC on-campus program as they enroll for other SMU courses. Army ROTC courses are listed in the Lyle School of Engineering section of this catalog under Reserve Officers' Training Corps and in the Access.SMU schedule of classes under ROTC. Permission to enroll must be obtained from Karen Coleman at kcoleman@engr.smu.edu or 214-768-3039.

CONTINUING AND PROFESSIONAL EDUCATION

The Office of Continuing and Professional Education provides noncredit courses that address different cultural, scholarly, personal and professional topics for the community, a practice that has been part of the SMU tradition since 1957. CAPE offers a selection of courses for open enrollment each fall, spring and summer term. Additional information is available at www.smu.edu/cape.

Personal Enrichment. CAPE classes – historically, *Informal Courses For Adults* – are generally short sessions on topics for enjoyment and reflection. Courses offered for personal enrichment include several major areas of exploration: personal finance, communication and workplace skills, history and science, literature, food and travel, and the fine arts (e.g., studio art, music, architecture, photography and art history). CAPE also offers noncredit language conversation courses, including courses in Spanish, French, Italian, German, Arabic, Russian, Mandarin Chinese, Japanese, Korean and American Sign Language.

Test Preparation. Study courses for the SAT, ACT, GRE, GMAT and LSAT are offered throughout the year. Information is available at www.smu.edu/testprep.

Professional Training and Development. For those who are seeking professional achievement or a new career direction but who are not interested in a traditional undergraduate or graduate degree-granting program, CAPE currently offers noncredit courses to enhance workplace skills, as well as **Certificate Programs** in

- Nonprofit leadership, together with the Center for Nonprofit Management (www.smu.edu/nonprofit).
- Paralegal studies (www.smu.edu/paralegal).
- Graphic design (www.smu.edu/graphicdesign).
- Web design (www.smu.edu/webdesign).
- Financial planning, with the option to test for national certification (www.smu.edu/cpfp).

Students complete certificate programs by taking a series of classes over weeks or years, depending on the specialization and the student's schedule. Cohort and independent options are available, with some classes being offered online. Upon successful completion of the program, students receive a transcript and a certificate of completion from SMU.

SMU's Summer Youth Program offers one-week, special-interest enrichment workshops throughout the summer for those entering grades K–12. Workshop topics include technology, computers, gaming, digital media, LEGO learning, science, creative arts, math, reading and writing, study and social skills, test preparation, and college planning. More information is available at www.smu.edu/SummerYouth.

Online Learning. CAPE partners with national leaders in online teaching and learning to offer a growing library of self-paced, practical, career-enhancing courses that can be accessed from home and office computers. Additional information is available at www.smu.edu/capeonline.

The vice president for student affairs oversees programs, services and activities that complement students' academic pursuits and promote their development, success and cocurricular learning. The Division of Student Affairs includes the Department of Student Programs and Development, the Department of Residence Life and Student Housing, the Memorial Health Center and Counseling Center, the Hegi Family Career Development Center, the Dedman Center for Lifetime Sports, the Office of the Chaplain, and the Office of the Dean of Student Life.

The mission of the Division of Student Affairs (www.smu.edu/studentaffairs) is to develop, with others in the University, opportunities for students to become productive citizens through the creation of challenging environments that contribute to students' intellectual, spiritual, physical, social, cultural, moral and emotional growth, and, in so doing, engage them with the widest range of persons within the University and beyond. Throughout the Division of Student Affairs, students will encounter caring professionals who are trained and skilled in their own specialties and are professional educators dedicated to assisting students in developing their full potential. The focus of Student Affairs is one of education and guidance, not merely problem-solving. The role of the staff is, along with the faculty, to assist the student in reaching true maturity and to prepare the student to take a useful place in society.

Concern for and realization of the full development of each student in and out of the classroom constitutes one of the major goals of the University. Consequently, SMU's Student Affairs programs are designed to support and supplement SMU's formal academic work. Many departments exist to provide services for the benefit and convenience of SMU students. The Division of Student Affairs encompasses a broad range of programs and services dealing with housing and residential matters, physical and mental wellness, personal and career counseling and testing, recreational sports and intramurals, religious affairs, multicultural student programs, as well as student conduct and community standard matters, new student orientation, leadership programs, volunteer opportunities and women's programs.

STUDENT LIFE

Student Life departments educate students and the SMU community by providing purposeful opportunities for learning, personal growth, clarifying values and developing skills that promote responsible citizenship. The Office of the Dean of Student Life (www.smu.edu/studentlife), located in Hughes-Trigg Student Center, is a resource for students to consult when they need general information and assistance. The dean serves as a primary liaison for students and parents who have concerns about any aspect of their SMU experience.

ACADEMIC INTEGRITY AND CODE OF CONDUCT

The Honor Code of Southern Methodist University

Intellectual integrity and academic honesty are fundamental to the processes of learning and of evaluating academic performance, and maintaining them is the responsibility of all members of an educational institution. The inculcation of personal standards of honesty and integrity is a goal of education in all the disciplines of the University.

The faculty has the responsibility of encouraging and maintaining an atmosphere of academic honesty by being certain that students are aware of the value of it, that they understand the regulations defining it, and that they know the penalties for departing from it. The faculty should, as far as is reasonably possible, assist students in avoiding the temptation to cheat. Faculty members must be aware that permitting dishonesty is not open to personal choice. A professor or instructor who is unwilling to act upon offenses is an accessory with the student offender in deteriorating the integrity of the University.

Students must share the responsibility for creating and maintaining an atmosphere of honesty and integrity. Students should be aware that personal experience in completing assigned work is essential to learning. Permitting others to prepare their work, using published or unpublished summaries as a substitute for studying required material, or giving or receiving unauthorized assistance in the preparation of work to be submitted are directly contrary to the honest process of learning. Students who are aware that others in a course are cheating or otherwise acting dishonestly have the responsibility to inform the professor and/or bring an accusation to the Honor Council.

Students and faculty members must share the knowledge that any dishonest practices permitted will make it more difficult for the honest students to be evaluated and graded fairly and will damage the integrity of the whole University. Students should recognize that both their own interest, and their integrity as individuals, will suffer if they condone dishonesty in others.

The Honor System

All SMU students, with the exception of graduate students enrolled in the Cox School of Business, Dedman School of Law or Perkins School of Theology, are subject to the jurisdiction of the Honor Code (www.smu.edu/studentlife, "Student Handbook" link) and as such are required to demonstrate an understanding of and to uphold the Honor Code. In support of the Honor Code, the Honor Council has the responsibility to maintain and promote academic integrity. The Honor Council is composed of a minimum of 27 members selected through an application and interview process organized by the Honor Council Executive Board. Five faculty members, nominated by the Faculty Senate, also serve on the Honor Council.

Academic dishonesty includes plagiarism, cheating, academic sabotage, facilitating academic dishonesty and fabrication. Plagiarism is prohibited in all papers, projects, take-home exams or any other assignments in which the student submits another's work as being his or her own. Cheating is defined as intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise. Academic sabotage is defined as intentionally taking any action that negatively affects the academic work of another student. Facilitating academic dishonesty is defined as intentionally or knowingly helping or attempting to help another to violate any provision of the Honor Code. Fabrication is defined as intentional and unauthorized falsification or invention of any information or citation in an academic exercise.

Suspected cases of academic dishonesty may be handled administratively by the appropriate faculty member in whose class the alleged infraction occurred or referred to the Honor Council for resolution. Suspected violations reported to the Honor Council by a student or by an instructor will be investigated and, if the

evidence warrants, a hearing will be held by a board composed of a quorum of four members of the Honor Council.

Any appeal of an action taken by the Honor Council shall be submitted to the University Conduct Council in writing no later than four calendar days (excluding school holidays) after notification of the Honor Council's decision.

Code of Conduct

The following are University procedures and standards with which every student must become familiar. The University considers matriculation at SMU an implicit covenant and a declaration of acceptance on the part of the student of all University regulations. As part of the Office of the Dean of Student Life, the Student Conduct and Community Standards Office (www.smu.edu/studentconduct) assists students in their personal development by providing a fair conduct process that issues consistent sanctions for behavior that is incongruent with the University's expectations for students.

Conduct. Standards of conduct are established through faculty, student and administrative efforts and are under continuous evaluation by the entire University community in order to assure reasonable and fair limits. At SMU, the student is assumed to have a high degree of loyalty and responsibility to the University and its well-being, as well as to himself or herself in personal, social and intellectual pursuits; the student's behavior both on and off campus is evidence of this.

Students at SMU will discover that they are encouraged to exercise a great amount of personal freedom as well as accompanying responsibilities. Through their personal capacities for intelligent thought and action, mature students understand that there are situations in which certain behavior must be modified for the benefit of others. The University stands firm in its commitments to the rights and freedoms of students, expecting in return the same respect and concern.

The University expects all students to be responsible citizens and to abide by all federal, state and local laws. Personal irresponsibility – including, but not limited to, that evidenced by dishonesty, gambling, hazing, irresponsible conduct and the misuse of drugs and alcohol – renders a student subject to disciplinary action. Although most specific regulations pertain to a student's behavior while on campus, a lack of personal responsibility and integrity is always considered grounds for discipline no matter where it occurs. Due respect for the entire University community, faculty, staff and one's fellow students is always expected.

Students are required to identify themselves when asked by a properly identified faculty or staff member, or by another student serving as a University staff member. Persons who are not members of the University community and without business on campus may be asked to leave.

Disciplinary Action. Clear disciplinary procedures are an important part of the mission of SMU as an educational institution. The intent of the system of due process at SMU is to be educational and not merely punitive for students. The goal continues to be to produce quality citizens. It is pertinent to the purpose of discipline to remember that self-discipline is part of the entire educational process, whereby students become more fully aware of the importance of responsibility for themselves and others. Anytime a student displays irresponsible behavior, that student will be subject to discipline.

Depending on the degree of misconduct, a student may be subject to sanctions ranging from a conduct reprimand to expulsion from the University. Should a student be asked to leave the University, he or she should do so in an expeditious and peaceful manner. The student should remain off campus until he or she receives written permission from the Office of the Dean of Student Life to return to campus. In the event of such separation, a student is still responsible for University financial obligations.

The University believes in student representation on all disciplinary bodies. To ensure fairness and due process for all students in the conduct process, the student is granted an impartial hearing and the right to appeal to the University Conduct Council. A student who is appealing a sanction may remain in school until the decision and penalty are reviewed, unless considered harmful to the University, to any individual or to himself or herself. All actions by the council are subject to presidential review.

Having voluntarily enrolled as students at Southern Methodist University and assumed a place in the University community, all students are presumed to be knowledgeable of, and have agreed to abide by, the rules and regulations set forth in the Student Code of Conduct, as outlined in the *SMU Student Handbook*, which is available online at smu.edu/studentlife.

NEW STUDENT ORIENTATION AND STUDENT SUPPORT

www.smu.edu/newstudent

The Office of New Student Orientation and Student Support provides on-going programs and services that support new students and families in transition to SMU. Academic Advising, Registration and Orientation takes place in May, July, August and January for all incoming students. In addition to AARO, the office also coordinates Mustang Corral, an off-campus orientation retreat.

STUDENT ACTIVITIES

Involvement outside the classroom is a tradition at SMU. Research shows that students who get involved outside the classroom tend to be more successful during their college experience. The Department of Student Activities provides more than 160 extracurricular opportunities for SMU students through 33 academic and professional associations, five campus programming councils, nine community service coalitions, 28 fraternities and sororities, eight governing boards, six honor societies, 15 multicultural societies, two political organizations, 17 recreational athletic clubs, 33 religious organizations, and 15 special-interest groups. The department can also assist students in forming a new organization. Higher education professionals advise and support specific areas of involvement, including diversity, programming and governance, and are available to answer student's day-to-day questions about getting involved. The mission of the Department of Student Activities is to advise and support student organizations and to encourage student development through involvement.

The Student Activities Office

The Student Activities Office, located on the third floor of the Hughes-Trigg Student Center, is the hub of activity for SMU student organizations. Permanent office space is provided for major campus-wide student groups. More than 160 campus organiza-

tions have their activities coordinated through this area. Many out-of-class programs planned and implemented by students are considered cocurricular in that they are designed to complement a student's educational experience. These student groups and their committees provide ample opportunity for students to become involved as leaders or participants.

Student Government

Through SMU's system of representative governance, students participate with faculty and administration in the University's decision-making process. The primary voice of students in this process is the student-elected Student Senate. The Student Code of Conduct in the *SMU Student Handbook* is reviewed and updated annually in conjunction with the Student Senate and contains the student code of rights and responsibilities.

Eligibility Requirements

Campus activities and organizations are an integral part of the developmental experience for SMU students. Leadership skills and interpersonal, social and cultural enhancement are but some of the benefits associated with out-of-class participation. Accordingly, students who hold office in a student organization or represent the University as a member of a sponsored campus group (Mustang Band, University Choir, etc.) must be matriculated in a University degree-granting program and may not be on academic probation.

MULTICULTURAL STUDENT AFFAIRS

The Multicultural Student Affairs Office provides support to the multicultural student population and maintains an inclusive campus community. The department works with and/or advises more than 20 culturally based student organizations, including the Asian Council, Association of Black Students and College Hispanic American Students. In addition to the work with organizations, the office develops and implements programs such as the Multicultural Gala, Multicultural Academic Achievement Awards, Leadership Retreats, and the CONNECT Mentoring Program. The staff in the office is here to assist and support students in every aspect of their college experience. The mission of the office is to work collaboratively with the campus community to provide support for students of color, focusing specifically on holistic development, advocacy and comprehensive student success. The office works to create an environment that fosters inclusivity and a deeper understanding of diversity.

INTERNATIONAL CENTER

www.smu.edu/international

The International Center houses the SMU Abroad Office and the International Student and Scholar Services Office. The center supports students and faculty who are not U.S. Citizens or permanent residents, as well as their families. The International Center is located in the Laura Lee Blanton Student Services Building.

INTERNATIONAL STUDENT AND SCHOLAR SERVICES

www.smu.edu/international/isss

The International Student and Scholar Services Office provides immigration services to students, scholars and professors from around the globe who are engaged in academic studies or cultural exchange projects at SMU. The office coordinates pre-

arrival information, ensures compliance with current federal guidelines, and provides cultural and educational programming opportunities to SMU's international community.

FRATERNITY AND SORORITY LIFE

www.smu.edu/fs

Fraternities and sororities exist to develop an individual's potential through leadership opportunities and group effort. These groups are a social network for students at Southern Methodist University. Fraternities and sororities were among the first organizations at SMU and one of SMU's longest standing traditions. There are 16 national fraternities and 14 national sororities on campus. The governing bodies for these groups are the Interfraternity Council, the Multicultural Greek Council, the National Pan-Hellenic Council and the Panhellenic Council. Students must meet the requirements as indicated in the *SMU Student Handbook* (Student Code of Conduct section 5.2(b) and/or council and Fraternity and Sorority Life requirements) to join a fraternity or sorority. More details on fraternity and sorority programming and recruitment are available from the Fraternity and Sorority Life Office or the website.

STUDENT CENTER

Hughes-Trigg Student Center

www.smu.edu/htrigg

Hughes-Trigg Student Center is the hub of student life at SMU, bringing together members of the University community with emphasis on the pursuit of educational programs, student activities and services. The center is fully accessible and features important services and resources to meet the daily needs of students, faculty, staff and visitors. These include a 500-seat theatre, a multipurpose ballroom, a 100-seat high-tech forum, 18 meeting rooms and the offices of various organizations and departments. In addition, the facility houses an art gallery, a 24-hour computer lab, a commuter lounge and several retail operations. Students may study in comfortable public lounge areas, snack or dine in the Mane Course, conduct small or large meetings, send faxes, practice the piano or get the latest information on special events. Open from early morning until late evening, the center provides cultural, social and educational programs and resources to foster personal growth and enrich cultural, social, educational and recreational experiences. More than a building, Hughes-Trigg is "the living room of the campus."

STUDENT MEDIA

The student media experience at SMU is one that offers aspiring media professionals the opportunity to work and learn in a fully converged news operation that combines print, online and broadcast platforms. Editors, writers and photographers of the *Daily Campus*, SMU's independent newspaper, work together with directors and videographers of SMU-TV, the student-run broadcast journalism program, to share content and produce timely and compelling packages for a shared news website at www.smudailycampus.com. SMU student media opportunities also include the student yearbook, *Rotunda* (www.smurotunda.com), which has annually chronicled the life and times on The Hilltop since 1915.

COMMUNITY ENGAGEMENT AND LEADERSHIP

www.smu.edu/cel

The Community Engagement and Leadership Center provides intentional learning opportunities and facilitates mutually beneficial relationships that support the development of students who have a lifelong commitment to ethical leadership and engaged citizenship. Leadership programs include workshops and conferences. Community engagement resources, training and opportunities are offered that enable students, alumni, faculty and staff to work with local agencies in community outreach activities and experiential education. The center maintains a current listing of volunteer and service-learning opportunities and serves as a resource for student service organizations. Students gain leadership experience through Alternative Break (service trips occur during every academic break), Mustang Heroes, Alpha Phi Omega, Rotoract, Si Puedes, Circle K International, Best Buddies and Habitat for Humanity. In addition, LEAD, the Leadership, Education, Activities and Development organization, coordinates the Emerging Leaders program for first-year students and the Crain All-University Leadership Conference for all SMU students.

VETERANS SERVICES

The Division of Student Affairs provides a coordinator of veteran support and services through the Office of the Dean of Student Life. The coordinator helps veterans navigate the campus community and connect with available resources on campus and in the greater Dallas community. A chartered student organization, U.S. Military Veterans of SMU (SMU MilVets), meets regularly to provide support to fellow veterans and to participate in fundraisers, care package drives and other activities during football games. In addition, the University Registrar's Office certifies veterans each term for their benefits under federal programs and the Office of Financial Aid works to provide individual aid packages. More information regarding services and benefits for veterans is available at www.smu.edu/registrar ("Veterans Affairs" link).

WOMEN'S CENTER

www.smu.edu/womenscenter

The Women's Center for Gender and Pride Initiatives of Southern Methodist University empowers students within the University to increase awareness and understanding of gender equity issues. The center aims to eliminate barriers, diminish prejudices, and create a supportive climate and space for all. Through advocacy, information, referral services and leadership experiences, the Women's Center provides a safe haven for students struggling with issues of injustice and oppression. Student organizations advised here include the Women's Interest Network; Campus YWCA; Women in Science and Engineering; and Spectrum, the lesbian, gay, bisexual, transgender and ally organization. Also housed in the Women's Center is the SMU Women's Symposium (www.smu.edu/womsym), which is part of The Education of Women for Social and Political Leadership series, established in 1966. The center provides an informal, homelike atmosphere where members of the SMU community can meet.

OFFICE OF THE CHAPLAIN AND RELIGIOUS LIFE

www.smu.edu/chaplain

The Office of the Chaplain and Religious Life offers resources of pastoral care and theological reflection that nurture the spiritual maturation, moral and ethical vision and character of students, faculty and staff.

Chaplain Stephen W. Rankin is the pastor and minister to the University community. Chaplain Rankin leads and preaches at University Worship, an ecumenically Christian all-University service of worship in the Methodist tradition, in Perkins Chapel each Sunday during the term. Students, faculty and staff are invited to participate in this service, whether through music, scripture readings or other expressions of worship. Other services, including the University Service of Memory, Ash Wednesday Service and memorial services as needed, are also planned and implemented by the Office of the Chaplain.

Presently, there are more than 30 religious life organizations. Alongside the Christian groups aligned with denominations, local Dallas-area congregations or national parachurch ministries, SMU also has an active Hillel chapter for Jewish students, a bustling Muslim Student Association and other faith groups of various traditions. A large number of undergraduate, graduate and professional students, as well as many of SMU's faculty, staff and administrators, participate in these dynamic religious communities.

In cooperation with the Department of Residence Life and Student Housing, the Office of the Chaplain places a resident community chaplain in each residence hall. The RCC is a graduate student at the Perkins School of Theology who provides a listening ear and pastoral presence for students, helping them navigate the sometimes confusing concerns of life.

Additionally, the Office of the Chaplain partners with faculty members across campus to direct the Faith and Learning Scholars, a new initiative involving a cohort of upperclass students who want the experience of integrating their faith with their academic pursuits. Similarly, the Civil Rights Pilgrimage, founded in 2004, offers students the opportunity to journey through the South while earning academic credit.

Chaplains are available for personal counseling and spiritual direction with students, faculty and staff during office hours. The Office of the Chaplain is located in the Hughes-Trigg Student Center, suite 316. Adjacent to this office is the Quiet Place, a setting for meditation, prayer and reflection for all faiths. The Quiet Place is open daily and available with no prior reservation needed.

HEGI FAMILY CAREER DEVELOPMENT CENTER

www.smu.edu/career

The Hegi Family Career Development Center guides and encourages students and alumni in the development of skills necessary for lifelong career management in the evolving world of work. The center provides a comprehensive set of services to assist each individual in the development of career plans and specific strategies leading to the desired employment goal.

Career Counseling. SMU students and alumni can schedule career counseling appointments to investigate different career paths. By exploring their interests, values and personality through the use of assessments, clients can increase their

self-awareness and make stronger career decisions. Counselors are available to help clients develop an individualized career action plan.

On-Demand Advising. The Career Center offers 15-minute sessions to drop-in visitors on a first-come, first-served basis. On-call counselors are available to introduce students to the Career Center's services and to address any time-sensitive career needs. Office hours are 11 a.m.–noon and 1–3 p.m. weekdays.

MustangTrak. The Career Center manages MustangTrak, a job posting service offering thousands of opportunities specifically targeted to the SMU student population. The online database includes full-time jobs, part-time jobs, volunteer opportunities and internships for all majors. MustangTrak is also used to manage on-campus recruiting interviews.

Career Fair. The Career Center hosts two Career and Internship fairs featuring more than 90 employers and more than 700 student participants. Employer participants include representatives from sectors such as business, technology, education, government and nonprofit. Students and alumni from all majors are welcome to attend.

SMU Connection. SMU Connection, which is a partnership between SMU's Office of Alumni Relations and Engagement and the Hegi Family Career Development Center, helps students to have a firm understanding of today's competitive, ever-changing job market, and it offers opportunities for students to develop an industry network before they graduate. SMU Connection also hosts OneDay Externship, a program that provides SMU undergraduate students with the foundation for a successful career development and major choice.

Career Events and Workshops. Specialized recruitment and networking events take place throughout the year. Events include Speed Networking, Résumania, industry-specific panels and career-related training. These events offer an opportunity to network with employers and alumni and to learn the skills necessary to be successful in the workplace.

Career Development Ambassadors. CDA is a group of students who help educate their peers about resources available at the Hegi Family Career Development Center. CDAs are chosen by Career Center staff, and they receive specialized training that equips them to represent and promote the center.

HEALTH SERVICES

SMU Memorial Health Center

www.smu.edu/healthcenter

The University's health facilities are located in the SMU Memorial Health Center, 6211 Bishop Boulevard. An outpatient primary care clinic, specialty clinics, pharmacy, and lab/X-ray facilities occupy the first floor. Counseling and Psychiatric Services, and the Office for Alcohol and Drug Abuse Prevention are located on the second floor. The Health Center is accredited by the Accreditation Association for Ambulatory Health Care Inc.

Outpatient Medical Services. SMU provides a convenient, economical medical clinic for diagnosis and treatment of illness and injury, as well as for immunizations and continuation of treatment such as allergy injections. The clinic is staffed by physicians, physician's assistants, registered nurses, medical assistants, and lab and X-ray technologists. Physicians are available by appointment 8:30 a.m.–4 p.m.,

Monday through Friday. For appointments and health information, students should call 214-768-2141.

Patient Observation. When ordered by a staff physician, a student may be held in observation between 8:30 a.m. and 5 p.m., Monday through Friday. Observation is available for most types of non-major medical treatment. When necessary, students are referred to medical or surgical specialists in Dallas. The patient will be responsible for the costs of these services.

Acute/After Hours Care. For emergency care after clinic hours, it is recommended that students call 911 or go to a hospital emergency room. Students should refer to the Health Center website (www.smu.edu/healthcenter) for hospital information and location of an urgent care facility.

Costs. Undergraduate and graduate students pay a mandatory health center fee and receive fully covered primary care physician services at the Health Center for that term, as well as counseling and psychological services and access to health education programs. Appointments with the gynecologist or dermatologist, lab, X-ray, pharmacy, and supplies are charged at reasonable rates.

Mandatory Health Insurance Policy. To ensure that students have appropriate health care coverage, SMU requires all domestic students, both undergraduate and graduate, taking nine or more credit hours to have health insurance through either an individual/family plan or the University-offered plan. All international students taking one or more credit hours must enroll in the University-offered plan unless they have a special waiver personally granted by the Health Center staff.

SMU's mandatory policy requires those students with the enrollment status mentioned above to provide documentation of current insurance coverage or to enroll in the Student Health Insurance Plan by the drop/add date each term. Students can enroll in SHIP, after they have enrolled for classes, by selecting the "Health Insurance" button on the "Student Center" component of Access.SMU. A domestic student who already has private health insurance coverage must waive SHIP coverage to avoid automatic enrollment into the plan and thereby have the semi-annual premium charge applied to his/her University account. Waivers will not be accepted nor will changes be made after the deadline each term. For more information and instructions on how to WAIVE or ELECT coverage, students should visit www.smu.edu/healthinsurance. **Note**: Health insurance is separate from the student Health Center fees and is paid for independently.

Pharmacy. A complete pharmacy with registered pharmacists is open from 8:30 a.m. to 5 p.m., Monday through Friday. Many prescription plans are accepted, and the pharmacy will transmit pharmacy claims to a student's insurance company if provided with the student's pharmacy benefits information.

X-ray and Laboratory Services. X-ray and laboratory tests are available for nominal fees. All X-rays are interpreted by a radiologist.

Immunizations. All students (undergraduate, graduate, part-time and full-time, to include international and IEP/ESL students) are required to have an SMU medical history form on file in the SMU Health Center before registration. To comply with SMU policy, all students must also submit to the Health Center immunization records that provide proof of immunization against measles, mumps and rubella. These MMR immunizations must be documented by a physician, public health record, military health record or school health record. Students will not be allowed to register without immunization compliance.

Students are encouraged to check their Access.SMU account for immunization status. Immunizations are available at the Health Center. Health history forms are available on the Health Center's website at www.smu.edu/healthcenter.

Meningitis Vaccination. Effective January 1, 2012, Texas state law requires that all new students under the age of 30 must provide documentation demonstrating they have been vaccinated against bacterial meningitis. The documentation must show evidence that a meningitis vaccine or booster was given during the five-year period preceding and at least 10 days prior to the first day of class of the student's first term. Students should provide the documentation at least 10 days before the first day of class. Students seeking exemption from this requirement due to health risk or conscience, including religious belief, should see the second page of the SMU medical history health form. More information is found under Final Matriculation to the University in the Admission to the University section of this catalog.

Class Absence Due to Illness. Students should schedule appointments with physicians at times when classes will not be missed. The Health Center does not issue excuses from classes for illness. Students should refer to the Health Center website (www.smu.edu/healthcenter) for the Class Absence Policy.

Notification of Parents. Students are encouraged to call one or both parents when ill. Parents or guardians will be notified in cases of life-threatening illnesses. The Health Center staff may not speak to parents without the student's permission.

Health Service Records. All health service records are confidential. A copy of medical records may be released to a physician only with a written release by the student. Records are not made available to parents, SMU administrators, faculty or staff without the student's written consent.

Counseling and Psychiatric Services. CAPS provides psychiatric evaluation, crisis intervention and group/individual/couples psychotherapy for students. All interviews are conducted on a voluntary and confidential basis. There is no charge to students who have paid the University health fee. Students can seek confidential help for concerns such as anxiety, depression, relationship issues, career/life planning, sexual identity, eating/body image concerns and sexual assault/sexual harassment matters. Any laboratory tests or pharmaceuticals ordered will be charged to the student. For more information regarding scheduling appointments, students should call 214-768-2277 between 8:30 a.m. and 5 p.m., Monday through Friday, or visit www.smu.edu/counseling.

Testing Services. Testing Services offers testing to the Dallas-area community. These services include on-campus administration of national testing programs such as the SAT, LSAT, GRE Subject and PRAXIS. Other testing offered includes CLEP tests and correspondence examinations for other universities. For additional information, students should call the center at 214-768-2269.

Office for Alcohol and Drug Abuse Prevention. This office provides a free and confidential source of help and information to the SMU community on issues related to substance abuse and addiction. Appointments for counseling or assessment can be made between 8:30 a.m. and 5 p.m., Monday through Friday by calling 214-768-4021. More information is available at www.smu.edu/liveresponsibly.

Office of Health Education and Promotion. This office serves as a resource for health information on campus. It promotes programs and activities that focus attention on health-related issues affecting college students. Students can get involved with health education on campus through the Peer Advising Network. More

information is available from the Health Center (phone: 214-768-2393; website: www.smu.edu/healthcenter/healtheducation.

HOUSING

The Department of Residence Life and Student Housing seeks to advance the goals and objectives of the University by creating residential communities that empower residents to value learning, citizenship and leadership in comfortable, well-maintained facilities. RLSH is responsible for the campus residential community, including all residence halls, SMU-owned apartments and SMU-owned Greek chapter houses. This responsibility includes maintaining facilities that are well cared for and that enhance opportunities for students to grow personally and excel academically.

CHILD CARE

SMU provides a licensed child care center for children ages 1 month to 5 years on a space-available basis. More information is available at www.smu.edu/childcare or from the director of the center at SMU Preschool and Child Care Center, Southern Methodist University, PO Box 215, Dallas TX 75275-0215; phone 214-768-2278.

RECREATIONAL SPORTS

Dedman Center for Lifetime Sports

Dedman Center for Lifetime Sports (www.smu.edu/recsports) is a facility designed for recreational sports and wellness. A 170,000-square-foot expansion and renovation was completed in 2006. The center provides racquetball courts; aerobic studios; an indoor running track; basketball courts; indoor and outdoor sand volleyball courts; climbing wall; bouldering wall; 25-meter, five-lane recreational pool; 15,000 square feet of fitness and weight equipment; lobby; and café. Various fitness classes are offered. These facilities are open to SMU students, faculty, staff and members.

Services and programs available include, but are not limited to, intramural sports, sport clubs, the Outdoor Adventure program, personal training and assessments, massage therapy, swimming lessons and camps.

Fitness. SMU Fitness offers group exercise classes, personal training sessions and massage therapy. The group exercise (Group X) classes are offered throughout the day to accommodate early birds, night owls and everyone in between. A variety of different types of cardio, strength and flexibility classes are available. Experienced and knowledgeable trainers offer sessions to train clients, either one-on-one or in groups, to meet their personal fitness goals. Licensed massage therapists offer chair or full-body massages. All SMU Fitness programs have a fee for participation.

Intramural Sports. Many opportunities for team and individual competition are available through intramurals. Various leagues provide year-round opportunities to participate in a wide variety of activities. The five major sports are football, volleyball, basketball, soccer and softball. Other sports and activities offered are bowling, golf, racquetball, tennis, track, swimming and game room activities. Additional leadership opportunities are available for those interested in officiating or supervising various activities.

Sport Clubs. Sport clubs offer an opportunity for students interested in concentrated training and participation in a sport. These student-sanctioned clubs, funded by the Student Senate, offer competition with other university/college club teams in

baseball, badminton, cricket, crew, cycling, ice hockey, men's and women's lacrosse, martial arts, rugby, sailing, soccer, triathlon, volleyball, and wakeboarding.

Aquatics. SMU Aquatics features a five-lane, indoor recreational pool and an outdoor, zero-depth entry fountain pool known as "The Falls." Students have opportunities to participate year-round in recreational swimming, sunbathing and competitive water sports such as water basketball, volleyball and polo. Classes offered include water fitness, adult and child swimming lessons, children's group lessons, and American Red Cross Lifeguard and Water Safety Instructor certifications. Both pools also are available for student group reservations. University resources include the Perkins Natatorium and Barr Outdoor Pool.

Outdoor Adventures. SMU Outdoor Adventures is the campus source for outdoor recreation and adventure, offering fun and challenging recreational adventure activities, community-building programs, and student leadership and personal growth opportunities. The Outdoor Adventure Center, located on the bottom floor of the Dedman Center for Lifetime Sports, is the place to rent outdoor recreation and picnic equipment and sign up for SMU OA trips offering traditional and nontraditional outdoor adventure pursuits such as backpacking, rock climbing, skydiving and canoeing. SMU OA also manages the SMU Climbing Center, the indoor climbing and bouldering facility, and the Portable Challenge and Team Development course.

Mustang Band. Founded in 1917, the Mustang Band was named the "Best College Marching Band" in Texas in Kirk Dooley's *Book of Texas Bests*. Long known as "the hub of SMU spirit," the band represents the University at football and basketball games, produces the *Pigskin Revue* during Homecoming and performs at special University- and community-related events. Membership is open to all SMU students by audition, regardless of major, and scholarships based on need and ability are available.

Spirit Squads. The Mustang Cheerleaders, Mustang Pom-Pom Squad and Peruna mascot are integral parts of SMU's spirit tradition and are national award winners, having participated in the NCA/NDA Collegiate National Championships. Along with the Mustang Band, they make SMU's spirit contingent an outstanding one.

Intercollegiate Athletics. SMU is a member of the National Collegiate Athletic Association (Division I-A). Men and women student-athletes compete in basketball, cross country/track and field (women only), swimming and diving, golf, soccer, tennis, volleyball (women only), crew (women only), equestrian (women only), and football (men only).

RIGHT TO KNOW

Southern Methodist University is pleased to provide information regarding academic programs, enrollment, financial aid, public safety, athletics and services for persons with disabilities. Students also may obtain paper copies of this information by contacting the appropriate office listed below. Disclosure of this information is pursuant to requirements of the Higher Education Act and the Campus Security Act. More information is available at www.smu.edu/srk.

1. Academic Programs: www.smu.edu/srk/academics
Provost Office, Perkins Administration Building, Room 219
214-768-3219

a. Current degree programs and other educational and training programs.
b. Instructional, laboratory and other physical facilities relating to the academic program.
c. Faculty and other instructional personnel.
d. Names of associations, agencies or governmental bodies that accredit, approve or license the institution and its programs and the procedures by which documents describing that activity may be reviewed.

2. Enrollment: www.smu.edu/srk/enrollment
Registrar, Blanton Student Services Building, Room 101
214-768-3417

a. Graduation Rates: The completion or graduation rate of the institution's certificate- or degree-seeking, full-time undergraduate students and students who receive athletically related financial aid.
b. Privacy of Student Education Records: The Family Educational Rights and Privacy Act governs SMU's maintenance and disclosure of a student's education records. FERPA provides students the right to inspect and review their education records and to seek amendment of those records that they believe to be inaccurate, misleading or otherwise in violation of their privacy rights. Further, FERPA prevents SMU from disclosing personally identifiable information about a student to outside third parties, except under specific circumstances outlined in SMU's Policy Manual.
c. Withdrawal: Requirements and procedures for officially withdrawing from the institution.

3. Financial Aid: www.smu.edu/srk/finaid
Director of Financial Aid, Blanton Student Services Building, Room 212
214-768-3417

a. Financial assistance available to students enrolled in the institution.
b. Cost of attending the institution, including tuition and fees charged to full-time and part-time students; estimates of costs for necessary books and supplies; estimates of typical charges for room and board; estimates of transportation costs for students; and any additional cost of a program in which a student is enrolled or expresses a specific interest.
c. Terms and conditions under which students receiving Federal Direct Loan or Federal Direct Perkins Loan assistance may obtain deferral of the repayment of the principal and interest of the loan for
    i. Service under the Peace Corps Act;
    ii. Service under the Domestic Volunteer Service Act of 1973; or

iii. Comparable service as a volunteer for a tax-exempt organization of demonstrated effectiveness in the field of community service.

d. The requirements for return of Title IV grant or loan assistance.
e. Enrollment status of students participating in SMU study abroad programs, for the purpose of applying for federal financial aid.

4. Student Financials/Bursar: www.smu.edu/srk; www.smu.edu/bursar
University Bursar, Blanton Student Services Building, Room 212
214-768-3417

a. Tuition and fees.
b. Living on campus.
c. Optional and course fees.
d. Financial policies.
e. Administrative fees and deposits.
f. Payment options.
g. Any refund policy with which the institution is required to comply for the return of unearned tuition and fees or other refundable portions of costs paid to the institution.

5. DASS: www.smu.edu/alec/dass
Disability Accommodations and Success Strategies
Altshuler Learning Enhancement Center
214-768-1470

a. Description of the process for establishing eligibility for services and documentation guidelines.
b. Listings of the various on- and off-campus resources.
c. Discussions of transitioning to postsecondary education.
d. Tips for faculty on teaching and making accommodations.

6. Athletics: www.smu.edu/srk/athletics
Associate Athletic Director for Student-Athlete Services, 316 Loyd Center
214-768-1650

a. Athletic program participation rates and financial aid support.
b. Graduation or completion rates of student athletes.
c. Athletic program operating expenses and revenues.
d. Coaching staffs.

7. Campus Police: www.smu.edu/srk; www.smu.edu/pd
SMU Police Department, Patterson Hall
214-768-1582

Southern Methodist University's Annual Security Report includes statistics for the previous three years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by SMU, and on public property within or immediately adjacent to/accessible from the campus. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other related matters.

The information listed above is available in a conveniently accessible website at www.smu.edu/srk.

DEDMAN COLLEGE

GENERAL INFORMATION

Dedman College is the heart of SMU. It is home to the humanities, social and behavioral sciences, mathematics, and natural sciences – disciplines central to the traditions of higher education.

In 1915 when SMU opened the doors of Dallas Hall to welcome the first class of students, those students matriculated into the College of Arts and Sciences, the academic unit that would eventually become Dedman College. In 1963, with the formulation of the Master Plan, the college became the School of Humanities and Sciences in recognition of its role in the specialized education of students in the liberal arts. From 1963 until 1980, the basic liberal arts education for all SMU students was provided by University College, an independent, nondegree-granting academic unit.

The School of Humanities and Sciences was merged in 1980 with University College to create a new entity central to the enterprise of undergraduate education. This college would provide the basic foundations in liberal arts education to all SMU students and also serve as a center for the integration of specialized education in the humanities, social sciences and natural sciences. As an indication of its centrality to the educational process, the name was changed from school to college, emphasizing that it is a community of students and teachers, whose life together, no matter how diversified and specialized, is unified by the implicit and explicit values derived from a liberal arts education. In 1981, the newly formed college was endowed by the late Robert H. Dedman, Sr., and his wife, Nancy McMillan Dedman, and became Dedman College.

In addition to being the oldest academic unit at SMU, Dedman College is also the largest. In 2012, some 1,400 undergraduate students majored in Dedman College programs, and the school enrolled just under 350 graduate students. More than 270 full-time faculty are based in the college's 16 academic departments. Undergraduate students in Dedman College may major and minor in more than 50 programs. Dedman College offers 18 graduate programs leading to a Master's degree and 13 programs leading to a Ph.D. degree.

Academic Programs of Study

Majors in Dedman College include the following:

Anthropology
Biochemistry
Biological Sciences
Chemistry
(Earth Sciences)
  Geology
  Geophysics
  Resource Geology
Economics
  Financial Applications
  Mgmt Info Systems
  Systems Analysis
English
  English With Creative Writing
Environmental Sciences
Environmental Studies
(Ethnic Studies)
  African/African-Amer Studies
  Mexican-American Studies
History
Human Rights
Individualized Studies in the Liberal Arts
International Studies
Mathematics
Medieval Studies
Philosophy
Physics
Political Science
Psychology
Public Policy
Religious Studies
Sociology
  Markets and Culture
Statistical Science
World Lang/Literatures
  World Languages: French
  World Languages: German
  World Languages: Italian
  World Languages: Spanish
  French
  German
  Spanish

Minors available include the following:

- Anthropology
  - Archaeological
  - Biomedical
  - Cultural
- Biological Sciences
- Chemistry
- Classical Studies
- (Earth Sciences)
  - Geology
  - Environmental Earth Sciences
- Economics
  - Econometrics
  - Economic Growth/Devlp
  - Economics of Decision-Making
  - Economics of Industrial Organization
  - International Economics
  - Labor Economics
  - Monetary Economics
  - Public Economics
- English
- (Ethnic Studies)
  - African-American Studies
  - Mexican-American Studies
- History
- Human Rights
- International Studies
  - Asian Studies
  - European Studies
  - Latin-Amer/Iberian Studies
  - Middle Eastern/African Studies
- Mathematics
- Medieval Studies
- Natural Sciences
- Philosophy
  - Ethics
- Physics
- Political Science
  - American Politics
  - Comparative Politics
  - International Relations
  - Law and Legal Reasoning
- Psychology
- Religious Studies
- Sociology
- Statistical Science
- Women's and Gender Studies
- World Lang/Literatures
  - Arabic
  - Chinese
  - French
  - German
  - Italian
  - Italian Area Studies
  - Japanese
  - Latin
  - Russian Area Studies
  - Spanish

Specific degree requirements and additional information for these programs can be found in the departmental sections of this catalog.

Dedman College students may also complete second majors and minors in other schools on campus, including the Cox School of Business, the Lyle School of Engineering, the Meadows School of the Arts, and the Simmons School of Education and Human Development, and. Interested students should contact the Office of the Dean in those schools concerning specific requirements.

Honors Programs

During their first and second years at SMU, students may participate in the University Honors Program, described in the Academic Programs section of this catalog, and subsequently graduate with "Honors in the Liberal Arts." Students participating in the University Honors Program are encouraged to join a departmental distinction program (described in the Academic Programs section and under General Information in the Dedman College section) to earn the designation "honors in the liberal arts, departmental distinction" on their transcripts.

Programs for Preprofessional Students

Before arranging a program in Dedman College, the preprofessional student should become familiar with the entrance requirements of the particular professional school that the student intends to enter. Requirements differ to some extent even within the same profession, and the student will find that some schools require that specific courses be included in the preprofessional training.

Pre-law

To be a pre-law student at SMU does not require a particular major or academic program. Pre-law seniors who go to law school may have majors in any undergraduate schools. Success in law school requires skills in critical analysis, logical reasoning, and written and oral expression. Students should keep in mind that the spoken and written word are the principal tools of the legal profession. Students who

intend to study law must develop an excellent knowledge and grasp of the English language as well as a clear and concise style of expression.

A sound liberal arts education is valuable for pre-law students. Courses in political science, history, economics, statistics and anthropology help a student understand the structure of society and the problems of social ordering with which the law is concerned.

The study of philosophy, literature, fine arts, world languages and other cultures imparts familiarity with traditions of universal thought and trends that have influenced or tend to influence legal developments nationally and internationally. The examination of human behavior in sociology and psychology will aid the prospective law student in understanding the types and effects of human behavior with which law is involved.

The systematic ordering of abstractions and ideas acquired by studying logic and the sciences contributes much to a pre-law student's capacity to analyze, understand and rationally organize his or her thoughts. In some fields of law practice, a fundamental knowledge of technology, engineering, computers and accounting is useful.

Admission to Law Schools. Candidates for admission to an American Bar Association-approved school of law must take the Law School Admission Test administered by the national Law School Admission Council. Candidates are urged to take the test on the June, October or December testing dates of the fall term in which they apply to law school. Except in very rare circumstances, all approved law schools require that an applicant for admission has been granted a Bachelor's degree from an accredited college or university. For additional pre-law information, as well as assistance in the application process, undergraduate students may consult the pre-law services in the University Advising Center.

Admission to Dedman School of Law. Admission to Dedman School of Law is by selection based upon the academic record of the applicant, the applicant's Law School Admission Test score and other available data. More information is available from the Admissions Office, Dedman School of Law, PO Box 750110, Dallas TX 75275-0110; www.law.smu.edu/Prospective-Students.

Premedical/Dental

Medical and dental schools seek students who have demonstrated strength in their major – any major of the student's choosing – and in the sciences. There is no preferred major but a number of prerequisite courses. Honors work is appropriate.

Most medical and dental schools require the following coursework for entry. These courses should be completed by the end of the junior year: English, six hours; mathematics (including calculus), six hours; biology, eight to 14 hours (14 for Texas medical schools); chemistry, 16 hours; and physics, eight hours. In addition, some schools require biochemistry. This coursework may be done as part of a major or minor in the sciences or as electives in a nonscience major or minor. Some courses will apply toward the University-wide requirements.

Candidates for admission to medical school must take the Medical College Admission Test; the test should be taken in the spring of the junior year. Candidates for dental school should take the Dental Admission Test, also in the spring of the junior year. All students intending to apply to medical or dental schools should contact the Office of Pre-Health Advising.

Undergraduate Internship Program

The Dedman College Undergraduate Internship Program helps students begin to prepare for employment. Internships are designed to demonstrate and reinforce the valuable and highly marketable skills that our students develop. The following guidelines apply:

- Credit-bearing internships are supervised by faculty, department or program. **Note:** Noncredit-bearing internships are without faculty, department or program supervision. These may be paid or unpaid internships. Internship orientation is strongly suggested. Students may be asked to sign a Release of Liability for some internships.
- Dedman Internship Program Orientation and Standardized University Release of Liability for Education Internship are required for credit bearing internships.
- Internship credit and grades are based on a written learning contract signed by the student and faculty supervisor and approved by the department chair or director of undergraduate studies. In addition, students and site supervisors will complete evaluations of the experience. These evaluations are not considered in determination of the grade.
- Internships require a written component based on and reflective of the experiential dimension.
- Internship credit is available only through approved internship courses.
- Internship credit may range from one to three hours.
- The maximum total internship credit that may be applied toward a degree is three hours.

Teacher Education

The University offers teacher education through the Simmons School of Education and Human Development and recommends candidates for certification by the State Board of Educator Certification. The recommendation is based on a candidate's successful completion of 24 hours in education (EDU) courses and six hours of student teaching. In addition, candidates must pass the Texas Examinations of Educator Standards. Prospective secondary teachers must have majors in appropriate teaching fields; students who wish to teach in a science or humanities discipline at the secondary level should combine a Dedman major in that area with the appropriate education (EDU) coursework through the Simmons School. More information is available from the Department of Teaching and Learning at 214-768-2780. For a general description of the program in teacher education, students should see the Simmons School of Education and Human Development section of this catalog.

Multiple Majors and Minors

Students are encouraged to broaden their education by taking full advantage of the University's diverse undergraduate programs. Although only one major is required for graduation, with careful planning students may complete two or more majors and/or multiple minors within the prescribed total hours.

Students may also qualify for baccalaureate degrees from two schools in the University. Some characteristic pairings are English or political science in Dedman College and journalism in Meadows School of the Arts; physics or mathematics in Dedman College and electrical engineering in the Lyle School of Engineering; and

world language in Dedman College and a major or minor in the Cox School of Business. Since all requirements for both degrees must be met, students should confer with advisers in both schools at an early date to prepare a plan of study.

Students are individually responsible for knowing and complying with all regulations and requirements that may apply to their respective programs.

Courses Taken in SMU Abroad Programs

Up to 30 term credit hours taken in approved SMU Abroad programs may be counted towards the degree requirements in Dedman College. Additional term credit hours may be allowed through petition. Students should check individual departments within Dedman College for additional limitations.

Transfer Courses From Other Institutions

Once matriculated at SMU, students wishing to enroll for and transfer courses offered at other institutions in subject areas within the Dedman College curriculum must receive prior approval from their adviser, the chair of the SMU department that normally offers the course, and the Dedman College Office of Records and Academic Services. A maximum of 30 credit hours of postmatriculation transfer work may be approved. Approval may be denied for educational reasons. Postmatriculation transfer work must be completed at accredited, four-year institutions. Postmatriculation transfer work from nonaccredited or two-year institutions will not be approved.

ADMISSION

All incoming first-year students to the University are admitted as SMU Pre-Majors. Students should see the Admission to the University section of this catalog for admission requirements. Students wishing to pursue majors in the humanities, in the social or natural sciences, or in various multidisciplinary programs will declare a major in Dedman College for their undergraduate education. Specific degree requirements and additional information for any of these programs can be found in the departmental sections of this catalog. Admission into academic departments within Dedman College requires the completion of 24 hours of coursework with a cumulative GPA of 2.000 or higher. Additional entry/admission requirements may exist within specific departments.

Admission From Other Schools Within SMU

An individual enrolled in another school of the University may apply to their current school for permission to transfer into a degree-granting program in Dedman College. A student who has achieved a cumulative GPA of 2.000 on all SMU work attempted will normally be admitted to candidacy for a degree in Dedman College. Some academic programs may have additional requirements. Students should consult the catalog section and/or the department for more information.

Readmission of Former Students

If three or more years have elapsed since the last enrollment at SMU, the student must meet any new requirements and is subject to any new regulations that have been instituted in the interval.

DEGREE REQUIREMENTS

Dedman College offers four undergraduate degrees: the Bachelor of Arts, the Bachelor of Science, the Bachelor of Social Sciences and the Bachelor of Humanities. Students should consult the individual programs of study outlined in the following sections of this catalog for the degree available in a specific area of study

The Major

A candidate for a degree must complete the requirements for a major in one of the departments or interdisciplinary programs of the college as well as the University-wide requirements. The major requirements of each department and program are stated at the beginning of the section describing the courses offered in that department or area. The applicable requirements of the major are those in effect during the academic year of matriculation. Coursework counting toward a major must include at least 18 advanced hours in approved SMU credit courses completed at SMU. All advanced courses required for the major must be passed with a grade of *C-* or better and may not be taken pass/fail. In addition, Dedman College requires a cumulative GPA of 2.000 for all courses attempted for completion of a major or minor. All courses attempted that could count toward the major/minor are included in determining the major/minor GPA. Majors must be officially declared (or changed) through the Dedman College Office of Records and Academic Services.

The Minor

A candidate for a degree may also complete the requirements of a minor, either in Dedman College or in one of the other undergraduate schools of the University. Advisers in the minor programs assist students in selecting a minimum of 15 hours, including at least nine at the advanced level, suitable for meeting requirements for a minor. Coursework counting toward a minor may not be taken pass/fail. All advanced courses required for the minor must be passed with a grade of *C-* or better. At least half of the advanced hours required by Dedman minors must be completed in approved SMU credit courses and may not be transferred or taken pass/fail. In addition, Dedman College requires a cumulative GPA of 2.000 for all courses attempted for completion of a major or minor. All courses attempted that could count toward the major/minor are included in determining the major/minor GPA. Minors must be officially declared (or changed) through the Dedman College Office of Records and Academic Services.

General Requirements

Student Responsibility for Completion of Degree Plan

Students are individually responsible for knowing and complying with all regulations and requirements that may apply to their respective programs.

Application for a Degree

Students must submit to the Dedman College Office of Records and Academic Services a formal application for graduation by the deadlines listed in the University Calendar within this catalog.

Credits

A candidate for a degree in Dedman College must have

- A minimum total of 122 term hours of credit, including the University-wide requirements and the requirements for a major. Within this 122 hours are the following:
  - A minimum total of 42 advanced hours (3000 level or above).
  - Two hours of Personal Responsibility and Wellness.
  - A maximum total of three hours of internship credit.

Grades

A candidate for a degree in Dedman College must attain

- A minimum cumulative GPA of 2.000 on all work attempted through enrollment at SMU.
- A minimum cumulative GPA of 2.000 including all equivalent work attempted elsewhere, if any.
- A minimum grade of *C-* on any advanced course offered in fulfillment of major or minor requirements.
- A minimum cumulative GPA of 2.000 for all work attempted for completion of major or minor requirements.
- No more than 12 hours with a grade of *P* (Pass).

Credit Requirement

As minimum requirements, a candidate for a degree in Dedman College must take the following hours as SMU credit through SMU courses or SMU-approved international programs:

- A total of 60 hours.
- A total of 18 hours of advanced work in the major.
- A total that is equivalent to at least 50 percent of the advanced work required in any minor program selected. Departmental requirements may exceed this minimum.

Requirements for Obtaining Two Degrees Simultaneously

A student who selects two majors in Dedman College that lead to different degrees (B.A. and B.S.) may receive both degrees simultaneously by completing all requirements in each major, along with general requirements for a degree in Dedman College and University-wide requirements. However, a student may not be awarded more than one baccalaureate degree from the same department.

A student may pursue a program of study leading to a degree from Dedman College along with a degree from the Cox School of Business, Lyle School of Engineering, Meadows School of the Arts, or Simmons School of Education and Human Development. The student must obtain approval for the proposed program of study from the records offices of the schools involved.

Graduation Honors

There are three classes of graduation honors: summa cum laude, magna cum laude and cum laude. Eligibility for graduation honors will be based upon a student's total academic program. All academic work attempted at other colleges or universities that is equivalent to SMU work will be included in the calculation of the GPA. For

students who have transferred to SMU, two grade point averages will be calculated: for all work attempted and for work completed through enrollment at SMU. Honors will be based on the lower of the two averages.

Departmental Distinction

During their junior and senior years, students may participate in the honors courses and seminars offered within their major departments. A variety of internships and research programs are also offered in some departments to provide practical exposure and experience within the disciplines. By successfully completing a special program of study in the major department, a student may be awarded departmental distinction regardless of eligibility for graduation honors. This award is conferred by the major department on the basis of criteria prescribed by the department, but all programs include the minimum requirements of independent reading and research beyond the regular departmental requirements for a degree and the completion of a senior paper or research report. Further information can be obtained from the individual departments in the Courses of Study in Dedman College section of this catalog or from www.smu.edu/dedman.

COURSES OF STUDY IN DEDMAN COLLEGE

Aerospace Studies: Air Force ROTC

While Air Force ROTC courses are not offered on the SMU campus, any SMU student who wishes to earn an appointment as a commissioned officer in the U.S. Air Force may participate in the Air Force general military course and professional officer course through the University of North Texas in Denton. The Air Force ROTC program develops skills and provides education vital to the career officer. Active-duty Air Force personnel provide all instruction and program administration. Students who participate in the UNT Air Force ROTC program are responsible for their own travel and other physical arrangements. First-year students may enroll in the four-year program, and students with at least three undergraduate or graduate academic years remaining may apply for the two- or three-year program. Scholarships, available to qualified students, provide full tuition, fees, textbook allowance and a monthly tax-free subsistence allowance of $300–$500. National competition is based on SAT or ACT test results, Air Force Officer Qualifying Test results or college academic records, and extracurricular and athletic activities. Uniforms and textbooks for Air Force ROTC courses are issued at no cost to cadets.

Students register for AERO courses at the same time and in the same manner as they register for other SMU courses. Air Force ROTC courses are fully accredited and may be taken as electives in most academic majors. Successful completion of degree requirements and the Air Force ROTC program can lead to a commission as a second lieutenant in the U.S. Air Force. Students with at least six months of active military service may be granted waivers on a portion of the general military course.

Information is available from Air Force ROTC, University of North Texas, PO Box 305400, Denton TX 76203; 940-565-2074; det835@unt.edu; www.unt.edu/afrotc.

The Courses (AERO)

AERO 1103 (1), 1104 (1). FOUNDATIONS OF THE USAF. Introduces the USAF and the AFROTC. Topics include mission and organization of the USAF; officership and professionalism; military customs and courtesies; USAF officer opportunities, and communication skills.

AERO 2100 (1), 2200 (2), 2300 (3), 2400 (4), 4100 (1), 4200 (2), 4300 (3), 4400 (4). COOPERATIVE EDUCATION IN AEROSPACE STUDIES. Supervised work in a job directly related to the student's major, professional field of study, or career objective. One to three hours each week. *Prerequisites:* Permission of division chair; student must meet employer's requirements. May be repeated for credit.

AERO 2103 (1), 2104 (1). EVOLUTION OF THE USAF AIR AND SPACE POWER. Examines general aspects of air and space power from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Extrapolates the development of Air Force capabilities (competencies) and missions (functions), and demonstrates the evolution of USAF air and space power. Students develop their communication skills and discuss the importance of the Air Force Core Values using operational examples and historical Air Force leaders.

AERO 3431 (4), 3432 (4). AIR FORCE LEADERSHIP. A study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics and communication skills required of an Air Force junior officer. Uses case studies to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied.

AERO 4431 (4), 4432 (4). NATIONAL SECURITY FORCES IN CONTEMPORARY AMERICAN SOCIETY/PREPARATION FOR ACTIVE DUTY. Examines the national security process; regional studies, advanced leadership ethics, and Air Force doctrine. Focuses on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, current issues affecting military professionalism, and communication skills.

Anthropology

www.smu.edu/anthro

Professor Karen Lupo, **Department Chair**

Professors: Eric G. Bing, Caroline Brettell, Robert Van Kemper, Karen Lupo, David Meltzer, Ben Wallace, Ronald Wetherington. **Associate Professors:** Michael Adler, Victoria Lockwood, Carolyn Smith-Morris, David Wilson. **Assistant Professors:** Sunday Eiselt, Brigitte Kovacevich, Nia Parson, Christopher Roos. **Professor of Practice:** Kacy Hollenback. **Emeritus Professors:** Anthony E. Marks, Ladislav Novak, Garth Sampson, Fred Wendorf.

Anthropology is divided into four subfields: 1) archaeology, 2) cultural/social anthropology, 3) anthropological linguistics and 4) physical anthropology. In addition to providing the basis for careers in the subdisciplines, anthropology provides a background for professional careers in teaching, research, international affairs, medicine, business or law. A grade of *C-* or better must be earned in all courses taken in fulfillment of the requirements for the anthropology major. Students majoring in anthropology must achieve a minimum 2.000 GPA in anthropology, and they are urged to consult their departmental adviser periodically to review their progress.

Bachelor of Arts With a Major in Anthropology

The B.A. degree is intended for students who desire general training in anthropology within a liberal arts curriculum. Thirty term hours of anthropology are required, of which 21 must be advanced. Of the 30 hours, ANTH 2301 is required. In addition, all candidates for the B.A. major must take at least three term hours in each subfield of anthropology (i.e., archaeology, cultural/social anthropology, anthropological linguistics and physical anthropology).

Bachelor of Science With a Major in Anthropology

Intended for students who wish more specialized training in anthropology, the B.S. degree provides a strong foundation for students intending to pursue a graduate degree. Thirty-six term hours of anthropology are required, of which 24 must be advanced. Of the 36 hours, the following courses are required: ANTH 2301, 2315, 2363, and either 5334 or 5335; six term hours of fieldwork-related study (generally ANTH 5381 or 5382 and 4333 or 5681; alternatives need to be approved by the director of undergraduate studies); one of the following: ANTH 3361 or 5359; and either 4399 or three term hours of independent study (ANTH 4191, 4192, 4291, 4292, 4391 or 4392). In addition, three term hours of statistics (generally STAT 2331), and six term hours of world language are required.

Departmental Distinction

This program is open to junior and senior anthropology majors with outstanding academic records. Graduation with departmental distinction is designated on the diploma of those who successfully complete the program. To earn departmental distinction, a student must

1. Complete the usual coursework for a B.A. or B.S. degree with at least a 3.500 GPA in anthropology and with at least a 3.000 GPA overall.
2. With a grade of *B* or higher, pass ANTH 5334 and 5335 or complete a substantial independent reading program (for three term hours credit that replaces one of these) on the history, conceptual foundations or methodological problems of the discipline.

3. With a grade of *A* or *A-*, conduct a research project (for three term hours credit in ANTH 4391 or 4392) and complete a significant research paper that is a minimum of 20 pages of text, includes a bibliography, and is written in appropriate sub-disciplinary professional style and format.
4. Pass an oral examination of one hour in length (with at least three full-time departmental faculty members), covering the results of the research project and general issues and concepts in anthropology according to the subfield specialty.

Minor in Anthropology

A 15-hour minor may be taken in one of three tracks: archaeology, cultural anthropology or general anthropology; an 18-hour track may be taken in biomedical anthropology. ANTH 2301 is common to all four minors, with the remaining courses selected from a list published in this catalog. A grade of *C-* or better must be earned in all advanced courses taken in fulfillment of the requirements for an anthropology minor. Students pursuing a major in anthropology may not also pursue the minor.

General Anthropology Minor (15 credit hours)

1. **ANTH 2301** Introductory Cultural Anthropology
2. A minimum of one course in each anthropological subfield (archaeology, cultural anthropology, linguistics, and physical anthropology), 9 hours of which are advanced (12 hours total) **Note:** ANTH 1321, 3330, 3331, 4350, 4351, 4352, 4399, 5334, and 5335 may be counted for the relevant subfield.

Archaeological Anthropology Minor (15 credit hours)

1. **ANTH 2301** Introductory Cultural Anthropology
2. **Archaeological Concepts** (one of the following):
   ANTH 2302 People of the Earth
   ANTH 2363 The Science of the Past
   ANTH 2380 Contemporary Archaeology
3. **Regional Archaeology/Methods** (9 hours from the following):
   ANTH 3304 North American Archaeology
   ANTH 3312 Mesoamerican Archaeology
   ANTH 3313 South American Indians of the Past and Present
   ANTH 3315 Origins of Civilization
   ANTH 3318 Prehistory of the American Southwest
   ANTH 3319 Human Ecology
   ANTH 3334 Fantastic Archaeology and Pseudoscience
   ANTH 3330, 3331 Special Topics in Anthropology (archaeological topic)
   ANTH 3351 Forensic Anthropology: Stories Told by Bones
   ANTH 3356 Before Civilization
   ANTH 3365 The Rise and Fall of Superpowers
   ANTH 3374 Cultures and Environments of the Southwest
   ANTH 3384 Paradise Lost? Archaeology and Ethics of Human Environmental Impacts
   ANTH 3388 Warfare and Violence
   ANTH 3390 The Plundered Past
   ANTH 3399 Ice Age Americans
   ANTH 4191, 4192, 4291, 4292 Independent Study and Research (archaeological topic)
   ANTH 4300 World Archaeology
   ANTH 4325 Zooarchaeology
   ANTH 4333 Laboratory Methods in Archaeology
   ANTH 4350, 4351, 4352 Special Topics in Anthropology (archaeological topic)
   ANTH 4381 Internship in Anthropology (archaeological topic)
   ANTH 4385 Coastal and Aquatic Archaeology
   ANTH 4386 The Archaeology of Gender and Sexuality
   ANTH 4390 Current Issues in Anthropology (archaeological topic)
   ANTH 4391, 4392 Independent Study and Research (archaeological topic)

3. **Regional Archaeology/Methods (continued)**
   ANTH 4399 Senior Seminar in Anthropology
   ANTH 5310 Human Osteology: Biology of the Human Skeleton
   ANTH 5355 Seminar in the Southwest
   ANTH 5381, 5382, 5681 Field Methods in Archaeology

Biomedical Anthropology Minor (18 credit hours)

1. **ANTH 2301** Introductory Cultural Anthropology
2. **Core Courses:**
   ANTH 3306 Intro to Medical Anthropology *or* **5336** Health in Cross-Cultural Perspective
3. **Biomedical Anthropology Electives** (12 hours from the following):
   ANTH 3301 Health, Healing, and Ethics
   ANTH 3303 Psychological Anthropology
   ANTH 3306 Introduction to Medical Anthropology
   ANTH 3328 Gender Violence
   ANTH 3330, 3331 Special Topics in Anthropology (biomedical topic)
   ANTH 3348 Health as a Human Right
   ANTH 3350 Good Eats and Forbidden Flesh
   ANTH 3351 Forensic Anthropology: Stories Told by Bones
   ANTH 4191, 4192, 4291, 4292 Independent Study and Research (biomedical topic)
   ANTH 4303 Political Economy of Health
   ANTH 4307 Global and Public Health
   ANTH 4343 Biomedicine, Culture, and Power
   ANTH 4344 Global Population Processes
   ANTH 4350, 4351, 4352 Special Topics in Anthropology (biomedical topic)
   ANTH 4381 Internship in Anthropology (biomedical topic)
   ANTH 4391, 4392 Independent Study (biomedical topic)
   ANTH 5310 Human Osteology: Biology of the Human Skeleton
   ANTH 5336 Health in Cross-Cultural Perspective
4. **Electives in Other Departments** (up to 3 credit hours)
   PHIL 3376 Bioethics
   PSYC 3360 Health Psychology
   RELI 3366 Magic, Myth, and Religion Across Cultures
   WGST 2380 Human Sexuality

Cultural Anthropology Minor (15 credit hours)

1. **ANTH 2301** Introductory Cultural Anthropology
2. **Cultural Concepts** (two of the following):
   ANTH 3301 Health, Healing and Ethics
   ANTH 3303 Psychological Anthropology
   ANTH 3305 The Other in America
   ANTH 3309 The Etruscans and Iron Age Italy
   ANTH 3310 Gender and Sex Roles: A Global Perspective
   ANTH 3319 Human Ecology
   ANTH 3327 Culture Change and Globalization
   ANTH 3328 Gender Violence
   ANTH 3329 Contesting Development: Global/Local Impacts and Human Rights
   ANTH 3330, 3331 Special Topics in Anthropology (cultural anthropology topic)
   ANTH 3333 The Immigrant Experience
   ANTH 3336 Gender and Globalization
   ANTH 3344 Cultural Aspects of Business
   ANTH 3348 Health as a Human Right
   ANTH 3350 Good Eats and Forbidden Flesh
   ANTH 3361 Language in Culture and Society
   ANTH 3366 Magic, Myth, and Religion Across Cultures
   ANTH 3368 Urban Life: A Cross-Cultural Perspective
   ANTH 3385 Sustainable Living
   ANTH 3388 Warfare and Violence

2. **Cultural Concepts (continued)**
   ANTH 4191, 4192, 4291, 4292 Indep. Study/Research (cultural anthropology topic)
   ANTH 4304 Migration, Ethnicity, and Nationalism
   ANTH 4305 Applied Anthropology
   ANTH 4306 Anthropology and Education
   ANTH 4309 Human Rights, Indigenous Peoples, and Nation States
   ANTH 4344 Global Population Processes
   ANTH 4346 Environmental Anthropology and Development
   ANTH 4350, 4351, 4352 Special Topics in Anthropology (cultural anthropology topic)
   ANTH 4381 Internship in Anthropology (cultural anthropology topic)
   ANTH 4384 Global Issues and Development: An Overview
   ANTH 4390 Current Issues in Anthropology (cultural anthropology topic)
   ANTH 4391, 4392 Independent Study (cultural anthropology topic)
   ANTH 4399 Senior Seminar in Anthropology (cultural anthropology topic)
   ANTH 5336 Anthropology and Medicine
   ANTH 5344 Research Methods in Ethnology
3. **Regional Ethnography** (6 hours from the following):
   ANTH 3309 The Etruscans and Iron Age Italy
   ANTH 3311 Mexico: From Conquest to Cancun
   ANTH 3313 South American Indians of the Past and Present
   ANTH 3314 Peoples of Africa
   ANTH 3316 Cultures of the Pacific Islands
   ANTH 3317 Peoples of Southeast Asia
   ANTH 3323 East Asia: Cultural Traditions and Transformations
   ANTH 3346 Culture and Diversity in American Life
   ANTH 3353 Indians of North America
   ANTH 3354 Latin America: People, Places, and Power
   ANTH 3355 Society and Culture in Contemporary Europe
   ANTH 3358 Indians of the Southwest, 16th Century–Present
   ANTH 3359 Peoples and Cultures of the Middle East
   ANTH 3376 Caribbean Transformations: From Columbus to Carnival

The Courses (ANTH)

Note: All 2000-level and 3000-level anthropology courses are open to first-year students. Undergraduate and graduate students may take 4000-level and 5000-level courses; however, undergraduate students must have introductory coursework in the appropriate subfield or permission of the instructor. Anthropology courses are grouped into subfields as follows.

General	ANTH 4399, 5334, 5335
Archaeology	ANTH 2302, 2363, 2380, 3304, 3312, 3313, 3315, 3318, 3319, 3334, 3351, 3356, 3365, 3374, 3384, 3388, 3390, 3399, 4300, 4325, 4333, 4377, 4385, 4386, 5355, 5381, 5382, 5681
Cultural/Social Anthropology	ANTH 2301, 3301, 3303, 3305, 3309, 3310, 3311, 3313, 3314, 3316, 3317, 3323, 3327, 3328, 3329, 3333, 3336, 3344, 3346, 3348, 3350, 3353, 3354, 3355, 3358, 3359, 3365, 3366, 3368, 3376, 3385, 3388, 4303, 4304, 4305, 4306, 4307, 4309, 4343, 4344, 4346, 4384, 4386, 5336, 5344
Anthropological Linguistics	ANTH 3361, 4311, 5359
Physical Anthropology	ANTH 2315, 3302, 3350, 3351, 4336, 4377, 5310

ANTH 1321 (3). FIRST-YEAR SEMINAR IN ANTHROPOLOGY. Offers beginning students an opportunity to pursue a specific, anthropological topic in depth in a small class setting. It will be both writing- and reading-intensive.

ANTH 2301 (3). INTRODUCTORY CULTURAL ANTHROPOLOGY. Basic theories and methods of cultural anthropology. Explores variations in cultural values, social practices, religion, rules of law, etc., in different cultures around the world. Focuses on understanding the forces that shape cultures and societies, and how they adapt to a rapidly changing world.

ANTH 2302 (3). PEOPLE OF THE EARTH: THE FIRST FIVE MILLION YEARS. Human biological and cultural evolution, from the appearance of ancestral humans in Africa, to agricultural origins and the rise of the world's great civilizations.

ANTH 2315 (3). HUMAN EVOLUTION: BIOLOGICAL AND SOCIAL BEGINNINGS OF HUMANKIND. Topics include mutation, natural selection, primate origins, and the human fossil record. Ethical and moral issues of cloning, eugenics, and creationism are also treated.

ANTH 2363 (3). THE SCIENCE OF OUR PAST: AN INTRODUCTION TO ARCHAEOLOGY. Introduces students to how and why archaeologists study evidence of past human behavior. Required labs emphasize hands-on analyses of artifacts and other archaeological materials.

ANTH 2380 (3). CONTEMPORARY ARCHAEOLOGY: CONTROVERSIES AND ETHICS. Introduces students to the social and political contexts of archaeological research in heritage and human rights arenas with emphasis on ethics and the law.

ANTH 3301/CFB 3301/SOCI 3301 (3). HEALTH, HEALING AND ETHICS: CROSS-CULTURAL PERSPECTIVES ON SICKNESS AND SOCIETY. A cross-cultural exploration of cultures and organization of medical systems, economic development and the global exportation of biomedicine, and ethical dilemmas associated with medical technologies and global disparities in health.

ANTH 3302 (3). MONKEYS AND APES: THE NONHUMAN PRIMATES. This course offers an introduction to the study of nonhuman primates, from prosimians to the great apes. It explores questions of taxonomy, aspects of social behavior, and patterns of communication.

ANTH 3303 (3). PSYCHOLOGICAL ANTHROPOLOGY. Examines the interplay of culture and personality in various Western and non-Western societies. Perception, cognition, dreams, altered states of consciousness, and psychological terrorism are analyzed in cross-cultural perspective.

ANTH 3304 (3). NORTH AMERICAN ARCHAEOLOGY. North America's human past, from the earliest colonization by Ice Age peoples and their descendants who colonized the continent, to the clash of cultures that followed the arrival of Europeans in 1492.

ANTH 3305 (3). THE OTHER IN AMERICA: POPULAR PERCEPTIONS AND GOVERNMENT POLICY THROUGH TIME. An examination of attitudes toward others in America during the past 200 years, as reflected in popular culture (films and fiction) and in national and local government policies.

ANTH 3306 (3). INTRODUCTION TO MEDICAL ANTHROPOLOGY. Provides an overview of methods and topics in medical anthropology, which is an interdisciplinary field that explores health, illness, and systems of healing through holistic and cross-cultural study. Case studies from a diversity of human societies and cultures around the globe are used to challenge assumptions of student understandings. Introduces major theoretical paradigms and professional issues within the field.

ANTH 3309/ARHS 3313 (3). THE ETRUSCANS AND IRON AGE ITALY. The art and architecture of early Italy, including Etruscan art, early Roman art, and Italic art, are studied with respect to the cultural context and environment.

ANTH 3310/CFB 3310 (3). GENDER AND SEX ROLES: A CROSS-CULTURAL PERSPECTIVE. Cross-cultural and historical comparison of women's and men's life experiences in the areas of family, marriage and kinship, economic and political participation, sexuality, reproduction, ritual, and religion.

ANTH 3311 (3). MEXICO: FROM CONQUEST TO CANCUN. An introduction to the unity and diversity of Mexican society as it has developed through encounters with other cultures – from 16th-century conquistadores to 21st-century tourists and emigrants.

ANTH 3312 (3). MESO-AMERICAN ARCHAEOLOGY. Examines development of civilizations from village life to the great empires of Mexico. How civilizations begin, grow, change and collapse.

ANTH 3313 (3). SOUTH AMERICAN INDIANS OF THE PAST AND PRESENT. A survey of the archaeology and ethnology of indigenous South Americans, from c. 13,000 years ago to recent times, focusing on environments, subsistence, and related levels of sociopolitical integration from Tierra del Fuego to the Amazon basin and the Andes.

ANTH 3314 (3). PEOPLES OF AFRICA. A contemporary study of the cultures and social structures of sub-Saharan African peoples and an examination of the dynamics of contemporary African societies.

ANTH 3315 (3). ORIGINS OF CIVILIZATION. Considers those cultural and historic factors that led to the development of agriculture and the first urban states in Egypt and Mesopotamia.

ANTH 3316 (3). CULTURES OF THE PACIFIC ISLANDS. Survey of the Pacific Island social systems focusing on Melanesia, Micronesia, and Polynesia. Explores nature of pre-contact societies and how colonial and missionary influences transformed island cultures. Examines how contemporary Pacific islanders are responding to forces of globalization.

ANTH 3317 (3). PEOPLES OF SOUTHEAST ASIA. A comparative study of insular and mainland cultures of Southeast Asia, their history and development, and their social and economic structures.

ANTH 3318 (3). PREHISTORY OF THE AMERICAN SOUTHWEST. Explores the evidence of thousands of years of human cultural change that archaeologists have uncovered across the American Southwest. Ranges in time from the first appearance of humans to the time of Pueblo civilization.

ANTH 3319 (3). HUMAN ECOLOGY. Examines interactions between human populations and their environments. Relationships between population size, technology, climate, and behavior in various living societies are explored.

ANTH 3323 (3). EAST ASIA: CULTURAL TRADITIONS AND TRANSFORMATIONS. Anthropological examination of East Asia, focusing on China, Korea, and Japan. Topics include mainstream philosophical traditions, individual and society, ethnicity and nationalism, and gender. *Prerequisite:* ANTH 2301 or instructor permission.

ANTH 3327/CF 3319 (3). CULTURE CHANGE AND GLOBALIZATION: SOCIAL SCIENCE PERSPECTIVES. Introduction to anthropological perspectives on global transformations: world economic integration; economic development and sociocultural change; new patterns of hunger, poverty, and disease; ethnic resurgence and nationalism; migration and transnationalism; the expansion of global religions and fundamentalist movements, and changes in gender and family patterns.

ANTH 3328/WGST 3328 (3). GENDER VIOLENCE: ANTHROPOLOGICAL PERSPECTIVES. This course examines how gender-based violence shapes individual subjective and collective experiences, material realities, and psychological states, as well as the impacts of interventions on intimate, interpersonal, local, and global scales.

ANTH 3329/HRTS 3329 (3). CONTESTING DEVELOPMENT: GLOBAL/LOCAL IMPACTS AND HUMAN RIGHTS. Examines the highly variable impacts of economic development on lives and communities around the world, with a focus on human rights issues.

ANTH 3330 (3). SPECIAL TOPICS IN ANTHROPOLOGY. An in-depth look at particular problems and issues in contemporary anthropology. Topics vary. This course is repeatable under different topics.

ANTH 3331 (3). SPECIAL TOPICS IN ANTHROPOLOGY. An in-depth look at particular problems and issues in contemporary anthropology. Topics vary. This course is repeatable under different topics.

ANTH 3333/CFA 3316 (3). THE IMMIGRANT EXPERIENCE. This course explores the historical, social, cultural, and political dimensions of the U.S. immigrant experience, and Americans' attitudes toward immigrants. Controversial issues such as bilingual education and illegal immigration are examined.

ANTH 3334/CF 3334 (3). FANTASTIC ARCHAEOLOGY AND PSEUDOSCIENCE: LOST TRIBES, SUNKEN CONTINENTS, AND ANCIENT ASTRONAUTS. This course investigates various claims (e.g., ancient astronauts have visited Earth, archaeologists are not revealing

secrets about the Mayan calendar, and creation theory is a scientific alternative to the theory of human evolution) and how archaeologists respond to them.

ANTH 3336/CFA 3336 (3). GENDER AND GLOBALIZATION: CULTURAL AND ETHICAL ISSUES. An analysis of the impact of globalizing forces on women's lives and identities, as well as on patterns of gender relations and ideology in various cultures around the world.

ANTH 3344 (3). CULTURAL ASPECTS OF BUSINESS. This course explores the cultural aspects of business and entrepreneurship at home and abroad. It also addresses the relationship between anthropology and business, examining business in a holistic context.

ANTH 3345 (3). INTRODUCTION TO ETHNOGRAPHIC METHODS. Introduces the methodological tools and approaches of ethnography. Relevant for students from a variety of disciplines. Topics include the conceptual work behind research, field site setup, research methods, data archiving and management, and ethnographic sampling. Course format includes lecture, projects, and exams.

ANTH 3346 (3). CULTURE AND DIVERSITY IN AMERICAN LIFE. An overview of contemporary U.S. culture, with an emphasis on how diversity (e.g., ethnicity, class, religion, and gender) is expressed in communities, in regions, and in the nation.

ANTH 3348/HRTS 3348/CFB 3348 (3). HEALTH AS A HUMAN RIGHT. This course examines the concept of human rights critically, with an eye for cross-cultural variation and a particular focus on rights that are health-related.

ANTH 3350/CFA 3350 (3). GOOD EATS AND FORBIDDEN FLESH: CULTURE, FOOD AND THE GLOBAL GROCERY MARKET. A cultural perspective on food that blends biological and medical information about human nutrition and development with an exploration of the global market of eating. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor).

ANTH 3351/CFB 3351 (3). FORENSIC ANTHROPOLOGY: LESSONS TAUGHT BY BONES. Introduction to the identification of human remains, including conditions of preservation and decay. Estimating sex, stature, age, and ethnicity. Identifying pathology, trauma, and other causes of death.

ANTH 3353 (3). INDIANS OF NORTH AMERICA. A survey of American Indian and Eskimo life, past and present, with emphasis on the interaction of Indians and whites since 1492 and contemporary American Indian problems and enterprises – reservation and urban life, gambling, health care, and legal rights.

ANTH 3354 (3). LATIN AMERICA: PEOPLES, PLACES, AND POWER. Examines the development of Latin America in the context of global transformations since the 16th century. Special attention is given to the interaction of local communities with regional, national, and international systems of power.

ANTH 3355 (3). SOCIETY AND CULTURE IN CONTEMPORARY EUROPE. Anthropological survey of social and cultural dimensions of contemporary European society. Explores unity and diversity within the region, the role of gender, religion, class, ethnicity, and nationalism in structuring the lives of Europeans.

ANTH 3356 (3). BEFORE CIVILIZATION. A survey of the Paleolithic archaeology of the first three million years of human history in the Old World. Emphasis is upon adaptation and cultural change.

ANTH 3358/CFA 3358 (3). INDIANS OF THE SOUTHWEST FROM THE 16TH CENTURY TO THE PRESENT. An introduction to the non-Pueblo and Pueblo peoples of the Greater Southwest, with a focus on Indian-Indian and Indian-Euro-American relations and the resultant transformations. Topics include the clash of cultures, tourism, gambling, legal rights, and urbanism.

ANTH 3359 (3). PEOPLES AND CULTURES OF THE MIDDLE EAST. This course employs the lens of cultural anthropology to explore the social, cultural, familial, religious, and political lives of Middle Easterners from a wide variety of countries and backgrounds.

ANTH 3361 (3). LANGUAGE IN CULTURE AND SOCIETY. An investigation of social and cultural factors affecting the use of language. Topics include linguistic variation, Black English, women's language, and body language.

ANTH 3365/CFA 3365 (3). THE RISE AND FALL OF SUPERPOWERS: THE DYNAMICS AND ETHICS OF EMPIRE. A comparative introduction to the institutions and organizational

dynamics of three ancient empires (Roman, Chinese, Incan), with discussions of the lessons that these civilizations can teach Americans about their society.

ANTH 3366/RELI 3366 (3). MAGIC, MYTH AND RELIGION ACROSS CULTURES. A cross-cultural and comparative exploration of religion, ritual, magic, and supernatural belief systems. Examines how religion permeates other aspects of society and culture.

ANTH 3368/SOCI 3368 (3). URBAN LIFE: A CROSS-CULTURAL PERSPECTIVE. An introduction to urban life and culture around the world, including how we study cities, who inhabits cities, and the special features of city places and spaces.

ANTH 3374/CF 3374 (3). CULTURES AND ENVIRONMENTS OF THE SOUTHWEST. Patterns of land and resource use in prehistoric and early historic times in the Southwest. The focus is on the mutual influence of cultures and resources in the northern Rio Grande region.

ANTH 3376 (3). CARIBBEAN TRANSFORMATIONS: FROM COLUMBUS TO CARNIVAL. An introduction to the anthropology of Caribbean societies, focusing on the social, economic, and political influences that have shaped the contemporary Caribbean.

ANTH 3384/CFA 3384 (3). PARADISE LOST? THE ARCHAEOLOGY AND ETHICS OF HUMAN ENVIRONMENTAL IMPACTS. Interdisciplinary archaeological, anthropological, and historical examination of human impacts on the environment around the world over the last 50,000 years.

ANTH 3385/CFA 3385 (3). SUSTAINABLE LIVING. This course focuses on environmental challenges facing society and strategies for achieving a more sustainable existence.

ANTH 3388/CFA 3388 (3). WARFARE AND VIOLENCE: THE ANTHROPOLOGY AND ETHICS OF HUMAN CONFLICT. An examination of the origins and development of human aggression, violence, and warfare using interdisciplinary data and theories from prehistory, ethnology, history, and political science.

ANTH 3390/CFB 3390 (3). THE PLUNDERED PAST: ARCHAEOLOGY'S CHALLENGES IN THE MODERN WORLD. This course will provide an interdisciplinary understanding of the importance societies place on knowing, preserving, and altering evidence of the past. Special emphasis is placed on archaeology's role in understanding and preserving the past.

ANTH 3399/CFA 3399 (3). IN SEARCH OF ICE AGE AMERICANS. The peopling of America during the Ice Age, reconstructed by various disciplines (e.g., archaeology, linguistics, and molecular biology), and what that reconstruction reveals about how people adapted to a truly new world.

ANTH 4191 (1), 4192 (1), 4291 (2), 4292 (2). INDEPENDENT STUDY AND RESEARCH. For advanced undergraduates. *Prerequisite:* Approval of the director of undergraduate studies and a faculty sponsor.

ANTH 4300 (3). WORLD ARCHAEOLOGY. An archaeological overview of the human trajectory and sociocultural development over time, beginning with the origins of modern humans and then looking at human interactions with specific environments.

ANTH 4303 (3). POLITICAL ECONOMY OF HEALTH. Course explores topics in health and healing from a political economy perspective. Addresses social and economic factors influencing culture change, health and healing practices within a society. Examines health inequities around the globe. *Prerequisites:* ANTH 2301, ANTH 3301 or approval by instructor.

ANTH 4304 (3). MIGRATION, ETHNICITY, AND NATIONALISM. Examines three interrelated topics: migration, ethnicity, and nationalism. Focuses on major theoretical positions and on specific ethnographic cases. *Prerequisite:* 18 hours of anthropology or permission of the instructor for nonanthropology majors.

ANTH 4305 (3). APPLIED ANTHROPOLOGY. The application of anthropological theories and methods to problems in contemporary societies, including global business, community development, health care issues, agricultural/environmental programs, urban planning, tourism projects and education policy. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 4306 (3). ANTHROPOLOGY AND EDUCATION. An overview of the interaction of culture, society, and institutions in contemporary schools in their local, regional, national, and international contexts. Special attention is given to the case of bilingual education. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 4307 (3). GLOBAL AND PUBLIC HEALTH. Provides an overview of issues in international health, with a focus on contributions of anthropology and anthropologists to international public health issues. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 4309/HRTS 4309 (3). HUMAN RIGHTS, INDIGENOUS PEOPLES, AND NATION STATES. An examination of human rights issues among contemporary indigenous peoples, especially the impact on their cultures and societies from governmental and nongovernmental organizations, large-scale development programs, and global tourism.

ANTH 4311 (3). APPLIED LINGUISTICS. Examination of linguistic theory and data in the context of diverse, especially multilingual, speech communities. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 4325 (3). ZOOARCHAEOLOGY. A lecture and laboratory course focused on the methods, techniques and implications of the analysis of animal remains from archaeological sites. *Prerequisite:* ANTH 2302 or ANTH 2363 or permission of instructor.

ANTH 4333 (3). LABORATORY METHODS IN ARCHAEOLOGY. Classification and analysis of archaeological materials (various topics). *Prerequisites:* Advanced standing and ANTH 5381 or 5382 or permission of instructor.

ANTH 4336/CFB 3336 (3). CONCEPTS OF EVOLUTION: A HISTORY. Using original writings, interpretive texts, and biographies, this course examines the rise of evolutionary ideas from ancient times through the 20th century.

ANTH 4343 (3). BIOMEDICINE, CULTURE, AND POWER. Examines the epistemology and history of biomedicine, medical bureaucracy, professionalism, medical education, alternative and popular medicine, economics, and health care.

ANTH 4344 (3). GLOBAL POPULATION PROCESSES: ANTHROPOLOGICAL PERSPECTIVES. Focuses on an anthropological understanding of population processes – nuptiality, fertility, mortality, migration – and examines them within historical and cross-cultural frameworks. *Prerequisite:* 18 hours of anthropology (or permission of instructor for nonanthropology majors).

ANTH 4346 (3). ENVIRONMENTAL ANTHROPOLOGY AND DEVELOPMENT. Analyzes the processes of globalization from the perspective of environmental anthropology and development. *Prerequisite:* ANTH 2301.

ANTH 4350 (3), 4351 (3), 4352 (3). SPECIAL TOPICS IN ANTHROPOLOGY. An in-depth look at particular problems and issues in contemporary anthropology. Topics will vary.

ANTH 4377 (3). THE HUMAN FOSSIL RECORD. An examination of morphology, classification, and evolutionary relationships in the human fossil record. Covers the Pliocene through the emergence of modern Homo sapiens. Comparisons using the departmental fossil collection. *Prerequisite:* ANTH 2315 or permission of instructor.

ANTH 4381 (3). INTERNSHIP IN ANTHROPOLOGY. This course offers students experience in varied organizations and agencies where anthropological applications are relevant. These might include a contract archaeology firm, the Natural History Museum, a zoo, health clinics, marketing or PR firms, or corporations involved in international business. *Prerequisite:* Approval of the Director of Undergraduate Studies and a faculty sponsor.

ANTH 4384 (3). GLOBAL ISSUES AND DEVELOPMENT: AN OVERVIEW. An introduction to the major forces driving globalization and economic development today, analyzing how these forces impact the lives, cultures, and identities of peoples around the world (with an emphasis on the developing world). *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 4385 (3). COASTAL AND AQUATIC ARCHAEOLOGY. Seminar on the use of coastlines, oceans, rivers, marshes, lakes and islands throughout human history. *Prerequisite:* ANTH 2302 or ANTH 2363 or permission of instructor.

ANTH 4386 (3). THE ARCHAEOLOGY OF GENDER AND SEXUALITY. This course explores how and why archaeologists study gender and sexual identities of the past and how they detect the diversity in these institutions across cultures through time.

ANTH 4390 (3). CURRENT ISSUES IN ANTHROPOLOGY. Seminar on selected anthropological topics.

ANTH 4391 (3), 4392 (3). INDEPENDENT STUDY AND RESEARCH. For advanced undergraduates. The department also offers 1- and 2-hour alternatives. *Prerequisite:* Approval of the director of undergraduate studies and a faculty sponsor.

ANTH 4399 (3). SENIOR SEMINAR IN ANTHROPOLOGY. An in-depth examination of current theoretical and methodological developments in the discipline. Recommended for candidates for departmental distinction in anthropology. *Prerequisites:* Senior standing or permission of instructor and ANTH 2301.

ANTH 5310 (3). HUMAN OSTEOLOGY: BIOLOGY OF THE HUMAN SKELETON. Analysis of the human musculoskeletal system in both forensic and ancient contexts. In this laboratory course, students will learn the measurement and assessment of sex, age, race and stature.

ANTH 5334 (3). HISTORY OF ANTHROPOLOGY, PART 1. Analytical history of anthropology from the Classical period to the 20th century. Explains the content and development of theory, method, and interpretation. *Prerequisite:* 18 hours of anthropology for undergraduates.

ANTH 5335 (3). HISTORY OF ANTHROPOLOGY, PART TWO. Traces the theoretical developments in ethnology and archaeology from 1960 to the present, with intense readings and a focus on the potential utility of theoretical coherence in the discipline. *Prerequisite:* 18 hours of anthropology.

ANTH 5336 (3). HEALTH IN CROSS-CULTURAL PERSPECTIVE. Cross-cultural study of the cultural construction and social organization of medical systems in preindustrial and industrialized societies, including the political economy of health, ethnomedicine, international health, ethnopharmacology, and bioethics. *Prerequisite:* ANTH 2301 or 3301, or permission of instructor.

ANTH 5344 (3). RESEARCH METHODS IN ETHNOLOGY. Examination of methodologies and techniques appropriate for different types of ethnological research. *Prerequisites:* Advanced standing and ANTH 2301 (or permission of instructor for nonanthropology majors).

ANTH 5355 (3). SEMINAR IN THE SOUTHWEST. This course will focus on the development of archaeology in the American Southwest by placing it in historical context, discussing the social role of archaeology in general, 19th-century exploration and the impact of early archaeological finds, development of museums, tourism, national monuments, field schools, and the changing role of the Native Americans.

ANTH 5359/ENGL 5378 (3). LINGUISTICS: GENERAL. An introduction to modern linguistic science. Topics include phonology, morphology, syntax, semantics, dialects, writing systems, child language, language and the brain, and language in education.

ANTH 5381 (3), 5382 (3), 5681 (6). FIELD METHODS IN ARCHAEOLOGY. Methods of excavation, recording, and interpretation used in archaeological research. Fort Burgwin Research Center. Summer only. Students may petition to have this course fulfill the Lab Science Requirement.

ANTH 5681 (6), 5981 (9). FIELD METHODS IN ARCHAEOLOGY. Participants are engaged in all aspects of archaeological field and laboratory research, including excavation, recording of finds, survey mapping of sites, laboratory analyses of archaeological materials, and interpretation of intact archaeological contexts. Fort Burgwin Research Center.

Biochemistry

www.smu.edu/biochemistry

Professor Steven Vik, **Director**

Bachelor of Science With a Major in Biochemistry

The Biochemistry Program offers courses leading to a B.S. degree in biochemistry. This program reflects the interdisciplinary nature of modern biochemistry and includes courses in physics, mathematics, chemistry and biology. Undergraduate research is also highly recommended. These courses will prepare students for graduate study leading to a Ph.D. degree, for entrance to professional schools such as medicine, or for the chemical or biotechnology industry.

The program includes a core of required courses but allows some flexibility in the choice of additional upper-division courses. Note that there are two options for choosing the additional courses. Option 1 has been certified by the American Chemical Society for professional training in biochemistry. Option 2 provides a more traditional curriculum for biochemistry majors. Students planning to attend graduate school are advised to take at least three credits of undergraduate research (BIOL 3398, 4398 or CHEM 4397). Students obtaining a B.S. degree in biochemistry may not also obtain a major or minor in chemistry or biology.

	Credit Hours
Core Chemistry Courses	25
CHEM 1303, 1304, 1113, 1114 General Chemistry	
CHEM 3351 Quantitative Analysis	
CHEM 3371, 3372, 3117, 3118 Organic Chemistry	
CHEM 5383, 5384 Physical Chemistry	
Core Biological Sciences Courses	11
BIOL 1401, 1402 Introductory Biology	
BIOL 3304 Genetics	
Core Biochemistry Courses	4
BIOL/CHEM 5310 Biological Chemistry: Macromolecular Structure and Function	
BIOL/CHEM 5110 Biological Chemistry: Laboratory	
Core Mathematics Courses	9
MATH 1337, 1338, 2339 Calculus	
Core Physics Courses	8
PHYS 1105, 1106, 1303/1307, 1304/1308 General Physics	
Additional Courses (Option 1 or Option 2)	9–11
Option 1 (11 credits)	
Required (8 credits)	
CHEM 4397 Undergraduate Research	
CHEM 5185 Laboratory Methods in Physical Chemistry	
CHEM 5192 Inorganic Synthesis Laboratory	
CHEM 5392 Advanced Inorganic Chemistry	
Electives (choose 3 credits)	
BIOL/CHEM 5311 Biological Chemistry: Metabolism *or* **BIOL/CHEM 5312** Physical Biochemistry	

	Credit Hours
Additional Courses (continued)	
Option 2 (9 credits)	
Required (6 credits)	
BIOL 3350 Cell Biology	
BIOL/CHEM 5311 Biological Chemistry: Metabolism	
Electives (choose 3 credits)	
BIOL/CHEM 5311 Biological Chemistry: Metabolism	
BIOL/CHEM 5312 Physical Biochemistry	
or **BIOL 5304** Molecular Biology: Control and Expression of Genetic Information	
	66–68

Departmental Distinction

A biochemistry major may graduate with departmental distinction by successfully completing a special program of study that includes independent reading and research and a senior thesis under the direction of a member of the faculty. The student must submit an application to the biochemistry adviser by the first term of the junior year. At this time, the student must have completed at least 22 hours toward the biochemistry degree, with a GPA of at least 3.500 in courses required for the major. Upon approval from the respective departments, the student must enroll in the following courses: BIOL 4398, 4399 or CHEM 4397. Upon completion of these courses, the student will write a senior thesis and present it orally before a public audience including a faculty committee composed of the student's research adviser, the biochemistry adviser, and at least one additional faculty member. Upon successful completion of the senior thesis and maintenance of a GPA of at least 3.500 in courses required for the major, the B.S. degree will be awarded with departmental distinction.

Biological Sciences

www.smu.edu/biology

Professor Steven Vik, **Department Chair**

Professors: Christine Buchanan, Richard Jones, Paul Ludden, William Orr, Larry Ruben, John Ubelaker, Steven Vik, Pia Vogel. **Associate Professor:** Robert Harrod, John Wise. **Assistant Professor:** Johannes Bauer. **Senior Lecturer:** Eva Oberdörster. **Lecturer:** Teresa Strecker. **Emeritus Professors:** Venita Allison, John McCarthy, Franklin Sogandares-Bernal.

Bachelor of Science With a Major in Biological Sciences

This degree program is designed for students who plan careers in the biological sciences or further study in graduate or professional schools. A candidate for the B.S. degree must complete a minimum of 10 courses in biological sciences, including BIOL 1401, 1402 and eight additional courses that 1) total at least 26 advanced hours, 2) include BIOL 3304 and 3350, 3) include at least one course at the 4000 or 5000 level, and 4) include at least two courses with laboratories. The B.S. degree requires 16 hours of chemistry, including Organic Chemistry 1 and 2 with labs; eight hours of general physics; MATH 1337; and one additional course chosen from MATH 1338, or STAT 2331 or 5371. Although statistics is used extensively in biological research, preprofessional students should be aware that certain medical schools also require a full year of calculus.

Bachelor of Science With a Major in Biological Sciences and Master of Science in Molecular and Cell Biology

This degree program is designed for students with a strong interest in a research career. It is a five-year plan that results in both the B.S. and M.S. degrees. Admission into the program is by petition and occurs during the spring term of the second year. A research mentor must be identified and a minimum 3.200 GPA in science courses is required. The Department Graduate Committee will evaluate interested applicants. Tuition support is provided in the fifth year, and stipend support is provided for summer research and throughout the fifth year. Students in the program must be engaged in research year round and will enroll in BIOL 2101, 2102 in the third year. All of the B.S. degree requirements must be completed and include the following courses: BIOL 3304, 3350, 3398, 3399, 5304, 5310 or 5311, 5110. The requirements for the M.S. degree will be met in years four and five. During year four, students will complete BIOL 6121, 6122, 6310, 6322. During year five, students will typically complete BIOL 6123, 6124; two additional graduate courses; and sufficient research credits to total 15 hours in each term of the fifth year. To remain in the program, students will maintain a 3.000 GPA in science courses and exhibit satisfactory progress in their lab work.

Bachelor of Arts With a Major in Biological Sciences

This degree program is designed for students who wish to couple training in the biological sciences with a broad liberal arts program. Students who are preparing for medical or dental school should consult with the pre-med adviser about additional science requirements. A candidate for the B.A. degree must complete a minimum of eight courses in biological sciences, including BIOL 1401, 1402 and six courses that 1) total at least 18 advanced hours, 2) include BIOL 3304 and 3350, 3) include at least one course at the 4000 or 5000 level, and 4) include at least two courses with laboratories. The B.A. degree also requires 12 hours of chemistry, including Organic Chemistry 1 with lab.

B.A. Degree With Teacher Certification. Students interested in the B.A. degree program with teacher certification in secondary education should confer with the teacher certification representative in the department to plan a specific program of study.

Departmental Distinction

A biological sciences major with sufficiently high academic standing may graduate with departmental distinction by successfully completing a special program of study that includes independent reading and research and a senior thesis under the direction of a member of the departmental faculty. To graduate with departmental distinction, a student must be working toward a B.S. degree and must submit an application to the Undergraduate Studies Committee of the department for this designation during the first term of the junior year. At the time of the application, the student must have completed at least 14 hours of biological sciences, including at least six advanced hours, with a GPA in these courses of at least 3.500 and an overall GPA of at least 3.500. For students who have transferred to SMU, two grade point averages will be calculated, that for all work attempted, and that for work completed through enrollment at SMU. Admission to the program will be based on the lower of the two averages. With departmental approval, the student will enroll for BIOL 4398 in the second term of the junior year. Upon completion of this course with a grade of *B+* or better, the student will enroll during the senior year for BIOL 4399 in which a research project will be carried out and a senior thesis written and presented to the faculty. Performance in these courses and maintenance of a 3.500 GPA for all biological sciences courses attempted will determine if the B.S. degree will be awarded with departmental distinction.

Minor in Biological Sciences

Students majoring in other departments may obtain a minor in biological sciences by completing BIOL 1401, 1402 and at least nine advanced hours, which must include BIOL 3304, 3350 and an advanced laboratory course. Each advanced course must be completed through enrollment at SMU. CHEM 1303, 1304, 1113, 1114 also are required for the minor. A student may not earn minors in both biology and the natural sciences, or a minor or a major in both biology and environmental science.

The Courses (BIOL)

Courses for Nonscience Majors. BIOL 1303, 1305, 1308 and 1310 are designed to satisfy the University-wide requirements of nonscience students. BIOL 1303 is not open to students who have earned prior credit in BIOL 1401, and BIOL 1305, 1308, 1310 are not open to students who have earned prior credit in BIOL 1402. Nonscience majors should note that BIOL 1401, 1402 may also be taken to satisfy University-wide requirements.

Courses for Biology Majors. Students who wish to earn the B.A. or B.S. degree in biology are encouraged to complete BIOL 1401, 1402 and CHEM 1303, 1304 (with labs) in their freshman year. However, with the approval of an academic adviser, a student may postpone BIOL 1401, 1402 for one or two terms. The introductory biology courses are the minimum prerequisite for all advanced biology courses. The general chemistry courses are a prerequisite for most advanced biology courses.

Special Courses. BIOL 2101, 2102, 3395, 3398, 3399, 4398 and 4399 are research courses. BIOL 3343, 3347 and 5359 are SMU-in-Taos courses.

BIOL 1302 (3). INTRODUCTORY BIOLOGY.

BIOL 1303 (3). ESSENTIALS OF BIOLOGY. An introduction to the major concepts of biological thought for the nonscience major. Includes one laboratory session each week. BIOL 1303 is not open to students who have earned prior credit in BIOL 1401.

BIOL 1305 (3). THE NATURAL ENVIRONMENT. An introduction to major environments and their resident populations for the nonscience major. Includes the equivalent of one laboratory session each week. BIOL 1305 is not open to students with prior credit in BIOL 1402. (SMU-in-Taos)

BIOL 1308 (3). PLANT BIOLOGY. An introduction to the economic, social, and industrial aspects of plant substances and material. Offered in summer session at Fort Burgwin, SMU-in-Taos, New Mexico. Includes equivalent of one laboratory session each week.

BIOL 1310 (3). AQUATIC BIOLOGY. An introduction to the biology of lakes and streams of the Southern Rocky Mountains. Lectures and labs will be conducted at Fort Burgwin, SMU-in-Taos, New Mexico.

BIOL 1401 (4). INTRODUCTORY BIOLOGY. Introduction to the study of living organisms: cell structure, metabolism, and genetics. 3 hours of lecture and one 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402 are prerequisites for all advanced courses in biological sciences.

BIOL 1402 (4). INTRODUCTORY BIOLOGY. Introduction to the study of living organisms: ecology, evolution, diversity, and physiology. 3 hours of lecture and one 3-hour laboratory each week. BIOL 1401, 1402 are prerequisites for all advanced courses in biological sciences.

BIOL 2099 (0). INTERNSHIP. Laboratory or fieldwork in biology at an on- or off-campus location. Pass/fail only. No tuition. *Prerequisite:* Departmental approval required.

BIOL 2101 (1). INTRODUCTORY RESEARCH I. A minimum of 5 hours per week doing supervised laboratory research. This course is offered on a pass/fail basis only. *Prerequisites:* At least sophomore standing; BIOL 1401, 1402; and consent of instructor.

BIOL 2102 (1). INTRODUCTORY RESEARCH II. A minimum of 5 hours per week doing supervised laboratory research. This course is offered on a pass/fail basis only. *Prerequisites:* BIOL 2101 and consent of instructor.

BIOL 3100 (1), 3200 (2). SPECIAL TOPICS ABROAD. Courses offered in SMU-approved international programs. May be repeated for credit under a different subtitle. A maximum of 6 hours of Special Topics Abroad may be applied toward the B.A. or B.S. degree in biology. May not be applied toward the minor in biology. *Prerequisite:* Departmental approval.

BIOL 3222 (2). MOLECULAR GENETICS LABORATORY. Students gain experience in investigative methods used in modern medical research, molecular biology, genetics, bioinformatics, forensic science, and the pharmaceutical and biotechnology industries. *Prerequisite:* C- or better in BIOL 3304.

BIOL 3300 (3). SPECIAL TOPICS ABROAD. Courses offered in SMU-approved international programs. May be repeated for credit under a different subtitle. A maximum of 6 hours of Special Topics Abroad may be applied toward the B.A. or B.S. degree in biology. May not be applied toward the minor in biology. *Prerequisite:* Departmental approval.

BIOL 3303 (3). EVOLUTION. A study of the principles of biological evolution. Includes natural selection, adaptation, molecular evolution, the formation of new species, the fossil record, biogeography, and principles of classification. 3 hours of lecture each week. *Prerequisites:* BIOL 1401 and C- or better in BIOL 3304.

BIOL 3304 (3). GENETICS. An introduction to the structure, function, and transmission of the hereditary material. 3 hours of lecture each week. *Prerequisites:* BIOL 1401 and CHEM 1304.

BIOL 3305 (3). LIMNOLOGY: AQUATIC BIOLOGY. The study of inland waters, integrating chemistry, physics, and biology. Emphasis is on identifying organisms and studying their interactions with the environment. 2 hours of lecture plus one 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402; CHEM 1303.

BIOL 3306 (3). PHYSIOLOGY. Homeostatic control mechanisms in vertebrates. 3 hours of lecture each week. *Prerequisites:* C- or better in BIOL 3304 and 3350.

BIOL 3307/GEOL 3307 (3). ECOLOGY. Basic principles and concepts of ecology, with emphasis on population and community interactions. 3 hours of lecture each week. *Prerequisites:* BIOL 1401, 1402.

BIOL 3308 (3). BIOLOGY OF MARINE MAMMALS. A comparative study of marine mammal anatomy, morphology, physiology, life history and behavior, and adaptation to marine existence. Includes study of the effect of human activities on marine mammals, with special reference to northern European waters. *Prerequisites:* BIOL 1401, 1402; CHEM 1303, 1113. (SMU-in-Copenhagen only)

BIOL 3309 (3). MARINE BIOLOGY OF EUROPEAN COASTAL WATERS. Special emphasis on animals and plants living in European coastal waters. Chemical and physical parameters and their effect on community structure, morphology, anatomy, and physiology. Functions, survival strategies, and survival adaptations of the most important organisms. *Prerequisites:* BIOL 1401, 1402; CHEM 1303, 1113. (SMU-in-Copenhagen only)

BIOL 3310 (3). ECOLOGY AND HUMAN IMPACT IN THE NORTH AND BALTIC SEAS. Marine ecosystems and communities, and their distribution and function in the North and Baltic seas. Problems related to human activities, e.g., fisheries, habitat deterioration, eutrophication, and pollution. Ecosystem approach, sustainability, and precautionary principle in management. *Prerequisites:* BIOL 1401, 1402; CHEM 1303, 1113. (SMU-in-Copenhagen only)

BIOL 3311 (3). TROPICAL ECOLOGY AND SUSTAINABLE DEVELOPMENT. Examines the ecological impact of human activity, especially agriculture, in a tropical country. Topics include water pollution, waste management, and climate change. *Prerequisites:* BIOL 3307 and at least one college-level course in Spanish. (SMU-in-Costa Rica only)

BIOL 3312 (3). WILDLIFE ECOLOGY. Ecological principles of the East Africa savanna ecosystem. Examines factors underlying distributions, population biology, and behavioral ecology, along with competition and predation, using African examples. *Prerequisite:* BIOL 3307. (SMU-in-Kenya only)

BIOL 3342 (3). PLANT KINGDOM. A survey of the plant kingdom emphasizing life histories and developmental morphology. 2 hours of lecture and one 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402.

BIOL 3343 (3). FIELD BOTANY. Identification of vascular plants, with emphasis on ecological indicators. Lectures and laboratories conducted at Fort Burgwin, New Mexico, site of SMU-in-Taos. *Prerequisites:* BIOL 1401, 1402.

BIOL 3347 (3). SYSTEMATIC BOTANY. An introduction to the history, nomenclature, family characteristics, identification, and biosystematics of the flowering plants. Lecture and laboratory work conducted at Fort Burgwin, New Mexico. *Prerequisites:* BIOL 1401, 1402.

BIOL 3350 (3). CELL BIOLOGY. The structure and function of cells. 3 hours of lecture each week. *Prerequisites:* BIOL 1401, 1402. *Pre/Corequisite:* CHEM 1304.

BIOL 3354 (3). PARASITOLOGY. Comparative study of protozoa and helminthic parasitic organisms, and their role in diseases. 2 hours of lecture and one 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402.

BIOL 3357 (3). BIOLOGY OF INVERTEBRATES. A general survey of the invertebrates, with emphasis on identification of local species, morphological adaptations, systematics, and ecology. 2 hours of lecture and one 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402.

BIOL 3365 (3). CANCER BIOLOGY. Emphasis on the molecular features of oncogenesis and human cancers, including carcinogenesis, metastasis, and roles of genetic mutations and chromosomal aberrations during neoplasia. *Prerequisite:* C- or better in BIOL 3350.

BIOL 3369/GEOL 3369 (3). PALEOBIOLOGY. A survey of biological diversity, phylogenetic analysis, rates of evolution, extinction, biogeography, taphonomy, and paleoecology. *Prerequisites:* BIOL 1401, 1402 or one 1300-level course in Earth sciences.

BIOL 3395 (3). INTERNSHIP IN BIOLOGY. Biological research at an institution other than SMU. Credit does not apply toward the degree requirement for two laboratory classes. A student may not take both BIOL 3395 and 3398 for a letter grade. Prior departmental approval required. *Prerequisites:* BIOL 3304, 3350.

BIOL 3398 (3). UNDERGRADUATE RESEARCH I. A minimum of 9 hours per week doing research in the laboratory of a faculty member. Credit for this course does not apply toward the degree requirement for two laboratory courses. A student may not earn credit in both BIOL

3395 and 3398. *Prerequisites:* Junior standing, and approval of faculty sponsor and the Undergraduate Studies Committee of the department.

BIOL 3399 (3). UNDERGRADUATE RESEARCH II. This course is offered on a pass/fail basis only, and cannot be applied toward the requirements for the major in Biological Sciences. *Prerequisite:* BIOL 3398, and approval by the faculty sponsor and the Undergraduate Studies Committee of the department.

BIOL 3403 (4). MICROBIOLOGY. The biology of microorganisms, with an emphasis on diversity, disease, and the environment. 3 hours of lecture and one 3-hour laboratory each week. *Recommended:* CHEM 3371, 3117. *Prerequisites:* BIOL 1401, 1402 and C- or better in BIOL 3304.

BIOL 4132 (1). SENIOR SEMINAR. Discussion of current problems of biological interest. 1 hour each week. *Prerequisites:* Senior standing; major in biology.

BIOL 4160 (1). TOXICOLOGY LABORATORY. Modern biochemical and molecular techniques are used to assess the impact of environmental contaminants on liver biomarkers in fish. One 3-hour laboratory each week. *Prerequisite:* C- or better in BIOL 3350. *Prerequisite or corequisite:* BIOL 4360.

BIOL 4319 (3). IMMUNOBIOLOGY. Introduction to fundamental concepts of the immune system. *Prerequisites:* BIOL 3304, 3350.

BIOL 4322 (3). MOLECULAR BIOLOGY OF EUKARYOTES. Structure and function of eukaryotic chromosomes as mediators of gene expression during growth, differentiation, and oncogenesis. A student cannot have previously completed BIOL 5304. *Prerequisites:* BIOL 3304, CHEM 3372, and junior standing.

BIOL 4331 (3). DEVELOPMENTAL BIOLOGY. Developmental processes in animals. 3 hours of lecture each week. *Prerequisites:* BIOL 1401, 1402 and C- or better in BIOL 3304.

BIOL 4360 (3). ENVIRONMENTAL AND HUMAN TOXICOLOGY. Introduction to environmental toxicology, focusing on the fate and transport, biotransformation, and biochemical and physiological impacts of pollutants on humans and wildlife. 3 hours of lecture per week. *Recommended:* CHEM 3371, 3372. *Prerequisite:* C- or better in BIOL 3350.

BIOL 4370 (3). BIOTECHNOLOGY AND NANOTECHNOLOGY. Introduction to current techniques and emerging applications of biotechnology and nanobiotechnology in medicine, agriculture, forensic and aquatic sciences, and bioremediation. *Prerequisites:* CHEM 3371 and C- or better in BIOL 3304.

BIOL 4398 (3). HONORS RESEARCH I. For students in the departmental distinction program. *Prerequisites:* BIOL 1401, 1402; admission to departmental distinction program.

BIOL 4399 (3). HONORS RESEARCH II. For students in the departmental distinction program. *Prerequisite:* B+ or better in BIOL 4398.

BIOL 4460 (4). ENVIRONMENTAL AND HUMAN TOXICOLOGY WITH LAB. Introduction to environmental toxicology, with a focus on fate, biotransformation, and the biochemical and physiological impacts of pollutants on humans and wildlife. Includes 3 hours of lecture and one 3-hour laboratory per week. *Prerequisites:* C- or better in BIOL 3304, 3350.

BIOL 4460 (4). ENVIRONMENTAL AND HUMAN TOXICOLOGY WITH LAB. Introduction to environmental toxicology, with a focus on fate, biotransformation, and the biochemical and physiological impacts of pollutants on humans and wildlife. Includes 3 hours of lecture and one 3-hour laboratory per week. *Prerequisites:* C- or better in BIOL 3304, 3350.

BIOL 5102 (1). STRUCTURAL BIOLOGY SEMINAR. Readings and discussions of the period 1933–1963 when structural molecular biology emerged. Readings include original research articles and historical reviews. *Prerequisite:* BIOL/CHEM 5310 or consent of instructor.

BIOL 5110/CHEM 5110 (1). BIOLOGICAL CHEMISTRY LABORATORY. One 3-hour laboratory each week. *Prerequisites:* BIOL 1401, 1402. *Prerequisite or Corequisite:* BIOL/CHEM 5310. If CHEM 5110 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

BIOL 5166/GEOL 5166 (1). VERTEBRATE ANATOMY LABORATORY. A laboratory course to accompany BIOL/GEOL 5366. Exercises include basic anatomy, dissections, and examinations of fossil skeletons. *Corequisite:* BIOL/GEOL 5366.

BIOL 5304 (3). MOLECULAR BIOLOGY: CONTROL AND EXPRESSION OF GENETIC INFORMATION. DNA structure and replication, control of transcription and translation, and techniques in molecular genetics and recombinant DNA technology. *Prerequisites:* CHEM 3372 and C- or better in BIOL 3304.

BIOL 5305 (3). GENOMICS AND BIOINFORMATICS. Impact of completely sequenced genomes on current experimental and computational approaches to biomedical research. Introduction to the technology, biology, and software exploited by molecular biology, genealogy, and medical diagnostic labs. *Prerequisites:* C- or better in BIOL 3304 and junior standing.

BIOL 5310/CHEM 5310 (3). BIOLOGICAL CHEMISTRY: MACROMOLECULAR STRUCTURE AND FUNCTION. Introduction to the structure and function of macromolecules of biological importance. Emphasis on nucleic acid and protein structure, enzyme kinetics, and carbohydrate and lipid chemistry. 3 hours of lecture each week. *Prerequisites:* BIOL 1401, 1402; CHEM 3371, 3372. The accompanying laboratory (BIOL 5110) is strongly recommended for biology majors. If CHEM 5310 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

BIOL 5311/CHEM 5311 (3). BIOLOGICAL CHEMISTRY: METABOLISM. Introduction to the pathways and regulatory events in the metabolism of carbohydrates, lipids, amino acids, and nucleotides. 3 hours of lecture each week. *Prerequisites:* CHEM 3371, 3372. If CHEM 5311 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

BIOL 5312/CHEM 5312 (3). PHYSICAL BIOCHEMISTRY. Physical chemistry of macromolecules and biological membranes, with an emphasis on the thermodynamics of solutions. *Prerequisites:* BIOL 1401, 1402; MATH 1338; CHEM 3372; CHEM/BIOL 5310. (CHEM 5381 or 5383 is recommended.) If CHEM 5312 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

BIOL 5325 (3). GENERAL AND MOLECULAR VIROLOGY. Emphasis on the molecular aspects of viral replication and pathogenesis, including the roles of viruses in emerging human infectious diseases, cancer, and bioterrorism. *Prerequisites:* C- or better in BIOL 3304 and junior standing.

BIOL 5358 (3). ECOLOGY OF PARASITISM. The biotic and abiotic factors influencing parasite communities. Emphasis on the free-living stages of parasites. 2 hours of lecture and one 3-hour laboratory each week. *Prerequisite:* BIOL 3354.

BIOL 5359 (3). HOST-PARASITE RELATIONSHIPS. Analysis of host-parasite relations from an evolutionary and ecological viewpoint. Lectures and laboratories conducted at Fort Burgwin in New Mexico. *Prerequisite:* BIOL 3354. (SMU-in-Taos)

BIOL 5366/GEOL 5366 (3). VERTEBRATE ANATOMY AND ORIGINS. An introduction to vertebrate anatomy with emphasis on structure and function. Additionally, the course examines processes that have affected the diversity of vertebrate organisms, including origination, biogeography, and adaptation. The accompanying laboratory is a corequisite for biology majors and strongly recommended for all other students. *Prerequisites:* BIOL 1401, 1402 or GEOL 1308. *Corequisite:* BIOL 5166.

Chemistry

www.smu.edu/chemistry

Professor Elfi Kraka, **Department Chair**

Professors: Edward Biehl, John Buynak, Dieter Crèmer, Elfi Kraka, Werner Horsthemke, Michael Lattman, Mark Schell, David Son, Patty Wisian-Neilson. **Assistant Professors:** Alexander Lippert, Peng Tao, Nicolay Tsarevsky, Brian Zoltowski. **Senior Lecturer:** Andrea Adams. **Lecturer:** Helen Babbili. **Emeritus Professor:** John Maguire.

The atmosphere of the Chemistry Department is an informal one where students have easy access to the faculty. Undergraduate majors are heavily involved in research, working in teams with faculty, postdoctoral fellows and graduate students. Graduates have been accepted into the leading graduate and professional schools in the nation. On average, two-thirds of chemistry graduates seek advanced degrees; other graduates choose employment in industry and research.

Bachelor of Science With a Major in Chemistry

The B.S. degree requires the completion of a minimum of 44 hours in the department, including CHEM 1113, 1114, 1303, 1304, 3351; Organic Chemistry 1 and 2 with labs; CHEM 4397, 5185, 5188, 5192, 5310, 5383, 5384, 5392, 5486; and an additional 5000-level course in chemistry to be chosen in consultation with the departmental adviser. In addition, the B.S. requires eight hours of general physics and MATH 1337, 1338, and 2339. This degree is certified by the American Chemical Society for professional training in chemistry.

Bachelor of Arts With a Major in Chemistry

The B.A. degree requires the completion of a minimum of 26 hours in the department, including CHEM 1113, 1114, 1303, 1304; Organic Chemistry 1 and 2 with labs; CHEM 5381 (or 5383); plus at least seven additional hours at the advanced level chosen in consultation with the department adviser. In addition, eight hours of general physics, MATH 1337 and one additional course in math or statistics are required. This degree is not certified by the American Chemical Society. Note that organic chemistry courses taken elsewhere generally do not count as advanced hours towards the degree.

Departmental Distinction

A chemistry major pursuing a B.S. degree may elect to graduate with departmental distinction. The student must apply to the department for this designation during the junior year, after at least 22 hours of chemistry have been completed with a minimum GPA of 3.500 in those courses. The student will enroll in CHEM 4397 and undertake an independent research project under the supervision of a departmental faculty member. During the senior year, a senior thesis will be written and presented to the department. Upon completion of all degree requirements, approval of the departmental faculty at the completion of these requirements, and provided the student maintains a minimum 3.500 GPA in all chemistry courses, the student will graduate with departmental distinction in chemistry.

Minor in Chemistry

Students majoring in other departments may obtain a minor in chemistry by completing CHEM 1303, 1113 and CHEM 1304, 1114 plus three additional advanced three- or four-hour courses to be chosen in consultation with the Chemistry

Department adviser. Note that organic chemistry courses taken elsewhere generally do not count as advanced hours towards the minor.

The Courses (CHEM)

CHEM 1113 (1). GENERAL CHEMISTRY LAB. One three-hour laboratory period each week. *Prerequisite or Corequisite:* CHEM 1303. Withdrawal from CHEM 1113 requires withdrawal from CHEM 1303.

CHEM 1114 (1). GENERAL CHEMISTRY LAB. One three-hour laboratory period each week. *Prerequisite:* Chemistry 1113; *Prerequisite or corequisite:* CHEM 1304.

CHEM 1301 (3). CHEMISTRY FOR LIBERAL ARTS. A course designed for students with weak backgrounds in chemistry and for liberal-arts students.

CHEM 1303 (3). GENERAL CHEMISTRY. Designed primarily for science majors, premed students, and engineering students. Offers an introduction to the fundamental principles and theories of chemistry, including stoichiometry, the structure of matter, energy relationships involved in the transformation of matter, the dynamics of such transformations, and some descriptive chemistry of the important elements. It is a prerequisite to all advanced courses in the department. Withdrawal from CHEM 1303, 1304 requires withdrawal from corresponding labs.

CHEM 1304 (3). GENERAL CHEMISTRY. Primarily for science majors or premed or engineering students. Introduces the fundamental principles and theories of chemistry, including stoichiometry, the structure of matter, energy relationships involved in the transformation of matter, the dynamics of such transformations, and some descriptive chemistry of the important elements. Prerequisite to all advanced courses in the department. *Prerequisite:* CHEM 1303 or equivalent. Withdrawal from CHEM 1303, 1304 requires withdrawal from corresponding labs.

CHEM 3117 (1). ORGANIC CHEMISTRY LAB. One three-hour laboratory period each week. *Pre or Corequisite:* CHEM 3371.

CHEM 3118 (1). ORGANIC CHEMISTRY LAB. One three-hour laboratory period each week. *Pre or Corequisite:* CHEM 3372. *Prerequisite:* CHEM 3117.

CHEM 3351 (3). QUANTITATIVE ANALYSIS. A course involving the theory and practice of quantitative analytical chemistry techniques including gravimetric, volumetric, electrochemical, and spectroscopic analyses. Three hours of lecture and two four-hour laboratory periods per week for one-half term. *Prerequisites:* CHEM 1303, 1304, 1113, 1114.

CHEM 3371 (3). ORGANIC CHEMISTRY. Designed to satisfy the requirements of the chemistry major and health-related professions student. The first term deals primarily with aliphatic chemistry with special emphasis on stereochemistry. The second term emphasizes aromatic substances and the chemistry of biologically relevant molecules. *Prerequisites:* CHEM 1303, 1304, 1113, 1114.

CHEM 3372 (3). ORGANIC CHEMISTRY. For chemistry majors and students interested in health-related professions. Emphasizes spectroscopy and the chemistry of functional groups. *Prerequisites:* C- or higher in CHEM 3371, 3117. *Corequisite:* CHEM 3118.

CHEM 4000 (0). RESEARCH. For students who hold research fellowships but are not enrolled in any credit-hour courses. No tuition.

CHEM 4197 (1), 4198 (1), 4297 (2), 4298 (2), 4397 (3), 4398 (3). UNDERGRADUATE RESEARCH. *Prerequisites:* Junior or senior classification and permission of the instructor. *Prerequisite or corequisite:* CHEM 4177.

CHEM 4299 (2). HONORS THESIS. *Prerequisite:* Departmental approval.

CHEM 5108 (1). SPECIAL TOPICS IN CHEMISTRY. Special topics of current interest. Content varies from term to term.

CHEM 5110/BIOL 5110 (1). BIOLOGICAL CHEMISTRY LABORATORY. One three-hour laboratory period each week. *Corequisite:* CHEM 5310. If CHEM 5110 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

CHEM 5185/CHEM 5188 (1). LABORATORY METHODS IN PHYSICAL CHEMISTRY. Laboratory experiments with emphasis on thermodynamics, chemical kinetics, and physical biochemistry. One half-hour of lecture and five-hour laboratory period each week for five weeks. *Prerequisite:* CHEM 5381 or 5383.

CHEM 5188/CHEM 5185 (1). ADVANCED PHYSICAL CHEMISTRY LABORATORY. Laboratory experiments with emphasis on chemical kinetics and molecular spectroscopy. One half-hour of lecture and five-hour laboratory period each week for five weeks. *Prerequisite:* CHEM 5185. *Corequisite:* CHEM 5384 or permission of instructor.

CHEM 5192 (1). INORGANIC SYNTHESIS LABORATORY. This course introduces students to advanced techniques and methods used in the synthesis of inorganic compounds. *Corequisite (or prerequisite):* CHEM 5392.

CHEM 5306 (3). INTRODUCTION TO COMPUTATIONAL CHEMISTRY. Besides the normal lab experiments, modern chemists/biochemists perform experiments on the computer by calculating the outcome of chemical/biochemical reactions. The present course will provide an introduction into this new field in a hands-on fashion. Major quantum chemical packages will be used.

CHEM 5308 (3). SPECIAL TOPICS IN CHEMISTRY. Presentation of advanced special topics in chemistry that are at the forefront of current chemical interest. Content varies from term to term.

CHEM 5310/BIOL 5310 (3). BIOLOGICAL CHEMISTRY: MACROMOLECULAR STRUCTURE AND FUNCTION. Introduction to the structure and function of macromolecules of biological importance. Emphasis on nucleic acid and protein structure, enzyme kinetics, carbohydrate and lipid chemistry. Three lecture hours per week. *Prerequisites:* CHEM 3371 and 3372. If CHEM 5310 is counted toward a chemistry major or minor, it cannot be counted toward a biological sciences major or minor.

CHEM 5311/BIOL 5311 (3). BIOLOGICAL CHEMISTRY: METABOLISM. Introduction to the pathways and regulatory events in the metabolism of carbohydrates, lipids, amino acids, and nucleotides. Three lecture hours per week. *Prerequisites:* CHEM 3371 and 3372.

CHEM 5312/BIOL 5312 (3). PHYSICAL BIOCHEMISTRY. Physical chemistry of macromolecules and biological membranes, with an emphasis on the thermodynamics of solutions. *Prerequisites:* MATH 1338; CHEM 3372, 5310. (CHEM 5381 or CHEM 5383 is recommended.)

CHEM 5317 (3). INTRODUCTION TO MOLECULAR MODELING AND COMPUTER ASSISTED DRUG DESIGN. The course presents a thorough and in-depth overview of methods and techniques in computer assisted drug design (CADD). It includes topics such as drug discovery and drug design, molecular recognition and docking, ligand-receptor interactions, pharmacophore searching, virtual screening, de novo design, molecular graphics, chemometrics, etc.

CHEM 5321 (3). UNDERSTANDING CHEMISTRY. The course focuses on a general understanding of chemistry in terms of models and concepts that describe structure, stability, reactivity and other properties of molecules in a simple, yet very effective way.

CHEM 5322 (3). INTRODUCTION TO NANOTECHNOLOGY. Nanotechnology (NT) is expected to change our lives and society more than computer technology and electricity have done together. The course will provide an introduction to NT. Nano-materials and their applications will be discussed.

CHEM 5333 (3). INTRODUCTION TO POLYMER CHEMISTRY. This course provides basic information on the synthesis, physical properties, and solution properties of high molecular weight molecules. Plastics, manufacturing, and fabrication of polymers are discussed. *Prerequisites:* CHEM 3371 and 3372.

CHEM 5344 (3). PHYSICAL CHEMISTRY OF PROTEINS. Graduate-level course on the fundamental aspects of techniques used to interrogate the thermodynamics and kinetics of protein conformational changes, with emphasis on atomic resolution structural techniques. *Prerequisites:* CHEM 5383 and 5384, knowledge of basic biochemistry, and instructor approval.

CHEM 5381 (3). PHYSICAL CHEMISTRY. Introduction to chemical thermodynamics, kinetics, molecular structure, spectroscopy, and statistical mechanics. Designed for B.A. majors in chemistry. *Prerequisites:* CHEM 1304, 1114, PHYS 1106, 1304, MATH 1337.

CHEM 5383 (3). PHYSICAL CHEMISTRY I. Gas laws; kinetic molecular theory; introduction to thermodynamics, with applications to phase transitions and chemical equilibrium; chemical kinetics. *Prerequisites:* PHYS 1106, 1304, 1114; MATH 2339 or permission of instructor.

CHEM 5384 (3). PHYSICAL CHEMISTRY II. Elements of quantum mechanics and its description of many – electron atoms, bonding, and spectroscopy; intermolecular forces; structure of solids; and transport properties of fluids. *Prerequisite:* CHEM 5383.

CHEM 5390 (3). ENVIRONMENTAL CHEMISTRY. An examination of the chemistry of Earth's environment, and of environmental problems caused by anthropogenic activities. Topics include aquatic and soil chemistry, nuclear chemistry, alternative energy, CO_2 neutral, biomaterial and green technologies, atmospheric chemistry and global warming. *Prerequisites:* MATH 1338, PHYS 1303 and CHEM 1304, 1114. *Recommended:* PHYS 1304; and CHEM 5381, CHEM 5383, GEOL 6338.

CHEM 5392 (3). ADVANCED INORGANIC CHEMISTRY. Survey of the bonding, structure, and reactivity of inorganic compounds; coordination, organometallic, and main group element chemistry. Three hours of lecture each week. *Recommended:* CHEM 5384.

CHEM 5393 (3). ADVANCED ORGANIC CHEMISTRY. Three hours of lecture each week. *Prerequisites:* CHEM 3372.

CHEM 5396 (3). ADVANCED PHYSICAL CHEMISTRY. Three hours of lecture each week. *Prerequisite:* Permission of instructor.

CHEM 5397 (3). BIOTRANSFORMATIONS AND BIOCATALYSIS. This course will cover the history, application and current trends of biotransformations and biocatalysis with the emphasis on how biocatalysts are developed and used in pharmaceutical research. *Prerequisites:* CHEM 3371 and CHEM 3372.

CHEM 5398 (3). MEDICINAL CHEMISTRY. This course will highlight the close relationships of organic chemistry and biochemistry with the field of medicine. The course will rely on the departmental computational laboratory to permit three-dimensional visualization of molecular interactions. Three hours of lecture each week. *Prerequisites:* CHEM 3371 and 3372.

CHEM 5486 (4). INSTRUMENTAL ANALYSIS. A course involving the theory, operation and application of instrumentation used in the modern chemical laboratory. Two hours of lecture and two three-hour laboratory periods each week. *Prerequisite:* CHEM 3351 or permission of instructor.

Classical Studies

Associate Professor Melissa Dowling, **Director**

The minor in classical studies offers an integrated program studying the various aspects of the civilization of ancient Greece and Rome. The minor requires 18 hours, of which at least nine hours must be at the advanced level (3000 or above). Coursework for the minor must be distributed as follows:

	Credit Hours
Classical Languages	6
LATN 2311, 2312 *or* other advanced Latin courses *or* classical Greek at the 2000 level, when available	
Classical Studies (at least one course from each group)	12
Group 1: Art History	
ARHS 1303 Introduction to Western Art I: Prehistoric Through Medieval	
ARHS 3303 Archaeological Field Methods of Italy (3 hours on the excavation)	
ARHS 3312 Etruscan and Roman Art	
ARHS 3313 Etruscan and Iron Age Italy	
ARHS 3314 The Art and Architecture of Ancient Pompeii	
ARHS 3316 Art in Rome (SMU-in-Rome)	
ARHS 3317 Ancient Painting	
ARHS 3319 Art of the Roman Empire	
ARHS 3603 Archaeological Field Methods of Italy (6 hours on the excavation)	
ARHS 4310 Seminar in Ancient Art	
CLAS 3311 Mortals, Myths, Monuments of Ancient Greece	
Group 2: History	
HIST 3353 The History of Ancient Greece	
HIST 3354 Warfare and Diplomacy in Antiquity	
HIST 3355 Class and Gender in Ancient Society	
HIST 3361 Roman History and the Roman Mind	
HIST 5391 Athenian Democracy	
PHIL 3351 History of Western Philosophy (Ancient)	
Group 3: Other	
ARHS 3603 Archaeological Field Methods of Italy	
CLAS 2311 Myth and Thought in the Ancient World	
CLAS 3312 Classical Rhetoric	
LATN 3323 Latin Literature	
LATN 3324 Advanced Latin Grammar and Composition	
LATN 3325 Advanced Latin Readings and Composition	
LATN 3326 Advanced Latin Readings: Vergil	
LATN 3335 Medieval Latin	
RELI 3320 Introduction to Classical Judaism	
RELI 3326 Introduction to New Testament	
RELI 3349 Early Christianity	
RELI 3371 The World of the New Testament	
	18

CLAS 2311/CFA 3311 (3). MYTH AND THOUGHT IN THE ANCIENT WORLD. Explores the conceptual and philosophical underpinnings of ancient understandings of reality in Western and non-Western cultures in both ancient and modern times. Materials for investigation will be primarily textual, including myths, epics, tragedies, and philosophical discourse in ancient Greece.

CLAS 2332/CFA 3332 (3). SOCIETY EXPANDING: POLIS AND EMPIRE. This course presents a case-study approach to the development of cities, civilizations, and empires from the appearance of urbanism in Mesopotamia to the end of the European Middle Ages, with special reference to political, economic, and religious institutions.

CLAS 3311/ARHS 3311 (3). MORTALS, MYTHS AND MONUMENTS OF ANCIENT GREECE. A visual analysis of the rich tapestry of ancient Greek culture, fountainhead of Western civilization, with emphasis on mythological, archaeological, and historical settings in which the art and architecture occur. Touches on various aspects of ancient Greek life including religious practices, Olympic contests, theatrical performances, and artistic perfection, among others.

CLAS 3312/CFB 3312 (3). CLASSICAL RHETORIC. Readings in the Ancient Sophists, Plato, Aristotle, Isocrates, Cicero, Quintilian, Longinus, and St. Augustine; study of the intellectual foundations of the Western world.

Earth Sciences

www.smu.edu/earthsciences

Professor Robert Gregory, **Department Chair**

Professors: Robert Gregory, Bonnie Jacobs, Louis Jacobs, Jim Quick, Brian Stump, John Walther, Crayton Yapp. **Associate Professors:** Heather DeShon, Matthew Hornbach, Maria Beatrice Magnani, Neil Tabor. **Emeritus Professors:** David Blackwell, Lee McAlester.

The Roy M. Huffington Department of Earth Sciences provides ways of understanding and appreciating dynamic earth processes, the physical environment, and the place of humanity in the long and complex history of the planet and solar system. They also provide the background for rewarding careers in industry, government and academia. The faculty offers exceptional learning and research opportunities in geology, geochemistry, geophysics, resource geology, planetary geology, paleontology, and natural resource and energy management.

Earth science is an interdisciplinary, applied science that integrates well with other fields. It attracts students with broad interests in geology, chemistry, biology, environmental science, archaeology, astronomy, oceanography, engineering, applied mathematics or physics. The department strongly encourages combined majors. In addition to combinations with the above fields, many undergraduate Earth science majors have double majors or minors in business (especially finance, real estate or marketing), economics, pre-law, computer science, archaeology, world languages, English, history, journalism and pre-med.

Academic programs are tailor-made to the educational and career objectives of each student. Because of the heavily funded active research programs within the department and their close ties with the Dallas geological community, students often receive excellent pre- and post-graduation employment opportunities. The department also has some financial aid available for undergraduate majors, including department scholarships and support for off-campus field programs.

The department offers four different majors in Earth sciences: geology B.A. and B.S., geophysics B.S., and resource geology B.S. A minor in geology or environmental Earth science that can be combined with virtually any other degree program on campus is available. The department also offers a minor, which is available to students who are not majoring in geology. The department is the home of the Environmental Science and Environmental Studies programs. (Students should see the degree program listing in the Dedman College section for details.)

Bachelor of Arts or Bachelor of Science With a Major in Geology

The B.A. or B.S. degree in geology consists of a core sequence that provides a basic background in plate tectonics, earth materials (mineralogy and igneous, metamorphic and sedimentary rocks) and field methods. Beyond the core sequence, all students are encouraged to include sedimentology and structural geology (required for the B.S.) in their programs. Students, in consultation with a faculty adviser, are encouraged to pursue concentrations in paleontology, geochemistry or resource geology that integrate classroom learning with field and laboratory experience. Participation in a recognized geology summer field camp is strongly recommended for all majors (B.A. and B.S.). Most Earth science graduate programs in the United States require that a field course be completed.

Requirements for the B.A. Degree. A minimum of 28 hours in Earth sciences and a minimum of nine hours of support courses, selected from the following:

	Credit Hours
GEOL Courses	14
One from GEOL 1301, 1305, 1307, 1308, 1313, 1315	
GEOL 3340, 3451, 3452	
Earth Science Electives	12
At the 3000 level or above.	
Geology Field Studies	2–3
One from GEOL 3241, 3242, 3243, 3343	
Required Support Courses	9–12
CHEM 1301 *or* 1303	
PHYS 1301 and 1303 (recommended), *or* 1313	
MATH 1337	
	37–41

Requirements for the B.S. Degree. A minimum of 36 hours in Earth sciences and a minimum of 17 hours of support courses, selected from the following:

	Credit Hours
GEOL Courses	18
One from GEOL 1301, 1305, 1307, 1308, 1313, 1315	
GEOL 3340, 3451, 3452, 3454	
Earth Science Electives	12
At the 3000 level or above.	
Geology Field Studies and Research	6–9
One from GEOL 3241, 3242, 3243, 3343	
GEOL 4296 and 4298, *or* 4657	
Required Support Courses	17
CHEM 1303/1113, 1304/1114	
PHYS 1303	
MATH 1337, 1338	
	36–39

Notes

- Experience with a modern scientific computing language is essential and can be gained in a course such as **GEOL 3359** Computer Methods in the Earth Sciences.
- The requirements for the geology major are considered minimal. Students planning careers in the Earth sciences should take additional coursework according to the geoscience emphasis that best fits their goals. Students should consult a faculty adviser for suggestions.

Minor in Geology

Requirements for the Minor. A minimum of 17 hours in Earth sciences, selected from the following:

	Credit Hours
GEOL Courses	3
One from GEOL 1301, 1305, 1307, 1308, 1313, 1315	
Earth Science Electives	12
At the 3000 level or above.	
Geology Field Studies	
One from GEOL 3241, 3242, 3243, 3343	2–3
	17–18

Bachelor of Science With a Major in Geophysics

Geophysical techniques are used to understand the physical behavior of Earth, including plate-tectonic processes, earthquake mechanisms and nuclear test-ban verification. The B.S. degree in geophysics provides a strong quantitative background in seismology, geothermics and digital signal processing.

Requirements for the B.S. Degree. A minimum of 33 hours in Earth sciences and a minimum of 30 hours of support courses, selected from the following:

	Credit Hours
GEOL Courses	24
One from GEOL 1301, 1305, 1307, 1313, 1315 GEOL 3340, 3451, 3452 GEOL 3454, 5320, 5392	
Earth Science Electives	9
At the 3000 level or above; with at least 3 credit hours in geophysics.	
Required Support Courses	30
CHEM 1303/1113 PHYS 1303/1105, 1304/1106 MATH 1337, 1338, 2339, 2343, 3337, 3353	
	63

Notes

- Participation in a recognized geology or geophysics summer field camp is strongly recommended for all geophysics majors.
- Experience with a modern scientific computing language is essential and can be gained in a course such as **GEOL 3359** Computer Methods in Earth Sciences.
- The requirements for the geophysics major are considered minimal. Students should consult a faculty adviser for recommendations on additional coursework that best fits their goals.

Bachelor of Science With a Major in Resource Geology

Resource and environmental issues are central to the important challenges facing the world today. As a result, resource and environmental problems are being addressed by a growing number of disciplines, including the sciences, engineering, the legal profession, economics, journalism and ethics. Yet, most of these problems are rooted in geological processes. The B.S. degree in resource geology is intended to

provide students with a quantitative understanding of the chemical and physical processes involved in the formation and production of a particular resource and the environmental consequences. The degree is preparation for the practice of geology in the public sector. Because of the multidisciplinary scope of most resource problems, students are strongly encouraged to take appropriate courses in other departments.

Requirements for the B.S. Degree. A minimum of 33 hours in Earth science and a minimum of 23 hours of support courses, selected from the following:

	Credit Hours
GEOL Courses	33–37
One from GEOL 1301 (recommended), 1305, 1307, 1308, 1313, 1315	
GEOL 3340, 3451, 3452	
GEOL 3330, 5384, 5386	
Two from GEOL 3343, 3353, 3374, 3454, 3472, 4390, 5459	
GEOL 4296 and 4298, *or* 4657	
Required Support Courses	23
CHEM 1303/1113, 1304/1114	
PHYS 1303	
MATH 1337, 1338, 2339, 2343	
	56–60

Notes

- Experience with a modern scientific computing language is essential and can be gained in a course such as **GEOL 3359** Computer Methods in Earth Sciences.
- The requirements for the resource geology major are considered minimal. Students should consult a faculty adviser for recommendations on additional coursework that best fits their goals.

Minor in Environmental Earth Sciences

The minor in environmental Earth sciences is designed with a two-course geology core as background to an interdisciplinary course of study. The minor is freestanding and is not intended to lead to a major. The minor is not available to students majoring in environmental Earth sciences. Instead, it should provide an excellent and substantive background for students heading into the environmental field from other disciplines. The minor is not suitable for a student majoring or minoring in the earth sciences. The Roy M. Huffington Department of Earth Sciences is responsible for administration of this minor.

Requirements for the Minor. A minimum of 17 hours, to be selected from the following, with at least nine hours at the 3000 level or above:

	Credit Hours
One from GEOL 1301, 1305, 1307, 1308, 1313, 1315	3
One from GEOL 3330, 3340, 3353, 3363, 3366	3
Any four from the following:	11–12
GEOL 1315, 3241–43, 3307, 3330, 3340, 3343, 3353, 3363, 3366, 5384, 5386 (if not taken for the requirements above)	
BIOL 1305, 3307, 3342	
CEE 5311	
	17–18

GEOL 1100 (1), 1200 (2), 1300 (3). EARTH SCIENCES ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitles.

GEOL 1301 (3). EARTH SYSTEMS. Examines geologic change within the earth as governed by physical, chemical, and biological processes, as well as interactions among the solid earth, oceans, atmosphere, and biosphere. 3 hours of lecture and one 2-hour laboratory each week. Recommended for all geology tracks.

GEOL 1305 (3). OCEANOGRAPHY. A study of the physical (geological), biological, and chemical processes responsible for the ocean, as it exists today. Examines the impact of man on the oceans and oceanography's role in resource development, climatic and environmental modification, and other human concerns. 3 hours of lecture and one 2-hour laboratory each week.

GEOL 1307 (3). THE SOLAR SYSTEM. A study of the formation and evolution of the solar system. Discussion of solar system materials, nebular processes, meteorites, the formation and evolution of the planets and their satellites, the origin of stars, and the evidence for the standard model of cosmology. 3 hours of lecture and one 2-hour laboratory each week.

GEOL 1308 (3). EVOLUTION AND LIFE HISTORY. Evolution as observed in the fossil record in light of biological principles. Evolution as a process, origins of life, adaptation, and extinction, emphasizing examples from the geological record. One 4-hour field trip each week. Recommended for the paleontology track.

GEOL 1313 (3). EARTHQUAKES AND VOLCANOES. Seismic and volcanic activity are two important manifestations of plate tectonics on the earth. They are also two major natural hazards affecting humankind. This course emphasizes the geologic insights provided by earthquakes and volcanoes, and their impact on society.

GEOL 1315 (3). INTRODUCTION TO ENVIRONMENTAL SCIENCE. Uses the fundamental principles of ecology, hydrology, geology, population dynamics, land-use management, and related fields as the basis for understanding many of the major environmental issues that face the planet: greenhouse climate changes, soil and water pollution, acid rain and related atmospheric pollution problems, habitat destruction and species extinctions, waste disposal, land-use management, energy resource development, geologic hazards, and others. 3 hours of lecture and one 2-hour laboratory each week. Field trips take the place of some laboratory classes.

GEOL 2320 (3), 2321 (3). SOUTHWEST ENVIRONMENTS: A GEOLOGICAL APPROACH. Practice of the scientific method by investigation of the processes affecting geologic and environmental change in the southwestern United States. Offered only through the SMU-in-Taos program. Course will satisfy either the laboratory science requirement (2320) or the second-term writing requirement (2321). Either course can fulfill a 1300-level geology major or minor course requirement.

GEOL 3100 (1). EARTH SCIENCES ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitles.

GEOL 3107 (1). DEPARTMENTAL SEMINARS. Students attend and critically evaluate departmental seminars given by visiting scientists, visiting engineers, faculty, and graduate students. *Prerequisite:* Major in geology, geophysics, or environmental geology.

GEOL 3200 (2). EARTH SCIENCES ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitles.

GEOL 3243 (2). GEOLOGY FIELD STUDIES. Project- and mapping-oriented, 2-week field trips to classical geological localities inside or outside of the U.S. Trips are normally conducted during the May interterm or between terms. Examples of planned trips include the Caribbean, Hawaii, the Grand Canyon, Lake Superior/Canada, and New Mexico/Colorado. *Prerequisites:* One 1300-level course in Earth sciences and permission of instructor.

GEOL 3300 (3). EARTH SCIENCES ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitles.

GEOL 3307/BIOL 3307 (3). ECOLOGY. Basic principles and concepts of ecology, with emphasis on population and community interactions. 3 hours of lecture each week. *Prerequisite(s):* BIOL 1401, 1402 or permission of instructor.

GEOL 3330 (3). RESOURCES AND THE ENVIRONMENT. A study of Earth's materials and processes and the effects they have on resource conservation planning and the pollution problems that arise from humankind's intense use of the Earth's resources. *Prerequisite(s):* Permission of instructor or high school algebra, CHEM 1301 or 1303, and one 1300-level course in Earth sciences.

GEOL 3340 (3). FACE OF THE EARTH. Students study the theory of plate tectonics in order to understand earthquake, volcano, and mountain-belt formations. Specific application of the theory helps to illustrate North American regional geology features such as coastal areas and the San Andreas Fault. *Prerequisite:* One 1300-level course in Earth sciences or permission of instructor.

GEOL 3343 (3). GEOLOGY FIELD STUDIES. Project- and mapping-oriented, 2-week field trips to classical geological localities inside or outside of the U.S. Trips are normally conducted during the May interterm or between terms. Examples of planned trips include the Caribbean, Hawaii, the Grand Canyon, Lake Superior/Canada, and New Mexico/Colorado. *Prerequisites:* One 1300-level course in Earth sciences and permission of instructor.

GEOL 3353 (3). MODERN AND ANCIENT CLIMATES. Science of the modern atmosphere, modern climate, and evidence of historical climatic change. Geological evidence for atmospheric and climatic changes throughout Earth's history. *Prerequisite:* One 1300-level course in Earth sciences or permission of instructor.

GEOL 3359 (3). COMPUTER METHODS IN EARTH SCIENCES. Solutions to geological, geochemical, and geophysical problems unique to Earth sciences using computer methods. Focuses on computer application to geologic mapping, modeling, and data analysis. *Prerequisite:* Permission of instructor.

GEOL 3360 (3). PROCESS GEOMORPHOLOGY. Analysis of geological processes and other factors that influence or control the origin and development of Earth's landforms. Includes laboratory exercises and field trips. *Prerequisite:* One 1300-level course in Earth sciences or permission of instructor.

GEOL 3361 (3), 3363 (3). ENVIRONMENTAL GEOLOGY SEMINAR. Focuses on timely geoscience-based environmental problems and addresses scientific, environmental, political, economic, legal, and social aspects of potential solutions through selected readings, seminars, guest speakers, and research projects. *Prerequisite:* One 1300-level Earth sciences course or permission of instructor.

GEOL 3369/BIOL 3369 (3). PALEOBIOLOGY. A survey of biological diversity, phylogenetic analysis, rates of evolution, extinction, biogeography, taphonomy, and paleoecology. *Prerequisite:* One 1300-level course in Earth sciences or permission of instructor; BIOL 1401 is also a suitable prerequisite.

GEOL 3374 (3). INTRODUCTION TO PETROLEUM GEOLOGY. An introduction to stratigraphy, sedimentation, and petroleum geology. *Prerequisite:* One 1300-level course in Earth sciences or permission of instructor.

GEOL 3451 (4). EARTH MATERIALS I: MINERALOGY. The study of minerals and rocks: elementary crystallography; crystal chemistry; mineral structures and physical properties; rock classification and identification of rocks and minerals in hand specimen; principles of mineral optics; identification of minerals in thin section; and introduction to relationships among rock textures, origins, and rock-forming processes. *Prerequisite:* One 1300-level course in Earth sciences. *Prerequisite/Corequisite:* CHEM 1301 or 1303.

GEOL 3452 (4). EARTH MATERIALS II: PETROLOGY. The study of minerals and rocks: elementary crystallography; crystal chemistry; mineral structures and physical properties; rock classification and identification of rocks and minerals in hand specimen; principles of mineral optics; identification of minerals in thin section; and introduction to relationships among rock textures, origins, and rock-forming processes. *Prerequisite:* One 1300-level course in Earth sciences. *Prerequisite or corequisite:* GEOL 3340.

GEOL 3454 (4). STRUCTURAL GEOLOGY. Introduction to the stress-strain relations of rocks, the origin of faults, the brittle-to-ductile transition, and the mechanics of thrusting and folding.

Also, laboratory problems in structure contouring, fault solutions, stereonet manipulation, and analysis of folded terrains. *Prerequisite or corequisite:* GEOL 3452 or permission of instructor.

GEOL 3472 (4). PRINCIPLES OF SEDIMENTATION. A study of the origin and post-depositional modification of sediments, sedimentary structures, and sedimentary rocks. Application to the recognition and interpretation of ancient marine and nonmarine sedimentary depositional sequences. Required weekend field trips. *Prerequisite or corequisite:* GEOL 3451 or permission of instructor.

GEOL 4199 (1). INTEGRATIVE RESEARCH. Faculty-supervised independent geoscience research project designed to acquaint the student with current scientific techniques in data gathering (in field and/or laboratory and/or library), data processing, and presentation of results. *Prerequisite:* Permission of faculty adviser.

GEOL 4296 (2), 4298 (2). SENIOR THESIS RESEARCH PROJECT. This is a significant scientific project. GEOL 4296, 4298 are taken during the student's senior year as a 1-year sequence (up to four credits).

GEOL 4299 (2). INTEGRATIVE RESEARCH. Faculty-supervised independent geoscience research project designed to acquaint the student with current scientific techniques in data gathering (in field and/or laboratory and/or library), data processing, and presentation of results. *Prerequisite:* Permission of faculty adviser.

GEOL 4321 (3). INTERNSHIP IN GEOSCIENCE. Direct experience using applied geoscience techniques in a work environment, including resource recovery companies; environmental companies; law firms; nonprofit organizations; educational institutions; and municipal, state, or federal agencies. *Prerequisites:* Junior or senior standing in a geoscience major; overall GPA of at least 3.000; GEOL 3452; and sponsorship of a professor and approved organization, agency, or company.

GEOL 4399 (3). INTEGRATIVE RESEARCH. Faculty-supervised independent geoscience research project designed to acquaint the student with current scientific techniques in data gathering (in field and/or laboratory and/or library), data processing, and presentation of results. *Prerequisite:* Permission of faculty adviser.

GEOL 4657 (6). FIELD GEOLOGY. Geologic mapping and field trips in a summer field-camp setting. *Prerequisites:* GEOL 3454, 3472 or permission of instructor.

GEOL 5110 (1). INDEPENDENT STUDY IN GEOSCIENCE. Independent study of a selected topic in geoscience. Individual study under direction of a faculty member allowed for GEOL 5110 or 5210; group projects allowed for GEOL 5310.

GEOL 5166/BIOL 5166 (1). VERTEBRATE ANATOMY LABORATORY. A laboratory course to accompany BIOL/GEOL 5366. Exercises include basic anatomy, dissections, and examinations of fossil skeletons. *Corequisite:* GEOL 5366 (BIOL 5366).

GEOL 5199 (1). SPECIAL TOPICS IN EARTH SCIENCES. Topics of special interest not covered by the regular curriculum, taught by visiting scientists and those with temporary appointments at SMU. Can be cotaught together with faculty of the department. *Prerequisite:* GEOL 3340 or permission of instructor.

GEOL 5210 (2). INDEPENDENT STUDY IN GEOSCIENCE. Independent study of a selected topic in geoscience. Individual study under direction of a faculty member allowed for GEOL 5110 or 5210; group projects allowed for GEOL 5310.

GEOL 5299 (2). SPECIAL TOPICS IN EARTH SCIENCES. Topics of special interest not covered by the regular curriculum, taught by visiting scientists and those with temporary appointments at SMU. Can be cotaught together with faculty of the department. *Prerequisite:* GEOL 3340 or permission of instructor.

GEOL 5310 (3). INDEPENDENT STUDY IN GEOSCIENCE. Independent study of a selected topic in geoscience. Individual study under direction of a faculty member allowed for GEOL 5110 or 5210; group projects allowed for GEOL 5310.

GEOL 5320 (3). DYNAMIC EARTH I. Covers the physical and chemical structure of the Earth and its evolution through geologic time; dynamic processes in the mantle and crust; the development of the theory of plate tectonics as a unifying mechanism for large-scale geologic processes; and the implications of plate tectonics and contemporary applications to geological and geophysical problems. *Prerequisite:* Permission of instructor.

GEOL 5360 (3). ELECTRON MICROPROBE ANALYSIS. Design and operation of the instrument. Correction procedures and computer automation. Analytical techniques and mineral chemistry.

GEOL 5366/BIOL 5366 (3). VERTEBRATE ANATOMY AND ORIGINS. Introduces vertebrate anatomy, with emphasis on structure and function. Examines processes that have affected the diversity of vertebrate organisms, including origination, biogeography, and adaptation. *Prerequisites:* BIOL 1401, 1402 and GEOL 1308, or permission of instructor. The accompanying laboratory, BIOL 5166, is strongly recommended.

GEOL 5368 (3). PALEOECOLOGY. Interactions between the living world and the Earth's changing environments through geologic time. *Prerequisite:* GEOL 3369 or permission of instructor.

GEOL 5372 (3). PRINCIPLES OF SEDIMENTATION. Study of the origin and evolution of sedimentary rocks in terms of interpretation of marine and non-marine sedimentary record.

GEOL 5374 (3). PETROLEUM GEOLOGY. Application of geologic principles to the location and recovery of hydrocarbon resources in the crust of the earth. *Prerequisite:* Permission of the instructor.

GEOL 5380 (3). PRINCIPLES OF STRATIGRAPHY. Evolution and application of modern stratigraphic concepts, and the development of stratigraphic nomenclature. Emphasis on the integration of physical, biological and chemical parameters in interpretation of the rock record. *Prerequisites:* GEOL 3340 and CHEM 1304 or permission of instructor.

GEOL 5384 (3). HYDROGEOLOGY. An introduction to the chemical and physical behavior of natural waters and the role of fluids in geologic processes. The course will stress the application of thermodynamics, kinetics, and fluid mechanics to understand such geologic processes as ore formation, sediment diagenesis, isograd formation, acid rain, global warming and groundwater contamination. *Prerequisites:* MATH 1338 and CHEM 1304, or permission of instructor.

GEOL 5386 (3). GEOCHEMISTRY. A survey of geochemical processes within the Earth and at its surface, emphasizing mineral-water interactions and application of the principles of chemical equilibrium to the solution of geochemical problems. *Prerequisite:* GEOL 3452 or permission of instructor.

GEOL 5389 (3). THEORY OF DIGITAL DATA PROCESSING IN GEOPHYSICS. Covers linear transform theory, convolution, correlation, linear systems, Shannon sampling theorem, discrete Fourier transform, fast Fourier transform, Z-transform, inverse filtering, recursive filtering, optimum filtering, deconvolution, and power spectrum analysis. *Prerequisite:* MATH 2343 or permission of instructor.

GEOL 5391 (3). POTENTIAL FIELD METHODS IN GEOPHYSICAL EXPLORATION. Introduction to potential theory in geophysics. The emphasis is on gravity and magnetic techniques with a brief introduction to heat flow and electrical methods. Basic concepts and their application to hard and soft rock exploration are covered.

GEOL 5392 (3). INTRODUCTION TO SEISMOLOGY. Basic principles of seismology. *Prerequisites:* MATH 2343 and permission of instructor.

GEOL 5394 (3). GEOPHYSICAL PROBLEM-SOLVING. Covers approaches to problem-solving in geophysics, back-of-the-envelope approximations and dimensional analysis, analytical solutions and numerical techniques on the computer, inverse theory and error propagation, and use of models in the real world. Students complete a term project. *Prerequisites:* MATH 2343, 5353; knowledge of a programming language.

GEOL 5399 (3). SPECIAL TOPICS IN EARTH SCIENCES. Topics of special interest not covered by the regular curriculum, taught by visiting scientists and those with temporary appointments at SMU. Can be cotaught together with faculty of the department. *Prerequisite:* GEOL 3340 or permission of instructor.

GEOL 5459 (4). SOILS AND PALEOSOLS. This is a lecture, lab, and field-based course about modern and ancient (paleosol) soil description, classification, and genesis. The course emphasizes environmental controls on soil formation and distribution across Earth's landscapes. *Recommended:* CHEM 1303, 1304, 1113, 1114, 3351; CEE 4385. *Prerequisites:* One from GEOL 1301, 1305, 1307, 1308, 1313, 1315; and GEOL 3343, 3451, 3452, 3472.

Economics

www.smu.edu/economics

Professor Nathan Balke, **Department Chair**

Professors: Nathan Balke, Raveendra Batra, Rajat Deb, Tom Fomby, Kathy Hayes, Daniel Millimet, Santanu Roy, Daniel Slottje, Shlomo Weber. **Associate Professors:** Thomas Osang, Saltuk Ozerturk. **Assistant Professors:** Bo Chen, Anna Kormilitsina, James Lake, Isaac Mbiti, Danila Serra. **Senior Lecturers:** James Cooley, Helen Reynolds, Elizabeth Wheaton.

The student majoring in economics may choose among four degree plans. Each degree plan requires the student to take six core classes (ECO 1311, 1312, 3301 and 3302, MATH 1309 or 1337, and STAT 2301 or 2331 or 4340). Under each degree plan, the student is expected to take ECO 1311 and 1312 and MATH 1309 and 1337 during their first or second year. Finally, under each degree plan, the student must have a GPA of at least 2.000 in economics courses attempted, and the student must receive at least a grade of *C-* in all classes counting toward the major. Once the major is declared, due progress must be made in terms of course enrollment. If requirements change, the catalog in force at the time the major is declared prevails.

Bachelor of Arts With a Major in Economics

The B.A. degree in economics is designed primarily for students who want a liberal arts education with an emphasis on economics but with great breadth. This degree requires the six core classes and 18 hours of advanced economics (defined as ECO 3355 or any economics course at the 4000 or 5000 level).

Bachelor of Science With a Major in Economics

The B.S. degree in economics offers more specialized training in economics and provides a firm basis for graduate study in business, economics or law. This degree requires the six core courses; 24 hours in advanced economics (defined as ECO 3355 or any economics course at the 4000 or 5000 level), of which at least six hours must be at the 5000 or above level; satisfaction of at least one of the approved subfields (listed below); and three additional hours of calculus (MATH 1338).

Major in Economics With Financial Applications. This B.S. degree combines specialized training in economics with a concentration in areas significant to financial markets. It is particularly suited to those seeking a career in the financial sector. This degree requires the six core courses; 27 hours in advanced economics (defined as ECO 3355 or any economics course at the 4000 or 5000 level) of which nine hours must be satisfied by ECO 3355, 4368 and 4378; at least six hours must be at the 5000 or above level; satisfaction of at least one of the approved subfields (listed below); ACCT 2301; and CSE 1340, 1341 or ITOM 3306 (only for business majors/minors).

Major in Economics With Management Information Systems. This B.S. degree combines specialized training in economics, econometrics and management information systems in areas important to the study of big data. It requires the six core courses and 21 hours in advanced economics courses with at least two courses in the econometrics field (ECO 5350 and one of the following ECO 5375, 5380, 5385, or 6352). The students must complete EMIS 1360, 2360, 3360, 3340 (or CSE/STAT 4340). In order to take the EMIS classes, the student must complete MATH 1337, 1338; ENGL 1301, 1302; and CSE 1341, 1342. All classes must be completed with a *C-* or better.

Major in Economics With Systems Analysis. The B.S. degree in economics with systems analysis offers integrated studies in economics, operations research and computer science. It provides excellent preparation for graduate education in economics, business or public administration and for service in both the public and private sectors where quantitative economists provide assistance in policy formulation. This degree requires the six core courses; 24 hours in advanced economics (defined as ECO 3355 or any economics course at the 4000 or 5000 level), of which at least six hours must be at the 5000 or above level; satisfaction of at least one of the approved subfields (below); MATH 1338 and 2339; CSE 1341, 1342, 2341, 2353 and 3358.

Notes

1. **ECO 3301** and **3302** require prior completion of **MATH 1309** or **1337**.
2. All economics courses at the 4000 level or above require prior completion of **STAT 2301** or **2331** or **4340**.
3. Additional recommended or required preparation for courses is indicated within the course descriptions.
4. Questions concerning specific courses and the undergraduate program in general should be directed to Economics Department personnel.
5. Each student majoring in economics is urged to consult a departmental adviser periodically to review their degree plan and progress.
6. The three B.S. degree plans require the student to satisfy at least one subfield in economics when choosing advanced economic courses. Approved subfields are

   Econometrics (2 out of 4): **ECO 5350, 5375, 5385, 5390, 6352**
   Economic Growth and Development (2 out of 4): **ECO 5359, 5360, 5361, 5362**
   Economics of Industrial Organization (2 out of 2): **ECO 4371, 4382**
   International Economics (2 out of 2): **ECO 4357, 4358**
   Labor Economics (2 out of 3): **ECO 4351, 4361, 5357**
   Economics of Decision-Making (2 out of 5): **ECO 5340, 5341, 5353, 5355**
   Monetary Economics (2 out of 2): **ECO 4385, 4386**
   Public Economics (2 out of 4): **ECO 4366, 5365, 5370**

Departmental Distinction

The student majoring in economics with sufficiently high standing may graduate with departmental distinction by pursuing a rigorous independent research project under the direction of a faculty sponsor. The research will occur while enrolled in ECO 4398. The project will be presented to the faculty sponsor and director of undergraduate studies at the end of the term.

Minor in Economics

The student majoring in other departments may obtain a minor in economics by completing the six core courses (ECO 1311, 1312, 3301, 3302; MATH 1309 or 1337; and STAT 2301, or 2331 or 4340) and two advanced courses at the 4000 or 5000 level. In addition, the student must have a GPA of at least 2.000 in economics courses attempted, and the student must receive at least a grade of *C-* in all classes counting toward the minor. Nonlecture classes cannot be used toward an economics minor.

Students may obtain either a general minor in economics or a minor in a specialized field (international economics, public economics, labor economics, economic

growth and development, econometrics, monetary economics, economics of industrial organization, economics of decision-making). The specialization may be obtained if six hours of 4000- and 5000-level courses constitute one of the above eight fields currently approved by the Economics Department.

The Courses (ECO)

ECO 1310 (3). EXPLORING ECONOMIC ISSUES. An introduction to current economic issues and problems, discussed in a manner suitable for students not majoring in economics or related sciences. Students may not receive credit for this course after receiving credit for ECO 1311 or 1312. The course may not be used to satisfy requirements for either an economics major or minor.

ECO 1311 (3). PRINCIPLES OF MICROECONOMICS: CONSUMERS, FIRMS, AND MARKETS. Explains tools of economic analysis and focuses on the individual participants in the economy: producers, workers, employers, and consumers. No prerequisites.

ECO 1312 (3). PRINCIPLES: INFLATION, RECESSION, AND UNEMPLOYMENT (MACROECONOMICS). Covers inflation, unemployment, and growth from both national and global perspectives. Tools of economic analysis include models of open economies. *Prerequisite:* C- or better in ECO 1311.

ECO 2301 (3). TOPICS IN ECONOMICS. Topics vary. Course may not be used to satisfy requirements for either an economics major or minor. *Prerequisites:* ECO 1310, 1311 or 1312.

ECO 3301 (3). PRICE THEORY (INTERMEDIATE MICROECONOMICS). Building on topics covered in ECO 1311, this course considers problems of microeconomics that are more advanced, with a focus on understanding how consumers behave, firms make pricing and output decisions, and market structure impacts the behavior of firms and consumers. *Prerequisites:* C- or better in the following: ECO 1311, 1312 and MATH 1309 or 1337.

ECO 3302 (3). NATIONAL INCOME AND EMPLOYMENT (INTERMEDIATE MACROECONOMICS). Investigates the factors that influence the level of aggregate income in an economy. Primitive general equilibrium models are employed to investigate questions and analyze the impact of various government fiscal policies. *Prerequisites:* C- or better in the following: ECO 1311, 1312 and MATH 1309 or 1337. *Recommended:* ECO 3301.

ECO 3321 (3). INTERNATIONAL ECONOMIC POLICY. Examines the facts and theories of international trade and finance. Emphasis is placed on analyzing current issues such as the U.S. trade deficit, policies toward multinational firms, and harmonization of fiscal and monetary policies among countries. This course may not be used to satisfy requirements for either an economics major or minor. *Prerequisites:* C- or better in ECO 1311, 1312. Note: ECO 3321 cannot be taken after or concurrent with ECO 4357.

ECO 3355/FINA 3330 (3). MONEY AND BANKING. Analyzes central and commercial banking for students majoring in economics and markets and cultures. A student may not receive credit for both ECO 3355 and FINA 3330. *Prerequisites:* C- or better in ECO 1311, 1312. Reserved for economics majors and minors and markets and cultures majors only.

ECO 4101 (1), 4201 (2), 4301 (3). TOPICS. Topics (to be specified in title). *Prerequisites:* C- or better in ECO 3301 and 3302 or permission of instructor.

ECO 4110 (1). ECONOMICS PRACTICUM. This advanced economics internship credit course requires weekly journal entries reflecting student experience. *Prerequisites:* ECO 3301, 3302; two advanced economics classes (4000 level or above); a 3.000 GPA in economics classes; STAT 2301, 2331, or 4340; and approval of the director of undergraduate studies.

ECO 4351 (3). LABOR ECONOMICS. An overview of labor supply and labor demand models, with extensions to models of taxes and tax credits, welfare, and Social Security. Also, models of wage determination and extensions such as the effects of minimum wage, performance-based pay, unions, and discrimination. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4357 (3). INTERNATIONAL TRADE. Examines international trade in goods and services among countries and develops a framework for analyzing trade policy issues. The course covers only the real effects of trade and not international financial issues. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4358 (3). INTERNATIONAL MACROECONOMIC THEORY AND POLICY. Examines the monetary aspects of international economics. Implications of contemporary banking and foreign exchange practices are explored, as are interpretations given to changes in the structure of a nation's balance of payments. Central attention is given to the macroeconomic interactions among national economies and international systematic adjustments expected from market disturbances and shifting government policies. Students will evaluate the operation of the international monetary system from the gold-standard period to the present. *Prerequisite:* C- or better in ECO 3301, ECO 3302, and one of the following: STAT 2301, 2331 or 4340.

ECO 4361 (3). ECONOMICS OF EDUCATION. An economic analysis of the state of the U.S. educational system. Topics include trends in academic achievement, educational production functions, teacher labor markets, and educational reforms. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4365 (3). STATE AND LOCAL GOVERNMENT. Examines how state and local governments make decisions about what services to provide their constituents and how to finance those services. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4366 (3). ECONOMICS OF THE PUBLIC SECTOR. Explores both the positive and normative aspects of government expenditures. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4368/FINA 3320 (3). FOUNDATIONS OF FINANCIAL ECONOMICS. Applies the tools of economic analysis to financial decision-making. Emphasis is placed on developing a framework for understanding the problems and solutions associated with the economic nature of finance. *Prerequisites:* C- or better in the following: ECO 3301, 3355; ACCT 2301; and ITOM 2305 or STAT 2301, 2331, or 4340. Reserved for economics majors and minors only. (ECO 4368 cannot be taken if the student has taken FINA 3320.)

ECO 4371 (3). THEORY OF INDUSTRIAL STRUCTURE. A focus on the structure and behavior of firms in the marketplace. Firm structure and behavior are worth studying, since most real markets violate the standard of competitive assumptions and, therefore, may not maximize social welfare. Considers both the exercise of market power in relatively simple markets with a single firm as well as the more complicated exercise of market power in markets with multiple firms. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4376 (3). SPECIAL TOPICS IN ECONOMIC HISTORY AND DEVELOPMENT. Economic principles are used to explore important and controversial questions. *Prerequisite:* C- or better in ECO 3301, and one of the following: STAT 2301, 2331 or 4340.

ECO 4378/FINA 4326 (3). FINANCIAL ECONOMICS AND INVESTMENT BEHAVIOR. Gives a theoretical basis for financial analysis within the context of the total process of investment decision-making, and develops the theoretical foundations for analysis of equities, bonds, and portfolio performance. *Prerequisites:* C- or better ECO 3301, ECO 4368, or FINA 3320; and C- or better ITOM 2305 or STAT 2301, 2331, or 4340; or permission of instructor. Reserved for economics majors and minors. (ECO 4378 cannot be taken if the student has taken FINA 4320 or 4326.)

ECO 4382 (3). ECONOMICS OF REGULATED INDUSTRIES. Examines why government regulation of business exists and what impact it has on firms' behavior, market structure, and social welfare. *Prerequisites:* C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 4385 (3). MACROECONOMICS: THEORY AND POLICY. Examines new developments in the analysis of business cycles, the causes and consequences of inflation, and the sources of economic growth. *Prerequisites:* C- or better in the following: ECO 3301, 3302 and STAT 2301, 2331, or 4340.

ECO 4386 (3). TOPICS IN MONETARY ECONOMICS. An in-depth look at selected topics of current interest in the field of monetary theory and policy. The topics covered vary from year to year. *Prerequisites:* C- or better in the following: ECO 3301, 3302 and STAT 2301, 2331, or 4340.

ECO 4390 (3). INDEPENDENT STUDY IN ECONOMICS. By arrangement with departmental Director of Undergraduate Studies. Eligible students undertake a research paper under the supervision of the faculty sponsor and give an oral presentation of the paper. Note: This course can only be taken once. *Prerequisites:* ECO 3301, ECO 3302, two advanced economics classes

(4000 level or above), and a 2.500 GPA in economics classes, and one of the following: STAT 2301, 2331 or 4340.

ECO 4398 (3). DEPARTMENTAL DISTINCTION IN ECONOMICS. By arrangement with departmental Director of Undergraduate Studies. Eligible students undertake a research paper under the supervision of a faculty sponsor and give an oral presentation of the paper. *Prerequisites:* ECO 3301, ECO 3302, two advanced economics courses (4000 level or above), 3.700 GPA in economics classes, 3.500 GPA overall, senior standing, and one of the following: STAT 2301, 2331 or 4340.

ECO 5101 (1), 5201 (2). TOPICS. Topics (to be specified in title). *Prerequisites:* C- or better in ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.

ECO 5301 (3). TOPICS. Topics (to be specified in title). *Prerequisite:* C- or better in ECO 3301, 3302 and one of the following: STAT 2301, 2331 or 4340, or graduate standing.

ECO 5320 (3). HEALTH ECONOMICS. An introduction to the economics of health and health care policies and how they have affected the structure, function, and cost-effectiveness of the health care industry, principally in the United States. *Prerequisites:* C- or better in ECO 3301.

ECO 5340 (3). DECISION-MAKING UNDER UNCERTAINTY. Provides a basis for the modeling of decision-making under conditions of incomplete information. *Prerequisite:* C- or better in ECO 3301, 3302 and one of the following: STAT 2301, 2331 or 2340

ECO 5341 (3). STRATEGIC BEHAVIOR. Introduces the basic concepts and tools of game theory, with applications to various areas of economics. The various topics are unified by the techniques employed for determining the outcome in particular situations. *Prerequisites:* Graduate standing or C- or better in ECO 3301 and STAT 2301, 2331, or 4340.

ECO 5342 (3). EXPERIMENTAL AND BEHAVIORAL ECONOMICS. Students study the field of behavioral economics in which the underlying assumptions of economics models are tested using experimental techniques. Guided by behavioral regularities, new models of behavior are introduced. *Prerequisites:* C- or better in ECO 3301. *Recommended:* ECO 5341, 5350.

ECO 5350/STAT 5350 (3). INTRODUCTORY ECONOMETRICS. The basic concepts of econometrics and, in particular, regression analysis, with topics geared to first-time regression users. *Prerequisites:* Graduate standing or C- or better in the following: MATH 1309 or 1337; ECO 3301; and ITOM 2305 or STAT 2301, 2331, or 4340.

ECO 5353 (3). LAW AND ECONOMICS. Examines economic theories that explain the development of common law and constitutional law and the economic implications of contracts, antitrust laws, and liability rules. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 5357 (3). ECONOMICS OF HUMAN RESOURCES. Examines several topics of interest to modern labor economists. The course is equally devoted to theoretical modeling and the interpretation of empirical evidence, and to the analysis of policies such as education subsidies, unemployment insurance, the minimum wage, and immigration restrictions. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340. ECO 4351 is recommended.

ECO 5359 (3). ECONOMIC DEVELOPMENT: MICROECONOMIC PERSPECTIVES. A microeconomic examination of various economic issues faced by developing countries. Topics include intrahousehold resource allocation, rural and urban labor markets, and credit and insurance markets. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 5360 (3). ECONOMIC DEVELOPMENT: MACROECONOMIC PERSPECTIVES. A macroeconomic examination of the economic issues faced by developing countries. Topics include population growth, national savings, capital accumulation, human capital formation, government institutions, and international integration. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3302 and STAT 2301, 2331, or 4340.

ECO 5361 (3). NATURAL RESOURCES AND ENERGY ECONOMICS. Students gain an understanding of the economics of energy and natural resource use and policy. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301, 3302 and STAT 2301, 2331, or 4340.

ECO 5362 (3). ECONOMIC GROWTH. Examines the facts and theories of economic growth, the economics of technological changes, and the role of governments and markets in promoting

or impeding economic development. *Prerequisite(s):* Graduate standing or C- or better in the following: ECO 3301, 3302 and one from STAT 2301, 2331, or 4340.

ECO 5365 (3). PUBLIC FINANCE. Covers the theories of the public sector and the problems of market failures, externalities, and preference revelation. Specific government expenditure policies are analyzed. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340. *Recommended:* ECO 3302.

ECO 5370 (3). COST-BENEFIT ANALYSIS. Introduces the tools for evaluating alternative methods of government intervention and develops a framework for evaluating costs and benefits of economic projects from the government's point of view. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301 and STAT 2301, 2331, or 4340.

ECO 5375/STAT 5375 (3). ECONOMIC AND BUSINESS FORECASTING. Presentation of methods used by economists to forecast economic and business trends and ways of evaluating the usefulness of these methods. Prerequisite(s): C- or better in the following: STAT 2301, 2331; or STAT 4340; or ITOM 2305.

ECO 5380 (3). COMPUTING FOR ECONOMICS. The primary objective is to teach programming skills. Programs to be reviewed could include SAS, R, STAT, SPSS, MATLAB, SQL, and Cognos. *Prerequisites:* Graduate standing or C- or better in the following: ECO 3301, 3302, and 5350; MATH 1309 or 1337; and ITOM 2305 or STAT 2301, 2331, or 4340.

ECO 5385/STAT 5380 (3). PREDICTIVE ANALYTICS FOR ECONOMISTS. A study of data-mining techniques used by economists in the fields of applied economics, marketing, finance, and statistics. These techniques include classification methods, affinity analysis, and data reduction and exploration methods. *Prerequisites:* Graduate standing or C- or better in the following: ECO 5350, and ITOM 2305 or STAT 2301, 2331, or 4340.

ECO 5390 (3). MATHEMATICAL FINANCE: THEORY AND APPLICATIONS. A study of selected topics in finance (such as capital asset pricing, options and their valuation, analytics of credit derivatives) that combines theory with actual applications in the financial profession. *Prerequisite:* C- or better in ECO 5350, ECO 4378 or FINA 4326, ECO 4368 or FINA 4325, and one of the following: STAT 2301, 2331 or 4340.

English

www.smu.edu/english

Associate Professor Nina Schwartz, **Department Chair**

Professors: Timothy Crusius, Dennis Foster (Director of Graduate Studies), Ezra Greenspan, Ross Murfin, Jasper Neel, Willard Spiegelman, Steven Weisenburger. **Associate Professors:** Richard Bozorth, Darryl Dickson-Carr, David Haynes (Director of Creative Writing), Michael Holahan, Beth Newman, Timothy Rosendale (Director of Undergraduate Studies), Lisa Siraganian, Nina Schwartz, Rajani Sudan, Marjorie Swann, Bonnie Wheeler. **Assistant Professors:** Angela Ards, Greg Brownderville, Timothy Cassedy, Irina Dumitrescu, Daniel Moss, Jayson Gonzales Sae-Saue, Martha Satz. **Senior Lecturers:** Carolyn Channell, Jo Goyne, Diana Grumbles (Director of Discernment and Discourse), Pamela Lange, Bruce Levy, Tom Stone. **Lecturers:** Marta Harvell, Vanessa Hopper, Harold Knight, Pauline Newton, Kristen Polster, Ona Seaney, Sam Ross Sloan, Lori Ann Stephens, Vicki Tongate. **Emeritus Professors:** John Lewis, C.W. Smith, Marshall Terry.

The B.A. in English offers a rich intellectual experience through the study of American, British and other literature written in English. The course of study engages with contemporary modes of literary inquiry in order to arrive at an understanding of how language, culture and society work. At the same time, it emphasizes the aesthetic, emotional and intellectual pleasures of imaginative writing. The degree is appropriate for students who wish to obtain a broad liberal education as a foundation for careers or further study, and is especially recommended as preprofessional training for fields such as law, administration, and business that require high proficiency in written and oral communication and in analytical thinking.

Bachelor of Arts With a Major in English

The major requires a minimum of 33 hours of English courses, including no more than 12 hours at the 2000 level and below (of these hours, no more than three hours at the 1000 level) and at least 12 hours of 4000 level courses, distributed as follows:

	Credit Hours
Core Courses	6
ENGL 2311 *or* 2314, 2315	
Reading Historically	12
One course at the 3000 or 4000 level from each group:	
Medieval Literature (c. pre-1500)	
Early Modern Literature (c. 1500–1775)	
Literature in the Age of Revolutions (c. 1775–1900)	
Modern to Contemporary Literature (c. 1900–present)	
Criticism and Theory	3
ENGL 3310 *or* 4310	
Major Electives	12
	33

Note: The following courses are not acceptable as major electives: **DISC 1311, 1312, 1313, 2305, 2311, 2312, 2315** and **ENGL 1300, 1301, 1302, 2302, 2305.**

Creative writing courses at the 4000 level do not fulfill the 4000-level literature requirement.

A grade of *C-* or better must be earned in all courses fulfilling major requirements, and English majors must attain a minimum GPA of 2.000 among all courses attempted for the major.

The department strongly recommends 12 hours of world language for all English majors. Students expecting to undertake graduate study in English should be advised that graduate schools require knowledge of at least one world language.

Secondary-school certification candidates must fulfill the departmental requirements described above. They should consult the departmental advisers on teacher training about further nondepartmental requirements for certification. (Revisions of these requirements may be mandated by the State of Texas; candidates should be alert to the possibilities of changes.)

Bachelor of Arts in English With a Creative Writing Specialization

Students pursuing an English major with a creative writing specialization must fulfill all requirements for the English major. All 12 elective hours within the regular major will be devoted to courses selected from the following list: ENGL 2390, 2391, 2392, 3390, 3391, 3392, 4390, 4391, 4392, 4393, 4395, 4394, 4396, 4397, 4398. No more than 12 of these hours will be credited toward the requirements for the major, though additional English courses of all kinds are encouraged.

Students may apply to individual instructors for directed study in poetry or in fiction only if they have completed 12 hours in creative writing courses, with at least nine of those hours in the genre in which the student is applying.

Departmental Distinction

This program is open to seniors by invitation. To enter the program, a student ordinarily must earn an overall GPA of at least 3.000 by the middle of the junior year, and a 3.500 average or better in courses fulfilling requirements for the major. Candidates for distinction must take ENGL 5310 in the fall of the senior year. Candidates completing ENGL 5310 with a grade of *B+* or better will then choose from the following options: ENGL 5381 (culminating in a senior thesis); or a graduate proseminar in English numbered 6320–6380 (requires permission of instructor); or (for creative writing specialists only) ENGL 4393, 4395 or 4394, 4396. Candidates must earn a *B+* or better in the option selected, and attain a 3.500 GPA in all courses counting toward the major and distinction. ENGL 4393–4396, 5381, 5310 may not be used to satisfy the 12 hours required in 4000-level courses. A minimum of 36 hours is required to graduate with departmental distinction.

Minor in English

The minor in English, which is available to students who are not pursing a major in English or major in English with creative writing, requires 15 hours of coursework, no more than six of them in courses numbered below 3000. Minors must take ENGL 2311, 2314 or 2315. A grade of *C-* or better must be earned in each course taken to fulfill the requirement for the English minor.

Note: DISC 1311, 1312, 1313, 2305 and **ENGL 1300, 1301, 1302, 1305, 2302, 2305** may not be used to fulfill minor requirements.

The Courses (ENGL)

The courses are numbered by the final two digits as follows.

Expository Writing (00–09)	DISC 1311, 1312, 1313, 2305, 2306 ENGL 1300–02, 1305, 2302, 2305, 2306, 2406, 3301, 3305, 3308, 5301, 5309
Genre, Method, Criticism (10–19)	ENGL 2310–15, 3310, 4310, 5310
Medieval (20–29)	ENGL 1320, 3320, 3329, 4320, 4321, 4323
Early Modern (30–39)	ENGL 1330, 3330–32, 3335, 4330–33, 4336, 4339
Age of Revolutions (40–49)	ENGL 3340, 3341, 3344–48, 4340, 4341, 4343, 4345, 4346, 4349
Modern to Contemporary (50–69)	ENGL 1360, 1362, 1363, 1365, 2361, 3350, 3354, 3355, 3359, 3360, 3362–68, 4350, 4351, 4356, 4360, 4369
Other Literature/Language Courses (70–89)	ENGL 1370, 1380, 1385, 2371, 3189, 3370, 3371, 3373–83, 3389, 4370, 5378, 5381
Creative Writing (90–99)	ENGL 2390, 2391, 2392, 3390, 3391, 3392, 4390, 4391, 4392, 4393, 4394, 4395, 4396, 4397, 4398

ENGL 1300 (3). FOUNDATIONS FOR RHETORIC. Writing paragraphs and short, analytic, thesis-directed essays in response to texts. Work on reading comprehension, principles of effective sentence construction, and punctuation.

ENGL 1301 (3). RHETORIC I – INTRODUCTION TO COLLEGE WRITING. The aims and processes of analytical-argumentative discourse. Understanding and evaluating sources. Use of MLA style. Students must earn C- or better.

ENGL 1302 (3). RHETORIC II – FIRST-YEAR SEMINAR IN RHETORIC: CONTEMPORARY ISSUES. Introduction to public intellectual life through inquiry into texts and discursive art. Multidisciplinary and multicultural. Analytical-argumentative writing. Research and oral communication components. Students must earn C- or better. *Prerequisite:* ENGL 1301.

ENGL 1305 (3). PERSPECTIVES OF THOUGHT. Focus on analytical writing while exploring major modes of interpreting the world and defining what constitutes knowledge in the 21st century. *Restricted:* Sections available for Hilltop Scholars and New Century Scholars placing out of ENGL 1301. Department consent required.

ENGL 1320 (3). CHIVALRY. The development of the ideal of chivalry from its origins in the medieval legends of King Arthur to modern literature.

ENGL 1330 (3). THE WORLD OF SHAKESPEARE. Introductory study of eight or nine of Shakespeare's important plays, placed in historical, intellectual, and cultural contexts.

ENGL 1360 (3). THE AMERICAN HEROINE. Images of the American heroine in popular and traditional literature, studied in terms of their reflection of the evolving roles of American women.

ENGL 1362 (3). CRAFTY WORLDS. An introductory study of selected 20th-century novels emphasizing both ideas of modernity and the historical or cultural contexts that generate these ideas.

ENGL 1363 (3). THE MYTH OF THE AMERICAN WEST. The myth and reality of the American West as seen through key works of history, folklore and fiction, including study of the serious Western novel and the subliterary Western.

ENGL 1365 (3). LITERATURE OF MINORITIES. Representative works of African American, Hispanic American, Gay, Asian American and Native American literature, both in their immediate cultural context and against the background of the larger American culture.

ENGL 1370 (3). TRAGEDY AND THE FAMILY. The study of individual tragedies and kindred texts in various genres and from various periods.

ENGL 1372 (3). ENGLISH STUDIES ABROAD. SMU credit for English courses taken in University-approved programs abroad. Departmental consent required.

ENGL 1380 (3). INTRODUCTION TO LITERATURE. An introduction to the study of literature including a range of literary genres and periods, varying by term.

ENGL 1385 (3). POWER, PASSION, AND PROTEST IN BRITISH LITERATURE. A survey of the history of British literature, from its medieval beginnings to the 20th century, with emphasis on literature as an instrument of power and desire.

ENGL 2302 (3). BUSINESS WRITING. Introduction to business and professional communication, including a variety of writing and speaking tasks, and the observation and practice of rhetorical strategies, discourse conventions, and ethical standards associated with workplace culture. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2305 (3). INTERPRETING, UNDERSTANDING AND DOUBTING. Insights from literature, linguistics, philosophy, psychology and science that explore major modes of interpreting the world in the 20th century and that define what constitutes knowledge in the 21st century. Open only to students in the University Honors Program.

ENGL 2306 (3). THE ETHICAL, THE CATASTROPHIC AND HUMAN RESPONSIBILITY. Study of ethical questions derived from history, literature, psychology, anthropology and philosophy, focused on what constitutes a meaningful life, historical challenges to the bases of ethics, racism, individual freedom and community responsibility. Open only to students in the University Honors Program. *Prerequisite:* DISC or ENGL 2305.

ENGL 2310 (3). IMAGINATION AND INTERPRETATION. An introduction to literary studies based on topics that will vary from term to term. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2311 (3). POETRY. Analysis, interpretation and appreciation of poetry, with attention to terms and issues relevant to the genre. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2312 (3). FICTION. Analysis, interpretation and appreciation of fiction, with attention to terms and issues relevant to the genre. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2313 (3). DRAMA. Analysis, interpretation, and appreciation of dramatic works, with attention to terms and issues relevant to the genre. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2314 (3). DOING THINGS WITH POEMS. Introduction to the study of poems, poets, and how poetry works, focusing on a wide range of English and American writers. Some attention to matters of literary history. Open only to students in the University Honors Program. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2315 (3). INTRODUCTION TO LITERARY STUDY. An introduction to the discipline for beginning English majors, covering methods of literary analysis in selected texts spanning a range of genres and historical periods. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2322 (3). GUILTY PLEASURES. Examination of classic and not-so-classic detective fiction from Sophocles to the present, focusing primarily on 19th- and 20th-century British and American traditions. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2361 (3). FORTUNE, FAME AND SCANDAL: THE AMERICAN DREAM. A survey of the pursuit of fame and fortune in classic American novels of business, politics, sports and show business, with attention to contemporary parallels. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2371 (3). THE DAWN OF WISDOM: ANCIENT CREATION STORIES FROM FOUR CIVILIZATIONS. The visions of the cosmos expressed in the art, archaeology and literature of Egyptian, Mesopotamian, Greco-Roman, and Mayan civilizations, emphasizing the role of human beings as central and responsible actors therein. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2372 (3). ENGLISH STUDIES ABROAD. SMU credit for English courses taken in University-approved programs abroad. Departmental consent required.

ENGL 2390 (3). INTRODUCTION TO CREATIVE WRITING. Workshop on the theory and techniques of writing fiction, poetry, and creative nonfiction. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302.

ENGL 2391 (3). INTRODUCTORY POETRY WRITING. Workshop in which student poetry and directed exercises in basic techniques form the content of the course. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2392 (3). INTRODUCTORY FICTION WRITING. Workshop in theory and technique and writing of fiction. *Prerequisite:* DISC 1312 or 2305; or ENGL 1301 or ENGL 2305.

ENGL 2406 (4). ETHICAL ISSUES AND COMMUNITY ACTION. Exploration of major ethical ideas and problems through literary texts and testing, and reflecting upon them through practical involvement in the community. Requires a commitment of time to volunteer community activities. Open only to students in the University Honors Program. *Prerequisite:* DISC or ENGL 2305.

ENGL 3189 (1). DIRECTED STUDIES. Directed readings in a coherent area of a student's choice to be approved by the director of Undergraduate Study and the instructor. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3301 (3). ADVANCED EXPOSITORY WRITING. Emphasis on styles and formats appropriate to academic writing, and on individual problems and needs. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3305 (3). WRITING AND THE PUBLIC INTELLECTUAL. Study and practice of writing for a broad, well-informed public, including the history and current status of the public intellectual. Includes advanced practice in revising and editing expository prose. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3308 (3). ENGLISH STUDIES INTERNSHIP. Work experience related to English studies, with instruction in professional communication. Workshop format and one-on-one consultation with instructor. *Prerequisite:* Open only to junior and senior English majors by permission of instructor.

ENGL 3310 (3). CONTEMPORARY APPROACHES TO LITERATURE, LANGUAGE, AND CULTURE. Introduction to contemporary methods of interpreting literature and to linguistic, cultural, and theoretical issues informing these methods. Readings of literary works to develop awareness of differences and limitations in approaches. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3320 (3). TOPICS IN MEDIEVAL LITERATURE. Study of a theme, issue, or topic in English literature from its beginnings to 1500, varying by term. May be repeated for credit under a different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3329/MDVL 3329/CF 3302 (3). THE WORLD OF KING ARTHUR. Study of Britain's greatest native hero and one of the world's most compelling story stocks: the legends of King Arthur and the Knights of the Round Table. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3330 (3). TOPICS IN EARLY MODERN LITERATURE. Study of a theme, issue, or topic in British literature circa 1500–1775, varying by term. May be repeated for credit under a different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3331 (3). BRITISH LITERARY HISTORY I: CHAUCER TO POPE. Introduction to earlier periods of English literature through the study of major authors in their historical context and from varied critical and thematic perspectives. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3332 (3). SHAKESPEARE. Studies of Shakespeare's major works in context with English history, society, and culture, including literary and theatrical conventions and practices. Topics vary by term; may be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3335 (3). TRANSATLANTIC ENCOUNTERS I. Comparative studies in British and American literature during the Early Modern period (c. 1500–1775), with attention to issues of first contact, colonization and cultural interrelations. Topics vary by term; may be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3340 (3). TOPICS IN BRITISH LITERATURE IN THE AGE OF REVOLUTIONS. Study of a theme, issue, or topic in British literature circa 1775–1900, varying by term. May be repeated for credit under a different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3341 (3). BRITISH LITERARY HISTORY II: WORDSWORTH THROUGH YEATS. Introduction to later periods of English literature through the study of major authors in their historical context and from varied critical and thematic perspectives. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3344 (3). VICTORIAN GENDER. Through an exploration of fiction, poetry, drama, and other writing from the Victorian period, this course considers why so much of the literature of Victorian England still speaks meaningfully and directly about what it means to be a man or woman. The course focuses on the way writing of the period reflects, questions, and protests the gender distinctions that Victorians understood as the foundation of the social world. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3345 (3). TRANSATLANTIC ENCOUNTERS II. Comparative studies in British and American literature during the Age of Revolutions (c. 1775–1900), with attention to cultural interrelations during a period of rapid social change. Topics vary by term; may be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3346 (3). AMERICAN LITERARY HISTORY I. Introduction to earlier periods of American literature through the study of major authors in their historical context and from varied critical and thematic perspectives. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or 2306.

ENGL 3347 (3). TOPICS IN AMERICAN LITERATURE IN THE AGE OF REVOLUTIONS. Study of a theme, issue or topic in American literature from c. 1775–1900, varying by term. May be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3348/CFA 3374 (3). HISTORY OF THE BOOK IN AMERICA, 1620–1900. A multidisciplinary survey of print culture in the United States, exploring literary, historical, technological, legal and sociological factors that shaped the formations, uses and dynamics of print in our society. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3350 (3). TOPICS IN MODERN AND CONTEMPORARY BRITISH LITERATURE. Study of a theme, issue, or topic in British literature from c. 1900 to the present, varying by term. May be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3354 (3). NON-WESTERN CULTURE AND LITERATURE. Major 20th-century, third-world literary and cultural texts with emphasis on political and economic contexts of colonialism and post-colonialism. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3355 (3). TRANSATLANTIC ENCOUNTERS III. Comparative studies of British and American writing in the period of Modern and Contemporary literature (c. 1900 to the present), with attention to cultural interrelations during the period. Topics vary by term; may be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or 2306.

ENGL 3359/CF 3359 (3). AMERICAN NARRATIVES OF DISCOVERY. This course focuses on the generic process of culture, integrating methods from various disciplines. It considers aesthetic questions about how narratives engage in intercultural dialogue, and ethical questions about the implications of ongoing American discoveries of the Southwest. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3360 (3). TOPICS IN MODERN AND CONTEMPORARY AMERICAN LITERATURE. Study of a theme, issue or topic in American literature from c. 1900 to the present, varying by term. May be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3362 (3). AFRICAN-AMERICAN LITERATURE. Major African-American writers and their works, and various social and historical influences. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3363 (3). CHICANA/CHICANO LITERATURE. A broad examination of major 20th-century Mexican-American writers and their works in the context of various social, geographic, political, and historical influences. Some knowledge of Spanish is helpful to students but is not a prerequisite for the course. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3364/CF 3370/WGST 3370 (3). WOMEN AND THE SOUTHWEST. A study and exploration of women writers, artists and thinkers in the American Southwest and their vision of this region as singularly hospitable to women's culture. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3365 (3). JEWISH AMERICAN LITERATURE AND CULTURE. An interdisciplinary introduction to Jewish culture through literature, especially in the American environment, as well as to the issues in studying any distinctive ethnic and cultural literature. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3366 (3). AMERICAN LITERARY HISTORY II. Introduction to later periods of American literature through the study of major authors in their historical context and from varied critical and thematic perspectives. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or 2306.

ENGL 3367/CF 3364 (3). ETHICAL IMPLICATIONS OF CHILDREN'S LITERATURE. Examination of children's literature with emphasis on notions of morality and evil, including issues of colonialism, race, ethnicity, gender, and class. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3368/CFA 3378 (3). LITERARY AND ARTISTIC TAOS: THE TOWN SEEN THROUGH MULTIPLE LENSES. Survey of the literary and artistic heritage of early 20th-century Taos, centered on the Native Americans, the artistic and literary salon of Mabel Dodge, and D.H. Lawrence. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3370 (3). SPECIAL TOPICS. Examination of a subject that includes material from a range of historical periods. Topics vary by term; examples include pastoral literature; Shakespeare in England and India; and irony, satire, and politics. May be repeated for credit under a different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3371/HIST 3357/CF 3363 (3). JOAN OF ARC: HISTORY, LITERATURE AND FILM. The life and later reception of the extraordinary peasant girl, Joan of Arc (c. 1412 to 1431), who in the two years before she was burned at the stake changed the course of European history. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3372 (3). ENGLISH STUDIES ABROAD. SMU credit for English courses taken in University-approved programs abroad. Departmental consent required.

ENGL 3373/WL 3359 (3). MASCULINITIES: IMAGES AND PERSPECTIVES. The representation of male sex roles in Western literature, from Achilles to James Bond. Open to juniors and seniors; sophomores by permission of instructors. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3374/CF 3345 (3). LITERATURE OF RELIGIOUS REFLECTION. Issues of faith and doubt in British and American literature, drawn from texts reflecting Christian humanism, secular rationalism, individualistic romantic faith, and scientific modernism and other modern alternatives. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3375 (3). EXPATRIATE WRITERS: THE INVENTION OF MODERNISM. Introduction to literary modernism in early 20th-century Europe through readings of, and films and excursions relating to, expatriate authors working in Paris. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3376 (3). LITERATURE OF THE SOUTHWEST. Nineteenth- and 20th-century Anglo, Hispanic and Native American literature of the Southwestern United States. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3377 (3). LITERATURE AND THE CONSTRUCTION OF HOMOSEXUALITY. Examination of same-sex desire in modern literature, as considered in the context of philosophical, religious and scientific texts since the ancient world. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3378 (3). STUDIES IN THE ENGLISH LANGUAGE. Linguistic introduction to history of English and to present day American English as spoken and written. Topics include theory and description, basic grammatical structures, and their application to writing and regional and stylistic variation. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3379/CFA 3379 (3). LITERARY AND CULTURAL CONTEXTS OF DISABILITY: GENDER, CARE AND JUSTICE. An examination of disability as a cultural construct, with attention to how literary, ethical and political representations bear upon it, and in relation to gender, race and class issues. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3380/CF 3380 (3). THE LITERATURE OF VISION. An examination of the ways in which prophets and imaginative writers have sought to communicate the source, content, and meaning of things invisible to mortal sight, whether as a consummation of or a challenge to the leading ideas of their time. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3381 (3). SEMIOTICS OF CULTURE. Analysis of form, technique and meaning in literary and textual representation, in comparison – or conjunction – with other representational media such as painting, photography, cinema. Topics will vary by term; may be repeated for credit under different subtitle. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3382 (3). HEROIC VISIONS: THE EPIC POETRY OF HOMER AND VERGIL. The literature of classical heroism in works by Homer and Vergil that influenced the epic traditions of English literature. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3383/CF 3305 (3). LITERARY EXECUTIONS: IMAGINATION AND CAPITAL PUNISHMENT. The literary treatment of capital punishment in drama, poetry, novel and biography. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3389 (3). DIRECTED STUDIES. Directed readings in a coherent area of a student's choice, to be approved by the Director of Undergraduate Studies and the instructor. *Prerequisite:* DISC 1313 or 2306; or ENGL 1302 or ENGL 2306.

ENGL 3390 (3). STUDIES IN CREATIVE WRITING: THEMATIC, EXPERIENTIAL, CRAFT, OR WORKSHOP. Continues the development of fiction, nonfiction, and poetic craft while also engaging students in new media, community-based writing, publishing, editing, and the deeper study of professional technique. *Prerequisite:* ENGL 2390.

ENGL 3391 (3). INTERMEDIATE POETRY WRITING. *Prerequisite:* ENGL 2391 or permission of instructor.

ENGL 3392 (3). INTERMEDIATE FICTION WRITING. *Prerequisite:* ENGL 2392 or permission of instructor.

ENGL 4310 (3). STUDIES IN LITERARY THEORY AND CRITICISM. An advanced study of a theoretical or critical problem in literary study and interpretation. Topics could include questions of history, major theoretical movements and cultural studies. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4320 (3). MEDIEVAL WRITERS. Intensive study of one or two medieval writers. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4321 (3). STUDIES IN MEDIEVAL LITERATURE. Advanced study of medieval literature focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4323 (3). CHAUCER. Advanced studies in the poetry of Geoffrey Chaucer in relation to historical contexts, medieval poetics and Middle English language. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4330 (3). RENAISSANCE WRITERS. Intensive study of one or two major writers from the period in context with English social and cultural history. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4331 (3). RESTORATION AND ENLIGHTENMENT WRITERS. Intensive study of one or two major writers from the period (1660–1775). May be repeated for credit under a different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4332 (3). STUDIES IN EARLY MODERN BRITISH LITERATURE. Advanced study of British literature from c. 1500 to 1775, focused on a specific problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4333 (3). SHAKESPEARE. Advanced studies in Shakespeare's poetry and plays, in historical, cultural and theatrical contexts. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4336 (3). STUDIES IN EARLY MODERN AMERICAN LITERATURE. Advanced study of American literature from c. 1500 to 1775, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4339 (3). TRANSATLANTIC STUDIES I. Intensive study of a theme, genre or topic in Transatlantic literature in English from the Early Modern period (c. 1500–1775). May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4340 (3). ROMANTIC WRITERS. Intensive study of one or two major British writers from the period. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4341 (3). VICTORIAN WRITERS. Intensive study of one or two major British writers from the period. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4343 (3). STUDIES IN BRITISH LITERATURE IN THE AGE OF REVOLUTIONS. Intensive study of British literature from c. 1775 to 1900, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4345 (3). AMERICAN WRITERS IN THE AGE OF REVOLUTIONS. Intensive study of one or two major writers from the period. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4346 (3). STUDIES IN AMERICAN LITERATURE IN THE AGE OF REVOLUTIONS. Advanced study of American literature from c. 1775 to 1900, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4349 (3). TRANSATLANTIC STUDIES II. Intensive study of a theme, genre, or topic in Transatlantic literature in English during the Age of Revolutions (c. 1775–1900). May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4350 (3). MODERN AND CONTEMPORARY BRITISH WRITERS. Intensive study of one or two major writers from the period. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4351 (3). STUDIES IN MODERN AND CONTEMPORARY BRITISH LITERATURE. Advanced study of British literature from c. 1900 to the present, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4356 (3). MODERN AND CONTEMPORARY AMERICAN WRITERS. Intensive study of one or two major writers from the period. This course may be repeated for credit under a differ-

ent subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4360 (3). STUDIES IN MODERN AND CONTEMPORARY AMERICAN LITERATURE. Advanced study of American literature from c. 1900 to the present, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4369 (3). TRANSATLANTIC STUDIES III. Intensive study of a theme, genre or topic in Transatlantic literature in English from the Modern to Contemporary period (c. 1900–present). May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4370 (3). SPECIAL STUDIES. Intensive study of a theme, genre or topic that includes material from a wide range of eras. May be repeated for credit under different subtitle. *Prerequisite:* 12 hours of English, including ENGL 2311 or 2314 and including 2315 (excluding DISC 1311, 1312, 1313, 2305, and 2306 and ENGL 1300, 1301, 1302, 2302, and 2305).

ENGL 4391 (3). ADVANCED POETRY WRITING. Advanced course for students seriously interested in the composition of poetry. *Prerequisite:* ENGL 3391 or permission of instructor. May be repeated for additional credit.

ENGL 4392 (3). ADVANCED FICTION WRITING. Advanced course for students seriously interested in writing the short story or novel. *Prerequisite:* ENGL 3392 or permission of instructor. May be repeated for additional credit.

ENGL 4393 (3), 4395 (3). DIRECTED STUDIES IN POETRY WRITING. *Prerequisite:* Open only to advanced students by permission of instructor.

ENGL 4394 (3), 4396 (3). DIRECTED STUDIES IN FICTION WRITING. *Prerequisite:* Open only to advanced students by permission of instructor.

ENGL 4397 (3). CRAFT OF POETRY. Examination of various readings for their usefulness from a poet's point of view. Emphasis on observation of technique rather than on interpretation. *Prerequisite:* ENGL 2391.

ENGL 4398 (3). CRAFT OF FICTION. Examination of various readings for their usefulness from a fiction writer's point of view. Emphasis on observation of technique rather than on interpretation. *Prerequisite:* ENGL 2392.

ENGL 5301 (3). DISCOURSE IN SOCIAL SCIENCES. History, characteristics, and functions of scientific writing, with a focus on the rhetoric of inquiry and science as persuasion. Practice in editing of scientific prose. *Prerequisite:* Permission of instructor.

ENGL 5309 (3). SEMINAR IN TEACHING WRITING. Contemporary theory and practice of teaching writing: discourse and rhetorical theory, conferencing and small group work, designing composition curricula, writing in all disciplines. Special emphasis on argumentation and persuasion.

ENGL 5310 (3). SEMINAR IN LITERARY THEORY. A seminar for candidates for departmental distinction, designed to acquaint them with particular approaches to literature. *Prerequisite:* Permission of instructor.

ENGL 5378/ANTH 5359 (3). LINGUISTICS: GENERAL. Introduction to the study of language as a part of human culture.

ENGL 5381 (3), 5382 (3), 5383 (3), 5384 (3). INDEPENDENT STUDIES. Directed readings in an area of the student's choice, to be approved by the Director of Undergraduate Studies and the instructor. A substantial amount of critical writing will be required. Open only to candidates for departmental distinction and to graduate students.

Environmental Science

www.smu.edu/esp

Professor John Walther, **Director**

The natural systems that constitute Earth's environment are in continuous mutual interaction. These interactions occur on spatial scales that range from microscopic to global and on temporal scales that range from fractions of a second to millions of years. Scientific efforts to understand how the activities of humans affect the workings of such a complex arrangement must properly involve the identification and study of the fundamental processes operating at present in Earth's environment. Furthermore, to apply such knowledge with skill, insight and perspective, information must also be acquired on the extent to which ancient environmental conditions on Earth may have differed from those observed today and how such changes affected life on the planet. An intellectual and practical scientific problem of such vast scope must be approached in an interdisciplinary manner. This interdisciplinary requirement is important not only for students who will become professional environmental scientists, but also for those who want a solid scientific foundation for postgraduate training in environmental law, public policy, business and other fields.

The program includes a set of core courses that provide the student with the necessary background in chemistry, Earth science, physics, biology and mathematics to move into an Earth science, chemistry or biology emphasis in the upper-division courses. All environmental science majors come together their senior year in a multidisciplinary seminar in environmental science. Juniors and seniors may do an internship (e.g., with a nonprofit agency, an environmental lawyer, or an assessment and remediation company) for course credit and by special arrangement.

Bachelor of Science With a Major in Environmental Sciences

The environmental sciences major requires 68 total hours, consisting of 50 hours of core classes and 15–18 hours of electives taken with an emphasis in chemistry, Earth science or biology.

	Credit Hours
Core Biology Courses	7
BIOL 1402 Introductory Biology II	
BIOL/GEOL 3307 Ecology	
Core Chemistry Courses	15–16
CHEM 1303/1113 General Chemistry I and Lab	
CHEM 1304/1114 General Chemistry II and Lab	
CHEM 3371/3117 Organic Chemistry I and Lab	
CHEM 3372/3118 Organic Chemistry II and Lab	
or **CHEM 3351** Quantitative Analysis	
Core Earth Sciences Courses	11
GEOL 1301 Earth Systems	
or **GEOL 1315** Introduction to Environmental Sciences	
GEOL 3451, 3452 Earth Materials I, II	
Core Environmental Science Course	3
GEOL 3363 Environmental Geology Seminar	
Core Mathematics Courses	6
MATH 1337, 1338 Calculus With Analytic Geometry I, II	

	Credit Hours
Core Physics Courses	8
PHYS 1303/1105 Introductory Mechanics and Lab *or* **PHYS 1307/1105** General Physics I and Lab **PHYS 1304/1106** Introductory Electricity/Magnetism, Lab *or* **PHYS 1308/1106** General Physics II and Lab	
Emphasis Courses (select one area of emphasis)	15–18
Chemistry Emphasis (15–16 credits): **CHEM 3372/3118** Organic Chemistry II and Lab *or* **CHEM 3351** Quantitative Analysis **CHEM 5383** Physical Chemistry I *Electives (9 or more credits from the following):* **CHEM 4397** Research **CHEM 5390** Environmental Chemistry **GEOL 3353** Modern and Ancient Climates **GEOL 3366** Environmental Geology/Geochemical Cycles **GEOL 5384** Hydrogeology **GEOL 5386** Geochemistry **ME 5317** Groundwater Hydrology and Contamination	
Earth Sciences Emphasis (18 credits from the following): **CEE 3341** Intro to Solid/Hazardous Waste Management **CHEM 3351** Quantitative Analysis **CHEM 3372/3118** Organic Chemistry II and Lab **CHEM 5383** Physical Chemistry I **CHEM 5390** Environmental Chemistry **GEOL 3353** Modern and Ancient Climates **GEOL 3360** Process Geomorphology **GEOL 3366** Environmental Geology and Geochemical Cycles **GEOL 3369** Paleobiology **GEOL 3454** Structural Geology **GEOL 3472** Principles of Sedimentation **GEOL 4296, 4298** Senior Thesis Research Project *or* **GEOL 4321** Internship in Geoscience **GEOL 4390** Introduction to Geophysical Prospecting **GEOL 5368** Paleoecology **GEOL 5384** Hydrogeology **GEOL 5386** Geochemistry **ME 2342** Fluid Mechanics **STAT 2331** Introduction to Statistical Methods *or* **STAT 4340** Statistical Methods for Engineers and Applied Scientists	
Biology Emphasis (18 credits) **BIOL 1401** Introductory Biology I *Electives (14 or more credits from the following):* **BIOL 3303** Evolution **BIOL 3304** Genetics **BIOL 3305** Aquatic Biology **BIOL 3306** Physiology **BIOL 3311** Tropical Ecology/Sustainable Development (SMU-in-Costa Rica)	

Biology Emphasis Electives (continued)

BIOL 3312 Wildlife Ecology (SMU-in-Kenya)
BIOL 3342 Plant Kingdom
BIOL 3343 Field Botany (SMU-in-Taos)
BIOL 3347 Systematic Botany (SMU-in-Taos)
BIOL 3354 Parasitology
BIOL 3357 Biology of the Invertebrates
BIOL 3403 Microbiology
BIOL 4360 Environmental Toxicology
BIOL 5366/5166 Vertebrate Anatomy and Origins, Lab
BIOL 5311/5110 Biological Chemistry: Metabolism, Lab
BIOL 5311 Biological Chemistry: Metabolism
GEOL 3353 Modern and Ancient Climates

65–68

The Courses (ENSC)

ENSC 3100 (1), 3200 (2), 3300 (3). SPECIAL TOPICS ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval is required. May be repeated for credit under different subtitle. A maximum of 6 credit hours may be applied toward the B.S. degree in environmental science.

ENSC 3310 (3). ECONOMIC AND ETHICAL ISSUES IN SUSTAINABLE DEVELOPMENT (SMU-IN-COSTA RICA ONLY). Class will address and apply principles of ecological economics to assess the sustainability of development models at the micro and macro level. Basic concepts of ecological economics cost-benefit valuation techniques will be presented and applied to the local people, government, and aid agencies for the implementation of sustainable development models. (SMU-in-Costa Rica only)

ENSC 3312 (3). DIRECTED RESEARCH. Scientific writing, oral, graphic and tabular presentation of results derived from experimental design, field techniques, basic descriptive statistics, and parametric and non-parametric quantitative analysis. (SMU-in-Costa Rica only)

ENSC 3313 (3). TECHNIQUES IN WILDLIFE MANAGEMENT. Class will focus on the introduction of laboratory techniques for monitoring ungulate populations and optimizing management practices, while studying behavioral, physiological and social responses of animals to a changing environment. (SMU-in-Kenya only)

ENSC 3316 (3). DIRECTED RESEARCH. Scientific writing, oral, graphic and tabular presentation of results derived from experimental design, field techniques, basic descriptive statistics, and parametric and non-parametric quantitative analysis. (SMU-in-Kenya only)

ENSC 3322 (3). INTERNSHIP IN ENVIRONMENTAL SCIENCE. Students experience work in a business or organization concerned with environmental issues. Opportunities may be found in environmental law, assessment and remediation companies, or among nonprofit or government agencies.

Environmental Studies

www.smu.edu/environmentalstudies

Professor John Walther, **Director**

The B.A. in environmental studies provides students with the tools necessary to address society's environmental problems through careers in government, non-governmental or educational organizations, public policy, business and related fields. This interdisciplinary program incorporates courses from numerous departments and three schools in the University. The environmental studies major can be tailored to emphasize an area of interest (e.g., environmental biology, sustainability and globalization, environmental policy) and would be complemented by minors or other majors in environmental Earth science, economics, business, environmental science, biology, anthropology, journalism, corporate communications and public affairs, advertising, sociology and many of the disciplines in the humanities and social sciences.

Bachelor of Arts With a Major in Environmental Studies

The environmental studies major requires 36 total hours, consisting of 21 hours of core classes and 15 hours of electives. The core classes provide the student with the appropriate concepts and tools to understand the scope of global, regional and local environmental issues.

Majors are strongly encouraged to take advantage of opportunities for study abroad and to seek relevant internships. Internship courses are offered in many departments and can be counted toward the major by petition.

Core Courses

BIOL/GEOL 3307 Ecology
GEOL 1301 Earth Systems
GEOL 3353 Modern/Ancient Climates
HIST 3309 North American Environmental History
PP 3310 Environmental Policy
STAT 2331 Introduction to Statistical Methods (Dallas and SMU-in-Taos)
or **STAT 2301** Statistics for Modern Business Decisions

A senior thesis is required, with a field, research or other practical component taken in a department relevant to the student's interests. For example:

ANTH 4391 *or* **ANTH 4392** Independent Study
CCJN 5308 Honors Thesis
ECON 4398 Departmental Distinction in Economics
GEOL 4399 Integrative Research

Elective Courses

A total of 15 elective credit hours are required in consultation with an academic adviser with at least one course from each of the three groups listed below. The SMU Abroad courses listed can also count as elective courses.

Natural Sciences and Statistics (Minimum of 3 credit hours required):
BIOL 3303 Evolution
BIOL 3308 Biology of Marine Mammals (SMU-in-Copenhagen)
BIOL 3309 Marine Biology of European Coastal Waters (SMU-in-Copenhagen)
BIOL 3310 Ecology and Human Impact in the North/Baltic Seas (SMU-in-Copenhagen)

Natural Sciences and Statistics (continued)

BIOL 3342 Plant Kingdom
BIOL 3343 Field Botany (SMU-in-Taos)
CEE 2421 Aquatic Chemistry
ENSC 3313 Techniques in Wildlife Management (SMU-in-Kenya)
GEOL 3330 Resources and the Environment
GEOL 3340 Face of the Earth
GEOL 3359 Computer Methods in Geological Sciences
GEOL 3363 Environmental Geology Seminar
GEOL 3366 Environmental Geology and Geochemical Cycles
GEOL 3472 Principles of Sedimentation
GEOL 5370 Global Change
GEOL 5368 Paleoecology
GEOL 5384 Hydrogeology
STAT 3380 Environmental Statistics
STAT 5371, 5372 Experimental Statistics I, II

Social Sciences and Humanities (Minimum of 3 credit hours required):

ANTH 3319 Human Ecology
ANTH 3374 Cultures/Environments of the Southwest (Dallas and SMU-in-Taos)
ANTH 3384 Paradise Lost? The Archaeology and Ethics of Human Environmental Impacts (Dallas and SMU-in-Taos)
ANTH 3385 Sustainable Living
ANTH 4346 Environmental Anthropology
ECO 4366 Economics of the Public Sector
ECO 4382 Economics of Regulated Industries
ECO 5301 Environmental Economics
ECO 5360 Economic Development
ECO 5361 Natural Resources/Energy Economics
ENSC 3310 Economic/Ethical Issues in Sustainable Development (SMU-in-Costa Rica)
ENSC 3311 Principles of Resource Management (SMU-in-Costa Rica)
ENSC 3315 Environmental Policy and Socioeconomic Values (SMU-in-Kenya)
HIST 3318 Human History of Natural Disasters
PHIL 3377 Animal Rights
PHIL 3379 Environmental Ethics
SOCI 4321 Immigration and Population Issues

Business and Engineering (Minimum of 3 credit hours required):

CEE 1302 Introduction to Civil and Environmental Engineering
CEE 2304 Introduction to Environmental Engineering and Science
CEE 3341 Introduction to Solid and Hazardous Waste Management
CEE 3355 Environmental Impact Evaluation, Policy, and Regulation
CEE 5325 Disaster Management
MNO 3375 Corporate Ethics and Organizational Responsibility
MNO 4371 Leadership and Culture

The Courses (ENST)

ENST 1100 (1), 1200 (2), 1300 (3), 2100 (1), 2200 (2), 2300 (3). ENVIRONMENTAL STUDIES ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitles.

ENST 3100 (1), 3200 (2), 3300 (3). SPECIAL TOPICS ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval is required. May be repeated for credit under different subtitle. A maximum of 6 credit hours may be applied toward the B.A. degree in environmental studies.

ENST 3311 (3). PRINCIPLES OF RESOURCE MANAGEMENT (SMU-IN-COSTA RICA ONLY). Class will introduce practical tools used in addressing complex environmental problems including coastal zone planning, guidelines for ecologically sustainable development, environmental impact assessment, fisheries management, and protected area planning and management. (SMU-in-Costa Rica only)

ENST 3315 (3). ENVIRONMENTAL POLICY AND SOCIOECONOMIC VALUES (SMU-IN-KENYA ONLY). Class will introduce students to the major constituencies that effect African conservation (non-governmental conservation groups, economic interests, etc.) and their underlying philosophies. Students will learn to determine effective approaches to resource management. (SMU-in-Kenya only)

Ethnic Studies

Professor Kenneth Hamilton, **Director**

The Ethnic Studies Program offers an interdisciplinary program that examines the African-American and Mexican-American experiences through the social sciences and humanities. The program offers instruction in important periods of African, Mexican and American history, probing the roots of traditions beginning in early African and pre-Columbian cultures, as well as examining minorities in contemporary U.S. society.

This program provides good preparation for graduate work in the social sciences, the humanities, and professional schools, as well as jobs and careers in many fields. Education, law, journalism, urban planning, business, social work and politics are a few of the fields for which ethnic studies provides a strong background.

Requirements for Majors and Minors

The following options are offered under the Ethnic Studies Program:

- The major leading to the B.A. in ethnic studies with specialization in African and African-American studies (33 hours) or in Mexican-American studies (34 hours).
- The major leading to the B.S. in ethnic studies with specialization in African and African-American studies (36 hours) or in Mexican-American studies (37 hours).
- The minor in African and African-American studies (18 hours).
- The minor in Mexican-American studies (19 hours).

Courses to fulfill the requirements for the above should be selected in consultation with the director.

I. **Bachelor of Arts.** The B.A. option focuses more on the humanities than on the social sciences and, consequently, requires less work in methodology and statistics.
   A. **Foundation.** Six hours are required of all students majoring in ethnic studies.
      ETST 2301 (SOCI 3305, CFA 3310) Race and Ethnicity in the U.S.
      SOCI 3370 Minority-Dominant Relations
   B. **Basic Courses.** A total of 18 hours comprised of the minor in African and African-American studies, and 19 hours comprised of the minor in Mexican-American studies form the basis of the ethnic studies major.
      i. African and African-American studies minor (9 of the 18 hours required must be at the 3000 level or above):
         a. Nine hours of core courses are required.
            HIST 2392 Modern Africa
            HIST 3313 African Americans in the United States, 1607–1877
            HIST 3314 African Americans in the United States, 1877–Present
         b. A total of nine hours of additional basic courses, of which six hours must be outside history.
            ANTH 3314 Peoples of Africa
            ARHS 3390 Traditional Arts of Africa
            ENGL 3362 African-American Literature
            HIST 2391 Africa to the 19th Century
            HIST 3304 Blacks and the Civil Rights Movement
            HIST 3378 Problems in African History
            HIST 3388 The African-American Urban Experience, 1865–1980
            HIST 5341 Seminar in American History: African Slavery in the U.S.
            MUHI 3340 Jazz: Tradition and Transformation

ii. Mexican-American studies minor (10 of the 19 hours required must be at the 3000 level or above):
   a. A total of 10 hours of core courses are required.
      ETST 4352 (SPAN 4352) Conversations and Community
      HIST 3324 The Mexican Americans, 1848 to the Present
      SOCI 3372 Chicanos in the Southwest
      SPAN 1401 Beginning Spanish (or higher level)
   b. A total of nine hours of additional basic courses from the following:
      ANTH 3312 Mesoamerican Archaeology
      ARHS 3383 The Ancient Maya
      ARHS 3385 The Aztecs Before and After the Conquest
      ENGL 3363 Chicana/Chicano Literature
      HIST 3305 The Hispanos of New Mexico, 1848 to the Present
      HIST 3308 History of Hispanics in the U.S. Through Film
      HIST 3382 History of Mexico
      HIST 5330, 5331 Seminar in Mexican-American History
      WL 3306 Chicano Literature of the Southwest

C. **Cross-Cultural Requirement.** Ethnic studies majors in the African/African-American option are required to take 3 hours in Mexican-American studies. Majors in the Mexican-American studies option are required to take 3 hours in African-American studies.

D. **Supporting Courses.** A total of six hours of other courses related to ethnicity must be selected from the following:
   ANTH 3353 Indians of North America
   ANTH 3361 Language in Culture and Society
   ANTH 3368 (SOCI 3368) Urban Life: A Cross-Cultural Perspective
   ENGL 1365 Literature of Minorities
   ENGL 3354 Non-Western Culture and Literature
   ENGL 3365 (CF 3398) Jewish-American Literature and Culture
   ETST 2305 Internship in Ethnic Studies
   HIST 2380 Ethnic Regions in the Western World
   PLSC 4337 Civil Rights
   RELI 3324 The Jewish Experience in America

II. **Bachelor of Science.** A total of 36 hours are required to complete the B.S. option in African and African-American studies, and 37 hours are required to complete the B.S. option in Mexican-American studies. The same pattern of courses is required as for the B.A. degree, with the addition of six hours of required methods courses, three of which may substitute for three hours of supporting courses:
   SOCI 3311 Qualitative Research Methods
   STAT 2301 Statistics for Modern Business Decisions
      or **STAT 2331** Introduction to Statistical Methods

The Courses (ETST)

ETST 2301/SOCI 3305/CFA 3310 (3). INTRODUCTION TO RACE AND ETHNICITY IN THE UNITED STATES. An interdisciplinary seminar designed to introduce students to the analysis of race and ethnicity in the United States.

ETST 2305 (3). INTERNSHIP IN ETHNIC STUDIES. This course offers students experience in varied careers serving ethnic communities. Opportunities include advertising for public service, community organizing, nonprofit economic development, local historical preservation, and more. Department consent.

ETST 4352/SPAN 4352 (3). CONVERSATIONS AND COMMUNITY. Advanced Spanish course that brings oral and written language to the center of students' learning by bringing them in contact with native Spanish speakers from a variety of Dallas communities. Includes fieldwork and contact hours in the classroom. Aimed at improving oral and listening skills of non-native speakers of Spanish. *Prerequisite:* C- or better in SPAN 3358. Not for heritage or native speakers of Spanish.

History

www.smu.edu/history

Professor Kathleen Wellman, **Department Chair**

Professors: Jeremy Adams, Kenneth Andrien, John Chávez, Dennis Cordell, Edward Countryman, Neil Foley, James Hopkins, Alexis McCrossen, Daniel Orlovsky, Sherry Smith, William Tsutsui, Kathleen Wellman. **Associate Professors:** Sabri Ates, Crista DeLuzio, Melissa Dowling, Jeffrey Engel, Andrew Graybill, Kenneth Hamilton, Thomas Knock, John Mears. **Assistant Professors:** Erin Hochman, Jill Kelly, Ada-Maria Kuskowski, Azfar Moin, Ling Shiao. **Adjunct Assistant Professor:** David Doyle. **Emeritus Professors:** Peter Bakewell, James Breeden, Ronald David, O.T. Hargrave, Luis Martin, Donald Niewyk, R. Hal Williams.

The William P. Clements Department of History offers three types of courses: introductory, survey and more advanced courses that explore large areas of human history; intermediate thematic courses that mix lectures and small group discussions to explore more closely defined topics; and seminars that probe deeply into given areas. Each student should devise a program of study that meets individual interests and needs and also achieves a balance between diversification and specialization. Except where specified, there are no prerequisites, and interested students are invited into all courses.

Bachelor of Arts With a Major in History

A total of 33 hours in history are required for the major, including HIST 4300 and one three-hour course at the 5000 level. In addition, majors must take at least six hours in each of the following three areas: 1) United States; 2) Europe; and 3) Africa, Asia or Latin America. Any combination of courses in these areas is acceptable (HIST 4300 will not fulfill these area requirements). At least 18 hours in courses at the 3000 and higher levels are required. History majors must earn 2.000 minimum GPAs in their history coursework. Six hours of advanced-placement credit can be applied toward the history major. Twelve term hours of world language are recommended.

Departmental Distinction

A history major candidate with sufficiently high standing may graduate with honors in history by applying for departmental distinction. During their senior year, candidates for distinction will pursue an individual research project under the direction of a particular professor (while enrolled in HIST 4375). This major research project will develop from the 5000-level seminar or HIST 4300, the junior seminar. The project will be presented as a thesis before the end of the term. The successful honors graduate must also pass an oral examination on the thesis.

Minor in History

Students who are not majoring in history, but who have a general interest in history, may pursue a minor by taking 15 hours of departmental coursework. Nine term hours must be taken at the 3000-5000 level. Students intending to take a minor in the department should design a program of study in consultation with the director of undergraduate studies.

The Courses (HIST)

Foundation and Special Courses	HIST 1301, 1302, 1311, 1312, 4300, 4375, 4376, 4397–99
United States History	HIST 1321, 2311, 2312, 2318, 2380, 2398, 3301, 3304–14, 3316, 3318–22, 3324, 3327, 3336, 3342, 3346–48, 3362, 3364, 3369, 3370, 3372, 3379, 3384, 3388, 3391, 3394, 3399, 3401, 4304, 4353, 4354, 5330, 5331, 5340, 5341, 5344, 5345, 5350, 5377
European History	HIST 1303, 1322, 2321, 2323, 2346, 2353, 2354, 2365, 2366, 3302, 3303, 3329, 3330, 3332–35, 3337, 3340–42, 3344, 3345, 3350–61, 3363, 3365–68, 3373–76, 3381, 3383, 3385, 3397, 4319, 4320, 4363, 4369, 4372, 4373, 4380, 4381, 4384, 4385, 5338, 5364, 5367, 5370–76, 5378, 5390–92
Latin American History	HIST 2384, 2385, 3317, 3320, 3321, 3380, 3382, 4380, 4381, 5330, 5331, 5382
African, Asian and World History	HIST 1323, 2355, 2379, 2390–95, 3315, 3323, 3325–26, 3371, 3377–78, 3386, 3387, 3389–90, 3392–93, 3395–96, 3398, 5395, 5397
SMU Abroad Courses	HIST 2100, 2200, 3100, 3200, 3300

HIST 1301 (3), 1302 (3). WORLD CULTURES AND CIVILIZATION. A survey of world cultures from the earliest times to the present. The development of individual civilization will be studied within a comparative framework emphasizing the themes common to all human history.

HIST 1303 (3). MILLENNIALISM THROUGH THE AGES. A historical look at the ancient and current notion that an apocalyptic End Time will produce a New Heaven and New Earth turning conventional order upside down, and how to behave if so.

HIST 1311 (3). WESTERN CIVILIZATION TO 1527. A survey of the cultural phenomenon often called Western Civilization, from its prehistoric roots in western Asia as well as Europe, through ancient Mesopotamian and Egyptian civilization to the Greeks, the Romans, and the medieval experience up to the Renaissance. Lecture course, with much reference to literature and visual arts.

HIST 1312 (3). WESTERN CIVILIZATION SINCE 1527. An introductory survey of Western civilization from about the time of the Reformation to the present.

HIST 1321 (3). INTRODUCTORY SEMINAR IN AMERICAN HISTORY. Offers the first or second year student the opportunity for intensive exploration of particular topics in American history in a small class setting.

HIST 1322 (3). INTRODUCTORY SEMINAR IN EUROPEAN HISTORY. Offers the first or second year student the opportunity for intensive exploration of particular topics in European history in a small class setting.

HIST 1323 (3). INTRODUCTORY SEMINAR IN NON-WESTERN HISTORY. Offers the first or second year student the opportunity for intensive exploration of particular topics in non-Western history in a small class setting.

HIST 2100 (1), 2200 (2). HISTORY STUDIES ABROAD. SMU credit for history courses taken in University-approved programs abroad.

HIST 2311 (3). OUT OF MANY: U.S. HISTORY TO 1877. Growth of American civilization. General survey, with particular attention to social and political aspects. Open to first-year students.

HIST 2312 (3). UNFINISHED NATION: U.S. HISTORY SINCE 1877. Growth of American civilization. General survey, with particular attention to social and political aspects. Open to first-year students.

HIST 2318/CFB 3318 (3). SCHOOLS AND SOCIETY: THE EVOLUTION OF AMERICA'S PUBLIC SCHOOL SYSTEM. An interdisciplinary exploration of America's public school system from the Colonial period to the present with emphasis on changing relationships between schools, families, and changing social and political ideals.

HIST 2320 (3). SOCIETY AND LIFE IN TEXAS.

HIST 2321 (3). PHILOSOPHICAL AND RELIGIOUS THOUGHT IN THE MEDIEVAL WEST. Study of the key issues in Western thought, and of their temporary resolutions, in the medieval millennium – and of the shifting balance between Greek and Hebrew elements in that evolving tradition.

HIST 2323/CFA 3320/WL 3323 (3). RUSSIAN CULTURE. Significant aspects of Russian thought and culture at its various stages of development, illustrated by examples from poetry, prose, drama, journalism, architecture, the fine arts and music.

HIST 2337 (3). HISTORY OF SPORTS IN THE UNITED STATES. The social, cultural, and business history of sport in the U.S. Focus on the cultural meaning and ethical components of sports in the 19th and 20th centuries.

HIST 2346 (3). MODERN ENGLAND, 1714 TO THE PRESENT. A survey of modern English history from the accession of the Hanoverians to the present, with emphasis on social and political themes dealing with the transition from a landed to an industrial society. (SMU-in-Oxford)

HIST 2353/CF 3392 (3). CURRENTS IN CLASSICAL CIVILIZATION. The interdisciplinary study of the art, literatures and history of the ancient Greek and Roman worlds, focusing on the development of democracy, individualism, immortality, heroism, justice, sexuality, nature, etc.

HIST 2354 (3). ANCIENT FOUNDATIONS OF MODERN CIVILIZATION. An introduction to the study of the ancient world embracing both the ancient Near East and classical Greek and Roman civilization.

HIST 2355 (3). HISTORY OF THE ANCIENT NEAR EAST AND EGYPT. An introduction to the ancient civilizations of Mesopotamia, Israel, Anatolia, and Egypt. Examines changing ancient cultures as they contact (or conquer) each other as seen through their literature, histories and archaeological remains.

HIST 2365 (3). EUROPE IN THE MODERN WORLD, RENAISSANCE TO 1760. An introductory survey of the growth of European civilization.

HIST 2366 (3). EUROPE IN THE MODERN WORLD, 1760 TO THE PRESENT. A continuation of HIST 2365.

HIST 2379 (3). A HISTORY OF ISLAMIC EMPIRES. This course introduces students to the history of various Islamic empires and covers the period from 600 to 1750.

HIST 2380/CFA 3380 (3). ETHNIC REGIONS IN THE WESTERN WORLD. An interdisciplinary course that examines the ways regional ethnic minorities such as the Basques, Quebecois, and Chicanos have functioned within larger societies in Western Europe and North America.

HIST 2384/CFA 3318 (3). LATIN AMERICA: THE COLONIAL PERIOD. Introductory survey of the development of Latin-American society from prediscovery to the early 19th century.

HIST 2385/CFA 3319 (3). LATIN AMERICA IN THE MODERN ERA. Introductory survey beginning with the 19th-century wars of independence from Spain and Portugal and emphasizing the 20th century as the new nations struggle for political stability and economic independence.

HIST 2390 (3). CIVILIZATION OF INDIA. Introduction to the history, society, and cultural features of South Asia from the third millennium BCE to the modern day.

HIST 2391 (3). AFRICA TO THE 19TH CENTURY. History of Africa south of the Sahara, focusing on culture and social organization, the Bantu migrations, African kingdoms, contacts with the world, Islam, and the slave trade.

HIST 2392 (3). MODERN AFRICA. Introduction to the history of Africa since 1800. Focuses on a number of themes to enable a better understanding of the recent past of this vast continent. Major topics include 19th-century social, political, and economic revolutions in Southern and

West Africa, the incorporation of the continent into the capitalist world economy, class formation under colonial rule, the rise of nationalism, and the politics of liberation.

HIST 2393 (3). JAPAN BEFORE 1850. Japan from its origins through the Tokugawa period. Themes include the military and the emperor in the polity; religions in society and culture; and the continuous, contested creation of identity.

HIST 2394/WL 3397 (3). CHINA BEFORE 1850. Examines changes and continuities from Neolithic times to 1850 in Chinese state, society, and religion, and the relations among the three spheres, through scholarly writings and primary sources.

HIST 2395/WL 3398 (3). MODERN EAST ASIA. A survey of modern East Asia emphasizing an outline of the traditional societies, the Western impact, Japanese industrialization and imperialism, Pearl Harbor, and the rise of Chinese communism.

HIST 2398 (3). AMERICAN POLITICS AND CULTURE, FDR TO OBAMA. Examines life and culture in modern America.

HIST 3100 (1), 3200 (2), 3300 (3). HISTORY STUDIES ABROAD. SMU credit for history courses taken in University-approved programs abroad.

HIST 3301/HRTS 3301/CF 3317 (3). HUMAN RIGHTS: AMERICA'S DILEMMA. This course examines violations of human rights within their historical contexts and explores the foundations of current human rights issues such as torture, terrorism, slavery, and genocide. Attention is given to the evolution of civil and human rights as entities within global political thought and practice.

HIST 3302 (3). GEORGIAN AND VICTORIAN ENGLAND, 1714–1867. The political, social, and economic institutions of Britain and their development in the 18th and 19th centuries.

HIST 3303 (3). MODERN ENGLAND, 1867 TO THE PRESENT. Britain in the 20th century, with social and cultural emphasis; traces the changes in outlook and Empire to the present day.

HIST 3304 (3). BLACKS AND THE CIVIL RIGHTS MOVEMENT. African Americans and the Civil Rights Movement with a focus on post-World War II migration, changing conceptions of race, increasing black prosperity, integration and black nationalism, and the lives of significant black leaders of the Civil Rights Movement.

HIST 3305/CF 3318 (3). THE HISPANOS OF NEW MEXICO, 1848–PRESENT. History of the Mexican-American subculture of New Mexico. Field trips to historical sites. SMU-in-Taos. Summer only.

HIST 3306/CF 3309 (3). COLONY TO EMPIRE: U.S. DIPLOMACY 1789–1941. Examines major events in American foreign policy from the Early National period to Pearl Harbor, emphasizing 19th-century continental expansion, early 20th-century imperialism, and American involvement in the World Wars.

HIST 3307 (3). THE U.S. AND THE COLD WAR, 1945–1989. An examination of major events in American foreign policy since World War II, emphasizing policy toward Western Europe, the Soviet Union, Asia, and Latin America.

HIST 3308/CF 3320 (3). HISTORY OF HISPANICS IN THE U.S. THROUGH FILM. An examination of selected events and developments in the histories of Mexican Americans, Puerto Ricans, Cuban Americans, and other Latinos as depicted in film and video, in movies and television.

HIST 3309/CFB 3309 (3). NORTH AMERICAN ENVIRONMENTAL HISTORY. Surveys North American environmental history since pre-Columbian times. It expands the customary framework of historical inquiry by focusing on the interaction of human beings and the natural world.

HIST 3310 (3). PROBLEMS IN AMERICAN HISTORY. Explores historical issues or trends in U.S. history will be explored using a case study or comparative format.

HIST 3311 (3). NINETEENTH-CENTURY AMERICAN WEST. History of the trans-Mississippi West in the 19th century, with an emphasis on major political, social, economic and environmental themes of the region's history.

HIST 3312 (3). WOMEN IN AMERICAN HISTORY TO 1900. Surveys the history of American women from the Colonial era to 1900 and introduces the major themes organizing these three centuries of U.S. women's history.

HIST 3313 (3). AFRICAN AMERICANS IN THE UNITED STATES, 1607–1877. Examines the people of the African continent, uprooted and enslaved, who continually grappled with the problem of how to preserve their dignity and identity in a hostile environment. The African Americans' adjustment to American society, their exterior struggle against political oppression, the interior nature of their group life, and the development of black institutions are critical to the course's concerns.

HIST 3314 (3). AFRICAN AMERICANS IN THE UNITED STATES, 1877 TO THE PRESENT. Particular attention will be given to Populism, disfranchisement, segregation and lynching, black leadership ideologies, the influence of mass migrations, the impact of the Great Depression and two world wars on black life, the quest for equality in the 1950s and the Civil Rights Movement in the 1960s, and the flowering of black culture and nationalism.

HIST 3315 (3). MODERN SOUTH ASIA: COLONIALISM AND NATIONALISM. Political history of South Asia from the eighteenth century onwards, focusing on the period of British colonial rule, nationalist movements, and independence.

HIST 3316/CF 3311 (3). HISTORY OF SEX IN AMERICA. This course will test the hypothesis that gender and sexuality are constructed categories. Readings in anthropology, history, literary criticism, and psychiatry will be utilized.

HIST 3317 (3). WOMEN IN LATIN-AMERICAN SOCIETIES. The female experience in the formation of Latin-American colonial societies. The theoretical explanation of womanhood within the ideology of the Spanish Counter-Reformation and its application to the daily life of women will be studied.

HIST 3318 (3). THE HUMAN HISTORY OF NATURAL DISASTER IN THE UNITED STATES. A survey of the role of natural disasters in U.S. history, with emphasis on the ways that they (including Hurricane Katrina) are human events, caused or complicated by social practices.

HIST 3319 (3). TEXAS HISTORY. Texas as a crossroad of cultures from the 16th century to the present.

HIST 3320 (3). THE SPANISH FRONTIER IN NORTH AMERICA, 1513–1821. The exploration, colonization, and development of the South and Southwest under Spanish rule, 1513 to 1821, including interaction with Indian peoples.

HIST 3321 (3). THE AMERICAN SOUTHWEST. History of the American Southwest, from the initial penetration in 1821 to the present.

HIST 3322/CFB 3322 (3). NATIVE AMERICAN HISTORY. Examines the roles Native Americans played in the history of North America (excluding Mexico) from 1500 to the present.

HIST 3323/CFB 3323 (3). HISTORY OF ISLAM IN SOUTH ASIA. A cultural history of Islam in South Asia focusing on the sacred practices, literature, and institutions of Muslim communities in the Indian subcontinent from 1000 CE to modern times.

HIST 3324 (3). THE MEXICAN AMERICANS, 1848 TO THE PRESENT. Traces the historical evolution of the Mexican-American people in the Southwest from pre-Columbian to modern times with emphasis on the era since the Mexican War.

HIST 3325 (3). ISLAM AND POLITICS. This course aims to familiarize students with the basics of Islam and explore the relationship between Islam as a religion and Islam as ideology.

HIST 3326/CF 3310 (3). VENTURE OF ISLAM. An introduction to Islamic civilization through an examination of Islamic history and society, arts and letters, and science, as well as philosophy and the legal order. Considers the response of Islam to the challenge posed by the West.

HIST 3327 (3). WOMEN IN AMERICAN HISTORY FROM 1900 TO THE PRESENT. Surveys the history of American women from 1900 to the present and introduces the major themes organizing this period of U.S. women's history.

HIST 3328 (3). HISTORY OF MODERN GERMANY. Surveys developments in German society from unification under Bismarck to division in the wake of World War II, with particular attention given to Hitler's rise to power.

HIST 3329/CF 3322 (3). WOMEN IN EARLY MODERN EUROPE. A study of the influence of women in European society and intellectual movements from the Renaissance through the Enlightenment.

HIST 3330 (3). WOMEN IN MODERN EUROPEAN HISTORY. An exploration of the role of women in European society, from the cultures of Crete and Sumer to the present.

HIST 3332 (3). ANCIENT AND MEDIEVAL FRANCE. An exploration of selected themes that dominate the current history, archaeology and historiography of ancient and medieval France, from the Paleolithic cave painters to Joan of Arc.

HIST 3333 (3). EARLY MODERN FRANCE TO 1789. An examination of the social, political and cultural transformation of 16th-, 17th-, and 18th-century France through the rise of the Bourbon monarchy, its consolidation under Louis XIV, and its evolution under his successors.

HIST 3334 (3). FRANCE SINCE 1789. A history of France from 1789 to the present with special emphasis on social and cultural history including the French Revolution and its legacy, the development of 19th-century French society, and France during the two World Wars.

HIST 3335/CF 3335 (3). ONE KING, ONE LAW: FRANCE 1500–1789. The culture of France through its history and literature, emphasizing the historical developments, ideas, and literary texts that define the period and illuminate both French classicism and absolutism.

HIST 3336/CF 3366 (3). CULTURAL HISTORY OF THE UNITED STATES. Analysis of the literature, art, architecture, music, drama, popular amusements and social customs of America since 1877.

HIST 3337/CFB 3337 (3). ETHICAL DILEMMAS IN A GLOBAL AGE. A cross-cultural exploration of major ethical problems emanating out of the radically changing context of human existence in recent decades.

HIST 3340 (3). THE REVOLUTIONARY EXPERIENCE IN RUSSIA: 1900–1930. The effects of the breakdown of the old regime and the establishment of Soviet power on Russian society and culture. Examines the evolution of political and social institutions, ideologies, literature and the arts against the backdrop of the era's turbulent political history.

HIST 3341 (3). SOVIET/POST-SOVIET SOCIETY AND POLITICS 1917 TO THE PRESENT. Soviet/Russian/Eurasian experience from historical, ethnographic, economic, social, and cultural perspectives, beginning with the present and going back to the roots of the Soviet state and society in the Revolutionary experience, 1917–1921.

HIST 3342/CFB 3383 (3). UTOPIAN PERSPECTIVE ON THE AMERICAN SOUTHWEST. The course focuses on the American Southwest when the region became a homeland of the imagination for those fleeing the modern, industrial culture of the West.

HIST 3343 (3). 20TH-CENTURY EUROPE. History of 20th-century Europe. Offered through International Programs only.

HIST 3344/CF 3394 (3). THE OXFORD LANDSCAPE: FROM THE STONE AGE TO THE TUDORS. An exploration of several approaches to the development of the distinctive human landscape of the Upper Thames Valley and the city that gradually became its metropolis, from the Paleolithic era to the end of the Middle Ages. (SMU-in-Oxford)

HIST 3345 (3). ENGLAND IN MEDIEVAL AND EARLY MODERN TIMES. Treats selected themes in the history of England to 1688, with special attention to formative periods and developments in the evolution of the English state. (SMU-in-Oxford)

HIST 3346 (3). THE 20TH-CENTURY AMERICAN WEST. Examines the American West in the 20th century, emphasizing major social, economic and political themes of the region's last one hundred years. Explores the characteristics that distinguish the West from other American regions and investigates its continued significance to American history.

HIST 3347 (3). CIVIL WAR AND RECONSTRUCTION. Examines the institution of slavery, the events leading to the Civil War, the War itself, and the subsequent efforts at Reconstruction.

HIST 3348/CFA 3348 (3). AMERICAN FAMILIES: CHANGING EXPERIENCES AND EXPECTATIONS. Explores changes in American family life from the colonial period to the present. Seeks to understand how family ideals, structures, and roles have shaped and been shaped by social and historical change.

HIST 3349 (3). IMAGES OF POWER. Using art, literature, history, and philosophy, this course explores the social, political, and intellectual life of the Parisian aristocracy and elite of the seventeenth century in its architectural setting. The Bourbon monarchs were well aware that the arts were instrumental to the construction of the absolutist state. As the course is set both intellectually and physically in Paris, the architectural monuments will encourage students to

make immediate connections between what they read and what they see. Offered through International Programs only.

HIST 3350 (3). LIFE IN THE MEDIEVAL WORLD, A.D. 306 TO 1095. A survey of the political, religious, and cultural history of Western Europe from Constantine the Great to the First Crusade.

HIST 3351 (3). LIFE IN THE MEDIEVAL WORLD, 1095 TO 1350. A survey of the political, social and intellectual structures that characterized the civilization of Western Europe between the First Crusade and the Black Death.

HIST 3352 (3). THE AGE OF THE CRUSADES. Exploration of patterns of thought and behavior underlying and motivating the military, ideological and general cultural confrontation between Christendom and Islam from the late 11th to the 14th centuries.

HIST 3353 (3). THE HISTORY OF ANCIENT GREECE. A study of the ways in which the various societies of ancient Greece approached the problem of defining, establishing and maintaining an equitable social order.

HIST 3354 (3). WARFARE AND DIPLOMACY IN ANTIQUITY. A study of the methods both of waging and of averting war in antiquity.

HIST 3355/CF 3325 (3). CLASS AND GENDER IN ANCIENT SOCIETY. An examination of class and gender in the ancient world with special emphases on changing definitions of masculinity and femininity in Greek and Roman culture and the position, rights and interaction of different groups (e.g., free and slave, citizen and foreigner, soldier and civilian).

HIST 3356 (3). THE INDIVIDUAL AND SOCIETY IN ANTIQUITY. A study of different concepts of the nature of the individual and his relation to society in Homeric and classical Greece and republican and imperial Rome.

HIST 3357/CF 3363/ENGL 3371 (3). JOAN OF ARC: HISTORY, LITERATURE AND FILM. The life and later reception of the extraordinary peasant girl, Joan of Arc (ca. 1412–1431), who in two years changed the course of European history before she was burned at the stake.

HIST 3358/CF 3313 (3). THE RENAISSANCE. A history of culture in the Renaissance from the perspective of advances in scholarship and science, and above all, in appreciation of social and political contexts.

HIST 3359 (3). EUROPE IN THE AGE OF THE REFORMATION, 1520–1598. The political, economic, religious and cultural history of Europe, including the impact of the Protestant and Catholic reform movements.

HIST 3360 (3). ENGLISH SOCIETY IN THE AGE OF ELIZABETH THE GREAT. Focuses selectively upon key aspects of the social, cultural, religious and intellectual life of Elizabethan England, set against the background of political, economic and diplomatic developments in Europe in the 16th century.

HIST 3361 (3). ROMAN HISTORY AND THE ROMAN MIND. The development of Roman civilization from its earliest beginnings to the dawn of the Middle Ages.

HIST 3362 (3). SEARCHING FOR THE AMERICAN DREAM: U.S. IMMIGRATION/ MIGRATION. Focus on American identity through the history of immigration and migration. Topics include the slave trade; European, Asian, and Latin-American immigration; the Overland Trail; illegal immigration; and the melting pot.

HIST 3363/CF 3306 (3). THE HOLOCAUST. Examines the destruction of the European Jews as it emerged from pre-World War I anti-Semitism and Nazi racism. Considers Jewish responses to genocide, the behavior of bystanders, and possibilities of rescue.

HIST 3364 (3). CONSUMER CULTURE IN THE UNITED STATES, 1700–1990. The business, cultural and political history of the rise of the consumer culture in the United States. Focus on the development of institutions, ideas and practices centered on consumption.

HIST 3365 (3). PROBLEMS IN EUROPEAN HISTORY. Historical events or trends of particular significance in the development of modern Europe will be examined with consideration of the ways in which historians have assessed and reassessed their viewpoints. Students will be invited to join in the controversy with a modest research project of their own. Topics will be selected in accordance with the interests of students and instructors and hence will vary from term to term.

HIST 3366 (3). PROBLEMS IN EUROPEAN HISTORY. Historical events or trends of particular significance in the development of modern Europe will be examined with consideration of the ways in which historians have assessed and reassessed their viewpoints. Students will be invited to join in the controversy with a modest research project of their own. Topics will be selected in accordance with the interests of students and instructors and hence will vary from term to term.

HIST 3367 (3). REVOLUTIONS IN EUROPEAN HISTORY. Traces the impact of revolutionary explosions on European civilization from the peasant revolts of the late Middle Ages through the rebellions of the 1560s and 1640s and the great upheavals of the Age of Democratic Revolution to the events of 1917 in Russia. Recommended preparation: HIST 2365, 2366.

HIST 3368/CF 3312 (3). WARFARE IN THE MODERN WORLD. The evolution of weapons, tactics, strategy and military organization in the western world from the Renaissance to the present, with special attention to the fundamental nature and causes of armed conflict as well as the interrelationships between warfare and society as a whole.

HIST 3369 (3). COLONIAL AMERICA. A study of the transfer of Europeans and Africans to the British mainland provinces and the development of a multicultural and multiregional colonial society.

HIST 3370 (3). THE AMERICAN REVOLUTION. A survey of political, social, and military history of the Revolutionary era. Major topics include the imperial crisis, mobilization and war, and state and federal constitutional development.

HIST 3371 (3). CONFLICTS IN THE MODERN MIDDLE EAST. Examines the Arab-Israeli conflict, other regional conflicts and the U.S.-U.S.S.R. Cold War in the Middle East.

HIST 3372 (3). THE SOUTH IN AMERICAN HISTORY. Explores the origin, development, and present and future status of the South's position in America.

HIST 3373/CF 3327 (3). SCIENCE, RELIGION AND MAGIC IN EARLY MODERN ENGLAND. A study of the interaction of three ways of thinking about nature and the place of human beings within nature – science, magic and religion. Focuses on early modern England and religious divisions of the English Reformation and civil wars that brought political dissension and many competing views of nature and society.

HIST 3374/CF 3328 (3). DIPLOMACY IN EUROPE: NAPOLEON TO THE EUROPEAN UNION. Treats the evolution of the European state system from the post-Napoleonic settlement through the end of the Cold War and creation of the European Union.

HIST 3375 (3). SOCIAL HISTORY OF EARLY MODERN EUROPE. Studies European social and cultural development from the Renaissance to the French Revolution.

HIST 3376/CF 3314 (3). SOCIAL AND INTELLECTUAL HISTORY OF EUROPE. Studies European social, cultural and intellectual development from 1848 to the present.

HIST 3377 (3). HISTORY OF SOUTH AFRICA. A survey of the history of South Africa from the 17th century to the present. Emphasis on the historical development of the patterns of economic, social, and political interaction among the peoples that led to the emergence of a majority-ruled, new South Africa.

HIST 3378 (3). PROBLEMS IN AFRICAN HISTORY. Examines a particular topic in the history of Africa. Potential topics include the trans-Saharan caravan system, the arrival and spread of Islam, the rise of African-European cultures, the slave trade, the abolition of slavery, imperialism and colonial transformations, nationalism, liberation movements, independence and underdevelopment, and democratization.

HIST 3379/CFA 3325 (3). A CULTURAL HISTORY OF NEW MEXICO. Explores the history of struggles among the state's dominant ethnic groups – Native Americans, Hispanos, and Anglos – over rituals, spaces, and objects. (SMU-in-Taos)

HIST 3380 (3). PROBLEMS IN IBERO-AMERICAN HISTORY. Allows students to study special topics on a comparative or thematic basis. Avoids the strictly national, chronological approach to history in favor of topical organization.

HIST 3381 (3). THE FIRST WORLD WAR AND ITS IMPACT. This course explores the origins as well as the geopolitical, social, cultural, and economic impact of the Great War on Europe and the wider world.

HIST 3382 (3). HISTORY OF MEXICO. Studies pre-Columbian, colonial and independent Mexico. Culture and social developments are stressed.

HIST 3383 (3). HABSBURG MONARCHY: MAKING OF EAST CENTRAL EUROPE. The Habsburg monarchy from its medieval origins through its disintegration at the end of World War I, with emphasis on its enduring legacy to contemporary Europe.

HIST 3384 (3). SOCIAL ACTION IN URBAN AMERICA. An examination of the historical development of social action in American cities and communities, from religious charity organizations of the 19th century to present-day community organizing projects. The course is taught in conjunction with the SMU Inter-Community Experience (ICE) Program and includes a three-hour-per-week community service requirement. *Prerequisite:* Permission of instructor.

HIST 3385 (3). THE BALKAN PENINSULA IN ITS EUROPEAN CONTEXT. The impact of events in the Balkan peninsula on the development of European civilization from the conquests of the Ottoman Turks prior to 1566 through the contemporary era.

HIST 3386/CFA 3368 (3). ORIENT AND OCCIDENT: ENCOUNTERS BETWEEN THE MIDDLE EAST AND THE WEST IN THE MODERN ERA. Explores major themes in relations between the countries and cultures of the Middle East and Western Europe from the early modern era to the present, beginning with Napoleon's invasion of Egypt in 1798.

HIST 3387/CF 3315 (3). ASIA AND THE WEST. Goods, ideas, religions, artistic styles, technologies, soldiers and diseases have long traveled between East and West. Scholarship, primary sources, literature and film illuminate the material and ideological effects of the exchanges.

HIST 3388 (3). THE AFRICAN-AMERICAN URBAN EXPERIENCE, 1865–1980. A history of blacks in American cities during the post-Civil War era. Investigates the forces that inspired blacks to relocate to urban areas and surveys the dynamic lifestyles created within evolving black urban communities, the long periods of major African-American rural-to-city migration, institution building, black politics, African-American economics, race relations, and social life.

HIST 3389 (3). PROBLEMS IN MIDDLE EASTERN HISTORY. A contemporary topic is treated in historical perspective. Sample topics include the Arab-Israeli conflict, oil and the politics of energy, and Islamic fundamentalism.

HIST 3390 (3). MODERN MIDDLE EAST: 1914 TO PRESENT. This survey course introduces students to history and politics of the contemporary Middle East.

HIST 3391/CF 3330 (3). FROM PEW TO BLEACHER: AMERICAN CULTURE AND INSTITUTIONS. An introduction to the formation of 19th- and 20th-century American culture and civilization through the study of the Church, print culture, museums, galleries, libraries, theater, Hollywood, television, and professional sports.

HIST 3392/WL 3349/CF 3349 (3). THE AFRICAN DIASPORA: LITERATURE AND HISTORY OF BLACK LIBERATION. Examines the role of Black literature in bringing on the collapse of European colonial order and as a major force in the struggle against neocolonialism today. Explores links between literature and politics, literature and history, and thought and action in 20th-century Africa and the Caribbean.

HIST 3393 (3). CHINA IN REVOLUTION. Examines the century of revolution in China, from the mid-19th century to the present, beginning with the unique political and social structure of Old China, and analyzing the impact of Western imperialism and the creative responses of intellectuals, warlords, and revolutionaries.

HIST 3394 (3). THE NEW WOMAN: THE EMERGENCE OF MODERN WOMANHOOD IN THE U.S., 1890-1930. Explores the experiences of a variety of women from 1890-1930, including feminists, reformers, intellectuals, artists, working women, mothers, high school and college students and juvenile delinquents.

HIST 3395 (3). PROBLEMS IN ASIAN HISTORY. Explores historical issues, trends or special topics in Asian history will be explored using a thematic or comparative format.

HIST 3396 (3). MIDDLE EASTERN ECONOMIC HISTORY. Examines economic patterns in Middle Eastern history, politics, and social life from the 18th century until the present.

HIST 3397/CF 3336 (3). MODERNITY AND CRISES OF IDENTITY. Draws on the works of major intellectuals and artists. Explores crises of identity in Western culture during the decades prior to World War I.

HIST 3398 (3). WOMEN IN CHINESE HISTORY. Examines changes and continuities from Neolithic times to today in women's roles in politics and the state, religions and ideologies, the family and its alternatives, and production and consumption.

HIST 3399 (3). U.S. FOREIGN POLICY FROM THE SPANISH AMERICAN WAR TO VIETNAM. A broad survey of American foreign relations in the 20th century. Traces the rise of the United States as a world power from Teddy Roosevelt's charge up Kettle Hill to the evacuation of Saigon in 1975.

HIST 3401/CF 3401 (4). THE GOOD SOCIETY. Examines the values and ideals that have been fundamental to the historical concept of the good society, with an emphasis on themes to aid in understanding issues of race, gender, ethics, and power essential to any meaningful evaluation of the society in which one lives.

HIST 4101 (1). INDEPENDENT STUDY. Independent study of a selected topic in history. Individual study under direction of a faculty member allowed for 4101.

HIST 4300 (3). JUNIOR SEMINAR IN RESEARCH AND WRITING. Consist of a common body of readings on research methods and writing and a relatively small core of required readings that will be different in each section and organized around a topic chosen by the instructor. Closely supervised writing assignments, based upon the required readings, will grow into a major research project by the end of the term.

HIST 4304 (3). AT THE CROSSROADS: GENDER AND SEXUALITY IN THE SOUTHWEST. This course approaches the study of New Mexico and by extension the Southwest, through the lens of gender and sexuality. Its history and changes over time will be examined.

HIST 4314 (3). JEWS IN EUROPE: MIDDLE AGES TO THE PRESENT. History of the Jews in Europe from the Middle Ages to the present.

HIST 4315 (3). HIST EAST CENTRAL EUROPE.

HIST 4319/CFA 3345 (3). MEDIEVAL FORMATION OF ENGLISH CULTURE. When, where, and how was English culture – that globally widespread and distinctive variation of Western culture – formed? In the 8th to 16th centuries, in a realm with Oxford at its center.

HIST 4320 (3). MEDIEVAL EUROPE I. History of medieval Europe.

HIST 4321 (3). MEDIEVAL EUROPE II.

HIST 4322 (3). LEGAL HISTORY OF MEDIEVAL ENGLAND.

HIST 4323 (3). HISTORY OF IRELAND.

HIST 4324 (3). MEDIEVAL SPIRITUALITY.

HIST 4325 (3). ISLAM TO AD 1453.

HIST 4326 (3). ANGLO-SAXON ENGLAND TO 1160.

HIST 4327 (3). INDIA BEFORE THE EUROPEANS.

HIST 4354 (3). HISTORY OF IDEAS IN AMERICA. Studies the main themes of American public thought from the colonial period to the Civil War and from the Civil War to the present.

HIST 4363 (3). INSIDE NAZI GERMANY. The reality beneath the spectacle of the Nuremberg rallies and the efficiency of the totalitarian state.

HIST 4365 (3). MAKING OF AUSTRALIAN SOCIETY. Examines the working of Australian society with special emphasis given to either the nineteenth or twentieth century or to particular themes such as the impact of war, the response of the Australians to booms and depressions and Australian national character.

HIST 4372 (3). HISTORY OF FRANCE I. A study of the history of France.

HIST 4373 (3). HISTORY OF MODERN FRANCE. A study of the history of modern France.

HIST 4375 (3), 4376 (3). DEPARTMENTAL DISTINCTION. Honors program open to qualified seniors by invitation of the department.

HIST 4380 (3). HISTORY OF SPAIN TO 1492. The main social, political, and cultural topics of the history of the Iberian Peninsula before Ferdinand and Isabella, focusing on the Roman and Medieval periods. (For history majors, fulfills only European requirement.)

HIST 4381 (3). HISTORY OF SPAIN, 1469 TO THE PRESENT. The main social, political, and cultural topics of the history of the Iberian Peninsula from Columbus to the present. (For history majors, fulfills only European requirement.)

HIST 4384 (3). EARLY AND MEDIEVAL ENGLAND, FROM THE BEGINNING TO 1485. The early historical heritage of the English peoples, from prehistoric times through the end of the Middle Ages.

HIST 4385 (3). TUDOR AND STUART ENGLAND, 1485 TO 1714. The emergence of the modern British state and societies in the 16th and 17th centuries.

HIST 4388 (3). GEORGIAN AND VICTORIAN ENGLAND. The history of Georgian and Victorian England 1714–1867.

HIST 4397 (3). INTERNSHIP IN HISTORY. An opportunity for students to apply historical skills in a public setting working with a supervisor of the student's work and a professor assessing the academic component of the project. *Prerequisites:* Junior or senior standing and at least 2.500 overall GPA.

HIST 4398 (3), 4399 (3). INDEPENDENT STUDY. History majors in their junior year may apply to the Director of Undergraduate Studies to pursue a personally designed course of study under the guidance of an appropriate professor during the junior or senior year.

HIST 5305 (3). SEMINAR IN HISPANIC-AMERICAN BORDERLANDS. Study of the historiography of the social interactions among varied peoples along the native, colonial, and national borders of Hispanic America, particularly those borders shaping the United States.

HIST 5309 (3). SEMINAR IN NORTH AMERICAN BORDERLANDS. Study of the historiography of the social interactions among varied peoples along the native, imperial, and national borders of the North American continent, particularly those shaping the United States.

HIST 5310 (3). SEMINAR ON THE AMERICAN WEST. Introduction to the historiography of the American West and its contested meanings.

HIST 5312 (3). SEMINAR ON NATIVE AMERICAN HISTORY. Introduction to the historiography of Native Americans in United States history.

HIST 5330 (3). SEMINAR IN MEXICAN-AMERICAN HISTORY. An examination of the growing historiography on Mexican-Americans that focuses on the relationship between their ethnic identity and the Southwest. (Also listed under Latin American History.)

HIST 5331 (3). SEMINAR IN MEXICAN-AMERICAN HISTORY. An examination of the growing historiography on Mexican-Americans that focuses on the relationship between their ethnic identity and the Southwest. (Also listed under Latin American History.)

HIST 5338 (3). 20TH-CENTURY ENGLAND. A study of the decline and fall of 20th-century England.

HIST 5340 (3), 5341 (3). SEMINAR IN AMERICAN HISTORY. Intensive examination of major topics in American history.

HIST 5344 (3). AMERICAN CULTURAL HISTORY. Considers the histories of cultural institutions, objects, ideas and practices. Explores an array of representative cultural conflicts and obsessions that have marked American history.

HIST 5345 (3). INDUSTRIALISM AND REFORM IN U.S., 1877–1919. An investigation of life in Gilded Age and Progressive-period America including industrialization, urbanization and social conflict.

HIST 5364 (3). THE CITY OF GOD IN ITS MILIEU. An examination of St. Augustine's masterpiece, along with several of its models and analogues from the Greco-Roman and Hebrew traditions.

HIST 5367 (3). RUSSIA FROM THE KIEVAN ERA TO 1881. Surveys the development of state and society from the beginnings of history in East Slavic territory through the era of the Great Reforms.

HIST 5370 (3). SEMINAR IN FRENCH HISTORY. An examination of key historians and of the several modes of historiographical writing that shape our vision of pre-modern France.

HIST 5371 (3). THE FRENCH REVOLUTION AND NAPOLEON, 1789–1815. The nature and causes of revolution, the French Revolution, and the career of Napoleon Bonaparte.

HIST 5374 (3). RECENT EUROPEAN HISTORY: 1918 TO THE PRESENT. Considers two attempts to revive Europe from the effects of disastrous world wars, as well as the sources of new vigor it has found in the past 30 years.

HIST 5375 (3). EUROPE IN THE AGE OF LOUIS XIV. The Scientific Revolution, the culture of the Baroque, and development of the European state system under the impact of the Thirty Years' War and the wars of Louis XIV.

HIST 5376 (3). EUROPE AGE OF ENLIGHTENMENT, 1715–1789. A study of society and culture in 18th-century Europe, Enlightenment philosophies, rococo art, the classical age of music, Enlightened Despotism, and the coming of the French Revolution.

HIST 5377 (3). THE UNITED STATES AND THE COLD WAR. History of the U.S. and the Cold War.

HIST 5382 (3). SEMINAR IN LATIN AMERICAN HISTORY. Intensive examination of major topics in Latin American history.

HIST 5387 (3). SEMINAR IN AFRICAN HISTORY. Intensive examination of special topics in African history.

HIST 5390 (3). SEMINAR IN RUSSIAN HISTORY. This advanced seminar covers selected topics in late Imperial and Soviet history. *Prerequisites:* HIST 3340 or 3341, or permission of instructor.

HIST 5391 (3). ATHENIAN DEMOCRACY. This seminar will examine the development of democratic government in Athens and study the functioning of that government in peace and in war.

HIST 5392 (3). SEMINAR IN EUROPEAN HISTORY. Intensive examination of major topics in European history. *Prerequisite:* Junior standing or permission of instructor.

HIST 5395 (3). A HISTORY OF IRAN. This seminar aims to introduce students to the history, cultures, and peoples of Iran and familiarize them with this complex and increasingly important country.

HIST 5397 (3). SEMINAR IN ASIAN HISTORY. Intensive examination of major topics in Asian history.

Human Rights

www.smu.edu/humanrights

Professor of Practice Rick Halperin, **Director**

The Embrey Human Rights Program offers an interdisciplinary program introducing students to the study of universally recognized civil, political, economic, social and cultural human rights. The program offers undergraduate majors and minors, lecture programs, and the opportunity for any SMU student to participate in educational travel programs to visit human rights sites worldwide.

Bachelor of Arts With a Major in Human Rights

The human rights major consists of 30 hours of coursework related to human rights and at least 11 hours in any one world language. Students may also demonstrate proficiency in a world language through testing or other approved means. Given the interdisciplinary nature of the study of human rights, students are required to take a second major or a minor in a related field. The required core courses total 12 hours, and of the remaining 29 hours, 12 hours must be taken at the advanced level (3000 or above). Students must also select three elective courses from the approved elective list below (or they may substitute other courses as approved by the director), and these must include courses from at least two departments and at least three hours at the advanced level (3000 or above).

	Credit Hours
Core Courses	12
HRTS/HIST 3301 America's Dilemma: The Struggle for Human Rights	
HRTS/WGST 3310 Gender and Human Rights	
HRTS/PLSC 4334 Politics/Legacies: Civil Rights Movement	
HRTS/PLSC 4380 National Security and Human Rights	
Human Rights Tracks	9
Three courses from either track, from at least two departments and with at least 6 hours at the 3000 level or above.	
Gender and Human Rights Track:	
ANTH 1321 First-Year Seminar in Anthropology	
ANTH 2301 Introductory Cultural Anthropology	
ANTH 3310 Gender and Sex Roles: A Global Perspective	
ANTH 3336 Gender and Globalization	
ANTH 3348 Health as a Human Right	
ANTH 4386 The Archaeology of Gender and Sexuality	
HIST 3312 Women in American History	
HIST 3317 Women in Latin-American Societies	
HIST 5340 Seminar: Women's Rights in the United States	
PLSC 1380 Introduction to International Relations	
PLSC 4339 Women in the Law	
SOCI 3305 Race and Ethnicity in the United States	
WGST 2309 Lesbian and Gay Literature and Film	
WGST 3328 Gender Violence	
Public Policy and Human Rights Track:	
ANTH 1321 First-Year Seminar in Anthropology	
ANTH 3327 Culture Change and Globalization	
ANTH 3333 The Immigrant Experience	
ANTH 3336 Gender and Globalization	
ANTH 3348 Health as a Human Right	

Public Policy and Human Rights Track (continued):

ANTH 3351 Forensic Anthropology: Stories Told by Bones
ANTH 3353 Indians of North America
ANTH 3354 Latin America: People, Places, and Power
ANTH 3358 Indians of the Southwest, 16th Century–Present
ANTH 3388 Warfare and Violence
ANTH 4303 Political Economy of Health
ANTH 4309 Human Rights, Indigenous Peoples, Nation States
ENGL 3383 Literary Executions
HIST 3312 Women in American History
HIST 3317 Women in Latin-American Societies
HIST 2391 Africa to the 19th Century
HIST 2392 Modern Africa
HIST 2395 Modern East Asia
HIST 3304 Blacks and the Civil Rights Movement
HIST 3306 Colony to Empire: U.S. Diplomacy 1789–1941
HIST 3307 The U.S. and the Cold War, 1945–1989
HIST 3313 African Americans in the U.S., 1607–1877
HIST 3314 African Americans in the U.S., 1877–Present
HIST 3322 Native American History
HIST 3341 Soviet/Post-Soviet Society Politics, 1917–Present
HIST 3371 Conflicts in the Modern Middle East
HIST 3392 The African Diaspora
HIST 3393 China in Revolution
HIST 3401 The Good Society
HIST 4363 Inside Nazi Germany
HIST 5340 Seminar: Women's Rights in the United States
MNO 3375 Corporate Social Responsibility/Ethical Leadership
PHIL 3371 Social and Political Philosophy
PHIL 3374 Philosophy of Law
PHIL 3377 Animal Rights
PHIL 3380 Ethical Theory
PLSC 1380 Introduction to International Relations
PLSC 3345 Governments and Politics of the Middle East
PLSC 3346 Japanese Politics and Society
PLSC 3347 Governments and Politics of Africa
PLSC 3348 Governments and Politics of Latin America
PLSC 3352 Governments and Politics of China
PLSC 3358 Governments and Politics of Russia
PLSC 3381 Current Issues in International Politics
PLSC 3383 The American Foreign Policy Process
PLSC 4321 Basic Issues in American Democracy
PLSC 4337 Civil Rights
PLSC 4339 Women in the Law
PLSC 4381 National Security Policy
SOCI 3305 Race and Ethnicity in the United States
SOCI 3363 Crime and Delinquency
SOCI 3370 Minority-Dominant Relations
SOCI 4360 Gangs in the United States
SOCI 4364 Correctional Systems

	Credit Hours
Electives	9
Three courses from at least two departments, with at least 3 hours at the 3000 level or above.	
Any **ANTH** course from track 1 or 2 above.	
ANTH 3301 Health, Healing, and Ethics	
ANTH 3311 Mexico: From Conquest to Cancun	
ANTH 4305 Applied Anthropology	
ARHS 1338 Chicano Art and the Politics of Place	
ARHS 3334 The Look of Freedom	
ARHS 4349 Why We Go to Auschwitz	
CCJN 5305 Human Rights and the Journalist	
ENGL 1365 Literature of Minorities	
ENGL 3367 Ethical Implications of Children's Literature	
ENGL 3383 Literary Executions	
FREN 4376 Intro to Francophone Cultures	
Any **HIST** course from track 1 or 2 above.	
HIST 3363 The Holocaust	
HIST 3377 History of South Africa	
HIST 3398 Women in Chinese History	
HIST 4398, 4399 Independent Study (for group tour credit)	
HRTS/ANTH 3329 Contesting Development	
HRTS/ANTH 3348 Health as a Human Right	
HRTS/PLSC 4380 National Security and Human Rights	
HRTS/RELI 3387 Religion and Human Rights	
HRTS/WGST 3310 Gender and Human Rights	
MNO 4371 Leadership and Culture	
PHIL 3371 Social and Political Philosophy	
PHIL 3374 Philosophy of Law	
PHIL 3377 Animal Rights	
PHIL 3380 Ethical Theory	
Any **PLSC** course from track 1 or 2 above.	
PLSC 4334 Politics/Legacies of the Civil Rights Movement	
PSYC 3375 Human Rights From a Psychological Perspective	
RELI 3321 Religion and the Holocaust	
Any **SOCI** course from track 1 or 2 above.	
SOCI 3360 Law and Society	
SPAN 3313 Human Rights in Latin America	
SPAN 5364 Human Rights Issues in Contemporary Spanish Literature	
THEA 4381 Theatre for Human Rights (SMU Abroad)	
WGST 2309 Lesbian and Gay Literature and Film	
WGST 3328 Gender Violence	
WL 3355 North-African Cinema	
Language	11
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Minor in Human Rights

A human rights minor consists of a minimum of 18 hours of coursework. HRTS/HIST 3301 is required. The remaining 15 hours must be taken from the approved elective list; nine hours of these must be at the advanced level (3000 or above). In addition to HRTS/HIST 3301, no more than two courses from any one department

may be taken as electives unless preapproval is given by the director. Students may not earn both the B.A. in human rights and the minor in human rights.

The minor also requires a commitment of students' effort, time and talent in defense of or in advocacy for human rights. Students will complete either a 20-hour service-learning placement with a human rights community-based agency (as a component of HRTS/HIST 3301) or will receive independent credit (HIST 4398, 4399) by participating in an Embrey Human Rights Program sponsored journey to a location where recent human rights violations have occurred or are occurring (e.g., Cambodia, Rwanda, Poland, Argentina, the U.S.-Mexico border) and completing a research paper on a human rights topic related to the site.

The Courses (HRTS)

HRTS 3301/HIST 3301/CF 3317 (3). HUMAN RIGHTS: AMERICA'S DILEMMA. Examines certain violations of human rights within their historical context and explores America's commission and prevention of human rights violations.

HRTS 3309/CFA 3309/WGST 2309 (3). LESBIAN AND GAY LITERATURE AND FILM: MINORITY DISCOURSE AND SOCIAL POWER. The exploration, through literature and film, of the struggles by gay men and lesbians to create social identities and achieve human rights. Study of key cultures and pivotal historical periods in the West from ancient Greece to contemporary America.

HRTS 3310/WGST 3310 (3). GENDER AND HUMAN RIGHTS. Introduction to global women's human rights and other intersections of human rights and gender, such as abuse of children's rights, gender-based violence, health and reproductive rights, and evolving concepts of sexual rights.

HRTS 3329/ANTH 3329 (3). CONTESTING DEVELOPMENT: GLOBAL/LOCAL IMPACTS AND HUMAN RIGHTS. Examines the highly variable impacts of economic development on lives and communities around the world, with a focus on human rights issues.

HRTS 3348/ANTH 3348/CFB 3348 (3). HEALTH AS A HUMAN RIGHT. This course examines the concept of human rights critically, with an eye for cross-cultural variation and a particular focus on rights that are health-related.

HRTS 3387/RELI 3387 (3). RELIGION AND HUMAN RIGHTS. Major world religious traditions and modern ideas of human rights. Religious understandings of humanity and political order are considered in relation to contemporary human rights issues.

HRTS 4309/ANTH 4309 (3). HUMAN RIGHTS, INDIGENOUS PEOPLES, AND NATION STATES. An examination of human rights issues among contemporary indigenous peoples, especially the impact on their cultures and societies from governmental and nongovernmental organizations, large-scale development programs, and global tourism.

HRTS 4334/PLSC 4334 (3). THE POLITICS AND LEGACIES OF THE CIVIL RIGHTS MOVEMENT. Examines the politics and legacies of the movement that destroyed the system known as Jim Crow and removed barriers to political participation by African Americans.

HRTS 4390 (3), 4391 (3). SPECIAL TOPICS IN HUMAN RIGHTS ABROAD. Travel abroad to designated countries to research and write about human rights situations and violations through interaction with educational, governmental, and nongovernmental representatives; human rights activists; and survivors of human rights violations.

HRTS 4392 (3). SPECIAL TOPICS IN HUMAN RIGHTS. Students research and write about a specific human rights issue under the supervision of the director and interact with human rights agencies in the greater Dallas area (or beyond).

Individualized Studies in the Liberal Arts

Senior Associate Dean for Academic Affairs Peter K. Moore, **Director**

The individualized studies major in the liberal arts provides students the opportunity to design an interdisciplinary program of study that brings fields of inquiry together in unique combinations not currently offered as a program in the curriculum. Interested and academically qualified students are invited to explore this possibility with the program's director (214-768-2168). If the student's plan of study appears to have merit, the dean will suggest faculty members in appropriate departments and divisions of the University who can provide further assistance in designing the program. Students must ask at least three faculty members to constitute a Faculty Supervisory Committee, with one serving as chair.

Program Description

Students with at least a 3.500 GPA in the first 24 term hours taken through enrollment at SMU are eligible to pursue the program, which consists of individually designed majors in the liberal arts of at least 36 term hours, with a minimum of at least 24 term hours of advanced courses (3000 level or above). The program must satisfy all University-wide requirements and all other University and Dedman College graduation requirements. Students are responsible for fulfilling all prerequisites for courses taken. The degree will be identified as a B.A. with a major in individualized studies in the liberal arts. A note on the transcript will denote the specialization. Students intending to seek admission to graduate schools are encouraged to include at least 30 hours of a coherent set of courses in an identifiable disciplinary field.

Students should submit to the program's director their formal plan of study (including goal statement and major plan) and transcript. With the director's approval and written approval of the Faculty Supervisory Committee, materials will be submitted to the Dedman College Undergraduate Council for action.

Administrative Procedures

The Dedman College Undergraduate Council shall have the final authority to approve all individualized programs. The associate dean for academic affairs will act as the director of the Individualized Studies program. Prior to declaring the major, a number of steps must be completed:

1. The student, with the assistance of the director, must form a Faculty Supervisory Committee with a minimum of three members. The committee will provide advice and guidance to the student. At least two members, including the chair of the committee, shall be resident members of the Dedman College faculty.
2. The student will submit a plan of study to the director and to each Faculty Supervisory Committee member. If the committee and the director approve the plan of study, the plan is then submitted for approval by the Dedman College Undergraduate Council.
3. The plan is transmitted to the Office of the Associate Dean for Student Academic Affairs and to the Dedman College Dean's Office.

The plan of study must be submitted to the Dedman College Undergraduate Council for approval before the completion of 60 total term hours of coursework. The chair of the Faculty Supervisory Committee and the Dedman College Dean's Office will recommend candidates for graduation. The dean of student records will be responsible for verifying and certifying graduation requirements.

International and Area Studies

www.smu.edu/internationalstudies

Stephen K. Wegren, **Director**

To succeed in an international career, students need expertise in the politics, economics, history, language and cultures of societies other than their own. The curricula for the International and Area Studies programs are designed to provide students with a foundation for this expertise, requiring coursework in the social sciences, business, language and humanities. A student majoring in international studies also chooses a region in which to specialize: Europe, Asia, Latin America, or the Middle East and Africa. As an alternative to the international studies major, a student may choose an area of study to earn a minor. Minors include European studies, Asian studies, Latin American and Iberian studies, and Middle Eastern and African studies.

Bachelor of Arts With a Major in International Studies

The international studies major provides students with the opportunity to design an interdisciplinary program of study that facilitates an understanding of the human experience in a global perspective, while at the same time allowing them to develop in-depth knowledge and expertise in a specific geographical area. The major requires 33 hours of coursework (in addition to prerequisites for certain courses). The 33 hours includes 15 hours of study from the basic curriculum and 15 hours in a regional specialization. At least 18 hours from the basic and area studies curricula must be in courses at the 3000 level or above. The final three-hour requirement for the B.A. in international studies is the seminar; access to the seminar is normally reserved for students in their senior year. The senior seminar, INTL 4388, which must be taken on campus by all students, is designed as a capstone course whereby students may integrate and apply what they have learned. The topic of the seminar will vary, depending upon the professor. A cocurricular requirement for the B.A. in international studies is two years of college-level study of a world language or equivalent. **Note:** Latin does not count as a second language. Courses for the language requirement do not count toward the 33-hour requirement. The language requirement may be met through examination, the transfer of language study credit from another university or by taking courses on campus.

An updated list of available courses and additional information about independent readings, departmental distinction requirements, study abroad opportunities and internship requirements are available on the website for international studies.

Minor in International Studies

The minor in international studies requires 15 hours of coursework from the basic curriculum, nine hours of which must be in courses at the 3000 level or above. A cocurricular requirement is one year of college-level study or equivalent of a world language. **Note:** Latin does not count as a second language. Courses taken in language study do not count toward the 15 hours of required coursework.

The Basic Curriculum

The international studies major provides exposure to global issues through the basic curriculum. A student must take 15 hours (five courses) from the basic curriculum for either the major or minor in international studies. The 15 hours must include one course from “World Cultures,” one course from “International Economics,” one

course from "International Politics" and two from "The Global Perspective." (Courses in The Global Perspective do not have a regional focus.) Of these 15 hours, at least six hours must be in courses at the 3000 level or above. Courses taken in the basic curriculum do not double count in the regional specialization.

Introduction to World Cultures

ANTH 2301 Introductory Cultural Anthropology
HIST 1302 World Cultures and Civilization
SOCI 2377 Markets and Cultures

International Economics

ECO 3321 International Economic Policy
ECO 4357 International Trade
ECO 4358 International Macroeconomics
PLSC 3389 International Political Economy (ECO 1311 or 1312 is *strongly* recommended although neither is required as a prerequisite.)

International Politics

PLSC 1340 Introduction to Comparative Politics
PLSC 1380 Introduction to International Relations

The Global Perspective

ADV 3354 International Advertising (SMU-in-London)
ANTH/SOCI 3301 Health, Healing, and Ethics
ANTH/SOCI 3310 Gender and Sex Roles: A Global Perspective
ANTH 3327 Culture Change and Globalization
ANTH 3329 Contesting Development: Global/Local Impacts and Human Rights
ANTH 3333 The Immigrant Experience
ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
ANTH 3344 Cultural Aspects of Business
ANTH 3348 Health as a Human Right
ANTH 3365 The Rise and Fall of Superpowers
ANTH/RELI/SOCI 3366 Magic, Myth, and Religion Across Cultures
ANTH/SOCI 3368 Urban Life: A Cross-Cultural Perspective
ANTH 3384 Paradise Lost? Archaeology/Ethics of Human Environmental Impacts
ANTH 3388 Warfare and Violence
ANTH 4303 Political Economy of Health
ANTH 4304 Migration, Ethnicity, and Nationalism
ANTH 4307 Seminar in International Health
ANTH 4309 Human Rights, Indigenous Peoples, and National States
ANTH 4384 Global Issues and Development: An Overview (seniors only)
ARHS 3368 Art and Context: 1940–1970
ARHS 3369 Contemporary Art: 1965–Present
BA 3300 Topics in International Management (study abroad programs)
COMM 3321 Communication in Global Contexts
ECO 5359 Economic Development: Microeconomic Perspectives
ECO 5360 Economic Development: Macroeconomic Perspectives
ECO 5361 Natural Resources and Energy Economics
ECO 5362 Economic Growth
ENGL 3354 Non-Western Culture and Literature (20th-century, Third World texts)
FILM 2351 International Film History
FILM 4399 Global Media Systems
FINA 4329 International Finance (available only to business majors with a minor or second major in international studies)
HIST 2380 Ethnic Regions in the Western World
HIST 3301 Human Rights: America's Dilemma

HIST 3306 Colony to Empire: U.S. Diplomacy 1789–1941
HIST 3307 The U.S. and the Cold War
HIST 3337 Ethical Dilemmas in a Global Age
HIST 3368 Warfare in the Modern World
HIST 3397 Modernity and Crises of Identity
HIST 3399 U.S. Foreign Policy From the Spanish-American War to Vietnam
MKTG 3300 Marketing Management Field Project (study abroad programs)
MKTG 3348 International Marketing (available only to business majors with a minor or second major in international studies)
PLSC 3342 Making Democracy Work
PLSC 3365 Communism and Post-Communism
PLSC 3381 Current Issues in International Politics
PLSC 3382 International Organizations: Global and Regional
PLSC 3383 The American Foreign Policy Process
PLSC 3387 Political Geography
PLSC 3390 Negotiating International Trade
PLSC 4342 Why Nations Revolt
PLSC 4344 Gender in World Politics
PLSC 4354 The Third World and North-South Relations
PLSC 4380 Special Studies in International Relations (also study abroad programs)
PLSC 4381 National Security Policy
PLSC 4382 The Politics of Military Force
PLSC 4391 NAFTA and Free Trade in the Americas
PLSC 4398 Nuclear Weapons and World Politics
RELI 1304 Introduction to Western Religions
SOCI 3340 Global Society
SOCI 4321 Immigration and Population Issues

The Regional Specialization Curriculum for the Major

International studies majors are able to specialize in a particular geographical region defined by a common historical and cultural experience. Students may specialize in African/Middle Eastern studies, Asian studies, European studies, or Latin-American and Iberian studies. A total of 15 hours must be taken in the student's area of regional specialization. Three courses (nine hours) must be taken from Group I: Social Sciences, and two courses (six hours) must be taken from Group II: Humanities and Arts for the selected geographical area.

Courses in African/Middle Eastern Studies

Group I: Social Sciences
ANTH 3314 Peoples of Africa
ANTH 3359 Peoples and Cultures of the Middle East
HIST 2355 History of the Ancient Near East and Egypt
HIST 2379 History of Islamic Empires
HIST 2391 Africa to the 19th Century
HIST 2392 Modern Africa
HIST 3323 History of Islam in South Asia
HIST 3326 The Venture of Islam
HIST 3371 Conflicts in the Modern Middle East
HIST 3378 Problems in African History
HIST 3389 Problems in Middle Eastern History
HIST 3390 The Modern Middle East: 1914 to the Present
HIST 3392 The African Diaspora
HIST 3396 Middle Eastern Economic History

HIST 4364 History of South Africa: Background to Conflict
HIST 5395 A History of Iran
PLSC 3345 Government and Politics of the Middle East
PLSC 3347 Government and Politics of Africa

Group II: Humanities and Arts
ARHS 3306 Mummies, Myths, and Monuments of Ancient Egypt
ARHS 3328 Byzantine Art
ARHS 3354 Modern and Contemporary Art of the Arab World
ARHS 3390 Traditional Arts of Africa
ARHS 3392 Islamic Art and Architecture: The Creation of a New Art
RELI 3329 Introduction to Islam
RELI 3362 Islam and the West
RELI 3372 Biblical Interpretation and the State of Israel
WL 3349/HIST 3392 The African Diaspora: Literature and History of Black Liberation

Courses in Asian Studies

Group I: Social Sciences
ANTH 3316 Cultures of the Pacific Islands
ANTH 3317 Peoples of Southeast Asia
ANTH 3323 East Asian Cultural Traditions
ANTH 4390 Asian Society: Study Tour and Seminar (SMU-in-Australia)
BA 3300 Japanese Business (SMU-in-Japan)
ECO 4357 Japanese Economy (SMU-in-Japan)
HIST 2390 Civilization of India
HIST 2393 Japan Before 1850
HIST 2394 China Before 1850
HIST 2395 Modern East Asia
HIST 3315 Modern South Asia: Colonialism and Nationalism
HIST 3387 Asia and the West
HIST 3393 China in Revolution
HIST 3395 Problems in Asian History
HIST 3398 Women in Chinese History
HIST 4394 Modern History of China (SMU-in-Taipei)
PLSC 3346 Japanese Politics and Society
PLSC 3352 Chinese Politics
PLSC 4340 Special Studies in Comparative Government and Politics
PLSC 4353 Political Economy of East Asia
PLSC 4386 International Relations of East Asia
SOCI 3300 Japanese Society (SMU-in-Japan)
WL 3350/SOCI 3341 Perspectives on the East Asian Woman
WL 3395 A Cultural Journey to China (SMU-in-Suzhou)

Group II: Humanities and Arts
ARHS 3394 Arts and Architecture of Japan
ARHS 3395 Arts and Architecture of India
ARHS 3396 Art and Architecture of China (SMU-in-Taipei)
CHIN 4381 Readings in Chinese Literature and Culture
CHIN 4382 Chinese Culture and Society in Film
RELI 1303 Introduction to Eastern Religions
RELI 3306 Introduction to the Hindu Tradition
RELI 3307 Introduction to Buddhism
RELI 3365 Understanding the Self: East and West
RELI 3367 The Religious Life of China and Japan
RELI 3376 Constructions of Gender: Sexuality/Family in South Asian Religions
RELI 3377 The Cultural History of Tibet

RELI 3378 Religions of China
RELI 3382 Mysticism, East and West
RELI 3384 Hinduism and Colonial Encounters
RELI 3385 Philosophies of India
WL 3310 Transnational Chinese Cinema
WL 3312 Women in Modern China
WL 3322 Japanese Literature in Translation (SMU-in-Japan)
WL 3325 Perspectives on Modern China
WL 3395 A Cultural Journey to China (SMU-in-Suzhou)

Courses in European Studies

Group I: Social Sciences

ANTH 3355 Society and Culture in Contemporary Europe
ANTH 3355 Nationalism in Europe (SMU-in-Copenhagen)
BA 3300 European Business Environment: The EU (SMU-in-Copenhagen)
BA 4315 EU Seminar (SMU-in-Copenhagen)
HIST 2323 Russian Culture
HIST 2366 Europe in the Modern World, 1760–Present
HIST 3303 Modern England, 1867–Present
HIST 3328 Economic History of Europe: 1000 A.D. to the Present
HIST 3329 Women in Early Modern Europe
HIST 3330 Women in Modern European History
HIST 3334 France Since 1789
HIST 3335 One King, One Law: France 1500–1798 (Paris)
HIST 3340 The Revolutionary Experience in Russia, 1900–1930
HIST 3341 Soviet/Post-Soviet Society and Politics, 1917–Present
HIST 3343 20th-Century European History (SMU-in-Copenhagen)
HIST 3346 Modern England, 1714 to the Present (SMU-in-Oxford)
HIST 3352 The Age of the Crusades
HIST 3353 The History of Ancient Greece
HIST 3358 The Renaissance
HIST 3359 Europe in the Age of the Reformation
HIST 3363 The Holocaust
HIST 3365, 3366 Problems in European History
HIST 3367 Revolutions in European History
HIST 3374 Diplomacy in Europe: Napoleon to the European Union (SMU-in-Oxford)
HIST 3375 Social History of Early Modern Europe
HIST 3376 Social and Intellectual History of Europe
HIST 3381 The First World War and Its Impact
HIST 3383 Habsburg Monarchy: Making of East Central Europe
HIST 3385 The Balkan Peninsula in Its European Context
HIST 4314 The Jews in Europe (SMU-in-Copenhagen)
HIST 4363 Inside Nazi Germany
HIST 4369 History of Modern Germany
HIST 4373 History of Modern France
HIST 4381 History of Spain, 1469 to the Present
HIST 4388 Georgian and Victorian England, 1714–1867 (SMU-in-Oxford)
HIST 5367 Russia From the Kievan Era to 1881
HIST 5371 The French Revolution and Napoleon, 1789–1815
HIST 5373 Europe From Bismarck to WWI, 1870–1918
HIST 5374 Recent European History, 1918 to the Present
HIST 5376 Europe in the Age of Enlightenment, 1715–1789
HIST 5390 Seminar in Russian History
HIST 5392 Seminar in European History
OBBP 3300 Business Relations With Russia and Central Europe (SMU-in-Copenhagen)

PLSC 3340 Western European Politics
PLSC 3351 Russia Under Putin (SMU-in-Copenhagen)
PLSC 3358 Government and Politics of Russia
PLSC 3359 From Communism to Democracy
PLSC 4340 Special Studies in Comparative Government and Politics
PLSC 4343 Nationalities and Minorities in Europe
PLSC 4358 Soviet Politics: Revolution to Revolution
PLSC 4380 Historical/Contemporary Issues of European Construction (SMU-in-Paris)
PLSC 4384 American-Russian Relationship
PLSC 5341 European Politics: The European Union
PLSC 5383 European Conflict and Security Issues (SMU-in-Copenhagen)
SOCI 5363 Criminal Justice in Scandinavia (SMU-in-Copenhagen)
WL 2343 After Communism (SMU-in-Moscow)

Group II: Humanities and Arts

ARHS 1303 Introduction to Western Art I
ARHS 1304 Introduction to Western Art II
ARHS 1331 Nineteenth-Century European Art
ARHS 1332 Twentieth-Century Art: Sources and Styles of Modern Art
ARHS 3320 Medieval Art
ARHS 3321 Age of the Crusades: Power and Piety in the Ancient and Medieval Near East
ARHS 3324 Art and Cultures of Medieval Spain
ARHS 3325 The Gothic Cathedral
ARHS 3329 Paris Art and Architecture I (SMU-in-Paris)
ARHS 3330 Renaissance and Baroque Architecture
ARHS 3331 Art and Culture of the Italian Renaissance
ARHS 3332 Sixteenth-Century Italian Art
ARHS 3333 Art and Architecture in Italy (SMU-in-Italy)
ARHS 3339 El Greco to Goya: Spanish Painting of the Golden Age
ARHS 3344 Paintings at the Prado (SMU-in-Spain)
ARHS 3346 Paris Art and Architecture II (SMU-in-Paris)
ARHS 3347 Eighteenth-Century European Art and Theatre: Staging Revolution
ARHS 3350 Modern Art and Media Culture
ARHS 3352 Impressionism, Symbolism, and the Deviant Body
ARHS 3353 Impressionism in Context (SMU-in-Paris)
ARHS 3362 Picturing Children: European Art 1848–1940
ARHS 3364 History and Theory of Prints
ARHS 3388 Why We Go To Auschwitz
ARHS 3399 The Medieval Jewish-Christian Dialogue in Art and Text
ARHS 4344 Images of Power: Kings, Nobles, and Elites (SMU-in-Paris)
ENGL 3341 British Literary History II
ENGL 3344 Victorian Gender
ENGL 3360 Writers in Paris: The Invention of Modernism (SMU-in-Paris)
FILM 2352 History of European Film (SMU-in-Copenhagen)
FREN 4373, 4374 French Civilization (SMU-in-Paris)
FREN 4375 Introduction to French History and Culture
FREN 4376 Introduction to Francophone Cultures
PHIL 3333 European Thought: Modernism to Postmodernism (SMU-in-Copenhagen)
PHIL 3352 History of Western Philosophy (Modern)
PHIL 3370 Nineteenth-Century Philosophy (also SMU-in-Copenhagen)
PHIL 3382 Twentieth-Century European Philosophy
WL 3303/SPAN 3373 Spanish Civilization (SMU-in-Spain)
WL 3307 The Belle Époque and the Birth of Modernity (SMU-in-Paris)
WL 3323/HIST 2323 Russian Culture
WL 3331 Survey of Russian Literature in Translation

WL 3361 Special Topics: French Literature in Translation
WL 3369 Perspectives on Modern Germany
WL 3390 Italian Cinema
WL 3391, 3392 Italian Literature in Translation

Courses in Latin-American and Iberian Studies

Group I: Social Sciences

ANTH 3311 Mexico: From Conquest to Cancun
ANTH 3313 South American Indians of the Past and Present
ANTH 3354 Latin America: Peoples, Places, and Power
ANTH 3376 Caribbean Transformations
HIST 2384 Latin America: The Colonial Period
HIST 2385 Latin America in the Modern Era
HIST 3308 Film History of U.S. Hispanics
HIST 3317 Women in Latin American Societies
HIST 3320 The Spanish Frontier in North America, 1513–1821
HIST 3321 The American Southwest
HIST 3324 The Mexican Americans, 1848 to the Present
HIST 3380 Problems in Ibero-American History (study abroad programs)
HIST 3382 History of Mexico
HIST 4380 History of Spain to 1492
PLSC 3348 Governments and Politics of Latin America
PLSC 3349 Politics of Major Latin American Countries
PLSC 4340 Special Studies in Comparative Government and Politics (SMU-in-Spain)
PLSC 4356 Latin American Political Economy
PLSC 4385 Inter-American Relations
PLSC 4391 NAFTA and Free Trade in the Americas
SOCI 3370 Minority-Dominant Relations
SOCI 3372 Chicanos in the Southwest

Group II: Humanities and Arts

ANTH 3312 Mesoamerican Archaeology
ARHS 1308 Epic of Latin America
ARHS 1338 Chicano Art and the Politics of Place
ARHS 1350 Transoceanic Visions: The Arts and Cultures of the Portuguese Empire
ARHS 3324 Arts and Cultures of Medieval Spain
ARHS 3338 Baroque Art in Italy, Spain and the New World
ARHS 3339 El Greco to Goya: Painting of the Golden Age
ARHS 3344 Paintings at the Prado (SMU-in-Spain)
ARHS 3360 Modern Painters in Spain (SMU-in-Spain)
ARHS 3363 Topics in Brazilian Art and Architecture
ARHS 3376 Latin American Art
ARHS 3377 Art and Architecture of Hispanic New Mexico
ARHS 3379 Power and Spectacle: The Arts of Spain and New Spain
ARHS 3382 Arts of the Ancient Andean Tradition: Chavin to Inca
ARHS 3383 The Ancient Maya: Art and History
ARHS 3385 The Aztecs Before and After the Conquest: Mesoamerica 1400–1600
ARHS 3391 Visual Culture in Colonial Mexico
ENGL 3363 Chicana/Chicano Literature
RELI 3353 Latino/a Religions
SPAN 3374 Spanish American Civilization (also SMU-in-Xalapa)
WL 3303/SPAN 3373 Spanish Civilization
WL 3305 Latin-American Literature in Translation
WL 3306 The Heart of Aztlan: Chicano Literature of the Southwest

Spanish Language and Literature Courses

SPAN 4391 Commercial Spanish for International Trade
SPAN 4395 Introduction to Hispanic Literature
SPAN 5310 Spanish Literature Before 1700
SPAN 5311 Spanish Literature Since 1700
SPAN 5315 Spanish American Literature to 1888
SPAN 5316 Spanish American Literature Since 1888
SPAN 5317 Literature of Mexico
SPAN 5320 The Renaissance and Golden Age: Drama
SPAN 5321 The Renaissance and Golden Age: Prose Fiction
SPAN 5323 Nineteenth-Century Prose Fiction of Spain
SPAN 5324 Twentieth-Century Poetry and Drama
SPAN 5325 Twentieth-Century Peninsular Prose Fiction
SPAN 5334 The Novel of the Post-Civil War Period
SPAN 5335 Genre Studies in Spain
SPAN 5336 The Spanish American Novel (also SMU-in-Xalapa)
SPAN 5337 The Spanish-American Essay
SPAN 5338 The Spanish American Short Story (also SMU-in-Xalapa)
SPAN 5339 Spanish American Poetry
SPAN 5360 The Concept of Honor in Spanish Literature
SPAN 5361 Don Quixote: The Idea, the Character, the Book
SPAN 5365 Contemporary Spanish Women Writers
SPAN 5370 Rewriting Discovery and Exploration in the Spanish Borderlands
SPAN 5375 Contemporary Fiction by Latin-American Women Writers

Minor in Area Studies

The area studies minor is separate from the major or minor in international studies. A student may earn a minor in a geographical area in order to increase expertise and in-depth knowledge of a region's history, politics, society and culture. A minor in an area study is offered in African and Middle Eastern studies, Asian studies, European studies, and Latin-American and Iberian studies.

Requirements for the Minor. A minor in one of the four geographic areas of study requires 15 hours of coursework. The first six hours (two courses) must be chosen from the four categories of the International and Area Studies Program's basic curriculum. Each of the two courses must be from a separate category: "World Cultures," "International Economics," "International Politics" or "The Global Perspective." The next nine hours (three courses) must be chosen from 1) the African and Middle Eastern studies curriculum, 2) the Asian studies curriculum, 3) the European studies curriculum, or 4) the Latin-American and Iberian studies curriculum. At least one course must be selected from Group I: Social Sciences and at least one course from Group II: Humanities and Arts for the selected curriculum. At least nine hours must be at the 3000 level or above. If a student is an international studies major, only one course from the area studies curriculum may be double counted toward the area studies minor. The language requirement for the minor may be met through examination, the transfer of language study credit from another university or by taking courses on campus.

Minor in African and Middle Eastern Studies. A cocurricular requirement for the minor in Africa and Middle Eastern studies is two years of college-level study of a language native to Africa or the Middle East. To maximize the educational experience, students are strongly encouraged to spend at least one term or summer studying in Africa or the Middle East. Most of the courses taught in University study

abroad programs in Africa and the Middle East may be applied to the African and Middle Eastern studies minor.

Minor in Asian Studies. A cocurricular requirement for the minor in Asian studies is two years of college-level study of an Asian language. To maximize the educational experience, students are strongly encouraged to spend at least one term or summer studying in Asia. Most of the courses taught in University study abroad programs in Asia may be applied to the Asian studies minor.

Minor in European Studies. A cocurricular requirement for the minor in European studies is two years of college-level study of a European language other than English. To maximize the educational experience, students are strongly encouraged to spend at least one term or summer studying in Europe. Most of the courses taught in University study abroad programs in Europe may be applied to the European studies minor.

Minor in Latin-American and Iberian Studies. A cocurricular requirement for the minor in Latin-American and Iberian studies is two years of college-level study of Spanish or Portuguese. To maximize the educational experience, students are strongly encouraged to spend at least one term or summer studying in Latin America or Iberia. Most of the courses taught in University study abroad programs in Latin America/Iberia may be applied to the Latin-American and Iberian studies minor.

International Studies Major and Minor Rules for SMU Abroad Credit

To maximize the educational experience in these degree programs, all international studies majors and minors are strongly encouraged to spend at least one term or summer studying abroad. The University offers numerous study abroad opportunities around the world; most of these courses may be applied to the international and area studies major or minor. As of fall 2011, the following SMU Abroad policies apply to the International and Area Studies Program:

For the International Studies Major

- Up to 12 hours of world language study may be taken in an SMU-approved study abroad program and counted toward the language requirement for the major.
- Up to 15 hours in the student's regional specialization may be taken in an SMU-approved study abroad program and counted toward the major.
- Of the 15 hours required from the basic curriculum, 12 hours must be taken on an SMU campus (Dallas, Taos or Plano). Three hours of transfer credit (not an SMU-approved study abroad program) may be counted toward fulfillment of the basic curriculum requirement.
- If a student wishes to take a course abroad for credit in the global perspective, it is highly recommended that the course be pre-approved by the director before enrolling. Petitions after the course has been taken may not be approved.
- The senior seminar (INTL 4388) must be taken on an SMU campus (Dallas, Taos or Plano).
- A total of 33 hours (exclusive of the 12 hours of language study required for the major) are required for the major in international studies.
- These policies do not change the required number of credit hours in advanced courses.

For the International Studies Minor

- Up to six hours of world language study may be taken in an SMU-approved study abroad program and counted toward the language requirement for the minor.
- Of the 15 hours required from the basic curriculum, 12 hours must be taken on an SMU campus (Dallas, Taos or Plano). Three hours of transfer credit (not an SMU-approved study abroad program) may be counted toward fulfillment of the basic curriculum requirement.

For an Area Studies Minor

- Up to 12 hours of world language study may be taken in an SMU-approved study abroad program and counted toward the language requirement for any area studies minor.
- Three of nine hours in the student's regional specialization may be taken in an SMU-approved study abroad program and counted toward the minor.

Law and Legal Reasoning

Associate Professor Pamela Corley, **Director**

The minor in law and legal reasoning. provides a coherent grouping of courses from different disciplines, examining the foundations and applications of the law. Specifically, the minor is designed to provide students with the knowledge of substantive law, along with the following skills: legal analysis and reasoning, oral advocacy, research and writing.

Minor in Law and Legal Reasoning

PLSC 1320 Introduction to American Politics and Government is a prerequisite to the minor In addition to taking PLSC 1320, students must take a minimum of 18 hours selected from the following:

	Credit Hours
Required Courses	6
PLSC 3330 Law, Politics, and the Supreme Court *or* **PLSC 3324** Introduction to Law **COMM 5302** Advanced Topics: Legal Advocacy *or* **COMM 3327** Argumentation and Advocacy	
Electives (one or more courses from the following)	12
COMM 2300 Public Speaking **COMM 3300** Free Speech and the First Amendment **COMM 3327** Argumentation and Advocacy **COMM 4323** Forensics Workshop **COMM 4324** Competitive Mock Trial **COMM 5302** Advanced Topics: Legal Advocacy *One or more courses from the following:* **PLSC 3335** Judicial Process **PLSC 4335** Constitutional Law **PLSC 4336** 1st Amendment and Privacy **PLSC 4337** Civil Rights **PLSC 4338** Criminal Process Rights **PLSC 4341** Rights and Representation **PLSC 4371** Jurisprudence **PLSC 3330** Law, Politics, and the Supreme Court **PLSC 3324** Introduction to Law *One or more courses from the following:* **PHIL 3373** Philosophy of Criminal Law **PHIL 3374** Philosophy of Law **SOCI 3363** Crime and Delinquency **SOCI 4363** Correctional Systems **SOCI 3360** Law and Society	
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Notes

- Students will not receive credit for both **COMM 3300** and **PLSC 4336**.
- Students may take **COMM 4323** or **COMM 4324** toward the minor.
- **COMM 3327, COMM 5302, PLSC 3330** and **PLSC 3324** can be taken as an elective if not taken as required.

Mathematics

www.smu.edu/math

Professor Douglas Reinelt, **Department Chair**

Professors: Alejandro Aceves, Vladimir Ajaev, Richard Haberman, Thomas Hagstrom, Peter Moore, Douglas Reinelt, Johannes Tausch. **Associate Professors:** Thomas Carr, Sheng Xu, Yunkai Zhou. **Assistant Professors:** Andrea Barreiro, Weihua Geng, Scott Norris, Daniel Reynolds, Benno Rumpf, Brandilyn Stigler. **Senior Lecturers:** Adriana Aceves, Judy Newell. **Emeritus Professors:** Robert Davis, Ian Gladwell, Mogens Melander, Montie Monzingo, George Reddien, Lawrence Shampine, Richard Williams.

The department of mathematics offers the B.S. and B.A. degrees in mathematics as well as a minor in mathematics. All mathematics majors, either B.S. or B.A., and minors must earn grades of at least *C-* in all courses taken in fulfillment of the requirements for the mathematics major or minor. MATH 6000-level courses may be taken for either the B.S. or B.A. major by students who have fulfilled the pre-requisites and have departmental permission. After any student matriculates to SMU, regardless of major, transfer credit for MATH 1307, 1309 or 1337 will not be approved.

Bachelor of Science With a Major in Mathematics

The B.S. degree in mathematics reflects contemporary trends in mathematics by incorporating computer science, mathematical and computational modeling, natural science and statistics courses. This degree is particularly appropriate for students who wish to proceed toward careers in industry concentrating on analytical problem solving, or toward graduate schools in any mathematical science area. Computer science, economics, electrical engineering, mechanical engineering, management science, physics and chemistry provide attractive opportunities as areas for a double major with mathematics. With a minimum of 21 approved advanced hours in the major, the following courses are required:

	Credit Hours
Fundamental Mathematics	12
MATH 1337, 1338, 2339, 2343	
Natural Science	6
At least 6 hours from the following:	
BIOL 1401, 1402	
CHEM 1303, 1304	
One GEO 1300-level course	
PHYS 1303, 1304	
Computer Science	3
CSE 1341 *or* 1342	
Statistics	3
STAT/CSE/EMIS 4340, *or* STAT 5340, *or* EE 3360	
Advanced Mathematics Elective	3
One 3000+ MATH course.	
Specialization:	15
At least two courses at the 4000+ level from one specialization, including at least one MATH 4000+ course.	
Applied and/or Numerical Mathematics:	
MATH 3315/CSE 3316 or 3365	
Four from MATH 3334, 3337, 3353, 4335, 5315, 5316, 5331, 5332, 5334, 5353; EMIS 3360	

Specialization (continued)

Computer Science and Computer Engineering:
MATH 3315/CSE 3316 or 3365, and CSE 4381
Three from MATH 3353, 5315, 5316, 5332

Engineering:
MATH 3315/CSE 3316 or 3365, and MATH 3337
One from MATH 5315, 5331, 5332, 5334
Two from EE 3322, 3330, 3372, 5330, 5332, 5336, 5360, 5362, 5372
or two from ME 4360, 5302, 5320, 5322, 5336 (MATH 6336), 5361, 5386

Civil Engineering:
MATH 3315/CSE 3316 or 3365, and MATH 3337
One from MATH 5315, 5331, 5332, 5334
Two from CEE 5361, 5364; ME 5322

Environmental Engineering:
MATH 3315/CSE 3316 or 3365, and MATH 3337
MATH 6336/ME 5336
One from MATH 5315, 5331, 5332, 5334
One from CEE 5331, 5332, 5334

Operations Research:
MATH 3315/CSE 3316 or 3365
Two from MATH 3353, 5315, 5316, 5332, 5353
EMIS 3360 (required)
One from EMIS 5361, 5362, 5369; STAT 5344/EMIS 5364

Pure Mathematics:
Five from MATH 3308, 3337, 3353, 4338, 4351, 4355, 4381, 5331, 5332, 5353

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Bachelor of Arts With a Major in Mathematics

The B.A. degree in mathematics is designed for students who need a traditional mathematics degree leading to careers in teaching, industry, business and government. It is particularly attractive when combined with liberal arts, social science or business administration as a double major. The requirements are the same as for the B.S. degree except that there is no natural science requirement. In exceptional circumstances, the Department of Mathematics may choose to waive one course (three credit hours) in mathematics.

Minor in Mathematics

The mathematics minor, available to students who are not seeking the B.A. or B.S. in mathematics, consists of 18 hours of MATH courses: MATH 1337, 1338, 2339 and nine hours selected from mathematics courses at the advanced (3000+) level. MATH 2343 may replace an advanced-level mathematics course. All courses in the minor must be passed with a grade of *C-* or higher.

The Courses (MATH)

MATH 1303/MATH 1304 (3). PRECALCULUS FOR BUSINESS. Inequalities, absolute value, graphs, functions, basic analytic geometry, polynomials, logarithms, exponentials, linear equations, and mathematics of finance. *Prerequisite:* High school algebra. No credit given if taken

after any calculus course. Credit not given for both 1303 and 1304. Intended for students planning to take MATH 1309.

MATH 1304/MATH 1303 (3). PRECALCULUS MATHEMATICS. Graphs, functions, basic analytic geometry, exponentials, logarithms, trigonometry, inverse functions. *Prerequisites:* High school algebra and trigonometry. No credit given if taken after any calculus course. Credit not given for both MATH 1303 and 1304. Intended for students planning to take MATH 1337.

MATH 1305 (3). MATHEMATICS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS. Study of rational number arithmetic with an emphasis on explanation through models and representations. Algebra from the viewpoint of the elementary curriculum and problem-solving are emphasized throughout the course. *Pre or Corequisite:* EDU 2350.

MATH 1307 (3). INTRODUCTION TO MATHEMATICAL SCIENCES. Permutations and combinations, probability, Markov chains, linear programming, elementary statistics, and mathematics of finance. *Prerequisite:* High school algebra.

MATH 1309/MATH 1337 (3). INTRODUCTION TO CALCULUS FOR BUSINESS AND SOCIAL SCIENCE. Derivatives and integrals of algebraic, logarithmic, and exponential functions with applications to the time value of money, curve sketching, maximum-minimum problems, and computation of areas. Applications to business and economics. (Natural science and engineering students must take MATH 1337. Credit not allowed for both MATH 1309 and 1337.) *Prerequisite:* Placement out of MATH 1303 or a grade of C- or higher in MATH 1303.

MATH 1337/MATH 1309 (3). CALCULUS I. Differential and integral calculus for algebraic, trigonometric functions, and other transcendental functions, with applications to curve sketching, velocity, maximum-minimum problems, area and volume. (Credit not allowed for both MATH 1309 and 1337.) *Prerequisite:* Placement out of MATH 1304 or a grade of C- or higher in MATH 1304.

MATH 1338/MATH 1340 (3). CALCULUS II. A continuation of MATH 1337 through differential and integral calculus, areas, techniques of integration, improper integrals, and infinite sequences and series, including Taylor series. *Prerequisite:* A grade of C- or higher in MATH 1337 (or MATH 1309 and departmental permission).

MATH 1340/MATH 1338 (3). CONSOLIDATED CALCULUS. A combined course in Calculus I and II for students with a background in Calculus I. Students receive credit for both this course and MATH 1337 if they receive a C- or higher. Students may not receive credit for both MATH 1338 and MATH 1340. *Prerequisite:* A score of 3 or higher on the AB or BC Calculus AP exam, or permission of the Mathematics Department.

MATH 2339 (3). CALCULUS III. A continuation of MATH 1338 including parametric equations, polar coordinates, partial differentiation, multiple integrals, and vector analysis. *Prerequisite:* A grade of C- or higher in MATH 1338.

MATH 2343 (3). ELEMENTARY DIFFERENTIAL EQUATIONS. First-order equations, linear equations, Laplace transform linear systems, and phase plane. *Prerequisite:* C- or better in MATH 1338.

MATH 3308 (3). INTRODUCTION TO DISCRETE MATHEMATICS. An introduction to logic, set theory, graph theory, recurrence relations, and combinatorics. Mathematical foundations and applications of these subjects are presented. (Credit not allowed for both CSE 2353 and MATH 3308.) *Prerequisite:* A grade of C- or higher in MATH 1338.

MATH 3315/CSE 3365 (3). INTRODUCTION TO SCIENTIFIC COMPUTING. An elementary survey course that includes techniques for root-finding, interpolation, functional approximation, linear equations, and numerical integration. Special attention is given to MATLAB programming, algorithm implementations, and library codes. Students registering for this course must also register for an associated computer laboratory. *Prerequisite:* C- or better in MATH 1338 and C- or better in CSE 1340 or 1341.

MATH 3316 (3). INTRODUCTION TO HIGH-PERFORMANCE SCIENTIFIC COMPUTING. An elementary survey course that includes techniques for root-finding, interpolation, functional approximation, linear equations, and numerical integration. Computational work focuses on the Python and C++ programming languages using Linux. *Prerequisites:* C- or higher in MATH 1338 and CSE 1342. *Corequisite:* MATH 3353.

MATH 3334 (3). MATHEMATICAL MODELING AND APPLICATIONS. Discussion of modeling principles such as conservation laws, dimensional analysis and scale, model validation and

the continuum hypothesis. Applications may include vibrations, traffic flow, population dynamics, and optimization. *Prerequisite:* A grade of C- or higher in MATH 2343.

MATH 3337 (3). ADVANCED MATHEMATICS FOR SCIENCE AND ENGINEERING. Elements of vector integral calculus, Fourier series, and boundary-value problems in partial differential equations. (No credit given if taken after MATH 5334.) *Prerequisites:* Grades of C- or higher in MATH 2343 and 2339.

MATH 3353 (3). INTRODUCTION TO LINEAR ALGEBRA. Matrices and linear equations, Gaussian elimination, determinants, rank, geometrical notions, eigenvalue problems, and coordinate transformations, norms, inner products, orthogonal projections, Gram-Schmidt and least squares. (No credit given if taken after MATH 5353.) *Prerequisite:* A grade of C- or higher in MATH 1338.

MATH 4335 (3). MATHEMATICAL BIOLOGY. Introduction of mathematical models of biological systems. Population dynamics, infectious diseases, population genetics, molecular and cellular biology. *Prerequisite:* Grades of C- or higher in MATH 2343 and MATH 3353.

MATH 4338 (3). ANALYSIS. Sequences and series of real numbers and functions, properties of continuous functions, differentiation and integration with some attention paid to higher dimensions. *Prerequisite:* A grade of C- or higher in MATH 2339.

MATH 4351 (3). THEORY OF NUMBERS. Classical number theory, including divisibility, congruencies, quadratic reciprocity, Diophantine equations, and number theoretic functions. *Prerequisite:* A grade of C- or higher in MATH 3308 or MATH 3353.

MATH 4355 (3). GROUPS AND RINGS. Basic properties of groups, rings and fields, homomorphisms, normal subgroups, integral domains, ideals, algebraic extension fields, geometric constructions. *Prerequisite:* A grade of C- or higher in MATH 3308 or MATH 3353.

MATH 4381 (3). INTRODUCTION TO GENERAL TOPOLOGY. Elementary topology of the line and plane, metric spaces, and general topological spaces; continuity of mappings, connectedness, compactness, completeness, and fixed-point theorems. *Prerequisite:* A grade of C- or higher in MATH 3308 and 3353, or consent of instructor.

MATH 5315 (3). INTRODUCTION TO NUMERICAL ANALYSIS. Numerical solution of linear and nonlinear equations, interpolation and approximation of functions, numerical integration, floating-point arithmetic, and the numerical solution of initial value problems in ordinary differential equations. Student use of the computer is emphasized. *Prerequisites:* C- or higher in MATH 3315/CSE 3365 and MATH 2343; a programming course (e.g., FORTRAN or MATLAB).

MATH 5316 (3). INTRODUCTION TO MATRIX COMPUTATION. The efficient solution of dense and sparse linear systems, least squares problems, and eigenvalue problems. Elementary and orthogonal matrix transformations provide a unified treatment. Programming is in MATLAB with a focus on algorithms. *Prerequisites:* C- or better in MATH 3315 (CSE 3365), 3353.

MATH 5331 (3). FUNCTIONS OF A COMPLEX VARIABLE. Complex numbers, analytic functions, mapping by elementary functions, and complex integration. Cauchy-Goursat theorem and Cauchy integral formulas. Taylor and Laurent series, residues, and evaluation of improper integrals. Applications of conformal mapping and analytic functions. *Prerequisite:* C- or higher in MATH 3337.

MATH 5332 (3). WAVELET TRANSFORMS. A mathematical introduction to sampling; data compression; multiresolution analysis; Fourier analysis; and wavelet theory, including biorthogonal wavelets and spline wavelets. *Prerequisites:* C- or higher in MATH 3315 (CSE 3365), 3337, 3353.

MATH 5334 (3). INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS. Elementary partial differential equations of applied mathematics: heat, wave, and Laplace's equations. Topics include physical derivations, separation of variables, Fourier series, Sturm-Liouville eigenvalue problems, and Bessel functions. *Prerequisite:* C- or higher in MATH 3337.

MATH 5353 (3). LINEAR ALGEBRA. Spectral theory of Hermitian matrices, Jordan normal form, Perron-Frobenius theory, and convexity. Applications include image compression, Internet page ranking methods, optimization, and linear programming. *Prerequisite:* C- or better in MATH 3353.

Medieval Studies

www.smu.edu/medievalstudies

Associate Professor Bonnie Wheeler, **Director**

Ranging from the fourth century A.D. to 1485, from Celtic Britain to Visigothic and Islamic Spain, Byzantium to Persia and the Caliphate, from script to print, from feast to fast, from fine arts to liberal arts, from Augustine to Saladin and beyond, this program offers an intense and condensed liberal education. Studies reveal how the historical shapes, institutional structures, literary visions and artistic forms that emerged from the Middle Ages have colored our concepts of God, society, self, love, individualism and success.

The Medieval Studies Program affords the student an opportunity for a classically liberal education within a broad subset of Western (Celtic, Franconic, Italic, Germanic, Visigothic) and non-Western (Byzantine, Islamic, Persian) contexts. It is appropriate for preprofessional training in multiple fields such as business, religious studies, biology, music theory, and world languages and literatures. The major can also lead to graduate work in medieval studies or, more usually, in such disciplines as literature, history and art/music history.

The Dallas Medieval Consortium makes it possible for students at SMU, the University of Dallas and the University of Texas at Dallas to enroll in selected medieval studies courses on the other campuses. Through the consortium, SMU students can elect no more than a total of 15 hours in medieval subject courses at any other consortium university.

Non-MDVL Courses With a Subject Area in Medieval Studies

Many courses are offered each year; with few exceptions, the remainder are available at least every other year. Students should consult with the director about offerings and frequency.

ARHS 1315 Medieval Messages
ARHS 3320 Medieval Art
ARHS 3321 Age of the Crusades
ARHS 3322 Art and the Italian Commune
ARHS 3323 Romanesque Art and Architecture
ARHS 3324 Art and Cultures of Medieval Spain
ARHS 3325 The Gothic Cathedral
ARHS 3328 Byzantine Art
ARHS 3329 Paris Art and Architecture I (SMU-in-Paris)
ARHS 3392 Islamic Art and Architecture
ARHS 3399 Medieval Jewish-Christian Dialogue in Art and Text
ARHS 4320 Seminar in Medieval Art
ARHS 4321 Word and Image: Seminar in Early Middle Ages
ENGL 1320 Chivalry
ENGL 3320 Topics in Medieval Literature
ENGL 3371 (HIST 3357) Joan of Arc in History, Literature, and Film
ENGL 3389 Directed Studies (when applicable)
ENGL 4320 Medieval Writers
ENGL 4323 Chaucer
FREN 5320, 5321 Literary Periods (when applicable)
FREN 5334, 5335 Genre Studies (when applicable)
HIST 2321 Philosophical and Religious Thought in the Medieval West

HIST 3332 Ancient and Medieval France
HIST 3344 The Oxford Landscape: Stone Age to the Tudors (SMU-in-Oxford)
HIST 3345 England in Medieval and Early Modern Times
HIST 3350 Life in the Medieval World, A.D. 306–1095
HIST 3351 Life in the Medieval World, A.D. 1095–1350
HIST 3352 Age of the Crusades
HIST 3357 (ENGL 3371) Joan of Arc: History, Literature, and Film
HIST 4320, 4321 Medieval Europe I, II
HIST 4322 Constitutional and Legal History of Medieval England
HIST 4323 History of Ireland
HIST 4324 Medieval Spirituality
HIST 4325 Islam to A.D. 1453
HIST 4326 Anglo-Saxon England to A.D. 1160
HIST 4380 History of Spain to 1492
HIST 4384 Early and Medieval England From the Beginning to 1485
HIST 5364 The City of God: Utopias in the Christian Tradition
HIST 5378 Medieval Renaissances
HIST 5392 European History Autobiographical Tradition (when applicable)
LATN 3324 Advanced Latin Grammar and Composition
LATN 3335 Medieval Latin
MUHI 3301 Survey of Music History I
MUHI 4301 Research Project in Music History (when applicable)
MUHI 4392 Directed Studies in Music History: The Middle Ages
MUHI 6309 Seminar in Medieval and Renaissance Sources and Styles
PERE 3175 Collegium Musicum
PHIL 3351 History of Western Philosophy (Ancient)
PLSC 4361 Political Regimes: Understandings of Rome
PLSC 4362 Medieval Political Philosophy
RELI 3326 Introduction to the New Testament
RELI 3349 Early Christianity
SPAN 5310 Spanish Literature Before 1700
WL 3365, 3366 Special Topics: French Literature in Translation (when applicable)
WL 3391, 3392 Special Topics: Italian Literature in Translation (when applicable)
WL 3393 Dante's Poetic Vision

Notes

The following courses earn credit toward the medieval studies major:

- ARHS 3320, 3325, 3392.
- HIST 3350, 3351, 3352, 4325.
- LATN 3324.
- MDVL 3329/CF 3302/ENGL 3329.

Bachelor of Arts With a Major in Medieval Studies

Medieval studies is an interdisciplinary major of 30 hours in medieval subjects, and Latin language and literature, distributed over at least three broad subject areas in medieval studies: 1) history, 2) literature, and 3) music and visual arts (art/music history), with no fewer than six hours in each area. Latin language and literature courses after the second year may, with the approval of the director, count toward hours for the medieval studies major. Students are encouraged to take courses in philosophy, religious studies and church history, as they are available. Individual student programs are approved by the director of the Medieval Studies Program and a committee of two other members of the Medieval Studies Program faculty.

As a model, the following is a typical Medieval Studies Program major sequence for SMU students:

SOPHOMORE YEAR

Fall term:

MDVL 3351 (CF 3351) The Pilgrimage: Images of Medieval Culture
LATN 1401 Beginning Latin

Spring term:

ENGL 3320 Topics in Medieval Literature
LATN 1402 Beginning Latin

JUNIOR YEAR

Fall term:

ARHS 3320 Medieval Art
LATN 2311 Second-Year Latin
HIST 3350 Life in the Medieval World, A.D. 306–1095

Spring term:

MDVL 3329 (CF 3302, ENGL 3329) The World of King Arthur
HIST 3351 Life in the Medieval World, A.D. 1095–1350
LATN 2312 Second-Year Latin

SENIOR YEAR

Fall term:

HIST 4325 Islam to A.D. 1453
ARHS 3392 Islamic Art and Architecture: The Creation of a New Art
LATN 3324 Advanced Latin Grammar and Composition

Spring term:

ARHS 3325 Art of the Crusades
ENGL 4323 Chaucer
HIST 3352 The Age of the Crusades

Departmental Distinction

The major offers graduation with distinction to select student majors of high academic achievement. Interested students with a minimum 3.000 overall GPA and a 3.500 GPA in the major may consult with the director of the Medieval Studies Program for admission to the distinction track. If the director determines that the student has satisfied the requirements, the student may then request a faculty member to direct his/her distinction paper. The distinction paper must be a substantial piece of independent and original research. The research will be presented and evaluated by a distinction committee. Upon positive recommendation from this committee, the student will be awarded graduation with distinction. Criteria for graduating with departmental distinction include the following:

1. A minimum 3.000 overall GPA at graduation.
2. A minimum 3.500 average in courses taken for the medieval studies major.
3. Preparation of a distinction thesis under the supervision of a faculty member while enrolled in MDVL 5399. MDVL 5399 will be taken in addition to all other requirements for the major. The faculty adviser's grade for the thesis must be *A-* or higher.
4. A passing grade on an oral examination conducted by a faculty distinction committee, which reviews the candidate's thesis. The distinction committee includes the faculty adviser, the director of the Medieval Studies Program and one additional faculty member selected by the faculty adviser in consultation with the student.

Minor in Medieval Studies

A student must complete 15 hours from the courses listed, including at least three interdisciplinary and nine advanced hours. No more than six hours at the introductory (1000 or 2000) level may be counted; some of the MDVL and CF (Cultural Formations) courses listed below are also interdisciplinary. Other courses may satisfy the interdisciplinary component. The minor is available to students who are not seeking the B.A. in medieval studies. Individual student programs are approved by the director of the Medieval Studies Program.

The Courses (MDVL)

MDVL 3323 (3). TALES OF WALES. Survey of native Welsh literature (in translation) from the sixth to the 20th century. Primary focus on medieval and Arthurian texts and their influence on the British and European literary imagination.

MDVL 3327/CF 3340 (3). THE UNICORN: UNDERSTANDING VARIETIES OF TRUTH IN THE MIDDLE AGES. Investigates the question of how history and fiction were perceived in the Middle Ages.

MDVL 3329/ENGL 3329/CF 3302 (3). THE WORLD OF KING ARTHUR. Study of Britain's greatest native hero and one of the world's most compelling story stocks: the legends of King Arthur and the Knights of the Round Table.

MDVL 3351 (3). THE PILGRIMAGE: MEDIEVAL. This course looks at the medieval world through one of its own literal and metaphorical images, investigating the music, art, monuments, and literature of pilgrimage during the Middle Ages.

MDVL 3352 (3). IDEAS AND IDEAL OF GENDER IN THE MIDDLE AGES.

MDVL 3353 (3). MEDIEVAL IDEAS. The goal of this course is to present some of the classic achievements of the medieval mind, focusing on developments of continuing interest; where advisable, comparisons and contrasts will be drawn with methods of thinking and solving problems in use in later times. While the main focus will be on Medieval Europe and the adjacent Muslim world, wherever possible, students' attention will be drawn to developments in other culture areas.

MDVL 3390 (3). MEDIEVAL PHILOSOPHY TOPICS. Research and writing in medieval fields on special philosophical topics at the forefront of current intellectual interest.

MDVL 3398 (3), 3399 (3). DIRECTED STUDIES.

MDVL 4308 (3). TOWNS, TRADE AND REVOLUTION IN THE MEDIEVAL WEST. This course investigates the medieval city from its origins through 1500. Within a chronological framework, we will explore urban populations and institutions, commerce, universities, guilds, and the Black Death.

MDVL 4318 (3). BYZANTINE HISTORY 285–1453. This course traces the outlines of Byzantine History from 285–1453. Topics include the changing structure of the family, gender roles, ruler and ruled, and town and country.

MDVL 4371 (3). SPECIAL TOPIC. Research and writing in medieval fields on special topics at the forefront of current intellectual interest.

MDVL 5301 (3), 5302 (3), 5398 (3), 5399 (3). INDEPENDENT STUDIES. Research and writing in medieval fields on special topics at the forefront of current intellectual interest.

Natural Sciences

Professor Christine Buchanan, **Director**

A minor in the natural sciences offers students a systematic exposure to biology and chemistry. It is particularly suitable for engineering majors who are interested in medicine, dentistry or other biomedical careers. This interdisciplinary minor may not be selected by students majoring or minoring in the biological sciences, biochemistry or chemistry. Each advanced course must be taken in residence.

Minor in Natural Sciences

	Credit Hours
BIOL 1401, 1402 Introductory Biology	8
BIOL 3350 Cell Biology	3
CHEM 1303/1113, 1304/1114 General Chemistry	8
CHEM 3371/3117, 3372/3118 Organic Chemistry	8
BIOL 3306 Physiology (*Prerequisite:* BIOL 3350) *or* **BIOL 3304** Genetics	3
	30

Philosophy

www.smu.edu/philosophy

Professor Eric Barnes, **Department Chair**

Professors: Eric Barnes, Doug Ehring, Robert Howell, Steven Sverdlik. **Associate Professors:** Philippe Chuard, Luke Robinson, Brad Thompson. **Assistant Professors:** Justin Fisher, Soraya Gollop, Matthew Lockard. **Senior Lecturer:** Ken Daley. **Lecturers:** Stephen Hiltz, Nenad Popovic.

Bachelor of Arts With a Major in Philosophy

The B.A. degree requires at least 30 term hours in the department, including at least 21 term hours of advanced work (courses 3000 and above). The 30 hours must include PHIL 1301, 3351, 3352 and at least one course from the sequence PHIL 3310–3319. At least 12 hours of a world language are strongly recommended.

Departmental Distinction

Departmental distinction is awarded to philosophy majors graduating with at least a 3.500 GPA in philosophy and who successfully complete a writing project under the guidance of a faculty member.

Minor in Philosophy

The minor will consist of 15 hours of work in the department. No more than six hours may be from 1000-level courses, and at least three hours must be chosen from PHIL 3351 or 3352. It is recommended that each student minoring in philosophy take one of the department's general introductory courses. The minor is available to students who are not seeking the B.A. in philosophy.

Minor in Ethics

The minor consists of at least 15 hours and must include PHIL 1305 or 1306; one of PHIL 1316, 1317 or 1318; and three from the sequence PHIL 3371–3381. Students majoring in philosophy may not minor in philosophy/ethics.

The Courses (PHIL)

PHIL 1300 (3). INTRODUCTION TO CRITICAL THINKING. Learning to analyze, evaluate, and present information in order to better assess one's own beliefs and to persuade others more effectively.

PHIL 1301 (3). ELEMENTARY LOGIC. An introductory course in symbolic logic. Logic provides a means for determining whether the purported conclusion of an argument really does follow from the premises. In symbolic logic, mechanical procedures are developed for determining whether a given argument is valid. The techniques and skills acquired through logic have important applications not only within other academic areas such as the sciences and humanities, but may be of use within various professional areas, including law.

PHIL 1305 (3). INTRODUCTION TO PHILOSOPHY. A general introduction to the central questions of philosophy. We will discuss topics from such areas as the theory of knowledge, philosophy of religion, metaphysics, philosophy of mind, ethics, and political philosophy. Typical questions might include: Can we know the world outside our minds? Is it rational to believe in a God who allows evil to exist? Do the laws of physics allow for human freedom? Is morality more than a matter of opinion? Can there be unequal wealth in a just society? Readings will include classical authors such as Plato, Descartes, Locke, Hume, and Mill, as well as contemporary philosophers. The focus of the course will be on arguments for and against proposed solutions to key problems of philosophy.

PHIL 1306 (3). INTRODUCTION TO PHILOSOPHY: MINDS MACHINES AND PERSONS. A focused introduction to the central questions of philosophy, with an emphasis on the mind and the self. Typical questions might include: Does the soul exist? Is the mind the same thing as the brain? Can animals feel pain? Can they think? Can a computer think? Might the mind be a computer? What is consciousness? Can we understand experiences radically different from our own? What is the self? Can we survive the death of our body? The focus of the course will be on arguments for and against proposed solutions to philosophical problems concerning mind, machines and persons.

PHIL 1316 (3). INTRODUCTION TO ETHICS. An introduction to philosophical ethics focusing on questions in ethical theory. Topics vary, but the following are representative. Is morality merely conventional – and hence historically and culturally relative – or is there an objective morality? If there is an objective morality, what is its content? And what is its basis: reason, human nature, or divine command? Why be moral? If the demands of morality conflict with our own self-interest, why should we comply with them? And what exactly is in our own self-interest: in what does human happiness or well-being consist? We will read, discuss, and write about philosophical arguments for and against proposed answers to questions like these.

PHIL 1317 (3). BUSINESS ETHICS. A discussion of the moral and political issues surrounding a free-enterprise system. Students will be introduced to basic moral theory. Further topics will include distributive (or economic) justice, the moral preferability of capitalism and socialism, and selected concrete moral issues such as truth in advertising, worker safety, and affirmative action.

PHIL 1318 (3). CONTEMPORARY MORAL PROBLEMS. An introduction to philosophical ethics focusing on questions in applied ethics. Students will explore ethical theories, philosophical methods, and their application to some of the most controversial and pressing issues confronting contemporary society. Topics vary, but the following are representative: abortion, animal rights, affirmative action, capital punishment, economic justice, euthanasia, sexuality, war and terrorism, and world hunger. Class discussion is an important component of the course, as is reading and writing argumentative essays about these issues.

PHIL 3301 (3). INTERMEDIATE LOGIC. Students are introduced to the formal theory of the logical systems they have already learned to use: namely, Sentential Logic and Predicate Logic. Students will learn to prove the completeness and soundness of both of these systems. In addition, they may also learn some simple nonstandard logical systems, such as Modal, Epistemic or Deontic logic, if time permits. *Prerequisite:* PHIL 1301, or its equivalent.

PHIL 3302/RELI 3302 (3). PROBLEMS IN THE PHILOSOPHY OF RELIGION. The philosophy of religion, considering such problems as religious experience, human freedom, good and evil, belief in God, and immortality.

PHIL 3305 (3). PHILOSOPHY AND GENDER. Considers whether or not there are differences between the sexes; whether or not western science, philosophy, and ethics have been dominated by male thinking; and current issues such as pornography, censorship, rape, reproductive technologies, etc. Writings by feminist philosophers as well as their critics will be examined.

PHIL 3310 (3). ADVANCED TOPICS IN PHILOSOPHY. May be repeated for credit

PHIL 3311 (3). 20TH-CENTURY PHILOSOPHICAL ANALYSIS. An examination of the method of philosophical analysis as practiced by such 20th-century philosophers as Moore, Russell, Wittgenstein, Quine, Austin, and others.

PHIL 3312 (3). INTRODUCTION TO PHILOSOPHY OF LANGUAGE. A systematic treatment of such topics as the nature of linguistic reference, meaning, synonymity, truth, vagueness, and metaphor. The course will also examine issues relating to the goals and methodology of linguistics, such as the status of semantic descriptions, and the nature versus nurture controversy in language-acquisition theories.

PHIL 3313 (3). KNOWLEDGE AND SKEPTICISM. A systematic treatment of such topics as skepticism, analyses of factual knowledge, theories of epistemic justification, foundational versus coherence theories of knowledge, and the relationship between psychology and a philosophical account of knowledge.

PHIL 3314 (3). METAPHYSICS. A study to acquaint the student with traditional metaphysical issues such as the problem of universals, the existence of other minds, continuants, the mind-body problem, and the existence of God.

PHIL 3315 (3). PHILOSOPHY OF MIND. A systematic treatment of the nature of consciousness, self, and person.

PHIL 3316 (3). MINDS, BRAINS AND ROBOTICS. Topics may include neural networks, artificial intelligence, perception and action, consciousness, robotics, dynamical systems, embodied cognition, game theory, and the evolution of cognition. *Prerequisites:* Two courses in cognitive-science related fields (philosophy, computer science/engineering, psychology, linguistics, biology or anthropology).

PHIL 3317 (3). PHILOSOPHY OF PERCEPTION. Explores sensory experiences (see, hear, touch, feel, smell, etc.), the nature of these perceptual states, and the many philosophical questions they raise.

PHIL 3318 (3). COLORS, SOUNDS, AND OTHER APPEARANCES. Things look colored, they produce sounds and smells, and they have a taste. What are these sensory appearances – colors, sounds, tastes, smells? Do they exist? Are they objective or mere projections of the mind?

PHIL 3319 (3). IDENTITY, PERSONS, AND OTHER OBJECTS. Surveys a range of related questions about identity, the nature of persons, and the constitution and persistence of other objects.

PHIL 3320 (3). CAUSATION. Intensive investigation of the metaphysics of causation. Examines regularity theory, counterfactual theory, probabilistic theory, and process theories. *Prerequisite:* Permission of instructor.

PHIL 3333 (3). TOPICS IN PHILOSOPHY. May be repeated for credit.

PHIL 3351 (3). HISTORY OF WESTERN PHILOSOPHY (ANCIENT). A study of the major philosophers from Thales to Plotinus, including Plato and Aristotle.

PHIL 3352 (3). HISTORY OF WESTERN PHILOSOPHY (MODERN). Survey course in the history of modern philosophy. Considers the modern period, beginning with Descartes, including Leibniz, Spinoza, Locke, and Hume, and ending with Kant. Many seminal writing on central areas of philosophy occur in this period; the course provides an introduction to, and background for, these areas. Examines key writings from major figures on issues such as rationalism and empiricism; the nature of external reality and our knowledge of it; the existence and nature of God; the relation between mind and body; causation; induction; rationality and rational action; and the nature of morality and moral action. Satisfies one part of the history requirement for philosophy majors; may be used to satisfy the history requirement for philosophy minors.

PHIL 3362/CF 3341 (3). CREATIVITY, DISCOVERY, AND SCIENCE. Considers central issues in the history and philosophy of science, with a special emphasis on the nature of creativity and discovery in scientific thought. General questions are: What is science, and what is the nature of scientific method? What is the nature of evidence and explanation in science? Addresses in detail the question of how new ideas – such as theories and problem solutions – are produced and assessed in scientific thinking. Is creativity essentially a random or blind process, or is it rule-governed in some way? What is the nature of scientific discovery? Combines literature in the history and philosophy of science together with psychological literature on the nature of creativity to answer these and other questions. No previous coursework in science is required, but some science background equip students to appreciate the relevant issues.

PHIL 3363/CF 3308 (3). AESTHETIC EXPERIENCE AND JUDGMENT. Attention is devoted to these questions: What is beauty? Are there any standards or rules concerning what is beautiful? What is art? Why is art an important part of human culture? The course will also consider the role of emotion in art, the problem of correct interpretation, and the nature of tragedy.

PHIL 3364/CFA 3364 (3). PHILOSOPHY OF BIOLOGY. A survey of topics in the philosophy of biology. Typical topics include evolution versus creationism, fitness, units of selection, adaptationism, biological taxonomy, evolution in humans, cultural evolution and niche construction.

PHIL 3366 (3). PHILOSOPHY IN LITERATURE. A nontechnical introduction to philosophy by an examination of traditional philosophical problems embodied in great works of fiction.

PHIL 3370 (3). NINETEENTH-CENTURY PHILOSOPHY. A detailed study of selected major thinkers from the 19th century, such as Kant, Hegel, Kierkegaard, Nietzsche, Schoepenhauer, Fichte, Feuerbach, and Marx.

PHIL 3371/CF 3342 (3). SOCIAL AND POLITICAL PHILOSOPHY. This course will examine some of the basic questions in these fields, and the most important answers that have been

given to them. Topics may vary, but typical questions include the following: What forms of government are most reasonable and morally defensible? Are citizens in a modern state normally obligated to obey the law? What is justice, and how might it be embodied in a system of government? Are there such things as natural rights and how do we know about them? What is the basis for saying that we have rights to freedom of speech and religion? When, if ever, is it legitimate for a state to go to war? These questions have been asked since antiquity, and we will be looking at the important answers that have been given to them since then.

PHIL 3373 (3). PHILOSOPHY OF CRIMINAL LAW. By what right does society punish some people? What is the correct amount of punishment? Who ought to be punished? Various philosophical responses to these questions are examined. Other topics include the morality of capital punishment, excuse and justification, the morality of self-defense, and the justifiability of punishing self-regarding acts such as drug use.

PHIL 3374 (3). PHILOSOPHY OF LAW. An examination of central questions in philosophy of law. Topics vary, but the following are representative. What is law? What is the relationship between law and morality? To what extent may or must judges make value judgments in deciding what the law is? To what extent can or should legislative intent or original meaning constrain judicial interpretation of constitutional provisions? Whom should we punish, why should we punish them, and how much should we punish them?

PHIL 3375 (3). TOPICS IN MORAL PHILOSOPHY. A topics offering that seeks to take advantage of the wide variety of issues that can be fruitfully explored in a course on moral philosophy. (May be repeated for credit.)

PHIL 3376 (3). BIOETHICS. An examination of ethical questions arising within medical practice, medical research, and the life sciences.

PHIL 3377 (3). ANIMAL RIGHTS. Examines the moral status of nonhuman animals, and its implications for the common use of animals as food and experimental subjects for humans.

PHIL 3379 (3). ENVIRONMENTAL ETHICS. A course exploring our ethical obligations concerning the natural world. Topical issues like climate change, endangered species, recycling, and the population explosion are covered from a variety of philosophical perspectives.

PHIL 3380 (3). ETHICAL THEORY. An examination of the more fundamental – and more abstract – questions in philosophical ethics. Topics vary, but the following are representative. What is the Good Life: in what does human happiness or well-being consist? What is truly worth valuing: are pleasure, knowledge, and virtue valuable in themselves? What are the basic principles that determine or govern our moral rights and obligations? Are moral judgments descriptions of some features of the world, or are they merely expressions of approval and disapproval? If they are descriptions of the world, what features of it do they describe? How do we know whether an action is morally right or wrong? We will explore questions like these through a close and critical examination of classic and contemporary works in philosophical ethics.

PHIL 3382 (3). TWENTIETH-CENTURY EUROPEAN PHILOSOPHY. An examination of some methods and principles of European philosophies in the 20th century. Philosophical schools studied: phenomenology, existentialism, Neo-Kantianism, life-philosophy, hermeneutics, and Neo-Marxist critical theory.

PHIL 3383 (3). AMERICAN PHILOSOPHY. Historical development and contemporary themes in American philosophy. Varying emphasis may be placed on trends (e.g., pragmatism), historical figures (e.g., Dewey), or influential contemporary Figures (e.g., Quine).

PHIL 4194 (1). INDEPENDENT STUDY AND RESEARCH.

PHIL 4381 (3). PHILOSOPHY IN THE IBER-AMERICAN WORLD. A survey of Latin-American philosophy as it relates to the social and cultural development of Latin-America. (SMU-in-Madrid only.)

PHIL 4393 (3), 4394 (3). INDEPENDENT STUDY AND RESEARCH. Special topics to be selected by the student in consultation with the department. *Prerequisites:* Senior standing and departmental approval.

Physics

www.smu.edu/physics

Professor Fred Olness, **Department Chair**

Professors: Fred Olness, Ryszard Stroynowski, Jingbo Ye. **Associate Professors:** Thomas Coan, Kent Hornbostel, Robert Kehoe, Pavel Nadolsky, Roberto Vega. **Assistant Professors:** Jodi Cooley-Sekula, Stephen Sekula. **Senior Lecturers:** Simon Dalley, Randall Scalise. **Emeritus Professors:** Jeff Chalk, George Crawford, Vigdor Teplitz.

The Physics Department offers a program consisting of courses in classical and modern physics, and research studies in both experimental and theoretical particle physics as well as in dark matter searches.

The research activities of the faculty are focused primarily in high energy, elementary particle physics and related fields. The advanced classes are small, so there is ample opportunity for students to work closely with Physics Department faculty, particularly in the advanced laboratories where students become familiar with state-of-the-art equipment. Undergraduate physics majors are strongly encouraged to participate in research activities. A majority of majors go on to pursue advanced degrees upon graduation from SMU.

Bachelor of Science With a Major in Physics

This degree program is designed for students who plan careers in physics in industry, research laboratories or academia. A candidate for the B.S. degree must complete a minimum of 40 hours in physics, including PHYS 1105, 1106, 1303, 1304 (or 1307 and 1308), 3305, 3340, 3344, 3374, 4211, 4321, 4392, 5382, 5383. (PHYS 3345 may be substituted for 4321.) Additional courses may be chosen from a variety of physics electives or in related fields with departmental permission. A candidate for the B.S. degree must also complete 15 hours of courses in mathematics, including MATH 1337, 1338, 2339, 2343 and one advanced mathematics course. STAT 4340 also counts as an advanced mathematics elective. Finally, degree candidates must complete a minimum of three hours in computer science and engineering by completing CSE 1341 or 1342. Students planning to pursue graduate studies are encouraged to complete more than the minimum 40 credit hours in physics and 15 credit hours in mathematics.

Bachelor of Arts With a Major in Physics

This degree program is appropriate for students who wish to combine a physics curriculum with a broad liberal arts program with the aim of pursuing careers in medicine, teaching, business or government. A candidate for the B.A. degree must complete a minimum of 30 hours in physics, including PHYS 1105, 1106, 1303, 1304 (or 1307 and 1308), 3305, 3344, 4211, 4392, 5382. Additional courses may be chosen from the available physics electives or in related fields with departmental permission. Additionally, a candidate for the B.A. degree must complete 15 hours in mathematics, including MATH 1337, 1338, 2339, 2343 and one advanced mathematics course.

Simultaneous Degree Programs

It is possible to earn simultaneously a B.S. degree with a major in physics from Dedman College and a degree in engineering from the Lyle School of Engineering. The undergraduate adviser of the Department of Physics should be consulted for detailed information on the simultaneous degree programs.

Departmental Distinction

A physics major achieving a B.S. degree may graduate with departmental distinction by successfully completing a special program of study in addition to the requirements stated above, while maintaining a minimum GPA of 3.500. The special program consists of independent reading, research and senior thesis under the direction of a departmental faculty member. The student must apply to the department for this designation during his or her junior year. The student will enroll in PHYS 4375 or 4390 during the program, and a senior thesis is to be written and presented to the faculty.

Minor in Physics

A minor in physics is particularly appropriate for majors in the natural sciences, excluding physics but including pre-med, pre-law, Earth science, biology, mathematics and engineering. The departmental requirement for a minor in physics is 17 hours in physics, including PHYS 1105, 1106, 1303, 1304 (or 1307 and 1308) and nine hours of advanced coursework.

The Courses (PHYS)

Notes: Students with a strong high school preparation in physics may take a departmental placement examination to acquire credit for either PHYS 1303 or 1304; the placement exam must be taken during the student's first term at SMU.

PHYS 1100 (1), 1200 (2), 1300 (3). SPECIAL TOPICS ABROAD. Course offered in approved SMU Abroad program. May be repeated for credit under different subtitle.

PHYS 1101 (1). INTRODUCTION TO THE UNIVERSE. Topics in cosmology (designed for first year students), including expansion of the universe, the cosmic microwave background, cosmic nucleosynthesis and cosmic inflation; treated qualitatively but with illustrative mathematics. *Prerequisite:* Comfortable with calculus or taking it concurrently.

PHYS 1105 (1). MECHANICS LABORATORY. One 3-hour laboratory period per week. Taken with PHYS 1303, 1307 if 8 hours of credit, including laboratory, are needed.

PHYS 1106 (1). ELECTRICITY AND MAGNETISM LABORATORY. One 3-hour laboratory period per week. Taken with PHYS 1304, 1308 if 8 hours of credit, including laboratory, are needed. *Prerequisite:* PHYS 1105 or self-test.

PHYS 1301 (3). THE IDEAS OF MODERN PHYSICS. Presents cosmology, relativity, quantum mechanics, and particle physics in an essentially descriptive, nonmathematical framework accessible to all SMU students.

PHYS 1303 (3). INTRODUCTORY MECHANICS. For science and engineering majors. Covers vector kinematics, Newtonian mechanics, gravitation, rotational motion, vibrations, waves, and fluids. *Prerequisite or corequisite:* MATH 1337.

PHYS 1304 (3). INTRODUCTORY ELECTRICITY AND MAGNETISM. For science and engineering majors. Electricity, magnetism, electromagnetic radiation, optics, and special relativity. *Prerequisites:* PHYS 1303, and MATH 1338 or concurrent registration in MATH 1338.

PHYS 1307 (3). GENERAL PHYSICS I. For life sciences majors. Covers vector kinematics, Newtonian mechanics, gravitation, rotational motion, vibrations, waves, and fluids. *Prerequisite or corequisite:* MATH 1337.

PHYS 1308 (3). GENERAL PHYSICS II. For life sciences majors. Covers electricity, magnetism, electromagnetic radiation, and geometrical and physical optics. *Prerequisite:* PHYS 1303 or 1307.

PHYS 1309 (3). ASTRONOMY. A course in planetary and stellar astronomy, with an introduction to cosmology. Intended for the nonscience major, with no prerequisites. Observation sessions included. Does not include laboratory component.

PHYS 1311 (3). ELEMENTS OF ASTRONOMY. A course in planetary and stellar astronomy including laboratory and observations.

PHYS 1313 (3). FUNDAMENTALS OF PHYSICS. Contemporary concepts of physics, including Newtonian mechanics, gravitation, rotational motion, fluids, the gas laws, vibrations and waves, and sound. For the nonscience major. No prior knowledge of physics is assumed.

PHYS 1314 (3). THE PHYSICAL PERSPECTIVE. Principles and concepts of physics including electricity, magnetism, the nature of light, Einstein's theory of relativity, quantum theory, atomic physics, and the Big Bang. Intended for the non-science major. No prior knowledge of physics is assumed.

PHYS 1320 (3). MUSICAL ACOUSTICS. Covers both the acoustics (physical sound properties) and the psycho-acoustics (psychological, perceptual properties) of music. Topics include sound in general, sound of musical instruments (including voice), sound characteristics of rooms, electronic production (synthesis), and reproduction of sound. No prior knowledge of physics is assumed. While this course requires no previous formal training in music theory, it is helpful if students have a basic understanding of musical scales and notation.

PHYS 1403 (4). GENERAL PHYSICS. Equivalent of PHYS 1303 and 1105.

PHYS 1404 (4). GENERAL PHYSICS. Equivalent of PHYS 1304 and 1106.

PHYS 1407 (4). GENERAL PHYSICS. For life sciences majors. Covers vector kinematics, Newtonian mechanics, gravitation, rotational motion, vibrations, waves, and fluids. *Prerequisite or corequisite:* MATH 1337.

PHYS 1408 (4). GENERAL PHYSICS. For life sciences majors. Covers electricity, magnetism, electromagnetic radiation, and geometrical and physical optics. *Prerequisite:* PHYS 1303 or 1307.

PHYS 2100 (1), 2200 (2), 2300 (3), 3100 (1), 3200 (2), 3300 (3). SPECIAL TOPICS ABROAD. Course offered in approved SMU Abroad program. May be repeated for credit under different subtitle.

PHYS 3305 (3). INTRODUCTION TO MODERN PHYSICS. For science and engineering majors. Special relativity, elements of quantum physics, structure of atoms, molecules and solids, nuclear physics, and elementary particles. *Prerequisite:* PHYS 1304.

PHYS 3310 (3). INTRODUCTION TO RELATIVITY AND THE PHYSICS OF WAVES. One-dimensional harmonic oscillator, coupled oscillators, longitudinal and transverse waves, sound and electromagnetic waves, interference and diffraction, Lorentz transforms and invariants, time dilation, length contraction, equivalence principle, and black holes. *Prerequisites:* PHYS 3305 (can be taken concurrently), MATH 2339, MATH 2343 (can be taken concurrently).

PHYS 3320 (3). PHYSICS OF MUSIC. The acoustics (physical sound properties) of music. Topics include sound in general, sound of musical instruments, acoustics, electronic synthesis, Fourier transforms, interference, diffraction, and resonance. While this course requires no previous formal training in music theory, it is helpful for students to have a basic understanding of musical scales and notation. *Prerequisites:* PHYS 1303, 1304 or equivalent. *Recommended:* PHYS 3344.

PHYS 3333/CFB 3333 (3). THE SCIENTIFIC METHOD (DEBUNKING PSEUDOSCIENCE). Provides students with an understanding of the scientific method sufficient to detect pseudoscience in its many guises: paranormal phenomena, free-energy devices, alternative medicine, creationism, and many others.

PHYS 3340 (3). COMPUTATIONAL PHYSICS. Introduction to the modeling of physical systems. Emphasis is on algorithm selection and implementation for simulating classical and quantum physics. *Prerequisite:* MATH 2343 or concurrent registration. Prior programming experience recommended.

PHYS 3344 (3). CLASSICAL MECHANICS. The motion of a particle and of systems of particles, including oscillatory systems, accelerated coordinate systems, central-force motion, rigid-body dynamics, gravitation, and Lagrangian mechanics. *Prerequisites:* PHYS 1303 and MATH 2339 (or taken concurrently).

PHYS 3345 (3). ADVANCED MECHANICS. Topics in classical mechanics including the motion of a system of particles, the two-body central-force problem, small oscillations of coupled systems, collision theory, Lagrange's and Hamilton's formulations, the vibrating string, and the special theory of relativity. *Prerequisite:* PHYS 3344.

PHYS 3350 (3). COMPUTATIONAL PHYSICS. This course teaches students the principles of analog and digital electronics relevant for designing instrumentation for modern physics experiments. *Prerequisite:* Physics 1304 or equivalent.

PHYS 3368 (3). PRINCIPLES OF ASTROPHYSICS AND COSMOLOGY. Cosmic distance scales. Physics of stars. Expansion of the Universe. Cosmic nucleosynthesis. Selected other topics as appropriate. *Prerequisite:* PHYS 3305.

PHYS 3374 (3). THERMODYNAMICS AND STATISTICAL MECHANICS. Basic concepts of thermodynamics and statistical mechanics with emphasis on quantum statistics. The laws of thermodynamics, entropy, Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics. *Prerequisites:* PHYS 3305. MATH 2343 recommended.

PHYS 4049 (0). UNDERGRADUATE RESEARCH. For students who hold research fellowships but are not enrolled in any credit hour courses. No tuition. *Prerequisites:* PHYS 3305 or consent of instructor.

PHYS 4112 (1). LABORATORY PHYSICS II. Intermediate-level experimental physics. Approximately one experiment per week. One 3-hour laboratory period per week. *Prerequisites:* PHYS 1106, 3305.

PHYS 4190 (1). SPECIAL PROJECTS IN PHYSICS. Directed study of special topics. For physics majors only. *Prerequisites:* Junior or senior standing and permission of department.

PHYS 4211 (2). LABORATORY PHYSICS I. Introduction to experimental physics. Approximately one experiment per week. One 2-hour laboratory period per week. *Prerequisites:* PHYS 1105, 1106, 3305.

PHYS 4213 (2). ADVANCED LABORATORY PHYSICS.

PHYS 4290 (2). SPECIAL PROJECTS IN PHYSICS. Directed study of special topics. For physics majors only. *Prerequisites:* Junior or senior standing and permission of department.

PHYS 4321 (3). METHODS OF THEORETICAL PHYSICS. Matrices, determinants, linear algebra, complex variables, inhomogeneous equations, Sturm-Liouville theory, partial differential equations, special functions, Fourier series and integral transformations, integral equations, calculus of variations, and applications. *Prerequisites:* MATH 2339, 2343.

PHYS 4375 (3). RESEARCH. For physics majors. Students participate in physics research with a member of the faculty of the Physics Department. *Prerequisite:* Instructor's permission.

PHYS 4390 (3). SPECIAL PROJECTS IN PHYSICS. Directed study of special topics for physics majors only. *Prerequisites:* Junior or senior standing and permission of department.

PHYS 4392 (3). INTRODUCTION TO ELECTROMAGNETIC THEORY. A development of electromagnetic theory from the experimental laws; Maxwell's equations for the electromagnetic field; electrostatics, magneto statics, steady currents, boundary-value problems, and time-varying electric and magnetic fields.

PHYS 5161 (1). SELECTED TOPICS IN PHYSICS FOR HIGH SCHOOL TEACHERS. Selected topics in physics for high school teachers. Contact the department office in 106 Fondren for more information.

PHYS 5337 (3). INTRODUCTION TO SOLID STATE PHYSICS. Crystal lattices and the reciprocal lattice, the free-electron model of metals, crystal binding, lattice vibrations phonons, thermal properties of solids, and energy bands in solids.

PHYS 5380 (3). CONCEPTS OF EXPERIMENTAL PARTICLE PHYSICS. Principles of elementary particle physics and the experiments by which one learns the laws obeyed by these particles, with reading of scientific papers. *Prerequisite:* PHYS 3305 or equivalent. PHYS 5382 is recommended.

PHYS 5382 (3). INTRODUCTION TO QUANTUM MECHANICS. A study of the development of quantum theory, including blackbody radiation, the Bohr atom, and the photoelectric effect. Also, wave mechanics and matrix mechanics approaches, and a brief introduction to the Dirac formalism. Solutions to the Schrodinger equation for a variety of one-dimensional problems and for the hydrogen atom are discussed. *Prerequisites:* PHYS 3305, MATH 3353.

PHYS 5383 (3). ADVANCED QUANTUM MECHANICS. Applications and approximation methods in quantum mechanics. Applications to laser physics, solid-state physics, molecular physics and scattering are included. *Prerequisite:* PHYS 5382.

PHYS 5384 (3). QUANTUM PHYSICS II. Quantum statistics; band theory of solids; superconductivity, magnetism, and critical phenomena; nuclear physics; physics of elementary particles. *Prerequisite:* PHYS 5383 or permission of instructor

PHYS 5393 (3). ELECTROMAGNETIC WAVES AND OPTICS. Theory and applications of electromagnetic wave radiation, propagation, and scattering. Geometrical and physical optics. Guided waves. Lasers. Coherent optics, interferometry, and holography. *Prerequisite:* Physics 4392, equivalent, or consent of instructor.

PHYS 5395 (3). INTRODUCTION TO ELEMENTARY PARTICLES. Modern theories of elementary particles, including relativistic kinematics, Feynman diagrams, quantum electrodynamics, quarks, weak interactions, and gauge theories. *Prerequisite:* PHYS 5383.

PHYS 5398 (3). APPLICATIONS OF QUANTUM MECHANICS. The principles of quantum theory are used in a study of radiative transition in atoms and molecules, quantum statistics, band theory of solids, semiconductor theory, and laser physics. *Prerequisite:* PHYS 5382 or equivalent.

Political Science

www.smu.edu/politicalscience

Professor Dennis Ippolito, **Department Chair**

Professors: James Hollifield, Dennis Ippolito, Calvin Jillson, Michael Lusztig, Harold Stanley, Stephen Wegren. **Associate Professors:** Bradley Carter, Pamela Corley, Joseph Kobylka, Luigi Manzetti, Dennis Simon, Matthew Wilson. **Assistant Professors:** Karisa Cloward, Hiroki Takeuchi. **Lecturer:** Chelsea Brown. **Emeritus Professor:** James Gerhardt.

The department offers undergraduate courses of three types. Introductory courses (at the 1000 level) survey each of the broad fields of study in the discipline. Advanced courses (at the 3000 and 4000 levels) explore more closely defined topics within each of those fields – 3000-level courses examine relatively broad subjects; 4000-level courses examine more specific topics, but are not inherently more demanding than 3000-level courses. Introductory-level preparation or at least sophomore standing is recommended for students undertaking these advanced courses. Independent study courses (at the 4000 level) are offered to majors with sophomore or higher standing; prerequisites for these courses are stated in the course descriptions that follow. For purposes of distribution and concentration, courses are grouped in their broad fields in the listings below, as indicated by the last two digits of their course numbers:

American Government and Politics	20–39
Comparative Politics	40–59
Political Theory	60–79
International Relations	80–99

Note: Offerings for independent study, research and study abroad (PLSC 4102, 4202, 4302, 4301, 4401, 4402, 4403, 4404, 4304, 4306, 4307) are available to majors in political science. Students must have departmental approval prior to registering for these courses. Such courses may not be counted toward departmental subfield requirements.

Students must receive at least a *C-* in all classes counting toward the major or minor. No course may be counted more than once toward meeting departmental major or minor requirements. In unusual circumstances, a student may petition, through his or her adviser, to the department chair for exceptions to the above requirements. Only the department chair may grant such a written waiver.

Bachelor of Arts With a Major in Political Science

The B.A. degree in political science requires a total of 33 term hours with two introductory courses (six hours) of choice and 27 advanced hours (3000 level and above). At least 18 advanced hours must be completed in residence. Advanced coursework must include at least six hours (two courses) in each of two distribution fields and three hours (one course) in a third. No coursework counting toward the major may be taken pass/fail. The following additional requirements apply to the 27 advanced hours (3000 level and above):

- A minimum of 15 hours of in-class advanced-level courses must be taken on one of the three SMU campuses (Dallas, Plano or Taos). In-class hours do not include directed reading courses (PLSC 4102, 4202, 4302), internships (PLSC 4306) and departmental distinction thesis (PLSC 4307). SMU campus courses do not include transfer courses, Washington Semester courses (PLSC 4401, 4402, 4403, 4404) and courses taken in SMU-approved study abroad programs.

- A maximum of three hours of directed reading courses (PLSC 4102, 4202, 4302) or internships (PLSC 4306) may count towards the major.
- A maximum of 15 hours of (preapproved) advanced-level courses in SMU-approved study abroad programs may be counted toward the major. (These hours will not count toward the required 15 hours of in-class, on-campus, advanced-level courses specified above.)

Departmental Distinction

The department offers graduation with distinction to select majors of high academic achievement. Interested students may consult with an appropriate faculty member and apply to the director of undergraduate studies for admission to the distinction track. Eligible students must have completed two introductory departmental courses and 24 hours of departmental credit before applying for candidacy. Criteria for graduating with departmental distinction include the following:

1. A minimum 3.000 overall GPA at graduation.
2. A minimum 3.500 average in courses taken for the political science major.
3. Preparation for a departmental distinction thesis under the supervision of a faculty thesis adviser. The faculty adviser's grade for the thesis must be *A-* or higher. This work will be accomplished by taking PLSC 4307.
4. Passing with distinction an oral examination of at least one hour, conducted by a faculty distinction examination committee, which reviews the candidate's thesis and major curriculum.
5. A minimum 3.500 average in at least two advanced courses related to the topic of the thesis; one of these may, but need not, be a course taken outside the requirements of the political science major.

Eligible students will be admitted to the distinction track upon recommendation of the director of undergraduate studies in consultation with the faculty member who has agreed to chair the distinction committee and oversee the student's research and writing. The department does not require candidates for distinction to take PLSC 4376, but strongly advises students interested in empirical research to do so.

Students advanced to the distinction track must write a substantial piece of independent and original research (PLSC 4307) and present it to a distinction committee composed of faculty selected by the distinction adviser in consultation with the student. Upon positive recommendation of this committee, the department will award the student graduation with distinction.

Minor in Political Science

Four minor concentrations are offered: a general program in political science and three specifically focused programs in political thought; comparative and international studies; and American politics, law and administration. Each concentration requires 18 term hours of political science courses, including three or six hours (one or two courses) at the introductory level and 12 or 15 advanced hours. At least half of the advanced hours applied toward a political science minor must be completed through enrollment at SMU. Advanced coursework must include at least six hours (two courses) in each of two distribution fields, and three hours (one course) in a third. No coursework counting toward the minor may be taken pass/fail. A maximum of six hours of (preapproved) advanced-level courses in SMU-approved study abroad programs may be counted toward the minor.

PLSC 1320 (3). INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS. The organization, functions, and processes of our national government, with particular attention to parties, pressure groups, and other forces that influence its course. Attention will also be given to the Texas Constitution.

PLSC 1340 (3). INTRODUCTION TO COMPARATIVE POLITICS. Analyzes and contrasts different patterns of national political development in Western, Marxist-Leninist, and Third World countries. Political dilemmas confronting each type of system will be examined.

PLSC 1360 (3). INTRODUCTION TO POLITICAL THEORY. An introduction to political theory through an examination of classical and modern approaches to the study of politics. Questions concerning how we get knowledge about politics and what we do with that knowledge will be addressed.

PLSC 1380 (3). INTRODUCTION TO INTERNATIONAL RELATIONS. A basic survey of the elements of international relations, including the nation-state system, international organizations, international law, diplomacy, foreign policy, and various nonstate actors such as multinational corporations.

PLSC 3124 (1), 3224 (2). STUDIES IN AMERICAN POLITICS AND GOVERNMENT – ABROAD. SMU credit for Political Science courses in American Politics and Government taken in SMU-approved programs abroad.

PLSC 3144 (1), 3244 (2). STUDIES IN COMPARATIVE POLITICS AND GOVERNMENT – ABROAD. SMU credit for Political Science courses in Comparative Politics and Government taken in SMU-approved programs abroad.

PLSC 3164 (1), 3264 (2). STUDIES IN POLITICAL THEORY – ABROAD. SMU credit for Political Science courses in Political Theory taken in SMU-approved programs abroad.

PLSC 3184 (1), 3284 (2). STUDIES IN INTERNATIONAL RELATIONS – ABROAD. SMU credit for Political Science courses in International Relations taken in SMU-approved programs abroad.

PLSC 3320 (3). PRINCIPLES OF PUBLIC POLICY. Public policy is the study of the outcome of the political process. Parties, pressure groups, bureaucracies, and legislative bodies are part of the mix that creates the decisions that govern our domestic social policy, our international economic policy, and our defense policy. *Prerequisites:* ECO 1311 and PLSC 1320. *Recommended:* ECO 1312 and either PLSC 1340 or PLSC 1380.

PLSC 3321 (3). CONGRESS AND THE LEGISLATIVE PROCESS. The powers, organization, and rules and procedures of legislatures in the United States. Emphasizes the U.S. Congress: its constitutional responsibilities, committee and staff systems, and legislative procedures in the House and Senate.

PLSC 3322 (3). THE AMERICAN PRESIDENCY. An evaluation of the office of president in the American political system with emphasis placed upon the functional and institutional development of the office and presidential leadership in policy making.

PLSC 3323 (3). SOUTHERN POLITICS. Focuses on the South, paying particular attention to partisan competition, the politics of race, redistricting and voting rights in the 11 Southern states.

PLSC 3324 (3). STUDIES IN AMERICAN POLITICS AND GOVERNMENT. SMU credit for Political Science courses in American Politics and Government taken in SMU-approved programs abroad.

PLSC 3325 (3). INTRODUCTION TO LAW. Provides the student with an understanding of the American legal system, covering such substantive areas of law as torts, contracts, property, civil procedure, and criminal law.

PLSC 3326 (3). STATE GOVERNMENT AND POLITICS. A comparative study of the structure, procedure, and functional services of state, county, and municipal governments with emphasis upon intergovernmental relations in the federal government and Texas government.

PLSC 3327 (3). TEXAS POLITICS. This course focuses on government and politics in Texas both by exploring its processes, institutions, and policies and by placing them within the broader context of the U.S. federal system.

PLSC 3329 (3). BUREAUCRACY AND REGULATORY POLITICS. Examines the fourth branch of government, including the rise of regulatory policymaking in the twentieth century, its instructions and organization, the role of administrative law, the behavior of civil servants and interest groups, and the relationship between bureaucracies and other branches of government.

PLSC 3330 (3). LAW, POLITICS AND THE SUPREME COURT. An introduction to the uniquely political and legal role played by the Supreme Court in elaborating the scope of governmental power and defining individual rights and liberties.

PLSC 3331 (3). MEDIA AND POLITICS. Examines how the media influence the American institutional governing process and citizen engagement in democratic practices such acquisition of political knowledge and political decision-making.

PLSC 3333/PP 3310 (3). ENVIRONMENTAL POLICY. Overview of governmental environmental policies designed to provide a foundation for future application and study in the growing environmental field.

PLSC 3334 (3). PUBLIC OPINION AND AMERICAN POLITICS. Focuses upon the influence of public opinion on American politics and policy making. Topics for the course will include public opinion and democratic theory, the methods of survey research, the use of the polling industry, and the influence of polls on politicians and policy.

PLSC 3335 (3). JUDICIAL PROCESS. Examines the role played by courts in the American system of government. Its coverage ranges from the generation of disputes, to the tools used by the judiciary to resolve them, to the ways judges are selected and make decisions, and to the impact of those decisions on society and government.

PLSC 3336 (3). CONGRESS, THE PRESIDENT AND THE CONSTITUTION. An examination of how constitutional interpretation, precedent, and politics affect presidential and congressional powers and the separation of powers with respect to war and foreign affairs; legislation and administration; and budgetary and fiscal policies.

PLSC 3340 (3). WESTERN EUROPEAN POLITICS. The political development of Britain, France, Germany, and Italy. Topics include the emergence of parliament and parties; democratic breakdown and the rise of fascism; modern parties and interest groups; state economic planning; corporatism; extraparliamentary oppositions.

PLSC 3341 (3). POLITICS OF PARTICIPATION AND REPRESENTATION IN WESTERN DEMOCRACIES. Focuses on the numerous avenues through which citizens influence politics and policy making in advanced industrial democracies. Considers the implications of formal institutional structures, such as electoral and party systems, the impact of organized groups, as well as more informal forms of participation, such as protest movements and citizen initiatives.

PLSC 3342/CF 3388 (3). MAKING DEMOCRACY WORK. Aims to answer the fundamental question of why democracy thrives in some nations while in others it struggles, and in many more it has not yet taken root.

PLSC 3344 (3). STUDIES IN COMPARATIVE POLITICS AND GOVERNMENT – ABROAD. SMU credit for Political Science courses in Comparative Politics and Government taken in SMU-approved programs abroad.

PLSC 3345 (3). GOVERNMENTS AND POLITICS OF THE MIDDLE EAST. A survey of modern Middle East governments and politics; historical, ideological, and economic and social influences on their domestic and foreign policies; analysis of emerging political forms; some emphasis on modernization problems.

PLSC 3346 (3). JAPANESE POLITICS AND SOCIETY. A survey of the major political and social trends in Japan, focusing on popular attitudes, political participation, and the government's response.

PLSC 3347 (3). GOVERNMENTS AND POLITICS OF AFRICA. The politics of Black Africa in an international context, emphasizing the problems of race, nationalism, and economic development.

PLSC 3348 (3). GOVERNMENTS AND POLITICS OF LATIN AMERICA. The structure, functions, and operations of government in Latin American countries with emphasis on political practices and institutions.

PLSC 3349 (3). POLITICS OF MAJOR LATIN AMERICAN COUNTRIES. An introduction to the problems of political development in some of the major countries of Latin America: Argentina, Brazil, Chile and Mexico.

PLSC 3350 (3). POLITICS OF CANADA.

PLSC 3351 (3). RUSSIA UNDER PUTIN. A study of contemporary Russia. The goal is to prepare a multi-faceted assessment of the superpower that is and was Russia. How will it develop, politically, economically and militarily? (SMU-in-Copenhagen)

PLSC 3352 (3). CHINESE POLITICS. A survey of Chinese political history since the establishment of the People's Republic of China in 1949 and the major challenges confronting the PRC today, evaluating the positive and negative aspects of China's socialist experiment by using a working knowledge of Chinese politics.

PLSC 3355 (3). THE POLITICAL ECONOMY OF THE WELFARE STATE. Focuses on the origins, evolution, and management of industrial democracy in Europe and America. It emphasizes the interconnections between political and economic challenges inherent in policy making, and the economic implications of public policy.

PLSC 3358 (3). GOVERNMENT AND POLITICS OF RUSSIA. Examines attempts to reform the former Soviet Union since 1985. In particular, it analyzes the social and political processes behind the demise of the Soviet system. Emphasis is placed on sources for support of, as well as obstacles to, political, economic, and social reform in post-communist Russia.

PLSC 3359/CFA 3359 (3). FROM COMMUNISM TO DEMOCRACY. The rise and fall of communist regimes and the transition to democracy in Eastern Europe and the former Soviet Union, emphasizing social, economic, and political influences affecting divergent paths to democracy.

PLSC 3360 (3). FOUNDATIONS OF POLITICAL THOUGHT. Main currents of political thought in their historical settings from Plato to the 17th century, with a critical evaluation of those elements of continuing worth.

PLSC 3361 (3). MODERN POLITICAL THOUGHT. Main currents of political thought in their historical setting from the 17th century to the present.

PLSC 3362 (3). TWENTIETH-CENTURY POLITICAL THOUGHT. Analysis of the political implications of selected responses to the problems of modern mass society.

PLSC 3363 (3). AMERICAN POLITICAL THOUGHT. A historical and analytical survey of the thinkers, actors, and main currents of American political thought from the founding of the first European colonies to the present day.

PLSC 3364 (3). STUDIES IN POLITICAL THEORY – ABROAD. SMU credit for political science courses in political theory taken in SMU-approved programs abroad.

PLSC 3365 (3). COMMUNISM AND POST-COMMUNISM. Theoretical foundations of communism and its variant forms in practice, explanations for the collapse of Eastern European communist systems, and possible futures of communism.

PLSC 3370 (3). WOMEN AND POLITICS. An analysis and critique of women's role in politics, theories on women's status and power, political activities, ideologies, and programs of feminists, past and present.

PLSC 3381/CFA 3381 (3). CURRENT ISSUES IN INTERNATIONAL POLITICS. An interdisciplinary survey of contemporary issues and challenges in the international arena. The student will research and propose solutions taking into account the multi-dimensional aspects of these international challenges.

PLSC 3382 (3). INTERNATIONAL ORGANIZATIONS: GLOBAL AND REGIONAL. A study of the United Nations and other international agencies in their attempts to deal with the great international political problems of our times.

PLSC 3383 (3). THE AMERICAN FOREIGN POLICY PROCESS. A survey of the contemporary content and the conduct of American foreign policy.

PLSC 3384 (3). STUDIES IN INTERNATIONAL RELATIONS – ABROAD. SMU credit for Political Science courses in International Relations taken in SMU-approved programs abroad.

PLSC 3387/CF 3303 (3). POLITICAL GEOGRAPHY. An examination of topics in international political rivalries within the nation-state system. Major emphasis will be given to the adaptations within that system since 1850 for spatial distributions of physical terrain, populations, economic resources and activities, and political and social divisions.

PLSC 3389 (3). INTERNATIONAL POLITICAL ECONOMY. Introduces students to the study of international political economy. The expansion of trade and foreign direct investment, and

the increase in international migration, are indicators of a new interdependence and globalization. How do nation-states respond to globalization and manage international economic relations?

PLSC 3390 (3). NEGOTIATING INTERNATIONAL TRADE. Examines the means by which countries negotiate international trade. In part, the course is theoretical, examining standard theories of trade. In part it is empirical, with hemispheric trade as the substantive focus. Finally, in part the course is practical. Students are engaged in a computer based simulation exercise with students from other universities.

PLSC 3424 (4). STUDIES IN AMERICAN POLITICS AND GOVERNMENT – ABROAD. SMU credit for political science courses in American politics and government taken in SMU-approved programs abroad.

PLSC 3444 (4). STUDIES IN COMPARATIVE POLITICS AND GOVERNMENT – ABROAD. SMU credit for political science courses in comparative politics and government taken in SMU-approved programs abroad.

PLSC 3464 (4). STUDIES IN POLITICAL THEORY – ABROAD. SMU credit for political science courses in political theory taken in SMU-approved programs abroad.

PLSC 3484 (4). STUDIES IN INTERNATIONAL RELATIONS – ABROAD. SMU credit for political science courses in international relations taken in SMU-approved programs abroad.

PLSC 3902 (9). COMPARATIVE PUBLIC POLICY.

PLSC 4102 (1), 4202 (2), 4302 (3). DIRECTED READINGS. Students develop and execute independent reading or research projects under the guidance of a departmental faculty member, culminating in a written report. *Prerequisites:* Written approval of the instructor and the department chair or a designate, at least sophomore standing, and appropriate introductory and advanced course preparation.

PLSC 4301 (3). WASHINGTON TERM. Intensive study of national political institutions. Includes a four-hour research project (4401), a four-hour internship (4402), and an eight-hour seminar (4403 and 4404). *Prerequisites:* Two courses in political science, at least one at the upper level, that are relevant to the selected program. Available for political science, public policy, or international studies majors or minors.

PLSC 4304 (3). DEPARTMENTAL SEMINAR: SCOPE AND METHODS OF POLITICAL SCIENCE. An overview of the enterprise of political science. It canvasses the areas of interest to the discipline, the questions political scientists pursue, and the ways scholars have addressed these questions.

PLSC 4306 (3). INTERNSHIP IN POLITICAL SCIENCE. Undergraduate students who arrange for part- or full-time jobs in government, political parties, interest groups, or other organizations relate these experiences to their academic curriculum through research and writing, under the guidance of a departmental faculty member. *Prerequisites:* Written approval of the instructor and the department chair or a designate, at least sophomore standing, and appropriate introductory and advanced preparation.

PLSC 4307 (3). DEPARTMENTAL DISTINCTION THESIS. Candidates for departmental distinction write a thesis under the direction of a departmental faculty member, culminating in an oral examination over the field of the thesis. *Prerequisite:* Admission to departmental honors candidacy.

PLSC 4320 (3). SPECIAL STUDIES IN AMERICAN GOVERNMENT AND POLITICS.

PLSC 4321 (3). BASIC ISSUES IN AMERICAN DEMOCRACY. An analysis of current American public policy issues within a theoretical framework. Examines the foundations of concepts and value orientations within which policy considerations are made.

PLSC 4322/CFA 3326 (3). LATINO POLITICS. An analysis of contexts, causes, and consequences of Latino political participation. The focus is on Latinos in the Southwest with some attention to other racial and ethnic groups elsewhere in the U.S.

PLSC 4323 (3). THE POLITICS OF CHANGE IN AMERICA, 1930–2000. Focuses upon American politics and society from 1930 to the present. Examines how America has changed, explains why changes occur and assess the consequences of these changes.

PLSC 4324 (3). POLITICAL DYNAMICS. Use of political parties in formulating political opinions; pressure groups; propaganda; measurement of mass opinions; political leadership.

PLSC 4325 (3). PRACTICAL ELECTORAL POLITICS. An exploration of techniques of political organization drawing on studies of recent campaigns and examining the political pressures that affect policy making in government.

PLSC 4326 (3). PRESIDENTIAL ELECTIONS. An examination of presidential nominations and elections. Topics include voter decision-making, media coverage, campaign finance, delegate selection rules, the Electoral College, and kindred concerns.

PLSC 4327 (3). URBAN POLITICS. Traces ideas and beliefs about the nature and purpose of local political arenas in the American experience from New England townships to modern metropolises.

PLSC 4328 (3). SEMINAR: AMERICAN GOVERNMENT AND POLITICS. An overview of the central questions in the study of American government and politics.

PLSC 4329 (3). THE POLITICS OF ECONOMIC POLICY. Analysis of interactions among political beliefs, economic theories, political processes, and public policies that shape and change the American political economy.

PLSC 4330 (3). POLITICS AND FILM. Uses films as a vehicle for understanding politics, leadership, and the political process in the U.S. Involves substantial reading and writing. *Prerequisites:* political science or film studies major/minor, or permission of instructor.

PLSC 4331 (3). GOVERNMENT AND BUSINESS. Analysis of the roles of business in American policies and the impacts of political and governmental decisions on business activity.

PLSC 4332 (3). POLITICS OF LITIGATION. An examination of the interaction between law and politics and, in particular, of the role interest groups have played in the litigation process.

PLSC 4333 (3). POLICY, POLITICS AND THE BUDGET. Examines the federal budget's historical evolution and contemporary significance. The constitutional division of the power of the purse between the legislative and executive branches; presidential-congressional conflicts over control of budget policy; major policy issues relating to the size of the federal budget; spending and tax policy priorities; and deficit and debt problems.

PLSC 4334/HRTS 4334 (3). THE POLITICS AND LEGACIES OF THE CIVIL RIGHTS MOVEMENT. Examines the politics and legacies of the movement that destroyed the system known as Jim Crow and removed barriers to political participation by African Americans.

PLSC 4335 (3). CONSTITUTIONAL LAW. Examines the scope of constitutional power in the American governmental system, questions of separation of powers between the branches of the national government, and the federal relationship between the national government and state governments.

PLSC 4336 (3). CIVIL LIBERTIES: FIRST AMENDMENT AND PRIVACY. Examines the place and treatment of expression, religion, and personal autonomy in the American Constitution and in the cases in which the Supreme Court has defined and applied the Constitution.

PLSC 4337 (3). CIVIL RIGHTS. Examines changes wrought in the American system of governance by addition of the Fourteenth Amendment, particularly its Equal Protection Clause, and the ways the Supreme Court has interpreted and applied it over time. Topics of attention include racial discrimination, sex discrimination, and equality in the political process.

PLSC 4338 (3). CRIMINAL PROCESS RIGHTS. Examines the application of the principles of ordered liberty and the Bill of Rights to criminal process disputes. Its concerns extend through initial police investigation, trial preparation, trial and jury concerns, and the post-trial determination of punishment.

PLSC 4339 (3). WOMEN AND THE LAW. The status of women in the American legal system, including an assessment of women defined as a legal category and the impact of increasing numbers of women lawyers, judges, and criminals.

PLSC 4340 (3). SPECIAL STUDIES IN COMPARATIVE GOVERNMENTS AND POLITICS.

PLSC 4341/CFA 3304 (3). COMPARATIVE RIGHTS AND REPRESENTATION. Examines the tension that exists between rights and democratic representation. Explores judicial social-policy making, individual versus collective rights, aboriginal rights and affirmative action.

PLSC 4342 (3). WHY NATIONS REVOLT. Survey of the major theories that have been developed to explain the occurrence of revolutions. Examines various revolutions as case studies, including the French, Russian, Nazi, and Chinese revolutions, and at least one peasant revolution in the Third World.

PLSC 4343 (3). NATIONALITIES AND MINORITIES IN EUROPE. A study of minority issues in Europe. The Balkans, the Baltics, the Basques: what is the fighting for? In modern Europe, minority issues are constantly debated and acted upon, both by majorities and minorities. This course is part of the SMU-in-Copenhagen program.

PLSC 4344 (3). GENDER IN WORLD POLITICS. A survey of classic and contemporary scholarship on women and gender in world politics, focusing on theoretical and empirical explorations of political participation, representation, activism, democracy, war, and human rights.

PLSC 4348 (3). SEMINAR: COMPARATIVE GOVERNMENT AND POLITICS. An overview of the central questions in the study of comparative government and politics.

PLSC 4353 (3). POLITICAL ECONOMY OF EAST ASIA. Analysis of the interplay between politics and economics in East Asia, examining in what ways and to what degree the growth experiences of the high-performing economies in East Asia shed light on the prospects for long-term success of reforms currently underway in China.

PLSC 4354 (3). THE THIRD WORLD AND NORTH-SOUTH RELATIONS. An inquiry into problems and theories of political economy of development and dependency in the third world countries.

PLSC 4355 (3). COMPARATIVE POLITICAL ECONOMY OF INDUSTRIALIZED DEMOCRACIES. Examines the nature and workings of the political economies of industrialized democracies of North America, Europe, and the Pacific in comparative perspective. *Recommended:* Prior completion of one introductory political science and/or economics course.

PLSC 4356 (3). LATIN AMERICAN POLITICAL ECONOMY. Focuses on the challenges facing public policy in the Latin American region and how to interpret that region's politics and economic frustrations. Attentive to the basic rules of the Latin American political game and the lack of agreement on them.

PLSC 4357 (3). SOUTH AMERICAN POLITICS.

PLSC 4358/PLSC 3358 (3). SOVIET POLITICS REVOLUTION TO REVOLUTION. A survey of Soviet political history from 1917–1991. Special attention is devoted to the way in which each Soviet leader attempted to change the political and economic system.

PLSC 4360 (3). SPECIAL STUDIES IN POLITICAL THEORY.

PLSC 4361 (3). POLITICAL REGIMES: UNDERSTANDINGS OF ROME. Focuses on the various understandings of Rome as developed in the writings of Plutarch, St. Augustine and Machiavelli. Addresses three fundamentally different conceptions of the regime – beginning with the Roman Empire, considering the effects of the Christian Order, and addressing the new modes and orders introduced by Machiavelli.

PLSC 4362 (3). MEDIEVAL POLITICAL PHILOSOPHY. Introduces the tradition of political philosophy represented by various thinkers of the medieval period. Through an analysis of Islamic, Jewish and Christian authors, students attempt to come to an understanding of the fundamental issues at stake in their works. The course also examines closely the alternative solutions proposed for solving what has been termed the theological-political problem.

PLSC 4363/CFA 3363 (3). RELIGION AND POLITICS IN THE WESTERN TRADITION. Analysis of the relationship between religious faith and civil government in the Western tradition. Focuses on thinkers and controversies from the late Roman empire to the contemporary United States.

PLSC 4365/PLSC 3365 (3). COMMUNISM.

PLSC 4368 (3). SEMINAR: POLITICAL THEORY AND PHILOSOPHY. An overview of the central questions in the study of political theory and philosophy.

PLSC 4369 (3). REPUBLICANISM AND THE GOOD SOCIETY. Our understanding of liberal democracies owes a great deal to republican thought. This course seeks to examine the intellectual history of republicanism, its uneasy alliance with liberalism, and its various contemporary manifestations – particularly in the United States and Canada.

PLSC 4371 (3). JURISPRUDENCE. An introduction to alternative ways of viewing the sources, functions, and uses of law. Attention is given to various understandings of concepts of justice and rights.

PLSC 4380 (3). SPECIAL STUDIES IN INTERNATIONAL RELATIONS.

PLSC 4381 (3). NATIONAL SECURITY POLICY. Examines the changing nature of foreign policy and national security policy issues in a world characterized by growing interdependence and globalization, with particular attention to how technology offers both new opportunities and new dangers. Includes analysis of counterterrorism and homeland security, cyberterrorism, global public health, energy security, nuclear proliferation, and global financial stability. Students learn how to analyze national security policy objectives by using real-world situations and how to determine optimal policy implementation by examining potential actors, potential hurdles to implementation, and sources of funding.

PLSC 4382 (3). THE POLITICS OF MILITARY FORCE. An examination of uses of U.S. military force as a political instrument and a political instrument and an attempt to judge its effectiveness as a tool of American foreign policy since the end of the World War II.

PLSC 4384 (3). AMERICAN-RUSSIAN RELATIONSHIP. Surveys American-Russian relations since 1945. Examines the relationship during the Cold War, with emphasis on how and why the Cold War began and then investigates the reasons for the end of the Cold War. Explores the nature of the relationship in the post-Cold War era, with emphasis on common interests and issues that divide the two nations. Incorporates a negotiation simulation exercise between American and Russian negotiating teams.

PLSC 4385 (3). INTER-AMERICAN RELATIONS. A survey of the diplomatic and commercial relations between the United States and the republics of the western hemisphere with particular attention to involvement in the Caribbean area.

PLSC 4386 (3). INTERNATIONAL RELATIONS OF EAST ASIA. A survey of the history of diplomacy, war, and economic relations of the East Asian region while introducing the leading theories and debates about regional cooperation in the field of international relations.

PLSC 4388 (3). SEMINAR: INTERNATIONAL GOVERNMENT AND POLITICS. An overview of the central questions in the study of international government and politics.

PLSC 4391 (3). NAFTA AND FREE TRADE IN THE AMERICAS. Exploration of the domestic politics of the three NAFTA countries leading to the North American Free Trade Agreement, the effects of the agreement, and possibilities for expanding free trade in the Americas.

PLSC 4398 (3). NUCLEAR WEAPONS AND WORLD POLITICS. Focuses on the nuclear rivalry between the U.S. and the USSR, and on how this rivalry has transformed the nature and conduct of world politics. Emphasis is placed on theoretical and analytical perspectives, including deterrence theory, bargaining, and game theory. Attention is also given to the implications stemming from both the vertical and horizontal proliferation of nuclear weapons.

PLSC 4401 (4), 4402 (4), 4403 (4), 4404 (4). WASHINGTON TERM. Intensive study of national political institutions. Includes a four-hour research project (4401), a four-hour internship (4402), and an eight-hour seminar (4403 and 4404). *Prerequisites:* Two courses in political science, at least one at the upper level, that are relevant to the selected program. Available for political science, public policy, or international studies majors or minors.

PLSC 5341 (3). EUROPEAN POLITICS: THE EUROPEAN UNION. Europe is in a period of transformation, emerging as a major player on the world scene, while internally developing a novel balance between unification of countries and the rise of local identities. What are the forces that shape the new Europe? How does European policy materialize and who makes the decisions? The course is part of the SMU-in-Copenhagen program.

PLSC 5383 (3). SEMINAR ON REGIONAL CONFLICTS. A study of the problems of European security, with a particular emphasis on the issues confronting populations and policy makers after the Cold War, on the search for a new European security order, and on the emergence of new threats to security. This course is part of the SMU-in-Copenhagen program.

Psychology

www.smu.edu/psychology

Professor Ernest Jouriles, **Department Chair**

Professors: Alan Brown, George Holden, Ernest Jouriles, Renee McDonald, Thomas Ritz. **Associate Professors:** Robert Hampson, Alicia Meuret, David Rosenfield, Lorelei Simpson, Jasper Smits. **Assistant Professors:** Austin Baldwin, Michael Chmielewski, Chrystyna Kouros, Andrea Meltzer, Amy Pinkham. **Research Assistant Professor:** Mark Powers. **Senior Lecturers:** Michael Crow, Susan Hornstein, Chris Logan. **Lecturer:** James Calvert.

Psychology is the study of human behavior and cognition. A degree in psychology equips students with a variety of fundamental and transferable skills. These include the ability to think scientifically, interpersonal and communication skills, and a sensitivity to diversity. A degree in psychology provides students with a solid academic foundation and prepares graduates to succeed in a variety of careers in addition to psychology, including law, medicine and business.

The research interests of faculty members fall into three broad areas of inquiry: psychopathology, biological and health psychology, and family psychology. There is ample opportunity for students to become involved in faculty research. Highly motivated students can choose from a series of three departmental distinction courses that provide students with the opportunity to design and execute their own research project.

Bachelor of Arts With a Major in Psychology

Prior to declaring a psychology major, students must complete PSYC 1300, 3382 and STAT 2331 or 2301 with no individual grade less than a *C-*.

	Credit Hours
PSYC 1300, 3382	6
STAT 2331 *or* 2301	3
Five courses chosen from the following: PSYC 2314, 2351, 3310, 3341, 3360, 3370, 4320	15
Additional courses at the 3000 level or above	12
	36

Practicum, research training and independent study courses (PSYC 3099, 3199, 3299, 3399, 4395) may be taken only on a pass/fail basis. Such courses will not count toward the major.

Departmental Distinction

The department offers a distinction program to select majors with high academic achievement. The program consists of a sequence of up to three classes where students, under the guidance of their faculty mentor, develop and conduct an independent research study. The program includes designing the study, collecting and analyzing the data, and then writing a paper for conference presentation and journal submission. Interested students should consult with the departmental adviser or director of undergraduate studies.

Minor in Psychology

PSYC 1300 must be successfully completed with a grade of *C-* or better before declaring a psychology minor. In addition to PSYC 1300, the minor requires three PSYC courses chosen from PSYC 2314, 2351, 3310, 3341, 3360, 3370, 3382, 4320, and two elective courses in psychology (six hours) at the 3000 level or higher. Nine

hours of the 18 needed for the minor must be at the 3000 level or above. Practicum, research training and independent study courses (PSYC 3099, 3199, 3299, 3399, 4395) may be taken only on a pass/fail basis. Such courses will not count toward the minor.

The Courses (PSYC)

PSYC 1300 (3). INTRODUCTION TO PSYCHOLOGY. Broad introduction to psychology as a behavioral science with special emphasis on cognition, development, learning, social, personality, physiological, and clinical psychology (psychopathology and psychotherapy).

PSYC 2314 (3). DEVELOPMENTAL PSYCHOLOGY. A survey of the processes and variables that influence the development of the fetus, infant, child, and adolescent. Emphasis is on theories and research in such areas as perceptual, cognitive, language, social/emotional, and moral development.

PSYC 2351 (3). ABNORMAL PSYCHOLOGY. A study of the theories, causes, assessment, and treatment of abnormal behavior, including depression, anxiety, psychosis, personality disorders, and other forms of psychopathology in adults. There is an examination of the continuum of normal and abnormal behavior, with consideration of historical and cultural perspectives, ethical concerns, and research methodologies in understanding psychological disorders. *Prerequisites:* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 3099 (0). RESEARCH TRAINING. Supervised experience in faculty research projects in labs, clinics, or field settings. May involve library research, participant recruitment, data collection, and data input and analysis. *Prerequisites:* PSYC 1300 and instructor approval.

PSYC 3192 (1). DISTINCTION SEMINAR IN PSYCHOLOGY: DATA COLLECTION AND ANALYSES. The second course in a three-course sequence for the psychology distinction program. During the term, students collect their data and begin analyses. In addition, continued attention is devoted to scientific writing. *Prerequisite:* Instructor approval.

PSYC 3199 (1). RESEARCH TRAINING. Supervised experience in faculty research projects in labs, clinics, or field settings. May involve library research, participant recruitment, data collection, and data input and analysis. *Prerequisites:* PSYC 1300 and instructor approval.

PSYC 3291 (2). DISTINCTION SEMINAR IN PSYCHOLOGY: RESEARCH PROJECT DEVELOPMENT. The first course in a three-course sequence for the psychology distinction program. Includes advanced training in research methodology. During the term, students design a rigorous research project. *Prerequisite:* Instructor approval.

PSYC 3299 (2). RESEARCH TRAINING. Supervised experience in faculty research projects in labs, clinics, or field settings. May involve library research, participant recruitment, data collection, and data input and analysis. *Prerequisites:* PSYC 1300 and instructor approval.

PSYC 3310 (3). MEMORY AND COGNITION. A survey of how information is encoded, stored, and retrieved in adults. Topics may include attentional processes, perception, verbal learning, and memory. *Prerequisites:* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 3335 (3). PSYCHOLOGY OF THE FAMILY. A basic introduction to understanding the family. Topics include coupling and dating, parenting of young and older children, and progression to older age. Also, understanding competent family functioning, dealing with health and illness, and family counseling. *Prerequisites:* PSYC 1300 and one additional psychology course or instructor approval.

PSYC 3341 (3). SOCIAL PSYCHOLOGY. Addresses the question of how an individual's thoughts, feelings, and behaviors are influenced by his/her social environment; includes topics such as attitude change, conformity, attraction, aggression, and small-group behavior.

PSYC 3360 (3). HEALTH PSYCHOLOGY. A basic introduction to the subject. Topics include causes and correlates of health, illness, and dysfunction, as well as the interplay of emotions, cognitions, and behavioral and/or physical factors. *Prerequisites:* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 3364 (3). FORENSIC PSYCHOLOGY. Examination of the interface between psychology and the legal system, focusing in particular on the role of mental health experts in criminal trials and civil disputes. *Prerequisites:* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 3365 (3). ORGANIZATIONAL PSYCHOLOGY. Psychological principles applied to organizations, both business and volunteer, emphasizing a systems approach and including personnel selection, leadership, motivation, communication, group dynamics, and an overview of organizational development. *Prerequisites:* PSYC 1300 and one additional psychology course or instructor approval.

PSYC 3370 (3). PERSONALITY. An examination of theories and research that address the underlying bases of personality and the causes of individual differences. Emphasis is on the normal personality, but the causes of abnormal personality development are also considered. *Prerequisites:* PSYC 1300 and one additional psychology course or instructor approval.

PSYC 3371 (3). PSYCHOLOGY OF WOMEN. This course focuses on understanding women as individuals. Also, personality theories as they relate particularly to women. Modern women's options and conflicts, motives and values, and their perceptions of their individuality in the face of rapid social change are examined. *Prerequisites:* PSYC 1300 and one additional psychology course or instructor approval.

PSYC 3375 (3). HUMAN RIGHTS FROM A PSYCHOLOGICAL PERSPECTIVE. Examines human rights as informed by psychological concepts and research. Insights from social, clinical, and developmental psychology are used to better understand human rights violations and issues. *Prerequisite:* Instructor approval.

PSYC 3382 (3). RESEARCH METHODS IN PSYCHOLOGY. Design and evaluation of psychological research, with emphasis on scientific method, data collection, experimentation, control procedures, validity, reliability, and report-writing skills. This is a challenging and rigorous class in research; required for psychology majors. *Prerequisites:* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 3384 (3). SPECIAL TOPICS PSYCHOLOGY ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle. A maximum of 6 credit-hours permissible towards the B.A. in psychology.

PSYC 3399 (3). RESEARCH TRAINING. Supervised experience in faculty research projects in labs, clinics, or field settings. May involve library research, participant recruitment, data collection, and data input and analysis. *Prerequisites:* PSYC 1300 and instructor approval.

PSYC 3484 (4). SPECIAL TOPICS PSYCHOLOGY ABROAD. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle. A maximum of 6 credit-hours permissible towards the B.A. in psychology.

PSYC 4320 (3). BIOLOGICAL PSYCHOLOGY. An advanced overview of the topic. Classes focus on understanding perception, consciousness and sleep, motor behavior, emotion, and learning, with evidence from biological and medical fields. Students learn basic anatomy, physiology, and research methods. Applications to research and treatment are addressed. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4321 (3). BEHAVIORAL ACTION OF DRUGS. Addresses the principles of drugs and behavior, classification, and chemical effects of behaviorally active drugs; influences of environmental, response, and task variables; and the evaluation and treatment of addiction. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4325 (3). PSYCHOLOGY OF EMOTIONS. An advanced introduction to the topic, with a focus on theory as well as psychological and psychobiological research on humans and animals. Considers the role that cognitions, culture, language, and the nervous system play in determining emotions. Classes include group projects and demonstrations. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4334 (3). PSYCHOLOGICAL DISORDERS OF CHILDREN. Theories, causes, assessment, and treatment of abnormal behavior from infancy through adolescence. Topics include behavioral and emotional disorders, as well as developmental and learning problems. Historical and cultural perspectives, ethics, and research methods are also addressed. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4339 (3). PSYCHOLOGY OF AGING. An exploration of the biological, psychological, and sociocultural influences on adult development and aging. Difficulties specific to older adults

such as elder abuse and neurodegenerative diseases are also covered. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4341 (3). SOCIAL COGNITION. Surveys social perception and cognition, including person perception, nonverbal communication, emotional expression, accuracy, and stereotyping. Considers ecological, evolutionary and cognitive theoretical approaches. *Prerequisites:* PSYC 1300, 3341, and 3382, or instructor approval.

PSYC 4342 (3). CLOSE RELATIONSHIPS. Covers research and theory in the psychology of close relationships, including different theoretical perspectives, with emphasis on attraction, relationship development and maintenance, communication, conflict resolution, and relationship dissolution. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4352 (3). INTRODUCTION TO CLINICAL PSYCHOLOGY. A survey of the important issues and subfields of clinical psychology from the viewpoint of the scientist-practitioner model. Covers research, assessment, diagnosis, and theories in the area of psychotherapy. Intended for students contemplating graduate school in clinical psychology or related fields. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

PSYC 4363 (3). PSYCHOLOGY OF CONFLICT RESOLUTION. Covers research and theory in the psychology of interpersonal conflict, as well as mechanisms for resolving, managing, or avoiding conflict. Emphasized domains are alternative dispute resolution, close relationships, and workplace and international conflict. *Prerequisites:* PSYC 1300, 3341, and 3382, or instructor approval.

PSYC 4376 (3). PSYCHOLOGY OF RELIGION. Introduces the major issues, theories, and empirical approaches to the psychology of religion. Topics covered include the role that religion plays in the beliefs, motivations, emotions, and behavior of individuals. *Prerequisite(s):* PSYC 1300 and one additional psychology course, or instructor approval.

PSYC 4380 (3). HISTORY OF PSYCHOLOGY. Covers the most important movements and individuals contributing to the development of modern psychology. *Prerequisite(s):* Instructor approval or PSYC 1300, 3382, and one additional psychology course.

PSYC 4381 (3). SPECIAL TOPICS. Cover topics that may have temporary or limited interest. Topics include child development, family violence, advanced family psychology, anxiety disorders, and positive psychology. *Prerequisites:* PSYC 1300 and 3382, or instructor approval.

PSYC 4393 (3). DISTINCTION SEMINAR IN PSYCHOLOGY: COMPLETION OF RESEARCH PROJECT. The third course in a three-course sequence for the psychology distinction program. Over the course of the term, students complete their research projects and prepare them for dissemination. *Prerequisite:* Instructor approval.

PSYC 4395 (3). PRACTICUM/INTERNSHIP. An intensive study of interpersonal helping relationships based upon psychological theories and research findings, with emphasis on supervised personal involvement with others. *Prerequisites:* PSYC 1300, 3382 and instructor approval.

PSYC 5381 (3). SPECIAL TOPICS. Designed to cover topics that may have temporary or limited interest. Topics include psychology and law, health psychology, and the psychology of attachment. *Prerequisites:* PSYC 1300, PSYC 3382, and one additional psychology course, or instructor approval.

Public Policy

Professor Dennis Ippolito, **Director**

The public policy major is an interdisciplinary program in economics and political science. The B.A. degree in public policy is designed to provide students with the analytical skills and historical context to understand and deal with contemporary policy issues. The major in public policy is useful as preparation for work in government and business and as preparation for postgraduate study in law, public policy and the social sciences.

Bachelor of Arts With a Major in Public Policy

The B.A. degree in public policy requires a total of 39 hours. The degree consists of two components:

1. A total of 24 hours of core courses:
   ECO 1311, 1312 and **3301**
   MATH 1309 or **1337**
   PLSC 1320, and **PLSC 1340** or **1380**
   PLSC 3320
   STAT 2301, 2331 or **4340**
2. At least 15 hours of advanced courses selected from the fields below, with no fewer than six hours in economics and six hours in political science or public policy.

To meet the advanced course requirements, students must take at least six hours in each of any two of the fields of political economy, law and social policy, and international politics and policy, as well as three hours from the quantitative methods field. **Note:** Students must receive at least a *C-* in all classes counting toward the major. A maximum of 12 hours of (preapproved) advanced-level courses in SMU-approved study abroad programs may be counted toward the major.

Political Economy

ECO 4366 Economics of the Public Sector
ECO 4371 Theory of Industrial Structure
ECO 4382 Economics of Regulated Industries
ECO 4385 Macroeconomics: Theory and Policy
ECO 5361 Natural Resources and Energy Economics
ECO 5365 Public Finance
PLSC 3329 Bureaucracy and Regulatory Politics
PLSC 3355 The Political Economy of the Welfare State
PLSC 3389 International Political Economy
PLSC 3390 Negotiating International Trade
PLSC 4329 The Politics of Economic Policy
PLSC 4333 Policy, Politics and the Budget
PLSC 4356 Latin American Political Economy

Law and Social Policy

ECO 4351 Labor Economics
ECO 4361 Economics of Education
ECO 5320 Health Economics
ECO 5337 Urban Economics
ECO 5353 Law and Economics
ECO 5357 Economics of Human Resources

PLSC 3321 Congress and the Legislative Process
PLSC 3327 Texas Politics
PLSC 3330 Law, Politics and the Supreme Court
PLSC 3333 Environmental Policy
PLSC 3335 Judicial Process
PLSC 3370 Women and Politics
PLSC 4321 Basic Issues in American Democracy
PLSC 4334 Politics and Legacies of the Civil Rights Movement
PLSC 4335 Constitutional Law
PLSC 4336 Civil Liberties: First Amendment and Privacy
PLSC 4337 Civil Rights
PLSC 4338 Criminal Process Rights
PLSC 4339 Women and the Law
PLSC 4341 Comparative Rights and Representation
PP 3310 Environmental Policy

International Politics and Policy

ECO 3321 International Economic Policy
ECO 4357 International Trade
ECO 4358 International Macroeconomic Theory and Policy
ECO 5360 Economic Development: Macroeconomic Perspectives
PLSC 3340 Western European Politics
PLSC 3345 Governments and Politics of the Middle East
PLSC 3346 Japanese Politics and Society
PLSC 3347 Governments and Politics of Africa
PLSC 3348 Governments and Politics of Latin America
PLSC 3352 Chinese Politics
PLSC 3358 Government and Politics of Russia
PLSC 3383 The American Foreign Policy Process
PLSC 3389 International Political Economy
PLSC 4356 Latin American Political Economy
PLSC 4381 National Security Policy
PLSC 4382 Politics of Military Force
PLSC 4384 The American-Russian Relationship
PLSC 4386 International Relations of East Asia
PLSC 4391 NAFTA and Free Trade in the Americas

Quantitative Methods

ECO 5341 Strategic Behavior
ECO 5350 Introductory Econometrics
ECO 5370 Cost-Benefit Analysis
ECO 5375 Economic and Business Forecasting

The Courses (PP)

PP 3310/PLSC 3333 (3). ENVIRONMENTAL POLICY. Overview of governmental environmental policies designed to provide a foundation for future application and study in the growing environmental field.

Religious Studies

Professor Carl Johan Elverskog, **Department Chair**

Professors: William Barnard, Mark Chancey, Charles Curran, Carl Johan Elverskog, Serge Frolov, Robin Lovin. **Associate Professors:** Richard Cogley, Jill DeTemple, Kate Carté Engel, John Lamoreaux, Steven Lindquist.

Bachelor of Arts With a Major in Religious Studies

The B.A. degree in religious studies is appropriate for a general liberal arts education and for preprofessional training leading to graduate degrees in religious studies, law, theology or other areas of the humanities.

Departmental courses are offered in four areas: philosophical studies of religious ideas and values, historical studies of religious movements and institutions, scientific studies of religious beliefs and behavior, and textual studies of religious traditions and scriptures. A well-balanced program of undergraduate study includes courses from each of these four areas. Students planning to undertake graduate studies are strongly encouraged to take the major with departmental distinction and to complete 12 term hours in either French or German.

Requirements for the B.A. Degree. A total of 30 term hours are required in the department, and 24 must be completed in courses numbered at the 3000 level or above.

	Credit Hours
One from RELI 3306, 3307, 3378	3
RELI 3319 *or* 3326	3
One from the following if not taken for the above requirements:	3
RELI 3306, 3307, 3352, 3365, 3368, 3375, 3377, 3378, 3382, 3384, 3386	
Additional RELI courses at the 3000 level or above	15
Other courses	6
	30

Departmental Distinction

A student majoring in religious studies with a minimum overall GPA of 3.000 and a 3.500 GPA in the major by the middle of the junior year may apply for the degree with departmental distinction. Candidates for distinction must enroll in a directed research tutorial in the fall term of their senior year followed by an independent studies course in the spring term for which they will write a senior thesis. Only the directed research tutorial may be used to fulfill the 30-term-hour requirement for the major.

Minor in Religious Studies

Students majoring in other departments or schools may obtain a minor in religious studies by completing 15 term hours in the department. Nine hours must be completed in courses numbered at the 3000 level or above.

The Courses (RELI)

RELI 1300 (3). SPECIAL TOPICS ABROAD – RELIGIOUS STUDIES. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under a different subtitle.

RELI 1301 (3). WAYS OF BEING RELIGIOUS. A comparative study of the beliefs and practices of a wide variety of religious traditions. Special attention to such perennial themes as God, salvation, evil, morality, and death.

RELI 1303 (3). INTRODUCTION TO ASIAN RELIGIONS. An introductory historical overview of select religious traditions of Asia. The course explores developments in religious and cultural trends expressed in South Asia and East Asia in traditions such as Hinduism, Buddhism, Jainism, Sikhism, Confucianism, Taoism, and/or Shintoism.

RELI 1304 (3). INTRODUCTION TO WESTERN RELIGIONS. A historical introduction to Judaism, Christianity, and Islam. Topics include Moses and ancient Israelite religion; Jesus and early Christianity; rabbinic Judaism; Muhammad and classical Islam; the birth of Protestantism; and Jewish, Christian, and Islamic modernism.

RELI 1305 (3). INTRODUCTION TO PRIMAL RELIGIONS. An introduction to the religious world views and ritual life of such primal cultures as Australian aboriginals, African tribal peoples and native North and South Americans, as well as the significance of the resurgence of neo-paganism in the West.

RELI 1308 (3). RELIGION IN THE UNITED STATES. Explores the role of religion in contemporary American culture, including mainstream civil religion, specific religious traditions, and the interactions among different groups.

RELI 1311 (3). JUDAISM, CHRISTIANITY, AND THE BIBLE. An exploration of the common and distinctive elements in Judaism and Christianity; a study of the historical relationships between Jews and Christians.

RELI 2300 (3), 3300 (3). SPECIAL TOPICS ABROAD – RELIGIOUS STUDIES. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle.

RELI 3302/PHIL 3302 (3). PROBLEMS IN THE PHILOSOPHY OF RELIGION. The philosophy of religion, considering such problems as religious experience, human freedom, good and evil, belief in God and immortality.

RELI 3304 (3). CHRISTIAN THEOLOGY. An exploration of such theological problems as the authority of the Bible, the reality of God, the meaning of Christ, the nature of humanity, and the end of history in light of the biblical heritage and contemporary thought.

RELI 3306 (3). HINDUISM. An exploration of the major attitudes and institutions that define Hinduism, with attention to ideology, social organization, and ritual in light of both historical development and contemporary practice.

RELI 3307 (3). BUDDHISM. Communal rituals, practice, ethics, and political involvement of the Buddhist community (*sangha*) as it has taken form in five cultural areas: India, South Asia, Tibet, East Asia, and America.

RELI 3308 (3). CHRISTIAN ETHICS AND MORAL ISSUES. An examination of the relationship between moral reasoning and Christian belief. An analysis of various Roman Catholic and Protestant theories of religious ethics and of specific questions of personal conduct and social policy.

RELI 3309/CF 3361 (3). BIOETHICS FROM A CHRISTIAN PERSPECTIVE. This course will examine bioethics from a Christian ethical perspective with special attention to different methodological approaches to the significant themes and realities involved (e.g., life, health, suffering, death), and to the most important issues faced today.

RELI 3310/SOCI 3320 (3). THE SOCIAL SCIENTIFIC STUDY OF RELIGION. Introduction to scientific ways of thinking about the social, cultural, and psychological aspects of religious life. Attention is given to major thinkers and theories dealing with religion in the disciplines of anthropology, psychology, sociology, and the social-scientific study of religion.

RELI 3314 (3). STUDIES: COMPARATIVE RELIGION. An examination of a particular topic or theme as expressed in a variety of religious traditions, Eastern and Western, ancient and modern. Topics will vary from term to term.

RELI 3315 (3). RELIGION IN POLITICS. An examination of the impact of religious belief and ethical thought, as well as social, cultural, and psychological factors, on the involvement of religious people in the political sphere. The course introduces the social-scientific study of religion to aid in the analysis of current and recent case studies, ranging from the conservatism of

the Far Right to the revolution of the Left, and involving Christian, Jewish, Muslim, Hindu, and Buddhist traditions.

RELI 3316/CFA 3306 (3). RELIGION AND SCIENCE. Explores how religion and science understand such topics as the origins and destiny of the universe and the evolution of life.

RELI 3318/CF 3316 (3). THE HERO IN THE BIBLE AND THE ANCIENT NEAR EAST. An examination of concepts of the hero in the literatures of ancient Mesopotamia, Canaan, and Israel, with special attention to the nature of traditional narrative and to the relationship between the hero, society, and the self.

RELI 3319 (3). HEBREW BIBLE. An introduction to the Old Testament and to the religion and history of ancient Israel. Special emphasis is given to the ancient Near Eastern roots of biblical religion and to the modern interpretation of biblical myth, epic, and prophecy.

RELI 3320 (3). CLASSICAL JUDAISM. An introduction to the study of religion through examination of Judaism. The course looks at central Jewish religious ideas and their development within the rabbinic and medieval periods. Special attention is given to conflicts and controversies, such as Judaism's rejection of early Christianity, heretical movements within medieval Judaism, and Jewish attitudes toward other religions.

RELI 3321/CF 3332 (3). RELIGION AND THE HOLOCAUST. A study of responses to the Holocaust by Jews and Christians. The course will begin with an overview of the history of the Holocaust as it affected the Jewish communities of Central and Eastern Europe. Students will then read personal memoirs of survivors of ghettos, concentration camps, and Nazi Germany. Post-war responses will include questions of faith after the Holocaust; Christian responsibility for modern anti-Semitism; the impact of the Holocaust on the creation of the State of Israel and Middle East politics today; and post-war relations between Jews and Germans.

RELI 3324 (3). AMERICAN JUDAISM. An examination of Jewish life in America, including history, literature, cultural expressions, and religious beliefs from the 17th century to the present.

RELI 3326 (3). NEW TESTAMENT. An introduction to the writings of the New Testament, the formative events, and the people who played leading roles in the origin of Christianity.

RELI 3329 (3). ISLAM. An examination of the history, doctrines, and rituals of the Muslim community, including Islam in the past and present and in its global context.

RELI 3330 (3). HISTORY OF CHRISTIANITY. An introduction to the European development of Christianity, focusing on the key movements, the outstanding leaders, and crucial turning points in the history of Christianity.

RELI 3331 (3). RENEWAL: ROMAN CATHOLICISM. The main section of the course concentrates on a study of the more significant documents of the Second Vatican Council (1962–1965). An introductory part considers the background prior to the Second Vatican Council and the changes that helped bring it about. A concluding part deals with the more significant developments in Roman Catholicism in the last 30 years.

RELI 3333 (3). RELIGION IN AMERICA. A consideration of the history of religion in America from the colonial period to the present. Special emphasis on either selected religious groups, movements, or thinkers.

RELI 3334 (3). CONSERVATISM AND LIBERALISM IN CHRISTIANITY. An examination of the fundamentalist, evangelical, and liberal understandings of Christianity, with attention to the issues at stake, and the problems and possibilities of dialogue.

RELI 3335 (3). RELIGIOUS SECTS IN AMERICA. An examination of new religious movements that originated in America, e.g., Mormonism; Seventh-Day Adventism; Scientology; the Church of Christ, Scientist (Christian Science); and the Nation of Islam, as well as religious movements in the U.S. that originated abroad, e.g., Hasidic Judaism, Theosophy, the Unification Church, the Hare Krishna movement, and Baha'i.

RELI 3336 (3). AFRICAN-AMERICAN RELIGIOUS HISTORY. An examination of the major movements, figures, and critical issues in African-American religious history. The focus is on the U.S., although West Africa, Caribbean, and South American materials are included. Special attention is given to slave religion, the civil rights movement, and Black criticism of Christianity.

RELI 3337/CF 3356 (3). CHRISTIANITY AND AMERICAN PUBLIC LIFE. Course objectives include: 1) to acquaint students with some recent criticisms of the dangers of individualism permeating American understanding and life; 2) to propose the communitarian dimensions of

human existence from the Christian perspective; and 3) to help students enter more critically into the dialogue about the role of religion in pluralistic contemporary American society.

RELI 3338/CFA 3338 (3). CHRIST AS CULTURAL HERO. An exploration of the impact of Jesus on the history of Western culture, not only in religion and philosophy, but in the fine arts, literature, and politics.

RELI 3339/CFA 3339 (3). THE PURITAN TRADITION IN ENGLAND AND AMERICA. An examination of the religious, political, scientific, economic, and literary dimensions of the Puritan movement in Tudor-Stuart England and in colonial America.

RELI 3340 (3). RELIGIOUS EXPERIENCE. An examination of the varieties of religious experience from traditional forms of mystical and ecstatic experience, to nontraditional forms of altered states of consciousness. Attention is given to social, cultural, ethical, psychological, and existential dimensions of religious experience approached from a cross-cultural perspective.

RELI 3341 (3). RELIGION IN THE UNITED STATES SINCE 1865. Explores American religion and the role of religion in politics, science and knowledge, community, gender and family, and culture.

RELI 3342 (3). RELIGION IN THE UNITED STATES TO 1865. Investigates the foundations of American religious culture, including native, African, and European traditions; colonization; early evangelicalism; the Revolutionary War; and the religious culture of the new United States.

RELI 3343 (3). RELIGION AND THE AMERICAN REVOLUTION. This course will investigate the history of religion and the American Revolution, including colonial background; evangelicalism and Enlightenment; and the influence of religion on Founding documents and leaders.

RELI 3349 (3). EARLY CHRISTIANITY. Major developments in the history of Christianity from 100-600. Emphasis is placed on institutional and ideological developments.

RELI 3350 (3). HISTORY OF BIBLICAL INTERPRETATION. A survey of the interpretive approaches to the Bible in Jewish and Christian traditions from ancient times to the modern era. Topics will include interpretation in the biblical period, rabbinic and early Christian exegesis, mystical interpretation, and modern historical scholarship. The social context and the aims of interpretation will be key concerns of the course.

RELI 3352/CF 3346 (3). LOVE AND DEATH. An exploration of love and death in the mythologies of Mesopotamia, Egypt, Canaan, Greece, and India. The interaction of these twin themes will be pursued as a key to the religious and philosophical perspectives of these ancient peoples. The significance of ancient mythology for modern reflection will be a central concern throughout the course.

RELI 3353/CFB 3353 (3). LATINO/A RELIGIONS. An introduction to the Latino/a religions and religious practices in the United States, with a special emphasis on social constructions of the borderland.

RELI 3358/CFA 3322 (3). PSYCHOLOGY OF RELIGION. An investigation of the biological and psychological underpinning of religious belief, behavior, and experience, as well as the psychological and biological consequences of religion.

RELI 3359 (3). NORDIC MYTHOLOGY. An examination of the beliefs, practices, and values of the Teutonic peoples prior to the Christianization of Northern Europe.

RELI 3360 (3). THE HISTORY OF JUDAISM. An overview of both the historical development of the Jewish tradition and its central laws, religious practices, and theology.

RELI 3362 (3). ISLAM AND THE WEST. A study of past and present encounters between Islam and the West, with special attention to the bearing of the contemporary Islamic resurgence upon these encounters today.

RELI 3364 (3). NATIVE AMERICAN RELIGIONS. An investigation of the mythologies of North America, centering on Southwestern and Northern Plains cultures. Native texts will be approached by way of modern theories of the interpretation of myth, ritual, and religion. Topics include creation myths, culture heroes, trickster tales, sacred music and dance, and rites of healing and passage.

RELI 3365/CF 3339 (3). UNDERSTANDING SELF: EAST AND WEST. An examination of several basic notions pertaining to selfhood, including consciousness, cognition, motivation, personal identity and decision, as found in Eastern and Western sources.

RELI 3366/ANTH 3366 (3). MAGIC, MYTH AND RELIGION ACROSS CULTURES. A cross-cultural and comparative exploration of religion, ritual, magic, and supernatural belief systems. Examines how religion permeates other aspects of society and culture.

RELI 3367 (3). THE RELIGIOUS LIFE OF CHINA AND JAPAN. Introduction to the history, thought, and religious practices of Taoism, Confucianism, Shinto, and Mahayana Buddhism.

RELI 3368/CF 3368 (3). WHOLENESS AND HOLINESS: RELIGION AND HEALING ACROSS CULTURES. An exploration of various understandings of the relationship between religion and healing. Analysis of the interface between medical and religious models of health through a wide range of ethnographic examples and theoretical perspectives. Special attention is also given to different religious healing modalities.

RELI 3370 (3). GREAT RELIGIOUS LEADERS. A comparative study of the life and thought of outstanding representatives of diverse religious traditions, with special attention to founders and revitalizers of the world religions.

RELI 3371/CFA 3307 (3). THE WORLD OF THE NEW TESTAMENT. Investigates the intersections of political history, social history, philosophical thought, and religious belief and practice, with particular attention to Judaism and Christianity in their Greco-Roman context.

RELI 3372 (3). BIBLICAL INTERPRETATION AND THE STATE OF ISRAEL. An examination of the ways in which the Bible has been interpreted both in support of and in opposition to the modern state of Israel.

RELI 3374 (3). FEMALE AND MALE IN RELIGION AND CULTURE. How does the study of gender differences affect our understanding of history, religion, and culture? This course will take a critical look at current discussions in the field of women's studies and their impact on contemporary thought.

RELI 3375/CF 3343 (3). THE FEMININE DIVINE. A historical and cross-cultural overview of the relationship between feminine and religious cultural expressions through comparative examinations and analyses of various goddess figures in world religions.

RELI 3377 (3). THE CULTURAL HISTORY OF TIBET. A critical study of Tibetan history, culture, and religion, and how they relate to the representation of Tibet in travel, scholarly, and popular literature.

RELI 3378 (3). RELIGIONS OF CHINA. A historical survey of the religious cultures of China from the ancient Shang dynasty through the contemporary period.

RELI 3380 (3). WOMEN AND RELIGION IN AMERICA. A historical introduction to the role of women in American religious history with special attention to the interplay between women and wider religious and cultural values.

RELI 3381 (3). RELIGION, GENDER, AND ECONOMIC DEVELOPMENT. A consideration of gender and religion in the context of international economic development with a particular emphasis on "tradition" as a category of analysis and evaluation.

RELI 3382 (3). MYSTICISM. An inquiry into mysticism as a path for attaining individual religious fulfillment. Attention to such mystic traditions as Zen, Tantra, Yoga, Sufism, Kabbalah, and Christian mysticism.

RELI 3384/CFB 3384 (3). HINDUISM AND COLONIAL ENCOUNTERS. A critical study of the history of colonialism in India and its impact on social, religious, and political discourse.

RELI 3386 (3). MYTHS, EPICS, AND TALES FROM INDIA. This course examines religious narratives from ancient India. We will read and analyze many examples across different genres (myth, epic, folktale) in text and performance, focusing on literary and historical context and interpretation.

RELI 3387/HRTS 3387 (3). RELIGION AND HUMAN RIGHTS. Major world religious traditions and modern ideas of human rights. Religious understandings of humanity and political order are considered in relation to contemporary human rights issues.

RELI 3388/CF 3371 (3). WESTERN IDEAS OF ENLIGHTENMENT: PLATO, AUGUSTINE, AND KANT. Explores how Plato, Augustine, and Kant defined enlightenment and how their competing ideas shape contemporary understandings of the educated, virtuous, and free person.

RELI 4198 (1), 4199 (1), 4298 (2), 4299 (2). INDEPENDENT STUDY. Individual study with an instructor. Permission of instructor and departmental chair required.

RELI 4300 (3). SPECIAL TOPICS ABROAD – RELIGIOUS STUDIES. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle.

RELI 4352 (3). JESUS AND THE GOSPELS. An examination of canonical and noncanonical Christian Gospels, with special attention to methods of gospel research and to the study of the historical Jesus.

RELI 4354 (3). PROPHETS OF OLD TESTAMENT. An introduction to the writings and religious concepts of the prophets of ancient Israel. Special emphasis will be given to the roots of prophecy in ancient Near Eastern religions, the social role of the Israelite prophet, and comparisons with seers and shamans of modern religious traditions.

RELI 4356 (3). THE BIBLE AND ETHICS. An examination of the ways in which Christians have appealed to the Bible in ethical debates, with special attention to classic ethical approaches, specific ethical issues, and methodological problems.

RELI 4371 (3). PAULINE CHRISTIANITY. A study of Paul and Pauline Christianity, drawing on Paul's letters, the Acts of the Apostles, and other documents of the New Testament.

RELI 4381 (3). INTERNSHIP IN RELIGIOUS STUDIES. This course enables students to gain vocational experience by working in nonsectarian religious organizations and institutions, such as social justice agencies, ecumenical associations, and charitable or educational foundations.

RELI 4388 (3), 4389 (3). SPECIAL TOPICS IN RELIGIOUS STUDIES. A detailed investigation of a topic chosen by the instructor. Topics vary.

RELI 4396 (3), 4397 (3). DIRECTED READING AND RESEARCH. Special topics to be selected by the student in consultation with the department. Open to seniors upon departmental approval.

RELI 4398 (3), 4399 (3), 4498 (4), 4499 (4). INDEPENDENT STUDY. Individual study with an instructor. Permission of instructor and departmental chair required.

Sociology

www.smu.edu/sociology

Professor Alan S. Brown, **Chair**

Professor: Anthony Cortese. **Associate Professors:** Richard Hawkins, Sheri Kunovich, Anne E. Lincoln. **Assistant Professor:** Matthew R. Keller. **Senior Lecturers:** Debra Branch, J. Michael Cruz, Adrian Tan. **Emeritus Professor:** Linda Brewster Stearns.

The sociology curriculum includes courses on research design, data analysis, social theory, and conceptualization of domestic and international organizational and social problems. In today's information society, these skills give sociology majors a competitive advantage in the fields of social research, criminology, public administration, demography, policy analysis, gerontology, social work, and market research and education.

Sociology majors entering the business world often work in marketing research, human resources, management, industrial relations, public relations or sales. Sociology majors entering human services often work with youths at risk, the elderly or people experiencing problems related to poverty or substance abuse. Sociology majors entering the government sector often work in policy analysis, program evaluation or urban planning.

Bachelor of Arts With a Major in Sociology

This major requires a minimum of 33 term hours, 18 of which must be at the advanced level. The four required courses include SOCI 2300 or 2310, SOCI 3311 and 3312, and SOCI 4313 or 4314. Of the remaining 21 credit hours, six hours must be at the 4000 level. Students should take SOCI 2300 or 2310 and SOCI 3311 or 3312 before taking a 4000-level course. STAT 1301 or 2331 can be counted as one of the 11 courses needed for the sociology major. Twelve term hours of a world language are recommended.

Bachelor of Science With a Major in Sociology

The B.S. degree is a more specialized program than the B.A. degree. It provides a sound foundation for graduate study in sociology or law. The major requires 36 term hours, 18 of which must be at the advanced level. The five required courses include SOCI 2300 or 2310, and SOCI 3311, 3312, 4313, 4314. Of the remaining 21 credit hours, nine hours must be at the 4000 level. Students should take SOCI 2300 or 2310 and SOCI 3311 or 3312 before taking a 4000-level course. STAT 1301 or 2331 may be counted as one of the courses within the sociology major. Twelve term hours of a world language are recommended. **Note:** Up to six hours from SOCI 2180, 2280, 2380, 3180 3280, 3380 may be taken in a SMU-approved study abroad program and counted toward the B.S. in sociology.

Bachelor of Arts With a Major in Markets and Culture

The B.A. in markets and culture provides students the opportunity to learn about the world's market places from an interdisciplinary vantage in the social sciences. Students receive a firm grounding in the economic principles of markets, the values and history of commerce, the social bases of economic behavior, and the basic concepts and practices of business. Students also gain an understanding of the multiple institutions and cultures that shape the world's markets.

The markets and culture major requires 42 total hours divided between 30 hours of core courses and 12 hours of electives. Students may strategically choose an emphasis among their electives, including management, strategy and organization; political economy, inequality and development; historical and political contexts; culture, consumption and economy; general theory; or study of a specific region. Prior to declaring a major in markets and culture, students must achieve a grade of *C* or better in SOCI 2377.

Core Courses

ACCT 2301 Fundamentals of Accounting I
ECO 3355 Money and Banking *or* **FINA 3330** Money and Capital Markets
ENGL 2302 Business Writing *or* **BLI 3302** Business Communications/Leader Development
SOCI 2377 Introduction to Markets and Culture
SOCI 3311 Social Science Research Methods
SOCI 3312 Database Methods and Analysis
SOCI 3340 Global Society
SOCI 3377 Organizations and Their Environment
SOCI 4377 Contemporary Markets and Culture
STAT 2301 Statistics for Modern Bus Decisions (*or* STAT 2331 *or* ITOM 2305)

Elective Courses

A total of 12 advanced hours is required. Students are encouraged to be strategic in planning their electives, using the following clusters:

Management, Business Strategy and Organizations

ADV 3354 International Advertising (SMU-in-London)
ADV 4317 Consumer Behavior
ANTH 3344 Cultural Aspects of Business
BA 3300 Special Topics in International Business (titles vary; offered at SMU-in-Paris, SMU-in-Copenhagen, SMU-in-Spain, and SMU-in Japan)
ECO 4368 Foundations of Financial Economics
FINA 4329 International Finance in a European Context (SMU-in-Copenhagen)
MKTG 3340 Fundamentals of Marketing
MNO 3300, 3301 Special Topics in International Management I, II (SMU-in-Copenhagen)
MNO 3370 Management
PLSC 3382 International Organizations: Global and Regional
PLSC 3390 Negotiating International Trade
PSYC 3365 Organizational Psychology
STRA 5370 Strategic Management in a Global Economy

Political Economy, Inequality and Development

ANTH 4303 Political Economy of Health
ANTH 4384 Global Issues and Development: An Overview
BA 3301 Special Topics in International Business (SMU-in-Copenhagen)
ECO 3321 International Economic Policy
ECO 4351 Labor Economics
ECO 4357 International Trade
ECO 4358 International Macroeconomic Theory and Policy
ECO 4366 Economics of the Public Sector
ECO 5360 Economic Development
PLSC 3389 International Political Economy
PLSC 4353 Political Economy of East Asia
PLSC 4354 The Third World and North-South Relations
PLSC 4355 Comparative Political Economy of Industrialized Democracies
PLSC 4356 Latin American Political Economy
SOCI 4353 Political Sociology

Historical and Political Contexts

FINA 4329 International Finance (SMU-in-Copenhagen)
HIST 3396 Middle Eastern Economic History
JAPN 4381 Readings in Japanese Culture and Business
PLSC 4354 The Third World and North-South Relations
PLSC 4391 NAFTA and Free Trade in the Americas
PLSC 5341 European Politics: The European Union (SMU-in-Copenhagen)
SOCI 4373 Class, Race, and Gender Inequalities

Culture, Consumption and Economy

ADV 4317 Consumer Behavior
ANTH 3327 Culture Change and Globalization: Social Science Perspectives
ANTH 3344 Cultural Aspects of Business
ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
ANTH 3350 Good Eats and Forbidden Flesh: Culture, Food, and the Global Grocery Market
HIST 3364 Consumer Culture in the United States, 1770–1990
SOCI 4340 Sociology of Culture

Regional Studies

ANTH 3311 Mexico: From Conquest to Cancun
ANTH 3314 Peoples of Africa
ANTH 3316 Cultures of the Pacific Islands
ANTH 3317 Peoples of Southeast Asia
ANTH 3354 Latin America: People, Places, and Power
ANTH 3355 Society and Culture in Contemporary Europe
ANTH 3358 Indians of the Southwest From the 16th Century to the Present
BA 4315 European Common Market (SMU-in-Copenhagen)
CHIN 4411 China in the 1990s (SMU-in-Beijing)
CHIN 4412 Chinese Literature and Culture (SMU-in-Beijing)
ENGL 3354 Non-Western Culture and Literature
ENGL 3363 Chicana/Chicano Literature
FREN 4375 Introduction to French History/Culture
FREN 4376 Introduction to Francophone Cultures
FREN 4391 Commercial French for International Trade
GERM 3313 Germany Today
HIST 3303 Modern England, 1867 to the Present
HIST 3324 The Mexican Americans, 1848 to the Present
HIST 3330 Women in Modern European History
HIST 3341 Soviet/Post-Soviet Society and Politics 1917 to Present
HIST 3343 Twentieth-Century European History (SMU-in-Copenhagen)
HIST 3376 Social and Intellectual History of Europe
HIST 3382 History of Mexico
HIST 3387 Asia and the West
HIST 3390 The Modern Middle East: 1914 to the Present
HIST 3393 China in Revolution
HIST 3398 Women in Chinese History
HIST 4314 The Jews in Europe (SMU-in-Copenhagen)
HIST 4365 Australian Society (SMU-in-Australia)
HIST 4369 History of Modern Germany
HIST 4381 History of Spain, 1469 to Present
HIST 5390 Seminar in Russian History
HIST 5392 Seminar in European History
ITAL 3373 Italian Culture
PHIL 3352 History of Western Philosophy (Modern)
PLSC 3340 Western European Politics

PLSC 3341 Politics of Participation and Representation in Western Democracies
PLSC 3345 Governments and Politics of the Middle East
PLSC 3346 Japanese Politics and Society
PLSC 3347 Governments and Politics of Africa
PLSC 3348 Governments and Politics of Latin America
PLSC 3349 Politics of Major Latin-American Countries
PLSC 3351 Russia Under Putin
PLSC 3358 Government and Politics of Russia
PLSC 4322 Latino Politics
PLSC 4358 Soviet Politics: Revolution to Revolution
PLSC 4386 International Relations of East Asia
RELI 3378 Religions of China
SOCI 3305 Race and Ethnicity in the United States
SOCI 3383 Race, Culture, and Social Policy in the Southwest
SPAN 3373 Spanish Civilization (SMU-in-Spain)
SPAN 3374 Spanish-American Civilization (SMU-in-Xalapa, Mexico)
SPAN 4391 Commercial Spanish for International Trade
SPAN 4395 Introduction to Hispanic Literature
WL 3303 Spanish Civilization (SMU-in-Spain)
WL 3312 Women in Modern China
WL 3325 Perspectives on Modern China
WL 3369 Perspectives on Modern Germany

Department Distinction

Students wishing to work for distinction in sociology should consult the director of undergraduate studies as soon as possible in the junior year. Students will be expected to engage in original research (based on a topic covered in a 3000- or 4000-level course) and write a journal-length article under the supervision of a faculty member while enrolled in SOCI 4396. At the end of the term, the supervising faculty will make a recommendation to departmental faculty regarding distinction. The department committee will then evaluate the merits of the paper and determine if distinction will be awarded. Either a B.A. or B.S. student can attempt distinction in sociology.

Minor in Sociology

Students majoring in other departments may obtain a minor in sociology by completing SOCI 2300 or 2310; one of the following: SOCI 3311, 3312, 4313 or 4314; one additional course at the 4000 level; and two courses at the 3000 level or above, for a total of 15 hours.

The Courses (SOCI)

SOCI 1300 (3). INTRODUCTION TO SOCIOLOGY. This course presents the sociological approach to understanding human behavior. Sociology considers how particular life experiences, attitudes, and values are shaped by membership in ascribed and achieved social categories such as social class, race/ethnicity, sex, sexuality, and nationality. *Prerequisite:* First-year, sophomore, or junior standing only.

SOCI 2180 (1), 2280 (2), 2380 (3), 3180 (1), 3280 (2). SMU ABROAD – SOCIOLOGY. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle. Maximum of 6 credit hours permissible toward the B.S. in sociology.

SOCI 2300 (3). SOCIAL PROBLEMS. Examines social problems within the contexts of their particular societies and cultures; how a social problem is defined; and how solutions are shaped by politics, corporations, media interests, and social movements. *Prerequisite:* First-year, sophomore, or junior standing only.

SOCI 2377 (3). INTRODUCTION TO MARKETS AND CULTURE. General introduction to economic sociology, examining the effects of culture and social relations on shaping production, distribution, and consumption in domestic and global markets. *Prerequisites:* First-year, sophomore, or junior standing.

SOCI 3301/ANTH 3301/CFB 3301 (3). HEALTH, HEALING AND ETHICS: CROSS-CULTURAL PERSPECTIVES ON SICKNESS AND SOCIETY. A cross-cultural exploration of cultures and organization of medical systems, economic development and the global exportation of biomedicine, and ethical dilemmas associated with medical technologies and global disparities in health.

SOCI 3305/ETST 2301/CFA 3310 (3). INTRODUCTION TO RACE AND ETHNICITY IN THE UNITED STATES. An interdisciplinary seminar designed to introduce students to the analysis of race and ethnicity in the United States.

SOCI 3311 (3). SOCIAL SCIENCE RESEARCH METHODS. Introduces qualitative and quantitative research methods used by sociologists. Students learn how to design, conduct, and report research in an ethical, clear, and concise manner. Assignments provide hands-on experience using and collecting data for social science research. *Prerequisites:* SOCI 1300 or 2377; sociology majors, markets and culture majors, or sociology minors only.

SOCI 3312 (3). DATABASE METHODS AND ANALYSIS. Focuses on data analysis of existing data commonly used for economic and social scientific purposes (e.g., U.S. Census, General Social Survey, World Bank) and the construction of new data from multiple sources. Reviews basic quantitative research methodology, descriptive and inferential statistics, data reduction and management techniques, and the interpretation of statistics in applied social research. Students become adept at using multiple database programs (e.g., Excel, SPSS, SAS). *Prerequisites:* SOCI 1300 or 2377; sociology majors, markets and culture majors, or sociology minors only.

SOCI 3320/RELI 3310 (3). THE SOCIAL-SCIENTIFIC STUDY OF RELIGION. An introduction to scientific ways of thinking about the social, cultural and psychological aspects of religious life. Attentive to major thinkers and theories dealing with religion in the disciplines of anthropology, psychology, sociology and the social-scientific study of religion.

SOCI 3321 (3). NONPROFIT ORGANIZATIONS: CONCEPTUAL PRIMER. Explores the nonprofit sector and relevant topics such as nonprofit history, theories, management, and trends, with a focus on strategies for improving organizations in light of the nonprofit sector's relationship with government and business. Prepares students for their subsequent nonprofit internship.

SOCI 3330 (3). SOCIOLOGICAL PSYCHOLOGY. A focus on the ways that macro-level forces and group membership affect individual beliefs, behaviors, and well-being. The course begins with the rich tradition of symbolic interactionist theories and transitions into the contemporary uses of these theoretical perspectives and their continued influence on contemporary research upon the effects of social institutions on individual attitudes, beliefs, and behaviors.

SOCI 3340 (3). GLOBAL SOCIETY. Provides students with a sociological orientation to the evolving interconnectedness among societies, nation-states, cultures, economies, and individuals around the globe.

SOCI 3345 (3). CONSTRUCTION OF SOCIAL IDENTITIES IN THE MEDIA. Provides a broad historical and contemporary background to the study of media representations of groups in society. Particular attention is paid to how gender, race, sexuality, and social class are constructed in visual and print media.

SOCI 3350/WL 3302/COMM 3302/CFB 3350 (3). ETHNOVIOLENCE: INTERDISCIPLINARY PERSPECTIVES. An introduction to ethnoviolence – violence or the threat of violence based on one's race, ethnicity, religion, gender, or sexual orientation – from a comparative, global and critical framework that synthesizes sociology, colonial studies, communications, and ethnic, religious, historical, and gender studies.

SOCI 3351 (3). MARRIAGE AND FAMILY. Covers the evolution of marriage and families through the ages, including changes in the definitions of marriages and families and changes in gender roles brought about by technology and shifts in the market system.

SOCI 3355 (3). VIOLENCE IN THE AMERICAN HOME. Topics include domestic violence, conflict over child custody in divorce, incest and child abuse, neglect, and failure to support the changing family in America. Also, intergenerational issues and problems.

SOCI 3360 (3). LAW AND SOCIETY. Designed to give students a broad overview of the history and functions of our major legal institutions and their relationship to American culture and social structure.

SOCI 3363 (3). CRIME AND DELINQUENCY. Extent of the problem, causal theories, prevention, and public policy.

SOCI 3368/ANTH 3368 (3). URBAN LIFE: A CROSS-CULTURAL PERSPECTIVE. An introduction to urban life and culture around the world, including how we study cities, who inhabits cities, and the special features of city places and spaces.

SOCI 3370 (3). MINORITY-DOMINANT RELATIONS. The nature, origins, and consequences of relationships between unequal groups; U.S. and other societies compared.

SOCI 3371 (3). SOCIOLOGY OF GENDER. Examines the social and cultural construction of gender within relationships, friendships, families, schools, the media, and the workplace. Also, explores the intersection of gender with race, ethnicity, social class, and sexuality.

SOCI 3377 (3). ORGANIZATIONS AND THEIR ENVIRONMENTS. Explores the theories and relationships between organizations and their environments. Applies these theories to the analysis of real-world organization activities. *Prerequisite:* C- or better in SOCI 2377; sociology or markets and culture majors only.

SOCI 3380 (3). SMU ABROAD – SOCIOLOGY. Courses offered in SMU-approved international programs. Prior departmental approval required. May be repeated for credit under different subtitle. Maximum of 6 credit hours permissible toward the B.S. in sociology.

SOCI 4093 (0). UNDERGRADUATE FULL-TIME STATUS. Noncredit-bearing course with no tuition.

SOCI 4179 (1), 4279 (2). MARKETS AND CULTURE INTERNSHIP. The student completes a paper under the supervision of the director, departmental faculty sponsor, or approved faculty sponsor outside the Sociology Department. *Prerequisites:* C+ in SOCI 2377; markets and culture majors only, with sophomore standing or above.

SOCI 4193 (1), 4293 (2). INDIVIDUAL RESEARCH. Students develop an independent research project under the guidance of a departmental faculty member, culminating in a written report. Students can earn 1 credit hour in SOCI 4193, 2 credit hours in SOCI 4293, and 3 credit hours in SOCI 4393. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, one additional 3000-level course, and sophomore standing or above.

SOCI 4198 (1), 4298 (2). SOCIOLOGICAL INTERNSHIP. Students who arrange for part-time jobs in fields of interest to sociology relate these experiences to their academic curriculum through written organizational analyses under the guidance of the director of undergraduate studies. Graded on a pass/fail basis only. *Prerequisites:* Sociology or markets and culture major, sophomore standing or above, and permission of the director of undergraduate studies.

SOCI 4313 (3). THE SOCIOLOGICAL TRADITION. Introduces theories of 19th- and early 20th-century sociologists. *Prerequisites:* SOCI 1300 or 2300; sophomore standing or above.

SOCI 4314 (3). CONTEMPORARY SOCIOLOGICAL THEORY. Surveys recent trends in sociological theory and research. *Prerequisites:* SOCI 1300 or 2300; sociology majors or minors only, with sophomore standing or above.

SOCI 4321 (3). IMMIGRATION AND POPULATION ISSUES. Causes and consequences of population growth and change in the United States and the world. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, and sophomore standing or above.

SOCI 4335 (3). SOCIAL MOVEMENTS AND COLLECTIVE BEHAVIOR. The nature, causes, and consequences of social movements and collective behavior (e.g., crowds, riots, fads, public opinion, social movements, and revolution). *Prerequisites:* SOCI 1300 or 2300; sophomore standing or above.

SOCI 4340 (3). SOCIOLOGY OF CULTURE. Provides an overview of the sociological study of culture, focusing on the ways language, artifacts, ideas, identities, and narratives construct social reality. *Prerequisites:* SOCI 1300 or 2300. Sophomore standing or above.

SOCI 4353 (3). POLITICAL SOCIOLOGY. Covers political movements, the impact of politics on other institutions in America, issues of power and control, and global issues of economics and political power. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, and sophomore standing or above.

SOCI 4363 (3). THE ADMINISTRATION OF JUSTICE. Law enforcement and criminal court systems as well as the ideal of justice and public policy. *Prerequisites:* SOCI 1300 or 2300; sophomore standing or above.

SOCI 4364 (3). CORRECTIONAL SYSTEMS. The history of punishment, adjustment to incarceration, comparison of prisons for men and women, and constitutional issues of criminal punishment. *Prerequisites:* SOCI 1300 or 2300; sophomore standing and above.

SOCI 4366 (3). DEVIANT BEHAVIOR. Explores causes and consequences of deviant behavior and evaluates leading theories. *Prerequisite:* Sophomore standing or above.

SOCI 4372 (3). WEALTH AND CONSUMPTION. Focuses on how group membership (e.g., race, social class) and societal forces (e.g., economic development) affect spending and savings patterns, with particular attention paid to sociological theories of consumption. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, and sophomore standing or above.

SOCI 4373 (3). CLASS, RACE AND GENDER INEQUALITIES. Unequal distribution of power, prestige, and opportunity within society; causes and consequences. *Prerequisites:* Either SOCI 1300 or 2300, and either SOCI 3311 or 3312. Sophomore standing or above.

SOCI 4374 (3). SOCIAL CHANGE. Review of major social change theories emphasizing technology, modernization, social power, and the impact of change on individuals and institutions and possible solutions to resulting problems. Seminar format. *Prerequisites:* SOCI 1300 or 2300; sophomore standing or above.

SOCI 4377 (3). CONTEMPORARY MARKETS AND CULTURE. Students apply knowledge acquired in core markets and culture courses to develop critical understanding of the social, economic, technological, and political forces shaping current global markets. *Prerequisites:* Junior or senior standing; C- or better in SOCI 2377, 3377; markets and culture majors only.

SOCI 4379 (3). MARKETS AND CULTURE INTERNSHIP. The student completes a paper under the supervision of the director, departmental faculty sponsor, or approved faculty sponsor outside the Sociology Department. *Prerequisites:* C+ in SOCI 2377; markets and culture majors only, with sophomore standing or above.

SOCI 4385 (3). ENVIRONMENTAL SOCIOLOGY. This capstone course examines the culture, economy, and environment, both domestically and globally. *Prerequisites:* SOCI 1300, 3311, and sophomore standing or above.

SOCI 4393 (3). INDIVIDUAL RESEARCH. Students develop an independent research project under the guidance of a departmental faculty member, culminating in a written report. Students can earn 1 credit hour in SOCI 4193, 2 credit hours in SOCI 4293, and 3 credit hours in SOCI 4393. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, one additional 3000-level course, and sophomore standing or above.

SOCI 4396 (3). INDIVIDUAL RESEARCH FOR DISTINCTION. *Prerequisites:* SOCI 1300 or 2300, SOCI 3311 or 3312, one additional 3000-level SOCI course, sophomore standing or above, and permission of director of undergraduate studies.

SOCI 4398 (3). SOCIOLOGICAL INTERNSHIP. Students who arrange for part-time jobs in fields of interest to sociology relate these experiences to their academic curriculum through written organizational analyses under the guidance of the director of undergraduate studies. Graded on a pass/fail basis only. *Prerequisites:* Sociology or markets and culture major, sophomore standing or above, and permission of director of undergraduate studies.

SOCI 4399 (3). SPECIAL TOPICS: SOCIOLOGY SEMINAR. Seminar on selected sociological areas. May be repeated for credit if topics differ.

SOCI 4401 (4), 4402 (4), 4403 (4), 4404 (4). WASHINGTON TERM. Intensive study of domestic and international economic, political, and social institutions. Includes a four-hour research project (4401), a four-hour internship (4402), and an eight hour seminar (4403 and 4404). *Prerequisites:* Two courses in the Markets and Culture or Sociology major or Sociology minor (at least one at the upper level) which are relevant to the selected program, and permission of department chair. Available for markets and culture majors or sociology majors and minors.

Statistical Science

www.smu.edu/statistics

Professor Wayne Woodward, **Department Chair**

Professors: Ronald Butler, Richard Gunst, Lynne Stokes, Wayne Woodward. **Associate Professors:** Jing Cao, Ian Harris, Monnie McGee, Hon Keung Ng, Sherry Wang. **Assistant Professor:** Cornelis Potgieter. **Senior Lecturers:** Alan Elliot, Stephen Robertson. **Emeritus Professors:** Narayan Bhat, Henry Gray, Chandrakant Kapadia, Campbell Read, William Schucany.

Statistics is the science of collecting, analyzing and interpreting data. The science of statistics is applicable in every setting where decisions are to be made or knowledge is to be advanced based on the analysis of data. Application fields include almost every academic discipline, including business, engineering and the natural and social sciences. Selecting the best medical treatment for a particular form of cancer, determining whether to use sampling methods to augment a census, and evaluating temperature trends for evidence of greenhouse-induced climate change are diverse examples of settings in which statistical science has made important contributions. Because of its interdisciplinary nature, statistical science is an exciting and valuable double major or minor.

Bachelor of Science With a Major in Statistical Science

The B.S. in statistical science prepares students for advanced studies in statistical science, such as graduate work in the field or in a related discipline.

	Credit Hours
Mathematics and Statistics	24
MATH 1337, 1338, 2339	
STAT 5304, 5371, 5372, 5373, 5374	
Electives	18
Choose at least 9 hours from the following:	
STAT 3312, 4385, 5350, (*or* ECO 5350), 5370, 5375, 5377, (*or* EMIS 5377), 5380 (*or* ECO 5385)	
STAT 4340/EMIS 3340/CSE 4340	
Choose remaining hours from the following:	
Any ECON class at the 4000 level or higher	
EMIS 3360, 5300, 5301, 5303, 5305, 5307, 5330, 5335, 5357, 5361, 5364, 5369	
MATH 2343, any 3000-level class, 4335, 4338, any 5000-level class	
MKTG 3342	
STAT 1301, *or* 2301, *or* 2331; *or* ITOM 2305	
STAT 4340/EMIS 3340/CSE 4340	
Other approved courses	
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Minor in Statistical Science

A minor in statistical science is a valuable complement to majors in the natural or social sciences, engineering or business. Students planning careers that involve the collection, processing, description and/or the analysis of quantitative information will enhance their career opportunities with a minor in statistical science. A minor in statistical science requires at least 15 term hours, as specified below.

	Credit Hours
STAT 5304, 5371, 5372	9
At least one from STAT 3312, 3370, 4340, 4385, 5377; PSYC 2301	3–6
At most one from STAT 1301, 2301, 2331; ITOM 2305	0–3
	15

The Courses (STAT)

STAT 1301 (3). INTRODUCTION TO STATISTICS. Introduction to collecting observations and measurements, organizing data, variability, and fundamental concepts and principles of decision-making. Emphasis is placed on statistical reasoning and the uses and misuses of statistics.

STAT 2301 (3). STATISTICS FOR MODERN BUSINESS DECISIONS. A foundation in data analysis and probability models is followed by elementary applications of confidence intervals, hypothesis testing, correlation, and regression. Introduces the use of Excel for statistical analysis, with a focus on business applications.

STAT 2331 (3). INTRODUCTION TO STATISTICAL METHODS. An introduction to statistics for behavioral, biological, and social sciences. Topics include descriptive statistics; probability; and inferential statistics, including hypothesis testing and contingency tables.

STAT 3312 (3). CATEGORICAL DATA ANALYSIS. Examines techniques for analyzing data that are described by categories or classes. Discusses classical chi-square tests and modern log-linear models. Emphasizes practical applications using computer calculations and graphics. *Prerequisite:* STAT 2301 or 2331, or equivalent.

STAT 3380 (3). ENVIRONMENTAL STATISTICS. Examines statistical design and analysis methods relevant to environmental sampling, monitoring and impact assessment. Emphasizes statistical procedures that accommodate the likely temporal and spatial correlation in environmental data. *Prerequisite:* STAT 2301 or 2331, or equivalent.

STAT 4340/EMIS 3340/CSE 4340 (3). STATISTICAL METHODS FOR ENGINEERS AND APPLIED SCIENTISTS. Basic concepts of probability and statistics useful in the solution of engineering and applied science problems. Topics: probability, probability distributions, data analysis, sampling distributions, estimation and simple tests of hypothesis. *Prerequisites:* MATH 1337 and 1338.

STAT 4385 (3). INTRODUCTION TO NONPARAMETRIC STATISTICS. Statistical methods that do not require explicit distributional assumptions such as normality. Analyses based on ranks. One- and multi- sample procedures. Tests of randomness and independence. *Prerequisite:* STAT 2301 or 2331, or equivalent.

STAT 5110 (1). INDEPENDENT STUDY IN STATISTICAL SCIENCE. Independent study of a selected topic in statistical science. Individual study under direction of a faculty member allowed for 5110; group projects allowed for 5310.

STAT 5304 (3). INTRODUCTION TO STATISTICAL COMPUTING. Introduces statistical computing, with an emphasis on SAS programming. Students learn how to read, write, and import data; prepare data for analysis; use SAS procedures; and create graphs. *Prerequisites:* STAT 1301, 2301, 2331 or equivalents.

STAT 5310 (3). INDEPENDENT STUDY IN STATISTICAL SCIENCE. Independent study of a selected topic in statistical science. Individual study under direction of a faculty member allowed for 5110; group projects allowed for 5310.

STAT 5340 (3). PROBABILITY AND STATISTICS FOR SCIENTISTS AND ENGINEERS. Introduction to fundamentals of probability and distribution theory, statistical techniques used by engineers and physical scientists. Examples of tests of significance, operating characteristic curve, tests of hypothesis about one and two parameters, estimation, analysis of variance, and the choice of a particular experimental procedure and sample size. *Prerequisites:* MATH 1337, 1338, and 2339, or equivalent.

STAT 5344/EMIS 5364 (3). STATISTICAL QUALITY CONTROL. Statistics and simple probability are introduced in terms of problems that arise in manufacturing; their application to control of manufacturing processes. Acceptance sampling in terms of standard sampling plans: MIL-STD 105, MIL-STD 414, Dodge-Romig plans, continuous sampling plans, etc. *Prerequisites:* STAT 4340 or STAT 5340.

STAT 5350/ECO 5350 (3). INTRODUCTORY ECONOMETRICS. The basic concepts of econometrics and, in particular, regression analysis, with topics geared to first-time regression users. *Prerequisites:* Graduate standing or C- or better in the following: MATH 1309 or 1337; ECO 3301; and ITOM 2305 or STAT 2301, 2331, or 4340.

STAT 5370 (3). SURVEY SAMPLING. Covers principles of planning and conducting surveys: simple random sampling; stratified and systematic subsampling; means, variances, and confidence limits; finite population correction; sampling from binomial populations; and margin of error and sample-size determination. *Prerequisites:* STAT 2301 (or 2331), 5304.

STAT 5371 (3). EXPERIMENTAL STATISTICS I. Noncalculus development of fundamental statistical techniques, including hypothesis testing for population means and proportions, analysis of variance, factorial designs, and linear regression. Covers obtaining sample sizes during the planning stages of research studies and emphasizes interpretation of results from analysis with SAS statistical software. *Corequisite:* STAT 5304.

STAT 5372 (3). EXPERIMENTAL STATISTICS II. Extension of techniques in STAT 5371 to multivariate data. Multiple linear regression, multivariate analysis of variance, canonical regression, and principal components analysis. Emphasizes interpretation of results from analysis with SAS. *Prerequisite:* STAT 5371.

STAT 5373 (3). MATHEMATICAL STATISTICS I. Introduction to mathematical statistics. Topics include probability, probability distributions, mathematical expectation, discrete and continuous random variables and their distributions, sampling distributions, moment generating function, functions of random variables, and confidence intervals. *Prerequisite:* MATH 2339.

STAT 5374 (3). MATHEMATICAL STATISTICS II. Second course in mathematical statistics. Topics include order statistics, limiting distributions, central limit theorem, point estimation, testing statistical hypotheses, Bayesian procedures, and nonparametric methods. *Prerequisite:* STAT 5373.

STAT 5375/ECO 5375 (3). ECONOMIC AND BUSINESS FORECASTING. This course presents methods used by economists to forecast economic and business trends. Statistical procedures for evaluating the usefulness of these methods are also discussed. Illustrative examples include forecasting GNP, interest rates, and unemployment. *Prerequisites:* C- or better in ECO 3301 and one of the following: STAT 2301, 2331, or 4340; or ITOM 2305 or equivalent; or graduate standing.

STAT 5377/EMIS 5377 (3). STATISTICAL DESIGN AND ANALYSIS OF EXPERIMENTS. Introduction to statistical principles in the design and analysis of industrial experiments. Completely randomized, randomized complete and incomplete block, Latin square, and Plackett-Burman screening designs. Complete and fractional factorial experiments. Descriptive and inferential statistics. Analysis of variance models. Mean comparisons. *Prerequisite:* STAT 4340 or 5371, or permission of instructor.

STAT 5380/ECO 5385 (3). DATA MINING TECHNIQUES FOR ECONOMISTS. Study of data mining techniques used by economists in the fields of applied economics, marketing, finance, and statistics. These techniques include classification methods (logistic models, classification trees, neural networks), affinity analysis (association rules), and data reduction and exploration methods (principal components and k-means clustering). *Prerequisites:* C- or better in ECO 5350 and one of the following: STAT 2301, 2331, or 4340; or ITOM 2305 or equivalent; or graduate standing.

Women's and Gender Studies

www.smu.edu/womgenstudies

Associate Professor Beth Newman, **Director**
Senior Lecturer: Josephine Caldwell-Ryan

Students in the Women's and Gender Studies Program explore a wide variety of disciplines and life experiences through gender, which is the set of meanings that societies attach to being female or male. The program's dual name acknowledges two approaches. One emphasizes the traditionally overlooked intellectual, artistic, political and social contributions of women. The other extends into to a broader range of issues, including the social and cultural meanings of masculinity and the relationships between gender, sexuality and sexual identity. Through participation in the program, SMU students are exposed to contemporary challenges to traditional academic disciplines and to scholarship that addresses matters of personal identity. Because it is interdisciplinary, a WGST minor complements a variety of majors and minors, especially those in the humanities, social sciences and fine arts. Students wishing to earn distinction must take a directed studies course that would entail a research project and paper.

Non-WGST Courses With a Subject Area in Women's and Gender Studies

Many courses are offered each year and, with few exceptions, the remainder are available at least every other year. Students should consult with the director about offerings and frequency.

ANTH 3310 Gender and Sex Roles: A Global Perspective
ANTH 3328 Gender Violence: What Does Culture Have to Do With It?
ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
ANTH 4386, 6386 The Archaeology of Gender and Sexuality
ARHS 3357 Women Artists
ARHS 3358, 6389 Women in the Visual Arts: Both Sides of the Easel
ARHS 4371/WGST 3381 Modern Myth-Making
CCJN 4360 Women and Minorities in Mass Media
COMM 3341 Ethnicity, Culture, and Communication
ECO 4351 Labor Economics
ECO 5357 Economics of Human Resources
ENGL 1360 The American Heroine: Fiction and Fact
ENGL 3344 Victorian Gender
ENGL 3364/WGST 3370 Women and the Southwest
ENGL 3367 Ethical Implications of Children's Literature
ENGL 3371/HIST 3357 Joan of Arc: Her Story in History, Literature, and Film
ENGL 3377 Literature and the Construction of Homosexuality
ENGL 3373/WL 3359 Masculinities: Images and Perspectives
ENGL 3379 Literary and Cultural Contexts of Disability: Gender, Care, and Justice
ENGL 3361, 4330, 4343, 4363, 6391, 6392, 6393, 6394, 6395 Topics and Seminars
FILM 2332 American Popular Film
FILM 2362 Diversity and American Film
FILM 3310 Screen Artists
FILM 3395, 3398 Topics in Cinema/Television
FREN 5334 Genre Studies: In Their Place: French Women Writers and Society
HIST 1322 Seminar in European History
HIST 3301 Human Rights: America's Dilemma
HIST 3310 Problems in American History: Women's Movements/Gender Systems

HIST 3312 Women in American History to 1900
HIST 3317 Women in Latin-American Societies
HIST 3327 Women in American History From 1900 to the Present
HIST 3329 Women in Early Modern Europe
HIST 3330 Women in Modern European History
HIST 3348 American Families: Changing Experiences and Expectations
HIST 3355 Class and Gender in Ancient Society
HIST 3394 The New Woman: Emergence of Modern Womanhood in the U.S., 1890 to 1930
HIST 3398 Women in Chinese History
HIST 4304 At the Crossroads: Gender and Sexuality in the Southwest
HX 8328 Women in the History of Christianity (Perkins' graduate course; instructor approval)
HX 8337 Sex and Gender Roles in the History of Patristic Thought
MDVL 3352 Ideas and Ideals of Gender in the Middle Ages
MUHI 3341 Women and Music "Like a Virgin": From Hildegard to Madonna
MUHI 4341 Women Composers/Performers in the 19th and 20th Centuries (majors only)
PHIL 3305 Philosophy and Gender
PLSC 3370 Women and Politics
PLSC 4339 Women and the Law
PLSC 4344 Gender in World Politics
PSYC 3371 Psychology of Women
RELI 3374 Female and Male in Religion and Culture
RELI 3375 Wives, Mothers, Lovers, Queens
RELI 3376 Constructions of Gender, Sexuality, and the Family in South Asian Religions
RELI 3380 Women and Religion in America
RELI 3381 Religion, Gender, and Economic Development
SOCI 3345 Media Ethics and Gender
SOCI 3351 Marriage and the Family
SOCI 3371 Sociology of Gender
SOCI 4373 Race, Gender, and Inequality
SPAN 5336 (Re)presentations of Gender in the Contemporary Short Latin-American Novel
ST 8375 Feminist/Womanist Theologies (Perkins' graduate course; instructor approval)
THEA 4381–4 Studies in Contemporary Performance: Solo Performance; Gender and Performance
WL 3312 Women in Modern China
WL 3363/WGST 3347 Figuring the Feminine
WO 8308 Women and Worship (Perkins' graduate course; instructor approval)
XS 8345 Faith, Feminism, and Public Policy (Perkins' graduate course; instructor approval)

Notes

Topics of these courses vary by term and must be approved by the director of WGST:

- ENGL 3361, 3379, 4330, 4343, 4363, 6391–6395.
- FILM 3310, 3395, 3398.
- FREN 5334.
- HIST 1322.
- SPAN 5336.
- THEA 4381–4384.

Minor in Women's and Gender Studies

Students must take a minimum of 15 hours, including WGST 2322 (or an approved substitute) and 12 additional hours. At least nine hours must be at the advanced level. Students satisfy these requirements through a combination of core courses (WGST) and a wide array of courses offered by many departments in Dedman College and the Meadows School of the Arts. (Courses marked "subject to approval"

are "topics" and "problems" courses that earn credit toward the minor only when offered under specific preapproved titles.)

Bachelor of Arts in Individualized Studies in the Liberal Arts With a Focus on Women's and Gender Studies

Students who qualify for individualized studies in the liberal arts and who have a strong interest in women's role in culture and society, or in the study of gender and sexuality more generally, may propose a program that focuses on women's and gender studies. The program description and administrative procedures specified for the individualized major in the liberal arts apply, with the following additional stipulations:

1. The student must consult with the director of WGST, who shall serve as one of the members of the Faculty Supervisory Committee for the student's major.
2. Two additional faculty members who teach courses in the program serve on this committee, which oversees the student's progress and certifies completion of the major.
3. The following courses must be included within the 36 minimum hours required for an individualized studies program:

   WGST 2322 Gender: Images and Perspectives

   At least two of the following:

   ANTH 3310 Gender and Sex Roles: A Global Perspective

   HIST 3312 Women in American History to 1900

   or **HIST 3327** Women in American History From 1900 to the Present

   HIST 3329 Women in Early Modern Europe

   PSYCH 3371 Psychology of Women

   WGST 6300 Advanced Feminist Theory

The program should expose the student to the diversity of gender meanings within and across cultures.

The Courses (WGST)

WGST 1395 (3). SPECIAL TOPICS ABROAD IN WOMEN'S AND GENDER STUDIES. Course offered in SMU-approved international programs. Prior approval by the director is required. A maximum of 3 credit hours may be applied toward the minor in women's and gender studies.

WGST 2308 (3). REVISIONS WOMAN AS ARTIST. This course is designed to discover how an emphasis on the particular experiences of women can enhance and complicate traditionally conceived areas of scholarship and critical endeavor. It also explores areas of women's experience traditionally undervalued, such as friendship, sexuality, motherhood, and old age.

WGST 2309/CFA 3309/HRTS 3309 (3). LESBIAN AND GAY LITERATURE AND FILM: MINORITY DISCOURSE AND SOCIAL POWER. The exploration, through literature and film, of the struggles by gay men and lesbians to create social identities and achieve human rights. Study of key cultures and pivotal historical periods in the West from ancient Greece to contemporary America.

WGST 2315/CFA 3315 (3). GENDER, CULTURE, AND SOCIETY. An interdisciplinary study of gender ideology stressing anthropological and literary perspectives, this course analyzes gender difference as a structuring principle in all societies and explores some of its representations in literature, film, and contemporary discourse.

WGST 2322/CFA 3302 (3). GENDER: IMAGES AND PERSPECTIVES. An interdisciplinary examination of the ways femininity and masculinity have been represented in the past and present, with attention to what is constant and what changes.

WGST 2395 (3). SPECIAL TOPICS ABROAD IN WOMEN'S AND GENDER STUDIES. Course offered in SMU-approved international programs. Prior approval by the director is required.

WGST 3310/HRTS 3310 (3). GENDER AND HUMAN RIGHTS. Introduction to global women's human rights and other intersections of human rights and gender, such as abuse of children's rights, gender-based violence, health and reproductive rights, and evolving concepts of sexual rights.

WGST 3328/ANTH 3328 (3). GENDER VIOLENCE: ANTHROPOLOGICAL PERSPECTIVES. This course examines how gender-based violence shapes individual subjectivities and collective experiences, material realities, and psychological states, as well as the impacts of interventions on intimate, interpersonal, local, and global scales.

WGST 3347/CF 3347/WL 3363 (3). FIGURING THE FEMININE. This course introduces students to a large body of French literary texts (in translation) by and about women, which bear witness to women's struggle for civil, social, and political adulthood. They span the period from the 14th century to the present.

WGST 3370/CF 3370/ENGL 3364 (3). WOMEN IN THE SOUTHWEST. A study and exploration of women writers, artists and thinkers in the American Southwest and their vision of this region as singularly hospitable to women's culture.

WGST 3380/CFA 3303 (3). HUMAN SEXUALITY. This course explores the biosocial aspects of human sexuality and sex behaviors. A multidisciplinary and cross-cultural perspective will be used to address a wide range of theoretical and pragmatic sexual issues.

WGST 3381/CF 3381 (3). MODERN MYTH-MAKING. The quest for enduring cultural heroes and the projection of changing social messages as reflected in art from past epochs to modern times.

WGST 3382/CFA 3382 (3). WOMEN'S BODY POLITICS. A cross-cultural, interdisciplinary exploration of the cultural and ideological work that women's bodies perform, as reflected in literature, art, medicine, philosophy, and political discourses from the Classical era to today.

WGST 3395 (3). SPECIAL TOPICS ABROAD IN WOMEN'S AND GENDER STUDIES. Course offered in SMU-approved international programs. Prior approval by the director is required.

WGST 4109 (1), 4209 (2), 4309 (3). INDEPENDENT STUDIES. A supervised practicum and/or directed readings on specific problems and themes under faculty guidance. Approval of director is required.

WGST 4303 (3). WOMEN'S STUDIES INTERNSHIP. This course offers students experiences with organizations serving women or addressing women's and gender issues, as well as varied potential careers or volunteer opportunities in the community.

WGST 4395 (3). SPECIAL TOPICS ABROAD IN WOMEN'S AND GENDER STUDIES. Course offered in SMU-approved international programs. Prior approval by the director is required.

WGST 5310 (3). SPECIAL TOPICS IN WOMEN'S AND GENDER STUDIES I. Study of a theme, issue, or topic relevant to the study of women, gender, and/or sexuality. The syllabus and assignments must be approved by a committee consisting of the professor of record, the director of Women's and Gender Studies, and one additional member of the affiliated faculty for Women's and Gender Studies (that is, a faculty member who teaches courses in the WGST program). *Prerequisite:* Enrollment in the Certificate Program in Women's and Gender Studies.

World Languages and Literatures

www.smu.edu/worldlanguages

Associate Professor Marie-Luise Gäettens, **Department Chair**

ARABIC: Lecturer: Liljana Elverskog. **CHINESE: Lecturers:** Gwen Chen, Yan Xia. **FRENCH: Associate Professor:** Dayna Oscherwitz. **Assistant Professor:** Hervé Tchumkam. **Senior Lecturers:** Gwen Aaron, Paola Buckley, Heather Garrett-Pelletier, Rita Winandy. **Lecturers:** Denis Bettaver, Martine Kincaid, Rachel Ney. **GERMAN: Associate Professors:** Gordon Birrell, Marie-Luise Gäettens. **ITALIAN: Senior Lecturer:** Teresa Brentegani. **Lecturers:** Brandy Alvarez, Damiano Bonuomo. **Visiting Lecturer:** Maria Patel. **JAPANESE: Senior Lecturer:** Keiko Flores. **SPANISH: Professor:** Denise DuPont. **Associate Professors:** Olga Colbert, Francisco Morán, Luis Maldonado-Peña, Alberto Pastor, Elizabeth Russ, Gabriela Vokic. **Assistant Professors:** Rubén Sánchez-Godoy, Alicia Zuese. **Senior Lecturers:** Maria Eguez, Susana Fernandez-Solera, Verónica León, Betty Nelson. **Lecturers:** Miroslava Detcheva, Linda Koski, Leticia McDoniel, Angie Morón-Nozaleda, Luis Polanco, Joy Saunders. **Professors of Practice:** Maria del Pilar Melgarejo Acosta, Donna Binkowski. **Emeritus Professors:** William Beauchamp, Vincenzo E. DeNardo, Margareta Deschner, Maurice G. Elton, John Harry LaPrade, Elizabeth G. Miller, Peter K. Mollenhauer, Zoë Goss Urbanek, Jutta Irene Van Selm, André Winandy.

SMU Abroad Rules for Credit

Students participating in an SMU Abroad term program can count nine hours toward a world languages and literatures major and six hours toward the minor; additional hours count as elective credit. For students studying abroad for a full year, the number of hours counting toward the major could be increased to a maximum of 15 hours with specific approval from the area chair of the language.

Bachelor of Arts With a Major in World Languages

The B.A. degree is offered in French, German and Spanish. Students wishing to specialize in two world languages may receive the B.A. degree in world languages by completing the requirements for the minor plus two additional advanced courses in one language (French, German or Spanish), and also completing the requirements for the minor in a second language (Arabic, Chinese, French, German, Italian, Japanese, Latin, Russian or Spanish). Courses are selected in consultation with the major adviser in the first language. Minors in area studies may not be applied to the world languages major.

Departmental Distinction

1. Overall 3.500 GPA by the middle of the junior year.
2. Overall 3.700 GPA in the major by the middle of the junior year.
3. Invitation of area faculty after the area as a whole has discussed the student's candidacy.
4. Two extra courses beyond the requirements for the major. One course must include a major research paper, to be undertaken and completed in the first term of the candidate's senior year.

Minors in World Languages

Academic minors are available in Arabic, Chinese, French, German, Italian, Italian area studies, Japanese, Latin, Russian area studies and Spanish.

Minor in Arabic

Required Courses	*Credit Hours*
ARBC 2301, 2302, 3301, 3302, or equivalents	12
Two from the following, with at least one 3000-level or higher:	6
ANTH 3359	
ARBC 4312	
ARHS 3354, 3392 (CFA 3313)	
HIST 2355, 2379, 3323, 3326 (CF 3310), 3389, 3390	
PLSC 3345	
RELI 3329, 3362	
WL 3355	
	18

Arabic Courses (ARBC)

All courses are conducted in Arabic.

ARBC 1310 (3), 1320 (3). SPECIAL TOPICS ABROAD IN ARABIC. Courses in SMU-approved international programs. Prior departmental approval required.

ARBC 1401 (4). BEGINNING ARABIC I. Introductory course for students with no knowledge of the language. The course presents essential vocabulary, grammar and Arabic culture.

ARBC 1402 (4). BEGINNING ARABIC II. This course continues the oral practice, reading, writing, grammar and cultural studies begun in ARBC 1401. Students will acquire a substantial amount of vocabulary and idiomatic language. *Prerequisites:* ARBC 1401 (C- or higher), or its equivalent.

ARBC 2301 (3). INTERMEDIATE ARABIC I. This course continues oral practice, reading, writing, grammar and cultural studies. Students will acquire a substantial amount of vocabulary and idiomatic language and more advanced syntax. *Prerequisites: ARBC* 1402 or equivalent.

ARBC 2302 (3). INTERMEDIATE ARABIC II. This course continues the oral practice, reading, writing, grammar and cultural studies. Students will acquire a substantial amount of vocabulary and idiomatic language and more advanced syntax. *Prerequisites:* ARBC 2301 (C- or higher), or its equivalent.

ARBC 2310 (3), 2320 (3). SPECIAL TOPICS ABROAD IN ARABIC. Courses in SMU-approved international programs. Prior departmental approval required.

ARBC 3301 (3). ADVANCED ARABIC I. This course provides a thorough study of authentic materials in classical prose for mastery of classical Arabic and involves more extended readings and discussions of contemporary and historical cultural topics. *Prerequisites:* ARBC 2302 or its equivalent.

ARBC 3302 (3). ADVANCED ARABIC II. This course provides a thorough study of authentic materials in classical prose for mastery of classical Arabic and involves more extended readings and discussions of contemporary and historical cultural topics. *Prerequisites:* ARBC 3301 (C- or higher), or its equivalent.

ARBC 3310 (3), 3320 (3). SPECIAL TOPICS ABROAD IN ARABIC. Courses in SMU-approved international programs. Prior departmental approval required.

ARBC 4312 (3). ADVANCED MEDIA ARABIC. Introduces authentic texts and audio files from a wide variety of media sources and emphasizes the semantic and stylistic aspects of media Arabic rather than its grammar. *Prerequisites:* ARBC 3301 and 3302, or placement test, or departmental permission.

Minor in Chinese

Students taking CHIN 4381 and 4382 for the language training component of the requirement must take another course from the list of supporting courses (Chinese culture, history or literature courses), for a total of 20 hours. Students testing into any course above 2402 will have to earn nine hours in SMU credit (six hours in Chinese language and three hours in Chinese culture) in order to receive the minor in Chinese. Study with SMU-in-China's summer program is strongly recommended.

Required Courses	*Credit Hours*
Language Training	14
CHIN 2401, 2402	
Two from CHIN 3311, 3312, 4381, 4382	
Supporting Courses (one from the following)	3
CHIN 4380, 4381, 4382, 4385	
HIST 3393, 3395, 3398	
RELI 3377, 3378	
WL 3310, 3312, 3325, 3395, 3397, 3398	
	17

Chinese Courses (CHIN)

All courses are conducted in Chinese.

CHIN 1401 (4), 1402 (4). BEGINNING CHINESE. Introduction to spoken and written Mandarin Chinese. Course emphasizes intensive drills in sounds and tones, sentence structure, and a vocabulary of 500 characters. Students attend three weekly master classes plus two hours of practice in small groups. Computer, video and audio assignments are required. *Prerequisite for CHIN 1402:* C- or better in 1401 or permission of area chair.

CHIN 2401 (4), 2402 (4). INTERMEDIATE CHINESE. Enhances basic language skills learned in Beginning Chinese but focuses on language proficiency, particularly in the areas of description, narration, correspondence and comparisons based on situational context. Students attend four weekly classes. Video and audio materials are used. *Prerequisite for CHIN 2401:* C- or better in CHIN 1402 or permission of area chair. *Prerequisite for CHIN 2402:* C- or better in CHIN 2401 or permission of area chair.

CHIN 3311 (3). ADVANCED CHINESE. Emphasizes the refinement of skills in Mandarin Chinese through the study of selected topics in contemporary Chinese culture and society. Students develop the ability to express themselves in sustained oral and written forms. *Prerequisite:* Beginning and intermediate Chinese.

CHIN 3312 (3). ADVANCED CHINESE (2ND TERM). Enhances students' proficiency in Mandarin Chinese through a multimedia software program. Special concentration is given to China's current affairs through the use of authentic journalistic materials – television news and newspaper reports. *Prerequisite:* CHIN 3311.

CHIN 3321 (3), 3322 (3). SPECIAL TOPICS ABROAD IN CHINESE. Courses in SMU-approved international programs. Prior departmental approval required.

CHIN 4380 (3). DIRECTED STUDIES IN CHINESE. Independent study in Chinese literature and culture in selected topics, authors and genres. Permission of department required.

CHIN 4381 (3). READINGS IN CHINESE LITERATURE AND CULTURE. An upper-level course designed for students who have finished third-year Chinese. Students will enhance their four year language skills, especially reading and writing, through a wide variety of primary, unedited texts. *Prerequisite:* CHIN 3312 or consent of area chair.

CHIN 4382 (3). CHINESE CULTURE AND SOCIETY IN FILMS. An advanced course designed for students who have completed third-year Chinese. Enhancement of all four language skills through original unedited texts and films from China and Taiwan. *Prerequisite:* CHIN 3312 or consent of area chair.

Bachelor of Arts With a Major in French

Courses are to be selected in consultation with the major adviser. Study with SMU-in-Paris and/or SMU-in-the-South of France is strongly recommended.

Required Courses	*Credit Hours*
FREN 2455, 3356, 4370	10
FREN 4375, 4371 *or* 4372	6
Two 5000-level FREN courses	6
Electives: Two 4000- or 5000-level FREN courses	6
	28

Minor in French

Required Courses	*Credit Hours*
FREN 2401 *or* equivalent	4
FREN 2455, 3356, 4370 *or* 4375	10
Two 4000-level FREN courses	6
	20

French Courses (FREN)

All courses are conducted in French.

Language Courses	FREN 1401, 1402, 2201, 2401, 2455, 3356, 4103, 4185, 4285, 4385, 4355, 4356, 4357
Literature and Culture Courses	FREN 4365, 4370–76, 4391, 5180, 5320, 5321, 5334, 5335, 5344, 5345, 5350, 5351, 5361, 5365–68, 5380, 5381

FREN 1401 (4). BEGINNING FRENCH: TERM ONE. Stresses acquisition of basic skills: speaking, listening comprehension, reading, and writing. Five classes per week. *Prerequisite:* This course is reserved for students with no previous knowledge of French.

FREN 1402 (4). BEGINNING FRENCH: TERM TWO. Stresses acquisition of basic skills: speaking, listening comprehension, reading, and writing. Five classes per week. *Prerequisite:* C- or better in FREN 1401, a minimum qualifying score on the SMU French placement exam, or permission of area chair.

FREN 1502 (5). BEGINNING FRENCH II WITH REVIEW. This course contains extensive review of the first term of French. It was designed for students who have had French previously but are not ready for FREN 1402.

FREN 2101 (1), 2102 (1). INTERMEDIATE CONVERSATION PRACTICE. Offered in the South of France, SMU-Abroad.

FREN 2201 (2). FRANCE TODAY: CULTURE, SOCIETY, AND DAILY LIFE. In conjunction with FREN 2401, a systematic exploration of diverse aspects of French life, involving both classroom study and on-site investigation. Emphasis on contextual language acquisition, both written and oral. *Prerequisite:* Permission of program director. (SMU-in-the-South of France only)

FREN 2401 (4). SECOND-YEAR/INTERMEDIATE FRENCH. Continues to strengthen the four language skills, with added emphasis on reading and writing. Five classes per week. Completes the second-year language requirement in French. *Prerequisite:* C- or better in FREN 1401 or a minimum qualifying score on the SMU French placement exam.

FREN 2455/FREN 3101/FREN 3355 (4). INTERMEDIATE FRENCH II. Refinement of all four language skills, with special emphasis on oral proficiency. Includes study of phonetics, oral presentations, viewing and discussion of films, vocabulary development, grammar review, short literary readings, and compositions. Five classes per week. *Prerequisite:* C- or better in FREN 2401.

FREN 3101/FREN 3355/FREN 2455 (1). FRENCH PHONICS. Perfecting French pronunciation: individual sounds, word groups, rhythmic patterns, intonation. Use of audiocassettes and interactive software. *Corequisite:* FREN 3355. *Prerequisite:* FREN 2401.

FREN 3321 (3), 3322 (3), 4321 (3), 4322 (3). SPECIAL TOPICS ABROAD IN FRENCH. Courses in SMU-approved international programs. Prior departmental approval required.

FREN 3355/FREN 3101/FREN 2455 (3). ADVANCED FRENCH I. Refinement of all four language skills. Special emphasis on conversation, particularly in the following areas: common social situations, narration, reporting in indirect discourse, expository oral presentation. Includes grammar review. Outside reading, compositions, use of audio and videocassettes. *Corequisite:* FREN 3101. *Prerequisite:* FREN 2401.

FREN 3356 (3). ADVANCED FRENCH II. Refinement of all four language skills. Special emphasis on writing proficiency, particularly in the following areas: exposition, narration, description, correspondence, literary analysis. Includes grammar review, oral presentations, dictionary research, outside reading. *Prerequisites:* C- or better in FREN 3455 or permission of area chair.

FREN 4103 (1). ADVANCED READINGS IN FRENCH. Optional course open to students simultaneously enrolled in CF 3349, FL 3349 or HIST 3392. This class is for students proficient in French who would like to have one-hour a week of class to read some of the course materials in the original French, as well as to discuss and write about them in French. *Corequisite:* FL 3349/CF 3349/HIST 3392. *Prerequisite:* FREN 4370 or equivalent and permission of instructor.

FREN 4185 (1), 4285 (2). INTERNSHIP IN FRENCH. This course offers students experience in organizations where knowledge of French and the cultures of French-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in French of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

FREN 4355 (3). ADVANCED SPOKEN FRENCH. Focus on development of both oral and aural skills. Development of topic-specific vocabulary; readings and discussion of texts and commentaries on contemporary French society and culture; viewing and discussion of feature films. *Prerequisite:* C- or better in both FREN 3455 and 3356 or permission of area chair.

FREN 4356 (3). ADVANCED COMMUNICATION SKILLS: THE FRENCH-LANGUAGE MEDIA. An exploration of the many countries and regions of the French-speaking world through the use of films, videos, and the Internet, as well as expository texts from the French-language press and other media. Development of listening and reading comprehension, advanced conversational skills, and writing of short expository texts. *Prerequisite:* C- or better in both FREN 3455 and 3356 or permission of area chair.

FREN 4357 (3). FRENCH STYLISTICS. Intensive hands-on study of advanced grammatical, syntactic, lexical and rhetorical features of written (and formal spoken) French. Comparison of standard French and English styles. French-English and English-French translation. *Prerequisites:* C- or better in both FREN 3455 and 3356 or permission of area chair.

FREN 4365 (3). INTRODUCTION TO FRENCH CINEMA. An introduction to French cinema's major works, filmmakers, and trends with a continued emphasis on improvement of advanced French language skills. *Prerequisites:* C- or better in FREN 3455, 3356 or permission of instructor and area chair.

FREN 4370 (3). INTRODUCTION TO THE ANALYSIS OF FRENCH AND FRANCOPHONE TEXTS. Strategies for interpreting French and Francophone written and filmic texts. Focus on the principal genres: poetry, prose narrative, essay. *Prerequisites:* C- or better in both FREN 3355 and 3356 or permission of area chair.

FREN 4371 (3). SURVEY OF FRENCH LITERATURE: FROM THE MIDDLE AGES TO THE REVOLUTION. Overview of French literary history from the beginning to the end of the 18th century. Selection of texts from major dramatists, poets and prose writers. *Prerequisites:* C- or better in FREN 4370 or permission of area chair.

FREN 4372 (3). SURVEY OF LITERATURE IN FRENCH: FROM ROMANTICISM TO THE PRESENT. Overview of French and Francophone literary history from the beginning of the 19th century to the present day. Selection of texts from major dramatists, poets and writers of prose fiction. *Prerequisites:* C- or better in FREN 4370 or permission of area chair.

FREN 4373 (3), 4374 (3). FRENCH CIVILIZATION. The evolution of French society, with emphasis on cultural, artistic and intellectual trends. *Prerequisites:* C- or better in FREN 3455, 3356 or permission of area chair. (SMU-in-Paris and SMU-in-the-South of France only)

FREN 4375 (3). INTRODUCTION TO FRENCH HISTORY AND CULTURE. Survey of French political and cultural history from Roman Gaul to the Fifth Republic. Topics include characteristic institutions, social groups and individuals, and key cultural myths. *Prerequisites:* C- or better in FREN 3455, 3356 or permission of instructor and area chair.

FREN 4376 (3). INTRODUCTION TO FRANCOPHONE CULTURES. Introduction to cultures once colonized by France. An exploration of the history and impact of French colonization on North America, Africa and the Caribbean and the relationship between these regions and France. *Prerequisites:* C- or better in FREN 4370 or permission of area chair.

FREN 4379 (3). INTRODUCTION TO FRENCH CULTURE AND LITERATURE I. Survey of French social, cultural, and literary histories from the time of Charlemagne to the end of the reign of Louis XIV. *Prerequisites:* FREN 4370.

FREN 4380 (3). INTRODUCTION TO FRENCH CULTURE AND LITERATURE II. Survey of French and francophone social, cultural, and literary histories from the death of Louis XIV to the Dreyfus Affair. *Prerequisites:* FREN 4370.

FREN 4381 (3). INTRODUCTION TO FRENCH CULTURE AND LITERATURE III. Survey of French and francophone social, cultural, and literary histories from the beginning of the 20th century to the present. *Prerequisites:* FREN 4370.

FREN 4385 (3). INTERNSHIP IN FRENCH. This course offers students experience in organizations where knowledge of French and the cultures of French-speaking countries is relevant: Corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in French of 3.300 or higher; sponsorship of a professor and of the organization, agency or corporation.

FREN 4391 (3). COMMERCIAL FRENCH FOR INTERNATIONAL TRADE. An advanced course for international trade and communication. *Prerequisite:* C- or better in both FREN 3455 and 3356 or permission of area chair.

FREN 5180 (1). INDEPENDENT STUDY.

FREN 5320 (3), 5321 (3). LITERARY PERIODS. The study of a variety of authors and works with respect to the ways in which they define and reflect the literary, political and social aspects of a given historical period. Specific topics vary. *Prerequisite:* FREN 4370 and any two additional French courses at the 4000 or 5000 level.

FREN 5334 (3), 5335 (3). GENRE STUDIES. Examines the works of several authors as a means of understanding the nature and evolution of a particular genre. Specific topics vary. *Prerequisite:* FREN 4370 and any two additional French courses at the 4000 or 5000 level.

FREN 5344 (3), 5345 (3). LITERARY MOVEMENTS. Explores the conventions that shape a specific movement through a reading of representative texts by various authors. Topics vary. *Prerequisite:* FREN 4370 and any two additional French courses at the 4000 or 5000 level.

FREN 5350 (3), 5351 (3). PROBLEMS IN FRENCH LITERATURE. The definition of a particular theme as elaborated by a group of writers, usually covering different time periods and genres. *Prerequisite:* FREN 4370 and any two additional French courses at the 4000 or 5000 level.

FREN 5361 (3). LITERARY TRANSLATION: THEORY AND PRACTICE. Exploring the relationship between interpretation and translation. Individual projects in a workshop setting. *Prerequisite:* Any two from FREN 4371, 4372, 4373, 4374 or permission of area chair.

FREN 5365 (3), 5366 (3). TOPICS IN FRENCH AND FRANCOPHONE CINEMA. A seminar in French and Francophone film studies. Topics vary. *Prerequisites:* C- in FREN 3455, 3356 or permission of instructor and French area chair.

FREN 5367 (3), 5368 (3). MAJOR AUTHORS. Focused study of one especially important writer/thinker whose work has had a major impact on French and European literature and thought. Examples: Montaigne, Rousseau, Balzac, Sartre, etc. *Prerequisites:* C- or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.

FREN 5380 (3), 5381 (3). TUTORIAL FOR JUNIORS AND SENIORS. By invitation of the entire area only. Special project set up with the help of the area chair. *Prerequisite:* Permission of the department.

Bachelor of Arts With a Major in German

Proficiency in written and spoken German is demonstrated by coursework in GERM 3311. Study in the SMU-in-Weimar summer program or in an approved term or junior-year program in a German-speaking country is highly recommended. Suggested electives outside the German area are courses in a second world language; other world literature in translation; literary criticism; English and American literature; linguistics, semiotics or philology; and German art history, philosophy or history.

Required Courses	*Credit Hours*
GERM 3311, 3320	6
Electives (3000 level and above, approved by adviser)	18
	24

Minor in German

Required Courses	*Credit Hours*
GERM 2311, 2312, 3311	9
Three advanced GERM courses approved by adviser	9
	18

German Courses (GERM)

All courses are conducted in German.

GERM 1401 (4). BEGINNING GERMAN. Stresses acquisition of basic skills: speaking, aural comprehension, reading, and writing. Classes meet 5 hours a week.

GERM 1402 (4). BEGINNING GERMAN II. Stresses acquisition of basic skills: speaking, aural comprehension, reading, and writing. Classes meet 5 hours a week. *Prerequisite:* C- or better in GERM 1401 or permission of area chair.

GERM 2311 (3). CULTURE, GRAMMAR, AND LITERATURE. Discussions and compositions based on literary and cultural texts, and review of grammar. *Prerequisite:* C- or better in GERM 1402 or permission of area chair.

GERM 2312 (3). CULTURE, GRAMMAR, AND LITERATURE. Discussions and compositions based on literary and cultural texts, and review of grammar. *Prerequisite:* C- or better in GERM 2311 or permission of the area chair.

GERM 3311 (3). TALKING AND WRITING ABOUT MODERN GERMANY. An advanced course intended to increase active command of the language. Utilizes a variety of short modern texts. *Prerequisite:* GERM 2312 or the equivalent.

GERM 3312 (3). ADVANCED GERMAN COMPOSITION. Discussion of short contemporary texts; compositions on personal topics. Selective study of grammar. *Prerequisite:* GERM 3311 or permission of department.

GERM 3313 (3). GERMANY TODAY: PEOPLE, CULTURE, AND SOCIETY. Explores current German culture; readings in newspapers and magazines to acquaint students with today's German cultural and political scene; and conversations, oral presentations, and compositions. *Prerequisite:* C- or better in GERM 3311 or permission of instructor.

GERM 3320 (3). CONTEMPORARY GERMAN CULTURE. An exploration of the German cultural scene through magazine and newspaper articles, short stories, television, and films from the postwar era to the present. *Prerequisite:* C- or better in GERM 3311 or permission of instructor.

GERM 3321 (3), 3322 (3). SPECIAL TOPICS ABROAD IN GERMAN. Courses in SMU-approved international programs. Prior departmental approval required.

GERM 3325 (3). INTRODUCTION TO GERMAN LITERATURE. Works from major genres (lyric poetry, drama, narrative fiction); overview of the history of German literature; introduc-

tion to analytical techniques and procedures. Course is taught in German. *Prerequisites:* C- or better in GERM 3311, or permission of the instructor.

GERM 3330 (3). GREAT GERMAN STORIES: KAFKA, MANN, WOLF, AND OTHERS. Short narrative forms from the beginning of the 20th century to the present: Mann, Kafka, Brecht, Boll, Seghers, Bachmann, Wolf, and others. Includes consideration of two postwar German literatures (the German Democratic Republic and the Federal Republic of Germany). *Prerequisite:* GERM 3311 or permission of instructor.

GERM 3370 (3). ADVANCED GERMAN GRAMMAR AND USAGE. Intensive study of advanced grammatical forms, syntactical structures, and usage distinctions in modern German. Weekly short written assignments. Course not open to native speakers of the language. *Prerequisite:* C- or better in GERM 3311 or permission of instructor.

GERM 4185 (1), 4285 (2), 4385 (3). INTERNSHIP IN GERMAN. Offers experience in organizations where knowledge of German and the cultures of German-speaking countries is relevant: Corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in German of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

GERM 4310 (3). MIDDLE AGES TO PRESENT: GERMAN POETRY. Historical survey of poetic forms from medieval Minnesang through the Baroque and Sturm und Drang to Classicism, Romanticism, and 20th-century styles. *Prerequisite:* GERM 3320, 3313 or permission of instructor.

GERM 4320 (3). MODERN DRAMA. Critical reading of dramatic works by major German, Austrian, and Swiss authors (Büchner, Schnitzler, Brecht, Dürrenmatt, Aichinger, Bachman, Müller, Jelineck, and others), with some attention to critical theory. *Prerequisites:* GERM 3313, 3320 or permission of instructor.

GERM 4321 (3), 4322 (3), 5326 (3). SPECIAL TOPICS ABROAD IN GERMAN. Courses in SMU-approved international programs. Prior departmental approval required.

GERM 4330 (3). 19TH-CENTURY STORIES. Short narrative forms from, Romanticism through realism to fin-de-siècle Vienna: Grimm, Eichendorff, Kleist, Storm, Schnitzler, and others. *Prerequisite:* GERM 3320 or permission of instructor.

GERM 4340 (3). GREAT PLAYS FOR LISTENING. Selections from the golden age of the German Horspiel: Borchert, Boll, Dürrenmatt, Aichinger, Bachmann, Jandl, Mayröcker, and others. *Prerequisite:* GERM 3313 and 3320 or permission of instructor.

GERM 4350 (3). HISTORY, CULTURE, AND IDENTITY IN POSTWAR GERMAN FILM. An examination of German films since 1945 from both German states, ending with the depiction of the unification in film, with continued emphasis on improvement of advanced German language skills. *Prerequisite:* GERM 3320 or permission of instructor.

GERM 4360 (3). CHILDHOOD AND YOUTH IN GERMAN LITERATURE AND FILM. Traces the representation of childhood and youth through German literature and film from the 19th century to the present. *Prerequisite:* GERM 3320, or 3330, or permission of instructor

GERM 4370 (3). MEMORY AND VICTIMIZATION DISCOURSES IN GERMANIC FILM AND LITERATURE SINCE 1945. Introduces students to discourses in German-speaking lands related to World War II and the Holocaust through film and literature, and explores major historical developments in coming to terms with the Nazi past. *Prerequisite:* C- or better in GERM 3320 or permission of instructor.

GERM 5310 (3). READING THE CLASSICS. Narrative, poetry and drama representing the German Enlightenment, Sturm und Drang, Classicism and Romanticism: Lessing, Goethe, Schiller, Kleist, Novalis, and others. *Prerequisite:* Any 4000-level course, or permission of instructor.

GERM 5330 (3). PROBLEMS WITH THE SELF. Poems, essays, and novellas dealing with the perception of self, from the Middle Ages to modern times. Walther, Fleming, Lichtenberg, Kleist, Goethe, Hesse, Mann, and others. *Prerequisite:* Any 4000-level course, or permission of instructor.

GERM 5380 (3). DIRECTED STUDIES. Permission of department.

GERM 5381 (3). DIRECTED STUDIES. Independent study in German literature and culture in selected topics, authors, and genres. *Prerequisite:* Permission of the department.

Minor in Italian

Required Courses	*Credit Hours*
ITAL 2401, 2402, 3355, and 3357 *or* 3373	14
Two 4000-level ITAL courses approved by adviser	6
	20

Minor in Italian Area Studies

Required Courses	*Credit Hours*
ITAL 2401, 2402, 3355, and 3357 *or* 3373	14
One 4000-level ITAL course approved by adviser	3
One from the following, with adviser's approval:	3
ARHS 3312, 3314, 3331, 3332 HIST 3351, 3358, 3359, 3361, 3365, 3366, 3376 WL 2395, 3390, 3391, 3392, 3393, 3394	
	20

Italian Courses (ITAL)

All courses are conducted in Italian.

Literature Courses	ITAL 4323, 4324, 4325, 4368, 4381, 4382

ITAL 1401 (4). BEGINNING ITALIAN. Stresses acquisition of basic skills, speaking, aural comprehension, reading, and writing. Students attend three weekly foundations classes plus two hours of applications classes for practice in small groups. Computer, video, and audio assignments in the Foreign Language Learning Center are required. Four credits per term.

ITAL 1402 (4). BEGINNING ITALIAN – 2ND SEMESTER. Stresses acquisition of basic skills, speaking, aural comprehension, reading, and writing. Students attend three weekly foundations classes plus two hours of applications classes for practice in small groups. Computer, video, and audio assignments in the Foreign Language Learning Center are required. *Prerequisite:* C- or better in 1401 or permission of area chair.

ITAL 2401 (4). INTERMEDIATE ITALIAN – FIRST SEMESTER. Continues to strengthen the four language skills with added emphasis on reading and writing. Students attend three weekly foundations classes plus two hours of applications classes for practice in small groups. Computer, video, and audio assignments in the Foreign Language Learning Center are required. Four credits per term. All courses are conducted in Italian. *Prerequisite:* C- or better in ITAL 1402 or permission of area chair.

ITAL 2402 (4). INTERMEDIATE ITALIAN – SECOND SEMESTER. Continued strengthening of all four language skills in Italian (listening, speaking, reading, writing). Computer, video and audio assignments are required. *Prerequisite:* C- or better in ITAL 2401 or permission of area chair.

ITAL 3320 (3), 3321 (3). SPECIAL TOPICS ABROAD IN ITALIAN. Courses in SMU-approved international programs. Prior departmental approval required.

ITAL 3355 (3). ADVANCED ITALIAN CONVERSATION. An advanced course for majors and non-majors intended to improve linguistic proficiency within the context of studying Italian contemporary movies and culture. *Prerequisite:* C- or better in ITAL 2402 or permission of the instructor.

ITAL 3357 (3). GRAMMAR AND COMPOSITION. Analysis and imitation of short contemporary texts: letters, film reviews, articles, criticism, narratives. Development of oral and written proficiency. Selective study of grammar. *Prerequisite:* ITAL 2401.

ITAL 3373 (3). ITALIAN CULTURE. The evolution of Italian society with emphasis on cultural, artistic, and intellectual trends. *Prerequisite:* ITAL 2401.

ITAL 4185 (1). INTERNSHIP IN ITALIAN. This course offers students experience in organizations where knowledge of Italian and the cultures of Italian-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Italian of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

ITAL 4285 (2). INTERNSHIP IN ITALIAN. This course offers students experience in organizations where knowledge of Italian and the cultures of Italian-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Italian of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

ITAL 4320 (3), 4321 (3). SPECIAL TOPICS ABROAD IN ITALIAN. Courses in SMU-approved international programs. Prior departmental approval required.

ITAL 4322 (3). MODERN ITALIAN LITERATURE I.

ITAL 4323 (3). MODERN ITALIAN LITERATURE II. From the latter half of the 19th Century to World War I. Realism, Decadentism, and the Grotesque. Authors studied are Verga, D'Annunzio, Pirandello. *Prerequisite:* ITAL 2401.

ITAL 4324 (3). CONTEMPORARY ITALIAN LITERATURE. Covers the Fascist Period and World War II. Introspection, society and the problem of evil: Moravia, Pavese, Bassani, Buzzati, and Ginzburg. *Prerequisite:* ITAL 2401.

ITAL 4325 (3). ITALIAN POETRY SINCE DANTE. Historical survey of works of poetry presented in their original form, from the medieval Dolce Stil Novo to the poetic styles of the twentieth century. *Prerequisite:* ITAL 3357 or permission of instructor.

ITAL 4367 (3). ITALIAN AUTHORS. From Middle Ages to the Modern Age.

ITAL 4368 (3). ITALIAN AUTHORS – CONTEMPORARY. *Prerequisite:* ITAL 2401.

ITAL 4381 (3). TUTORIAL FOR JUNIORS AND SENIORS: DIRECTED READINGS AND RESEARCH. Directed reading and research in specific literary topics or writers. *Prerequisite:* ITAL 3357 or permission of instructor.

ITAL 4382 (3). TUTORIAL FOR JUNIORS AND SENIORS: DIRECTED READINGS AND RESEARCH. Directed reading and research in specific literary topics or writers. *Prerequisite:* ITAL 3357 or permission of instructor.

ITAL 4385 (3). INTERNSHIP IN ITALIAN. This course offers students experience in organizations where knowledge of Italian and the cultures of Italian-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Italian of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

Minor in Japanese (JAPN)

Required Courses	*Credit Hours*
JAPN 2401, 2402, 3311, 3312	14
One from the following:	3
ARHS 3394	
FILM 3359	
HIST 3395	
JAPN 4381	
PLSC 3346	
WL 3398	
	17

Japanese Courses

All courses are conducted in Japanese.

JAPN 1401 (4), 1402 (4). BEGINNING JAPANESE. This course focuses on oral and aural proficiency for daily communication situations, mastery of Japanese writing systems (hiragana, katakana, basic kanji) and foundational grammar. *Prerequisite for JAPN 1402:* C- or better in 1401 or permission of area chair.

JAPN 1501 (5). JAPANESE AT KGU, LEVEL 1. Emphasis on understanding of basic Japanese grammar, mastery of fundamental sentence patterns and acquisition of 170 new kanji. This course provides basic reading skills for students.

JAPN 2401 (4), 2402 (4). INTERMEDIATE JAPANESE. This course focuses on developing and enriching literacy experience in Japanese through reading and writing narrative and descriptive texts, as well as conversing on personal topics in more complicated situations. *Prerequisite for JAPN 2401:* C- or better in JAPN 1402 or permission of area chair. *Prerequisite for JAPN 2402:* C- or better in 2401 or permission of area chair.

JAPN 3311 (3). THIRD-YEAR JAPANESE. Emphasis on enhancing abilities in advanced reading and writing skills, and communicating with accuracy and grammatical complexity. Students also acquire the ability to use refined honorific forms in appropriate cultural contexts. *Prerequisite:* C- or better in JAPN 2402 or permission of area chair.

JAPN 3312 (3). THIRD-YEAR JAPANESE – 2ND SEMESTER. Emphasis on enhancing abilities in advanced reading and writing skills, communicating with accuracy and grammatical complexity. Students also acquire the ability to use refined honorific forms in appropriate cultural contexts. *Prerequisite:* C- or better in JAPN 3311 or permission of area chair.

JAPN 3320 (3), 3321 (3). SPECIAL TOPICS ABROAD IN JAPANESE. Courses in SMU-approved international programs. Prior departmental approval required.

JAPN 3501 (5). JAPANESE AT KGU, LEVEL 2. Further development of basic reading skills with emphasis on an adequate command of complex sentence patterns. Acquisition of 200 new kanji.

JAPN 3600 (6), 3900 (9). STUDIES IN JAPAN. Selected coursework at KGU, chosen in consultation with adviser. Students enroll in Studies in Japan (JAPN) 3600 and JAPN 3900) for the second term of the academic year, for a total of 15 hours. Equivalent SMU course numbers to be determined upon receipt of grades after the end of the term.

JAPN 4381 (3). READINGS IN JAPANESE CULTURE AND BUSINESS. Upper-level language course designed for students who have finished third year Japanese. Students will enhance their speaking, reading, and writing skills through a wide range of primary materials. *Prerequisite:* JAPN 3312 or approval of area chair.

JAPN 4501 (5). JAPANESE AT KGU, LEVEL 3. Grammar and reading, advanced. Vocabulary buildup and acquisition of reading and writing 200 new kanji.

JAPN 5501 (5). JAPANESE AT KGU, LEVEL 4. Students are expected to read a variety of selected materials for better understanding of the Japanese culture and ways of thinking. Acquisition of a larger vocabulary and 250 new kanji.

Minor in Latin

Required Courses	*Credit Hours*
LATN 2311, 2312; three from LATN 3323, 3324, 3325, 3326	15
One from the following:	3
ARHS 3312, 3314, 3316, 3318 (CF 3392), 3319	
CLAS 2311; ENGL 3382	
HIST 3350, 3354, 3355 (CF 3325), 3356, 3361	
One 3000-level LATN course	
RELI 3352 (ARHS 3346), 3371 (CFA 3307)	
	18

Latin Courses (LATN)

LATN 1401 (4). BEGINNING LATIN. Structures of the Latin language: vocabulary, grammar, and syntax. Also, introduction to Roman history and culture, and simple readings from Latin authors.

LATN 1402 (4). BEGINNING LATIN (2ND SEMESTER). Structures of the Latin language – vocabulary, grammar, syntax. Introduction to Roman history and culture. Simple readings from Latin authors. *Prerequisite:* C- or better in 1401.

LATN 2311 (3). SECOND YEAR LATIN. Readings from Latin prose authors: Caesar, Livy, Eutropius. *Prerequisite:* C- or better in LATN 1402.

LATN 2312 (3). SECOND-YEAR LATIN: SECOND TERM. Readings from Roman prose and poetry (Caesar, Pliny, Ovid). *Prerequisite:* C- or better in LATN 2311 or consent of the area chair.

LATN 3185 (1), 3285 (2), 3385 (3). INTERNSHIP IN LATIN. Offers experience in organizations or institutions where knowledge of Latin is relevant: museums, libraries, historical archives, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Latin of 3.300 or higher; sponsorship of a professor and of the organization, agency, or institution.

LATN 3323 (3). LATIN LITERATURE. A thematic approach to Roman literature incorporating excerpts from a variety of authors and genres. Topics include aspects of Roman life and culture, history and politics, and religion and philosophy. *Prerequisite:* C- or better in LATN 2312 or permission of the area chair.

LATN 3324 (3). ADVANCED LATIN GRAMMAR AND COMPOSITION. Development of skills in analyzing and translating complex grammatical structures; practice in writing Latin with correct syntax and usage. *Prerequisite:* C- or better in LATN 2312 or permission of instructor.

LATN 3325 (3). ADVANCED LATIN READINGS AND COMPOSITION. This course concentrates on the Latin language as a powerful vehicle for communication and artistry through reading and writing. Students will study Latin texts on universal themes from various authors and times.

LATN 3326 (3). ADVANCED LATIN READINGS: VERGIL. In this course, students experience the integration of storytelling with the artistry of language in the Aeneid through which Vergil creates a national epic with political and cultural impact. *Prerequisites:* C- or better in LATN 2312 or permission of instructor.

LATN 3327 (3). ADVANCED LATIN: MYTH VIA OVID. Students discover the classical inspiration for great works of Western civilization's art and literature through Ovid's recounting of mythological transformations and heroic tales in the poem *Metamorphoses*. *Prerequisite:* C- or better in LATN 2312 or permission of instructor.

LATN 3330 (3), 3331 (3). SPECIAL TOPICS ABROAD IN LATIN. Courses in SMU-approved international programs. Prior departmental approval required.

LATN 3335 (3). MEDIEVAL LATIN. This course explores the rich heritage of medieval Latin literature from the fifth century to the thirteenth century: prose and poetry, texts of history and philosophy, theology, and spiritual writings. (Medieval Studies Consortium Course; permission of director required).

Minor in Russian Area Studies

Required Courses	*Credit Hours*
RUSS 2341, 2351	6
One from RUSS 3323, 3351, 3361, 3362	3
RUSS 3341, 3302	6
or RUSS 3304 and one supporting course	
or two from the list below	
HIST 3340, 3341, 5367	
PLSC 3351, 3358, 3359 (CFA 3359), 3365, 4358, 4384	
WL 3323	
	15

Russian Courses (RUSS)

All courses are conducted in Russian.

RUSS 1351 (3). RUSS FOR READING KNOWLEDGE I: GRAMMAR/SYNTAX. A comprehensive overview of the grammar and syntax of Russian, both for students who aim at reading proficiency only, and for those who expect to use this course as a platform for developing conversational and writing skills later on.

RUSS 1401 (4). BEGINNING RUSSIAN. An overview of the structures of the Russian language, with emphasis on skills of comprehension, speaking, reading, and writing. Foundations sections (two 50-minute classes per week) will aim at understanding concepts and grammatical structures, while Applications sections (three 50-minute classes per week) will concentrate on oral drill and conversation practice.

RUSS 1402 (4). BEGINNING RUSSIAN: SECOND SEMESTER. An overview of the structures of the Russian language, with emphasis on skills of comprehension, speaking, reading, and writing. Foundations sections (two 50-minute classes per week) will aim at understanding concepts and grammatical structures, while Applications sections (three 50-minute classes per week) will concentrate on oral drill and conversation practice. *Prerequisite:* C- or better in 1401 or permission of area chair.

RUSS 2312/RUSS 2351 (3). INTERMEDIATE RUSSIAN.

RUSS 2341 (3). RUSSIAN READING AND CONVERSATION. Russian language work beyond the first-year level is done in multilevel workshops, organized by target skills, each including students with varying levels of experience and background with the Russian language. Small classes permit an individualized approach, so that students completing varying assignments work together in the same classroom. Each workshop is completed twice, once at the second-year level, and once at the third-year level. Progress to higher levels will be measured by proficiency tests. The Reading/Conversation Workshop targets skills of oral and textual comprehension and active conversational skill. *Prerequisite:* C- or better in RUSS 1402 or permission of area chair.

RUSS 2351/RUSS 2312 (3). RUSSIAN SYNTAX AND COMPOSITION. This workshop undertakes a review of grammatical and syntactic structures and seeks to employ them in writing, using a text and materials from everyday life in today's Russia. (See RUSS 2341 for a description of the multilevel workshop system). *Prerequisite:* C- or better in RUSS 1402 or permission of area chair.

RUSS 3202 (2). PRACTICUM IN RUSSIAN CONVERSATION AND PHONETICS.

RUSS 3302 (3). PRACTICUM IN RUSSIAN CONVERSATION AND PHONETICS. (Russia, summer)

RUSS 3304 (3). RUSSIAN GRAMMAR PRACTICUM. (Russia, summer)

RUSS 3311/RUSS 3341 (3). ADVANCED RUSSIAN CONVERSATION. Intensive training in Russian composition with a thorough study of grammatical structure. Continued work on conversation and reading. *Prerequisite:* Russian 2312 or consent of consent of instructor.

RUSS 3312/RUSS 3351 (3). ADVANCED RUSSIAN COMPOSITION. Continuation of advanced Russian grammar and syntax. *Prerequisite:* RUSS 3311 or consent of instructor.

RUSS 3321 (3), 3322 (3). SPECIAL TOPICS ABROAD IN RUSSIAN. Courses in SMU-approved international programs. Prior departmental approval required.

RUSS 3323 (3). PRACTICUM IN RUSSIAN CULTURE. St. Petersburg, summer.

RUSS 3341/RUSS 3311 (3). RUSSIAN READING AND CONVERSATION. Continuation of RUSS 2341.

RUSS 3351/RUSS 3312 (3). RUSSIAN SYNTAX AND COMPOSITION. Continuation of RUSS 2351.

RUSS 3361 (3). COMPARATIVE GRAMMAR. For students who are fully bilingual in Russian and English, these courses provide a practical analysis of the similarities and differences between the two languages. Special problems of native speakers of Russian speaking English. Translation in both directions. Weekly compositions and translations, essay exams. *Prerequisite:* 16 hours of Russian by examination.

RUSS 3362 (3). COMPARATIVE GRAMMAR. For students who are fully bilingual in Russian and English, these courses provide a practical analysis of the similarities and differences between the two languages. Special problems of native speakers of Russian speaking English. Translation in both directions. Weekly compositions and translations, essay exams. *Prerequisite:* RUSS 3361 or permission of area chair.

RUSS 4185 (1), 4285 (2). INTERNSHIP IN RUSSIAN. This course offers students experience in organizations where knowledge of Russian and the cultures of Russian-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Russian of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

RUSS 4301 (3). ADVANCED CONVERSATION. Moscow or St. Petersburg, term.

RUSS 4302 (3). ADVANCED PHONETICS. Moscow or St. Petersburg, term.

RUSS 4311 (3). ADVANCED READINGS IN RUSSIAN LITERATURE I. *Prerequisite or Corequisite:* RUSS 3341 and 3351 or permission of instructor.

RUSS 4312 (3). ADVANCED READINGS IN RUSSIAN LITERATURE II. *Prerequisite:* RUSS 4311 or permission of instructor.

RUSS 4313 (3). ADVANCED COMPOSITION. Moscow or St. Petersburg, term.

RUSS 4314 (3). TRANSLATION. Moscow or St. Petersburg, term.

RUSS 4380 (3), 4381 (3). DIRECTED STUDIES.

RUSS 4385 (3). INTERNSHIP IN RUSSIAN. This course offers students experience in organizations where knowledge of Russian and the cultures of Russian-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Russian of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

Bachelor of Arts With a Major in Spanish

Heritage and native speakers of Spanish follow a special course track. The distinction between heritage and native speakers is described on the Spanish page ("FAQs" tab) of the Dedman College website at smu.edu/dedman. Courses are selected in consultation with the major adviser. Students who do not place out need to complete the sequence of first-year courses (SPAN 1401 and 1402) and second-year courses (SPAN 2401 and 2302) before taking any 3000-level course. Proficiency in written and spoken Spanish is demonstrated by coursework in SPAN 3358 and proficiency in Spanish conversation by SPAN 3355, which may be taken concurrently. Study abroad in a Spanish-speaking country is strongly recommended. Suggested electives outside the Spanish area are courses in a second world language, other world literature in translation, literary criticism, English and American literature, and courses listed under the Latin-American and Iberian studies major in the International and Area Studies section of this catalog. **Note:** Electives must be from the same level as the highest-level course the student is currently taking (e.g., a student taking a 5000-level course must then take a 5000-level elective.

Track for Heritage Speakers. Heritage speakers must replace SPAN 3355 with SPAN 4355 and SPAN 3358 with SPAN 4358.

Track for Native Speakers. Native speakers will start coursework at the 4000 level. Native speakers who have not had formal academic training in written Spanish may begin coursework with SPAN 4358.

Required Courses	*Credit Hours*
SPAN 3355 or equivalent (*or* 4355), 3358 (*or* 4358)	6
SPAN 4357	3
SPAN 4395	3
Four or more 5000-level literature and linguistics courses (at least one in Peninsular literature, one in Spanish-American literature, and one in linguistics)	12
Two Electives	6
	30

Minor in Spanish

Heritage and native speakers of Spanish follow a special course track. The distinction between heritage and native speakers is described on the Spanish page ("FAQs" tab) of the Dedman College website at smu.edu/dedman. Students who do not place out need to complete the sequence of first-year courses (SPAN 1401 and 1402) and second-year courses (SPAN 2401 and 2302) before taking any 3000-level course. SPAN 3353 and 3358 may be taken concurrently.

Track for Heritage Speakers. Heritage speakers must replace SPAN 3355 with SPAN 4355 and SPAN 3358 with SPAN 4358.

Track for Native Speakers. Native speakers will start coursework at the 4000 level. Native speakers who have not had formal academic training in written Spanish may begin coursework with SPAN 4358.

Required Courses	*Credit Hours*
SPAN 2302 *or* equivalent	3
SPAN 3355 (*or* 4355), 3358 (*or* 4358)	6
Three advanced courses	9
	18

Spanish Courses (SPAN)

All courses are conducted in Spanish.

General Survey Courses	SPAN 5310, 5311, 5315, 5316, 5317
Period Survey Courses	SPAN 5320, 5321, 5323, 5324, 5325
Genre Studies	SPAN 5334, 5335, 5336, 5337, 5338, 5339
Advanced Courses in Linguistics	SPAN 5340, 5341, 5342, 5343
Thematic Courses	SPAN 5360, 5361, 5364, 5365, 5370, 5375
Other Literary Studies	SPAN 5380, 5381

SPAN 1401 (4). BEGINNING SPANISH I. This intensive course aims to develop insight into the interconnectedness of the fundamentals of language and its application to communication. The focus of the beginning sequence is providing students with rudimentary linguistic skills (vocabulary and grammar) and an acquaintance with the Spanish-speaking world – tools that allow students to further pursue studies of the Hispanic culture. To varying degrees, attention is devoted to all four linguistic skills (listening, speaking, reading, and writing). Each course is comprised of a fundamentals (MWF) and an applications (TTH) module. Enrollment is required in both.

SPAN 1402 (4). BEGINNING SPANISH II. This intensive course aims to develop insight into the interconnectedness of the fundamentals of language and its application to communication. The focus of the beginning sequence is providing students with rudimentary linguistic skills (vocabulary and grammar) and an acquaintance with the Spanish-speaking world – tools that allow students to further pursue studies of the Hispanic culture. To varying degrees, attention is devoted to all four linguistic skills (listening, speaking, reading, and writing). Each course is comprised of a fundamentals (MWF) and an applications (TTH) module. Enrollment is required in both. *Prerequisite:* C- or better in SPAN 1401.

SPAN 2302 (3). INTERMEDIATE SPANISH II. For students who have completed SPAN 2401 (or equivalent) and who are comfortable expressing the seven communicative functions (i.e., describing, comparing, reacting and recommending, narrating, discussing likes and dislikes, creating hypotheses, and talking about the future). Designed to move students toward fluency, with a focus on development of written expression, significant vocabulary expansion, and increased grammatical accuracy. Although attention is devoted to listening, reading, and speaking, the course emphasizes development of writing skills. *Prerequisite:* C- or better in SPAN 2401.

SPAN 2311/SPAN 2401 (3). SECOND YEAR SPANISH. Review of grammar. Discussions and compositions based on literary and journalistic texts. Language laboratory. (Offered abroad; replaced on campus by SPAN 2401.) *Prerequisite:* C- or better in SPAN 1402.

SPAN 2312 (3). SECOND YEAR SPANISH 2ND SEMESTER. Review of grammar. Discussions and compositions based on literary and journalistic texts. Language laboratory. (Offered abroad; replaced on campus by SPAN 2401.) *Prerequisite:* C- or better in SPAN 1402.

SPAN 2401/SPAN 2311 (4). INTERMEDIATE SPANISH I. For students who have completed SPAN 1401, 1402 (or equivalent) and who are relatively comfortable expressing their personal needs and describing their immediate environment in Spanish. Designed to move students toward fluency by means of significant vocabulary expansion, mastery of the seven communicative functions (i.e., describing, comparing, reacting and recommending, narrating, discussing likes and dislikes, creating hypotheses, and talking about the future), and a focus on the application of these functions to authentic social contexts and cultural situations. Emphasis on development of speaking skills, although attention is devoted to listening, reading, and writing as well. The course is comprised of two modules: fundamentals (MWF) and applications (TTH); enrollment is required in both. *Prerequisite:* C- or better in SPAN 1402 or consent of area adviser.

SPAN 3310 (3). READINGS IN SPANISH AND SPANISH AMERICAN LITERATURE. Refinement of oral and written proficiency based on extensive reading and discussion of literary texts. *Prerequisite:* C- or better in SPAN 2302 or equivalent.

SPAN 3311 (3). CULTURAL DIALOGUES: SPAIN. Improving linguistic proficiency by surveying Spanish. Peninsular culture and history. Course content varies; may include Peninsular film, music, art, etc. *Prerequisite:* C- or better in SPAN 3358. Not for heritage or native speakers of Spanish.

SPAN 3312 (3). CULTURAL DIALOGUES: MEXICO. Improving linguistic proficiency by surveying Mexican culture and history. Course content varies; may include Mexican film, music, art, etc. *Prerequisite:* C- or better in SPAN 3358. Not for heritage or native speakers of Spanish.

SPAN 3313 (3). CULTURAL DIALOGUES: LATIN AMERICA. Improving linguistic proficiency by surveying Latin-American culture and history. Course content varies; may include Latin-American film, music, art, etc. *Prerequisite:* C- or better in SPAN 3358. Not for heritage or native speakers of Spanish.

SPAN 3321 (3), 3322 (3). SPECIAL TOPICS ABROAD IN SPANISH. Courses in SMU-approved international programs. Prior departmental approval required.

SPAN 3355 (3). SPANISH CONVERSATION. An advanced course for majors and non-majors intended to increase active command of the language. *Prerequisite:* C- or better in SPAN 2302 or equivalent. Not for heritage or native speakers.

SPAN 3358 (3). ADVANCED SPANISH. By acquiring grammar through culture, students are prepared to communicate effectively in Spanish, be it oral or written communication. *Prerequisite:* C- or better in SPAN 2302 or equivalent. Not for heritage or native speakers of Spanish. Heritage speakers should take SPAN 4358.

SPAN 3373/WL 3303/CFA 3330 (3). TOPICS IN SPANISH CIVILIZATION. A topical exploration of Spanish culture and society, with particular emphasis on artistic and sociological aspects. The topic explored varies by instructor. *Prerequisite:* C- or better in SPAN 3358/4358 or equivalent.

SPAN 3374 (3). TOPICS IN SPANISH-AMERICAN CIVILIZATION. A topical exploration of Spanish-American culture and societies, with particular emphasis on artistic and sociological aspects. The topic explored varies by instructor. *Prerequisite:* C- or better in SPAN 3358/4358 or equivalent.

SPAN 4321 (3), 4322 (3). SPECIAL TOPICS ABROAD IN SPANISH. Courses in SMU-approved international programs. Prior departmental approval required.

SPAN 4352/ETST 4352 (3). CONVERSATIONS AND COMMUNITY. Advanced Spanish course that brings oral and written language to the center of students' learning by bringing them in contact with native Spanish speakers from a variety of Dallas communities. Includes fieldwork and contact hours in the classroom. Aimed at improving oral and listening skills of non-native speakers of Spanish. *Prerequisite:* C- or better in SPAN 3358. Not for heritage or native speakers of Spanish.

SPAN 4355 (3). CULTURE AND COMMUNICATION FOR SPANISH SPEAKERS. An advanced course intended primarily for bilingual students whose home language is Spanish, but whose dominant intellectual language is English. Also, its emphasis on cultural readings and communication skills makes this course suitable for native speakers who would like to broaden their knowledge of the language, Hispanic culture, and the major Hispanic groups in the U.S. *Prerequisite:* C- or better in SPAN 4358 (formerly SPAN 3358 Heritage). Not for non-native speakers of Spanish. Non-native speakers should take SPAN 3355.

SPAN 4357 (3). INTRODUCTION TO SPANISH LINGUISTICS. What is language? How do languages function? How is human language different from other communication systems? This course focuses on Spanish and also explores language acquisition, language contact, and bilingualism. *Prerequisites:* C- or better in SPAN 3358/4358 and one of the following: SPAN 3310, 3311, 3312, 3313, 3355/4355, 3373, 3374.

SPAN 4358 (3). ADVANCED SPANISH FOR HISPANIC SPEAKERS. For Spanish-English speakers who learned Spanish at home, without formal training in the language. Students reactivate their spoken Spanish and acquire skills in Spanish academic language and literacy. *Prerequisite:* Placement test. Not for non-native speakers of Spanish. Non-native native speakers should take SPAN 3358.

SPAN 4385 (3). INTERNSHIP IN SPANISH. This course offers students experience in organizations where knowledge of Spanish and the cultures of Spanish-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. *Prerequisites:* Junior or senior standing; an overall GPA of 3.000 or higher; GPA in Spanish of 3.300 or higher; sponsorship of a professor and of the organization, agency, or corporation.

SPAN 4391 (3). COMMERCIAL SPANISH FOR INTERNATIONAL TRADE. An advanced course in Spanish for international trade and communication. *Prerequisites:* Permission of instructor or C- or better in SPAN 3358/4358 and one of the following: SPAN 3311, 3312, 3313, 3355/4355.

SPAN 4395 (3). INTRODUCTION TO HISPANIC LITERATURE. Study of the tools necessary for analysis and understanding of literature. Application of these tools through reading of Hispanic texts. Limited enrollment. *Prerequisites:* C- or better in SPAN 3358/4358 and one of the following: SPAN 3310, 3311, 3312, 3313, 3355 or 4355, 3373, 3374.

SPAN 5310 (3). SPANISH LITERATURE BEFORE 1700. An introduction to Spanish prose, drama, and lyric and narrative poetry through the Golden Age. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5311 (3). SPANISH LITERATURE SINCE 1700. Major writers and movements from 1700 to the present. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5315 (3). SPANISH-AMERICAN LITERATURE TO 1888. Literary figures and trends from the Spanish conquest to Modernism. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5316 (3). SPANISH-AMERICAN LITERATURE SINCE 1888. Literary figures and trends from Modernism to the present. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5320 (3). THE RENAISSANCE AND GOLDEN AGE: DRAMA. A study of the early development of Spanish drama and of the flourishing of the theatre with Lope de Vega and Calderon de la Barca, and their contemporaries. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5321 (3). THE RENAISSANCE AND GOLDEN AGE: PROSE FICTION. An exploration of the development of Spanish narrative through various modes of idealism, realism, and self-reflection. Readings include works from Cervantes and Zayas, their contemporaries, and their literary predecessors. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5323 (3). 19TH-CENTURY PROSE FICTION. Major prose writers of the realistic and naturalistic movements in the context of 19th-century political, social, and economic development. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5325 (3). TWENTIETH-CENTURY PENINSULAR PROSE FICTION. Examination of significant individuals, movements, themes, and works of 20th-century Spanish prose fiction, e.g., generation of 1898, exile of 1939, Francoism, transition to democracy, social realism, and postmodernism. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5326 (3), 5327 (3). SPECIAL TOPICS ABROAD IN SPANISH. Courses in SMU-approved international programs. Prior departmental approval required.

SPAN 5334 (3). THE NOVEL, POST-CIVIL WAR. The development of the novel and short story in Spain from 1940 to the present. Readings from Cela, Delibes, Sanchez Ferlosio, Goytisolo, etc. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5335 (3). GENRE STUDIES (SPAIN). A study of the evolution of contemporary Spanish theatre within the context of dominant historical, social, and cultural trends. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5336 (3). SPANISH-AMERICAN NOVEL. The evolution of the Spanish-American novel and analysis of master works of the 19th and 20th centuries. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5337 (3). SPANISH-AMERICAN ESSAY. Students explore the intellectual climate of Spanish America in the last two centuries as revealed in the works of famous essayists such as Jose Marti and Octavio Paz. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5338 (3). SPANISH-AMERICAN SHORT STORY. The evolution of the Spanish-American novel and analysis of master works of the 19th and 20th centuries. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5339 (3). SPANISH-AMERICAN POETRY. Major Spanish-American poets, with emphasis on the 20th century: Octavio Paz, Nicolas Guillen, Gabriela Mistral, Pablo Neruda, and others. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5340 (3). THE STRUCTURE OF SPANISH. Explanation of Spanish syntactic structures using conventional and more recent treatments of Spanish grammar and current developments in syntactic theory. Development of skills in analyzing Spanish syntax. *Prerequisite:* C- or better in SPAN 4357.

SPAN 5341 (3). SPANISH PHONETICS AND PHONOLOGY. Survey of phonetic (acoustic, physical) and phonological (distributional) properties of the Spanish sound system, and comparison with the English sound system. Introduces phonologically conditioned dialectal variation in the Spanish-speaking world. *Prerequisite:* C- or better in SPAN 4357.

SPAN 5342 (3). LINGUISTIC VARIATION IN THE SPANISH-SPEAKING WORLD. Introduction to language change and a panoramic overview of regionally and socially conditioned linguistic variation in Peninsular and Latin-American Spanish, including topics such as language contact and bilingualism. *Prerequisite:* C- or better in 4357.

SPAN 5343 (3). SPANISH AS A SECOND LANGUAGE: PRINCIPLES OF SECOND LANGUAGE ACQUISITION AND TEACHING. Provides a background in issues pertaining to the acquisition of Spanish as a second language and addresses how findings from Spanish second-language acquisition research are applicable to the teaching of Spanish. *Prerequisite:* C- or better in SPAN 4357.

SPAN 5361 (3). DON QUIXOTE: THE IDEA, THE CHARACTER, THE BOOK. An exploration of Cervantes' masterpiece *Don Quixote* and its influence on art and society. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5364 (3). HUMAN RIGHTS ISSUES IN CONTEMPORARY SPANISH LITERATURE. A study of human rights issues such as repression, torture, violence against women and the disabled, children's rights, genocide, and immigration as represented in contemporary Spanish literature. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5365 (3). CONTEMPORARY SPANISH WOMEN WRITERS. This course explores constructions of gender and identity in contemporary Spanish literature by women. Written texts, music, film, and documentary combine to offer multiple perspectives on the subject. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5370 (3). REWRITING DISCOVERY AND EXPLORATION IN THE SPANISH BORDERLANDS. An examination of shifts in the articulation of discovery and exploration in writings treating the northern frontier of New Spain during the mid-to-late 16th century. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5375 (3). CONTEMPORARY FICTION BY LATIN-AMERICAN WOMEN WRITERS. This course explores constructions of gender and identity in 20th-century fiction by Latin American women. Novels, short stories, film, and critical texts are examined. *Prerequisite:* C- or better in SPAN 4395.

SPAN 5380 (3), 5381 (3). TUTORIAL FOR JUNIORS AND SENIORS. Special project arranged by the student with the help of a faculty adviser and the approval of the chair of the department.

All WL/WLAN courses are conducted in English.

Chinese Culture and Literature	WL 3310, 3312, 3325, 3395
French Literature	WL 3361 (SMU-in-Paris only), 3365, 3366 (Electives that do not count toward the French major.)
German Culture	WL 3321, 3322, 4321, 4322, 5326
Italian Culture and Literature	WL 2201, 2395, 3390 (FILM 3390), 3391–94
Russian Culture	WL 2343, 3323 (HIST 2323)
Spanish Culture and Literature	WL 3303, 3305, 3306
Spanish Linguistics	WL 3308

WL 2201 (2). ITALY TODAY: CONTEMPORARY ITALIAN CULTURE AND INSTITUTIONS. Overview of contemporary Italian society, institutions, and traditions, from the role of the church to the fashion industry. *Pre or Corequisite:* Enrollment in ITAL 1401, ITAL 1402, or ITAL 2401 with instructor approval

WL 2343 (3). AFTER COMMUNISM. Examines changes in Russian and East European culture since the mid-1980s, when openness and restructuring prepared the ground for the fall of the Soviet Union.

WL 2395 (3). ITALIAN CULTURE. Significant aspects of Italian culture and thought, beginning with the age of Dante, are presented from poetry, prose, drama, journalism, architecture, the fine arts, music, and film. There are no prerequisites for the course.

WL 3301 (3). SPANISH CULTURE AND THOUGHT. Significant aspects of Spanish culture are presented and illustrated by examples from Spain's history, music, art, architecture, literature folklore, and contemporary life.

WL 3302/SOCI 3350/COMM 3302/CFB 3350 (3). ETHNOVIOLENCE: INTERDISCIPLINARY PERSPECTIVES. An introduction to ethnoviolence – violence or the threat of violence based on one's race, ethnicity, religion, gender, or sexual orientation – from a comparative, global and critical framework that synthesizes sociology, colonial studies, communications, and ethnic, religious, historical, and gender studies.

WL 3303/SPAN 3373/CFA 3330 (3). TOPICS IN SPANISH CIVILIZATION. A topical exploration of Spanish culture and society, with particular emphasis on artistic and sociological aspects. The topic explored varies by instructor. Colisted with SPAN 3373 and WL 3303.

WL 3306 (3). CHICANO CULTURAL HERITAGE. A study of the Chicano/mestizo cultural identity in the Southwest. Includes readings from selected contemporary authors as well as from the early recorded contacts between Native Americans and their European conquerors.

WL 3307 (3). THE BELLE ÉPOQUE. Through a series of lectures, readings, and visits, the course will present an in-depth study of society, culture, art and literature in Paris and in the provinces. (Offered at SMU-in-Paris.)

WL 3308 (3). INTRODUCTION TO GENERAL LINGUISTICS. Introduction to the field of linguistics, which is concerned with the study of human language in the broadest sense.

WL 3309/CFA 3353 (3). FRENCH CINEMA: 1945 TO THE PRESENT. Uses cultural studies theory to explore the evolution of the French national identity from the end of the Nazi occupation of France in 1945 to the present day.

WL 3310/CF 3390/FILM 3310 (3). TRANSNATIONAL CHINESE CINEMA. Introduces students to films produced in the People's Republic, Taiwan, and Hong Kong. In considering cinema as a sign system for the construction of sociocultural and aesthetic meanings, this course examines different national identities and film genres. Students will learn to understand non-Western cultural texts and to analyze cinematic representations. No prerequisites.

WL 3312 (3). WOMEN IN MODERN CHINA. Critical examination, from literary and gender perspectives, of the lives and roles of the 20th century Chinese women, including works from major women writers.

WL 3320 (3). POSTWAR JAPAN: CULTURE AND SOCIETY. The purpose of this course is to provide a critical knowledge of postwar Japanese society and culture by examining issues that have shaped contemporary Japan from the perspectives of such disciplines as history, sociology, anthropology, and cultural studies, including literary works and films.

WL 3322 (3). MODERN JAPANESE NOVELS IN TRANSLATION. A number of Japanese novels from Shimazaki Toson's *The Broken Commandment* (1906) to Yoshimoto Banana's *Kitchen* (1988) will be studied in this course. Each student is required to give a talk on at least one novel and this may be developed into an essay that will be a major component of assessment. Students' presentation and participation in the discussion in class together with short critical comments on other students' talks will form the basis for continuous assessment.

WL 3323/HIST 2323/CFA 3320 (3). RUSSIAN CULTURE. Significant aspects of Russian thought and culture at its various stages of development are presented and illustrated by examples from literature, folklore, prose, drama, journalism, architecture, the fine arts, and music.

WL 3325/CF 3365 (3). PERSPECTIVE ON MODERN CHINA. Survey of China in the 20th century in terms of cultural trends, literature, and cinema. Stresses the interactions between reality and representation, between author and reader/audience, and between text and interpretation. Close reading of texts or viewing of films, followed by critical analysis, is emphasized.

WL 3330/CFB 3304 (3). MIGRATION, OCCUPATION AND INDEPENDENCE IN NORTH AFRICAN CINEMA. Introduces the cinemas of Algeria, Tunisia, Morocco, Chad, and Mali. Explores the themes of migration, occupation, and independence in individual and national terms.

WL 3331 (3). SURVEY: RUSSIAN LITERATURE IN TRANSLATION. Russian literature from the 18th century to the present. Works by Tolstoy, Dostoevsky, Chekhov, Solzhenitsyn, others.

WL 3332 (3). SPECIAL TOPICS: RUSSIAN LITERATURE IN TRANSLATION. Texts, periods, and thematic and critical approaches will vary from term to term. No prerequisite.

WL 3340 (3). SEMIOTICS AND INTERPRETATION. Semiotics is the study of how meaning is produced and communicated. This course explores semiotic approaches to the interpretation of the most complex of all human communications: literary texts.

WL 3349/HIST 3392/CF 3349 (3). THE AFRICAN DIASPORA: LITERATURE AND HISTORY OF BLACK LIBERATION. Black literature played an important role in bringing on the collapse of the European colonial order, and it remains a major force in the struggle against neocolonialism today. The course explores links between literature and politics, literature and history, and thought and action in 20th-century Africa and the Caribbean. Readings and lectures are supplemented by class discussion, films, and videotapes about the Caribbean and Africa.

WL 3350 (3). EXISTENTIALISM AND LITERATURE. Existentialist perspectives on society, individual responsibility, politics, and war as presented in key literary texts by Kierkegaard, Dostoevsky, Malraux, Sarte, Camus, Ellison, and others.

WL 3351/CF 3350 (3). INTRODUCTION TO MEDIA LITERACY: SEMIOTICS AND CURRENT CULTURAL MYTHS. Students learn how to decode a variety of verbal and nonverbal languages in mass media such as advertising, journalism, and entertainment TV. Focus is on the values (ideology) these discourses convey.

WL 3355/CFA 3354/CFA 3344 (3). TRADITION, COMMUNITY, AND IDENTITY IN AFRICAN CINEMA. Uses cultural studies theory to explore evolutions of African identity (individual, collective, and national) in the postcolonial period.

WL 3359/ENGL 3373 (3). MASCULINITIES: IMAGES AND PERSPECTIVES. The representation of male sex roles in Western literature, from Achilles to James Bond. Open to juniors and seniors; sophomores by permission of instructor.

WL 3360 (3). ETHICS OF COLONIZATION IN LATIN AMERICA. Through a study of literary, philosophical, historical, and religious texts, this course considers how the humanist ethics of the Renaissance were debated and carried out in the colonization of Latin America.

WL 3362/CFB 3306 (3). POSTCOLONIAL FRANCE. A multidisciplinary course providing an introduction to, or better understanding of, some of the most passionate debates on assimilation, difference, and multiculturalism that have emerged in France in recent years.

WL 3363/CF 3347/WGST 3347 (3). FIGURING THE FEMININE. The feminist inquiry in France from the Middle Ages to the present. Texts by women that bear witness to women's struggles for civil, social, and political adulthood.

WL 3365 (3). SPECIAL TOPICS FRENCH LITERATURE IN TRANSLATION. Texts, periods, and thematic and critical approaches will vary from term to term.

WL 3369/CF 3369 (3). PERSPECTIVES ON MODERN GERMANY. A multidisciplinary survey of the German heritage, with emphasis on Germany's quest for identity and unity. *Prerequisite:* Sophomore standing or permission of instructor.

WL 3370/CFB 3360 (3). SHADOWS OF ENLIGHTENMENT: HUMAN RIGHTS IN GERMANY. Study of documents and debates on human rights, literature, and art from the Enlightenment to the present. Discussion of the Holocaust, human rights concerns in divided Germany, migration, and multiculturalism.

WL 3390 (3). ITALIAN CINEMA. A chronological survey of Italian cinema from its beginnings to the present. Themes and cinematic styles of several internationally noted directors such as Rossellini, DeSica, Fellini, Antonioni, and Bertolucci, with attention to the Italian cinema as a reflection of sociopolitical trends.

WL 3391 (3). ITALIAN LITERATURE IN TRANSLATION: THE ITALIAN NOVEL. A close reading of five representative works. While the novels are considered in light of historical events, students give special attention to form and rhetoric in order to understand the novel's unique ability to express and create reality.

WL 3392 (3). ITALIAN LITERATURE IN TRANSLATION: EARLY HUMANISM. The course defines and characterizes the major aspects of 14th-century humanism by exploring the seminal works of Petrarch, Boccaccio, Salutati, Valla, and others.

WL 3393 (3). DANTE'S POETIC VISION. Students read *Inferno* and *Purgatory* in English translation and explore the cultural and poetic values that reflect a specific world vision strongly conditioned by religious and political philosophy.

WL 3394 (3). BOCCACCIO'S DECAMERON AND MEDIEVAL STORYTELLING. Students read stories from the Decameron in English translation along with such narrative predecessors as the Roman exempla, hagiography, monks' tales, sermons, and the bawdy French tales known as the fabliaux.

WL 3395/CF 3395 (3). A CULTURAL JOURNEY TO CHINA. Suzhou, in China's cultural heartland, hosts this course on the development of Chinese culture: religion, literature, cinema, art, architecture, and history. Trips complement readings centered on self, family and state.

WL 3397/HIST 2394 (3). CHINA BEFORE 1850. Examines changes and continuities from Neolithic times to 1850 in Chinese state, society, and religion, and the relations among the three spheres, through scholarly writings and primary sources.

WL 3398/HIST 2395 (3). MODERN EAST ASIA. A survey of modern East Asia emphasizing an outline of the traditional societies, the Western impact, Japanese industrialization and imperialism, Pearl Harbor, and the rise of Chinese communism.

WLAN 1301 (3). BEGINNING LANGUAGE (LANGUAGES NOT TAUGHT AT SMU). Stresses the acquisition of basic skills: speaking, listening comprehension, reading, and writing. Three classes a week. For SMU Abroad students only.

WLAN 1302 (3). BEGINNING LANGUAGE TERM TWO. Stresses the acquisition of basic skills: speaking, listening comprehension, reading, and writing. Three classes a week. *Prerequisite:* C- or better in WLAN 1301 (same language) or permission of program director. For SMU Abroad students only.

WLAN 1401 (4). BEGINNING LANGUAGE TERM ONE (LANGUAGES NOT TAUGHT AT SMU). Stresses the acquisition of basic skills: speaking, listening comprehension, reading, and writing. Five classes a week. For SMU Abroad students only.

WLAN 1402 (4). BEGINNING LANGUAGE TERM TWO. Stresses the acquisition of basic skills: speaking, listening comprehension, reading, and writing. Five classes a week. *Prerequisite:* C- or better in WLAN 1401 (same language) or permission of the program director. For SMU Abroad students only.

WLAN 3311 (3), 3313 (3). SPECIAL TOPICS ABROAD IN WORLD LANGUAGES. Courses in SMU-approved international programs. Prior departmental approval required.

GENERAL INFORMATION

Vision Statement

The mission of the Edwin L. Cox School of Business is to improve the school's academic programs and reputation as a top-tier business school by providing a high-quality business education to students and the business community, conducting research that contributes to the understanding of business and management, and participating in the service activities of the University and professional organizations.

History

From its beginning as the Department of Commerce for Southern Methodist University, the Edwin L. Cox School of Business has been educating the country's business leaders for more than 90 years.

Named in 1978 in honor of Dallas businessman Edwin L. Cox, the Cox School has a rich heritage that began in 1920 when the SMU Board of Trustees established a Department of Commerce at the request of the Dallas business community. In 1921 the Department of Commerce was renamed the School of Commerce, and in 1941 the Board of Trustees established the School of Commerce as a separate entity within the University. At this point, the School of Commerce became the School of Business Administration and the Bachelor of Business Administration degree was approved by the trustees.

The graduate program at the School of Business Administration began in 1949 with the authorization of a Master of Business Administration program. Both the B.B.A. and the M.B.A. degree programs are fully accredited by The Association to Advance Collegiate Schools of Business (AACSB International). The Cox School also grants a minor in business administration and a minor in business to undergraduates. The graduate programs include Full-Time M.B.A., Professional M.B.A. and Executive M.B.A.; M.S. degrees in accounting, finance, management and entrepreneurship; an M.A./M.B.A.; a Juris Doctor/M.B.A.; and custom and open enrollment Executive Education certificate programs.

In 1965, the SMU Foundation for Business Administration was established. This group of advisers has helped guide the Cox School throughout the years and today is known as the Executive Board. Also instrumental in supporting the Cox School are members of its two successful mentoring programs: the Associate Board for M.B.A. students and the BBA Mentoring Alliance. These two boards involve more than 350 area business leaders who volunteer their time and expertise to students who want to start making business connections for the future.

Cox School Complex

In 1952, ground was broken for the Joseph Wylie Fincher Memorial Building for the School of Business Administration. In 1987, two buildings were added to the Cox School complex: the Cary M. Maguire Building and the Trammell Crow Building.

Today, the Fincher Building houses administrative and faculty offices as well as conference and meeting rooms, while the Maguire and Crow buildings primarily house classrooms and study rooms. Hailed as one of the most technologically advanced business learning facilities in the country, the Cox School complex has as

its hub the Business Information Center – a business library that combines many of the features of a traditional university library with the latest in online databases, search tools and presentation facilities. Through the business library, Cox School students, faculty and staff have access to instruction and research assistance from dedicated business librarians to enhance their use of current business news and financial, industry and market data from premier providers. In addition, the business library contains a multimedia studio, personal computers, printers and scanners for students to use for presentations and papers. In 2011, the Kitt Investing and Trading Center was added to the business library. The Kitt Center is a state-of-the-art instructional and research facility designed to integrate finance curriculum, enhance innovative faculty research and teach students practical finance and investment applications.

In 2005, the Cox School opened the James M. Collins Executive Education Center. Part of the east quadrangle, the building is home to the region's premier resources for working professionals and executives. The Collins Center houses the Cox School's Executive Education programs, Executive M.B.A. program and M.B.A. Global Leadership Program Office (supported by the Norman E. Brinker Global Leadership Endowment Fund), as well as the Southwestern Graduate School of Banking.

Centers and Institutes

Edwin L. Cox Business Leadership Institute

Paula Hill Strasser, **Director**

The Edwin L. Cox Business Leadership Institute offers undergraduate courses designed to develop B.B.A. students' fundamental business communication and leadership skills. The BLI provides students with essential knowledge and experience through class discussions, self-assessments, team projects, simulations, corporate presentations and a comprehensive capstone project. The BLI seeks to help students

- Understand communication channels/appropriate mediums within organizations.
- Understand how cultural diversity and global expansion affect business communication.
- Exercise knowledge through experiential learning/hands-on assignments to develop demonstrable communication skills.
- Develop a communication package necessary for initiating and managing a business career.

The Executive Education Center

Frank R. Lloyd, **Associate Dean of Executive Education**

The Executive Education Center is located in the Collins Center. The center is Dallas' best resource for advanced leadership and business training, offering numerous open-enrollment certificate programs to managers and working professionals in the business community. The center also offers custom programs, tailored to the specific needs of individual organizations and designed to improve organizational performance.

A distinctive offering is the Summer Business Institute, a four-week business certificate for current nonbusiness students and recent graduates. The institute provides a solid foundation in accounting, marketing, finance and other key business topics, along with in-depth career guidance. This program, open to SMU and non-

SMU students, provides a valuable credential in a competitive job market as it sets participants apart from other nonbusiness undergraduates.

The Center for Marketing Management Studies

Raj Sethuraman, **Executive Director**

The Center for Marketing Management Studies serves as a focal point for interaction among faculty, practitioners and students who share a common interest in applied marketing management research and education. The center sponsors research and educational programs in marketing management.

Since 1989, the center has sponsored the Graduate Marketing Certificate Program, designed to provide current and aspiring business professionals with the latest in marketing thought and practice. The program is held at the Dallas campus and at the SMU-in-Plano campus, one night each week throughout the school year.

The Caruth Institute for Entrepreneurship

Jerry F. White, **Director**

Since its founding in August 1969, the Caruth Institute has continuously developed innovative courses and programs to help individuals keep pace with the dynamic, rapidly changing field of entrepreneurship. The institute currently offers undergraduate, graduate, and professional development courses to give students the skills and knowledge necessary to launch and manage successful entrepreneurial ventures.

In addition to its academic courses, the institute has created a number of unique programs that enable students to experience and better understand the inner workings of entrepreneurial ventures. Programs include the Southwest Venture Forum and the Dallas 100™ Awards – an annual event that identifies and honors the 100 fastest-growing privately held companies in the Dallas area.

The Center for Research in Real Estate and Land Use Economics

William B. Brueggeman, **Director**

The Center for Research in Real Estate and Land Use Economics was created in 1984 as a research entity with a focus on major issues in the real estate industry. It is currently engaged in a number of projects, including housing finance, real estate development, real estate investment performance, database management and property valuation. The center also acts as a conduit for research grants and proposals for management programs, which it conducts through the Costa Institute of Real Estate Finance and the Robert and Margaret Folsom Institute of Real Estate Development and Land Use Policy.

Maguire Energy Institute

W. Bruce Bullock, **Director**

The Maguire Energy Institute promotes the study of policy, marketing and management issues that affect oil, natural gas and electricity. Founded by Cary M. Maguire, chairman, president and chief executive officer of Maguire Oil Company, the institute is a leading-edge resource for energy industry information and facilitates the exchange of ideas among students, businesses, the media and government officials.

Students can participate in courses, workshops and seminars. The institute also conducts research and analysis, publishes a quarterly newsletter on important policy issues and focuses on exploring innovative ways to improve management of the world's oil and gas resources.

JCPenney Center for Retail Excellence

Edward J. Fox, **Executive Director**

The JCPenney Center for Retail Excellence was endowed in 1999 through a gift from the J.C. Penney Company Inc. in order to promote, develop and integrate retail education and practice. Today, the center has become a leading source of academic expertise on consumer shopping behavior and the effects of marketing and merchandising decisions on retailer performance. Among its activities, the center works with SMU's undergraduate Retailing Club to foster student interest in retail careers and cosponsors a retail speaker series with the Dallas/Fort Worth Retail Executives Association.

The EnCap Investments & LCM Group Alternative Asset Management Center

Donald F. Shelly, Jr., **Director**

Made possible by gifts from EnCap Investments and LCM Group, the EnCap Investments & LCM Group Alternative Asset Management Center is designed to meet the increasing demand for investment professionals in the growing field of alternative assets, including hedge funds, private equity, venture capital, real estate, and oil and gas. The center offers courses leading to a specialization within the finance major at the undergraduate level and a specialization within the finance concentration for M.B.A. students. Selected course offerings are also open to M.S. in finance students. Undergraduate students interested in earning a specialization in alternative asset management apply for admission to the program during their junior year, and complete two courses under the direction of the EnCap Investments & LCM Group Alternative Asset Management Center.

William J. O'Neil Center for Global Markets and Freedom

W. Michael Cox, **Director**

The center was established in 2005 by William "Bill" J. O'Neil (BBA, '55) and his wife, Fay C. O'Neil, to study the impact of competitive market forces on freedom and prosperity in the global economy. The O'Neils created the center to offer education and training for today's forward-looking individuals and businesses that recognize the importance of globalization in changing the paradigm in which everyone is operating. More information is available at www.oneilcenter.org.

ADMISSION

The Cox School of Business offers three undergraduate programs. All Cox classes, unless otherwise noted in the course descriptions, are open only to students in the Bachelor of Business Administration or Minor in Business Administration programs. Students in the minor in business may enroll only in the classes listed in this minor's curriculum (Minor Requirements section). **Note:** Detailed information regarding SMU's admission requirements, regulations and procedures is found in the Admission to the University section of this catalog.

- The B.B.A. program offers seven academic majors within business. Admission is available to entering SMU students through the BBA Scholars Program, the Business Direct Program, or to continuing and transfer students through the process described in Admission of SMU Students to a Business Major or Admission of External Transfer Students to a Business Major below.
- The minor in business administration provides a comprehensive introduction to business for SMU students who have majors outside the Cox School. Courses in this minor are a subset of the B.B.A. core courses and are offered throughout the academic year. Admission to the minor in business administration follows the same requirements outlined in Admission of SMU Students to a Business Major or Admission of External Transfer Students to a Business Major below.
- The minor in business offers non-Cox students a foundation in business concepts to complement their primary areas of academic interest. Courses in this program are offered during summer terms at SMU's main campus and January terms at the SMU-in-Plano campus. These courses are open to all non-Cox majors or students not enrolled in the minor in business administration. Cox majors and minors in business administration may take BUSE 3310, FINA 3312 and ITOM 3310 as free elective credit only.
- All B.B.A. majors and minors in business administration are required to have a laptop computer for use in the classroom. Many prebusiness students enroll in ITOM 2308; this course requires students to bring their own laptops to class. In ITOM 2308 classes, students run Windows-based software on their laptops.

Admission of SMU Students to a Business Major/B.B.A. Degree Program

Admission to the Cox undergraduate program may be earned by current SMU students via the admission requirements below, or at the time a student is admitted to SMU via the BBA Scholars Program or the Business Direct Program (under Applying for Admission as a First-Year Applicant). *Regular admission to any B.B.A. major requires*

1. Completion of a minimum of 39 hours.
2. A minimum all-college cumulative GPA of 3.300.
3. A minimum 3.300 GPA in the business subset:
   DISC 1312 *or* 2305
   DISC 1313 *or* 2306
   ECO 1311, 1312
   MATH 1309 *or* 1337 *or* 1340
   ACCT 2301
   ITOM 2305, *or* STAT 2301, *or* EMIS 3340, *or* CSE/STAT 4340

Notes

- After a student completes MATH 1340, the Mathematics Department may award credit for MATH 1337, depending on the grade earned in MATH 1340. When this occurs, the letter grade earned in MATH 1340 will count for the subset, not the MATH 1337 credit.
- Test or transfer credit for STAT 2331 earned prior to SMU matriculation will count toward the subset.
- For admission purposes to the Cox B.B.A. program, the all-college cumulative GPA is recorded at the end of the term the student completes the business subset AND has at least 39 cumulative credit hours. The all-college cumulative GPA includes all SMU coursework and courses completed at all other colleges if these courses have content-based equivalents at SMU. If credit is nontransferable because the grade earned is below *C-*, but the course is equivalent in content to an SMU course, the grade will count toward the all-college cumulative GPA.
- Once a student enters SMU, all remaining subset courses must be completed through enrollment at SMU.
- With the exception of courses completed under the SMU first-year grade-repeat policy (under Grades for Repeated Courses in the Grade Policies section of this catalog), the subset GPA is calculated using the first graded attempt of these courses, even if the course was later repeated.
- The subset GPA for students who have Advanced Placement or International Baccalaureate credit is based on the remaining (graded) subset courses.
- All subset courses must be taken for a grade (not taken pass/fail), with the exception of those courses in which the student has test credit.
- Students must have passing grades in all subset courses before entering the Cox School.
- Current University grading policy, as summarized under Academic Forgiveness in the General Policies section of this catalog, permits forgiveness of academic work taken 10 or more years prior to the term of admission. Academic work forgiven under this policy will not be included in the subset or all-college cumulative GPA.

Admission via the Extended Subset

Students who do not achieve a 3.300 GPA in the business subset and/or a 3.300 all-college cumulative GPA and/or 39 hours completed may seek admission to Cox through the extended subset option by adding the first graded attempt of ACCT 2302 to the original subset. Students who have completed at least 39 credit hours and who earn both a minimum 3.300 GPA on the extended subset and a minimum 3.300 all-college cumulative GPA as of the term in which the extended subset is completed will be admitted to the Cox B.B.A. degree program. Once a student enters SMU, ACCT 2302 must be completed through enrollment at SMU.

Applying for Admission as a First-Year Applicant

First-year applicants submit an application for admission to the SMU Division of Enrollment Services and follow the University requirements for admission (under the Admission to the University section in this catalog). Applicants who are admitted to SMU and who indicate business as their primary academic interest on the applica-

tion for admission are automatically reviewed for admission to the Cox BBA Scholars Program or the Business Direct Program. More information is available in the BBA Scholars and Business Direct programs sections.

Admission to the Cox BBA Scholars Program and to the Business Direct Program is by invitation only to students entering SMU directly from high school. Transfer students are not considered for admission in either the BBA Scholars Program or the Business Direct Program. First-year students invited to join either program must accept their invitation no later than the University's deposit deadline (typically May 1) prior to SMU matriculation in the following fall. Students who accept admission to the Cox BBA Scholars Program may enter Cox during their first year at SMU. Students who accept admission to the Business Direct Program may enter Cox after completion of the subset courses with good academic standing.

Declaring a Business Major as a Current SMU Student

Students who meet the Cox admission requirements should complete a Change of Academic Program form at the records office of their current school. This form will be forwarded with the student's academic record to the Cox School. Business majors normally enter Cox after three terms of full-time enrollment; students who take longer to complete the admission requirements may need additional time to complete degree requirements.

Admission of External Transfer Students to a Business Major/B.B.A. Degree Program

Admission of external transfer students to a B.B.A. major requires

1. Admission to SMU.
2. Completion of a minimum of 39 hours of transferable college credit.
3. Minimum all-college cumulative GPA of 3.300.
4. A minimum GPA of 3.300 in the business subset:
   ENGL 1301, 1302
   ECO 1311, 1312
   MATH 1309 *or* 1337 *or* 1340
   ACCT 2301
   ITOM 2305, *or* STAT 2301, *or* EMIS 3340, *or* CSE/STAT 4340

Notes

- After a student completes MATH 1340, the Mathematics Department may award credit for MATH 1337, depending on the grade earned in MATH 1340. When this occurs, the letter grade earned in MATH 1340 will count for the subset, not the MATH 1337 credit.
- Test or transfer credit for STAT 2331 earned prior to SMU matriculation will count toward the subset.
- For admission purposes to the Cox B.B.A. program, the all-college cumulative GPA is recorded at the end of the term the student completes the business subset AND has at least 39 cumulative credit hours. The all-college cumulative GPA includes all SMU coursework and courses completed at all other colleges if these courses have content-based equivalents at SMU. If credit is non-transferable because the grade earned is below *C-*, but the course is equivalent in content to an SMU course, the grade will count toward the all-college cumulative GPA.

- The subset GPA is calculated using the first graded attempt of the subset courses, even if a course was later repeated.
- Current University grading policy, as summarized under Academic Forgiveness in the General Policies section of this catalog, permits forgiveness of academic work taken 10 or more years prior to the term of admission. Academic work forgiven under this policy will not be included in the subset or all-college cumulative GPA.
- The subset GPA for students who have Advanced Placement or International Baccalaureate credit is based on the remaining (graded) subset courses.
- Students must have passing grades in all subset courses before entering the Cox School.
- When evaluating courses taken at other colleges or universities, the Cox School will use the grades and credit hours designated by the school at which the courses were taken. The Cox School will not recalculate grades earned at schools that use grading systems different from SMU's nor change the number of credit hours for a course.

Transfer students who have not completed the business subset courses may be eligible for admission to SMU as prebusiness majors and will then follow the admission requirements outlined above for current SMU students. Those who have completed the subset but who do not meet Cox admission requirements may be eligible for admission to SMU via the extended subset option or for admission to SMU to pursue a nonbusiness major.

Transfer Admission via the Extended Subset

Students who do not achieve a 3.300 GPA in the business subset and/or a 3.300 all-college cumulative GPA and/or 39 hours completed may seek admission to Cox through the extended subset option by adding the first graded attempt of ACCT 2302 to the original subset. Students who have completed at least 39 credit hours and who earn both a minimum 3.300 GPA on the extended subset and a minimum 3.300 all-college cumulative GPA as of the term in which the extended subset is completed will be admitted to the Cox B.B.A. degree program. Once a student enters SMU, ACCT 2302 must be completed through enrollment at SMU.

Admission to Minors

SMU students who are NOT seeking a major in the Cox School may select from two business minors. The minor in business administration provides a comprehensive introduction to business for SMU students who have majors outside the Cox School. Students in this minor take specified B.B.A. core courses, which are offered throughout the academic year. The minor in business offers non-Cox students a foundation in business concepts to complement their primary areas of academic interest. Courses in this program are offered during summer terms at SMU's main campus and January terms at the SMU-in-Plano campus. These courses are open to all non-Cox majors or students not enrolled in the minor in business administration.

Admission to the Minor in Business Administration

The minor in business administration operates concurrently with the B.B.A. degree program and includes seven courses that can apply toward either the B.B.A. degree or the minor in business administration (Minor Requirements section). Students in this minor must meet the same admission requirements as students in the Cox B.B.A. program as described above and will be enrolled in the same sections of business courses as business majors.

Admission to the Minor in Business

The minor in business is open to all SMU students who are NOT pursuing a B.B.A. major or the minor in business administration. The minor in business does not have prerequisite courses or GPA-based admission requirements. The minor in business offers courses designed to provide a general overview of business topics to complement a variety of academic interests. Students may pursue this minor by enrolling in the appropriate courses and completing a minor declaration form with the academic adviser for their major.

Statute of Limitations

If a student is readmitted to SMU after an absence of three years or longer, the student will be readmitted under the University catalog in effect at the time of readmission and will be subject to degree and admissions requirements in that current catalog.

Acceptance of Transfer Credit Prior to Enrollment

A prospective transfer student must present to the Division of Enrollment Services official transcripts containing a full record of all previous college work attempted. Failure to provide full records of all work is grounds for dismissal from the Cox School. To avoid delay, students should forward transcripts to the SMU Division of Enrollment Services no later than July 1 for the fall term and December 1 for the spring term.

In general, transfer credit will be accepted for business major or minor credit only if the courses completed are equivalent in content to those offered at SMU and if the university's school of business at which the courses were completed is accredited by The Association to Advance Collegiate Schools of Business (AACSB International). In the case of transfer credit completed at a junior/community college, only those courses with equivalents at the first-year and sophomore level at SMU (1000- and 2000-level courses) will be accepted for business major or minor credit.

Prior to matriculation, the Cox School will accept transfer business credit toward the B.B.A. degree from schools accredited by AACSB International regardless of the student's classification if there are equivalent/appropriate courses at SMU.

Courses completed with a grade of *D*+ or less or those completed without letter grades (pass/fail or satisfactory/unsatisfactory) will not be transferred for any degree credit. Grades earned elsewhere will be considered for admission purposes and in determining graduation with honors. When evaluating courses taken at other colleges and universities, the Cox School will use the grades designated by the school at which the courses were taken. The Cox School will not recalculate grades earned at schools that use grading systems different from SMU's.

Transfer Credit for Current SMU Students

Students enrolled in the Cox School who are seeking to fulfill any portion of their degree requirements through transfer credit must file a petition for approval of their intentions with the Undergraduate Advising and Records Office in 252 Maguire prior to enrollment for such courses. With the approval of the appropriate SMU departmental chair, SMU students may complete a maximum of 30 transfer hours for degree credit. Students are cautioned to check the current SMU catalog before enrolling in courses at other institutions and to verify transferability with the appropriate offices. Matriculated students must complete all required business courses through enrollment at SMU. Exceptions to this policy require concurrent approval of the associate dean for undergraduate studies, the appropriate department chair, and the director of B.B.A. academic advising and records.

Regardless of the number of acceptable transfer hours, at least 60 hours of the total 122 baccalaureate hours must be completed through enrollment at SMU. Of the required business hours, a minimum of 30 must be completed through enrollment at SMU or SMU-approved international programs.

Detailed information regarding University-wide policies is provided in this catalog in the Admission to the University section and the Academic Records, General and Enrollment Standards section, and topics for the latter are listed in the table of contents.

ACADEMIC REGULATIONS

B.B.A. Degree Requirements

The Edwin L. Cox School of Business adheres to the Association to Advance Collegiate Schools of Business (AACSB International) standards of accreditation. Students will be awarded the Bachelor of Business Administration degree upon successful completion of the following requirements:

- **Admission.** Detailed information regarding admission to the Cox School of Business is found in the Admission section above.
- **Grade Requirements.** An overall GPA of at least 2.000 on all SMU work attempted and on all SMU business coursework attempted. Students must earn at least a 2.000 GPA in all business coursework attempted within the student's declared major to graduate with that major.
- **Minimum Hours and SMU Credit Requirement.** University policy requires a minimum of 122 term hours of approved credits. Detailed information is found in the Curriculum section below. Of the 122 minimum required term hours for a degree, at least 60 academic hours must be earned as SMU credit in SMU courses or SMU-approved international programs. No more than two hours of Wellness or PRW courses can count toward the 122 minimum hours. A minimum of 30 business hours must be completed through enrollment at SMU or SMU-approved international programs. The maximum number of business credit hours a student may take is the sum of the number of credit hours required to complete the student's major, plus up to 12 credit hours in one concentration if the student is pursuing a concentration (under Concentrations for Majors below), plus up to six credit hours of unrestricted business electives. Students may not exceed six credit hours of unrestricted business electives. Students are not required to take courses in a concentration or unrestricted business electives. The maximum limit on business hours does not include business courses taken abroad, business internship courses not required for a major, business-directed studies or hours needed to meet the business degree requirements related to the minimum credit hours taken at or through SMU. Business majors are limited to one major within the Cox School.

Major	*Minimum Number of Business Credit Hours*
Accounting	54
Finance	57
Financial Consulting	57
All other business majors	51

Application for Graduation

In order to graduate, students must file an application for candidacy to graduate with the Undergraduate Advising and Records Office of the Cox School (in 252 Maguire) before the final term of coursework. Students should consult the Official University Calendar for graduation application deadlines.

In addition to requiring students to fulfill all academic requirements, the Cox School may consider any judicial or disciplinary matters before any degree may be conferred. Students must meet all financial obligations to the University in order to receive their diploma and transcript(s).

Commencement Activities Prior to Completion of Degree Requirements

Participation in May graduation activities is allowed for students who are August graduates provided they are enrolled to complete all graduation requirements during the summer following May graduation activities.

Curriculum Requirements

The requirements summarized below must be satisfied to earn the Bachelor of Business Administration degree. In addition to the University-wide requirements, a core of required business fundamental courses has been designed by the faculty of the Cox School as specified below. Each core course must be passed for a student to be eligible for graduation. Generally, Discernment and Discourse, calculus, and economics courses should be completed in the student's first year; accounting, managerial statistics, business communications and information systems requirements in the sophomore year; finance, legal environment and ethics, marketing, management, and operations management requirements in the junior year; and the business strategy requirement (STRA 5370 or CISB 5397, also known as capstone courses) in the senior year.

Students are responsible for designing their own degree programs with assistance from the Cox academic advisers. Coordination with the B.B.A. Career Management Center is highly advantageous for students who want to align major and course selection with their career aspirations. Close attention should be given to course and knowledge prerequisites as well as course content to maximize the value of each course and to avoid enrolling in a course for which a student has insufficient preparatory background. It is expected that students will consult with faculty and academic advisers in determining their course selections.

Each student's file, reflecting his or her total academic record, is located in the Undergraduate Advising and Records Office, 252 Maguire. Transcripts of the student's official record should be requested from the Office of the Registrar.

Minor in Business Administration

Undergraduates with majors outside the Cox School may complete the minor in business administration. *The minor in business administration requires*

- Admission to the Cox School through the same admission process as admission to the business majors. **Note:** Admission requirements are found under Admission of SMU Students to a Business Major/B.B.A. Degree Program in the Admission section of this catalog.
- A minimum 2.000 business and 2.000 minor in business administration GPA.
- Completion of the 21 hours specified for the minor in business administration below and all related prerequisite courses.

Course Requirements

Matriculated students must complete all hours toward the minor in business administration through enrollment at SMU. Students who transfer courses for this minor prior to SMU matriculation must still complete 21 hours in business through enrollment at SMU or SMU-approved international programs, and will need additional business courses beyond the 21 hours specified below for the minor in business administration to meet the SMU credit requirement. To earn a minor in business administration, students must satisfy the following requirements:

	Credit Hours
ACCT 2301, 2302	6
FINA 3320	3
ITOM 2308, 3306	6
MNO 3370	3
MKTG 3340 (*or* ADV 3362, for advertising majors and minors only)	3

Note: Management science majors in the minor in business administration take ITOM 2308; however, they take EMIS 3360 and 5362 instead of ITOM 3306.

Grading

Regular grading standards will be used. None of the 21 hours may be completed pass/fail for the minor in business administration. A minimum 2.000 GPA on all business courses attempted is required for satisfactory completion of the minor in business administration.

Minor in Business

Undergraduates with majors outside the Cox School may complete the minor in business, which is an open-enrollment program with no grade-based admission requirements. The minor in business offers courses designed to provide a general overview of business topics to complement a variety of academic interests. The minor in business requires

- A minimum 2.000 business and 2.000 minor in business GPA.
- Completion of the 18 hours specified for the minor below.

Minor in business courses will be accepted in transfer prior to matriculation, but once a student has entered SMU, all remaining minor in business courses and a minimum of nine hours of business coursework must be completed through enrollment in courses offered by the faculty of the Cox School of Business.

Note: With the exception of BUSE 3310, FINA 3312 and ITOM 3310, no courses offered for the minor in business may be taken by B.B.A. majors or students enrolled in the minor in business administration. BUSE 3310, FINA 3312 and ITOM 3310 may be taken as free (nonbusiness) elective credit by B.B.A. majors and students enrolled in the minor in business administration.

Course Requirements

Students must complete all hours toward the minor in business through enrollment in courses at SMU (or a minimum of nine hours for transfer students). Courses in this program are offered during summer terms at SMU's main campus and January terms at the SMU-in-Plano campus.

Students entering the minor in business with prior course credit for certain business courses may substitute the following credits toward the minor in business: ACCT 2301 for ACCT 2310, BL 3335 for BL 3310, FINA 3320 for FINA 3310, MNO 3370 for MNO 3310 and MKTG 3340 for MKTG 3310. No other course substitutions are approved, and all postmatriculation courses must be completed at SMU. Students must complete all remaining courses and a minimum of nine hours toward the minor in business through enrollment in courses at SMU. Students must petition for course substitutions after having declared the minor in business.

With the exception of ITOM 3310, BUSE 3310 and FINA 3312, the courses offered as part of the minor in business may not be taken by students in the Cox B.B.A. program or in the minor in business administration. Cox B.B.A. majors and students enrolled in the minor in business administration may take ITOM 3310, BUSE 3310 and/or FINA 3312 as free elective credit; these courses will not count as business hours toward any B.B.A. degree. To earn a minor in business students must satisfy the following requirements:

	Credit Hours
Core Courses	15
ACCT 2310, *or* ACCT 2301 *or* 2311	
BUSE 3310 *or* BUSE 3311	
FINA 3310	
MNO 3310	
MKTG 3310 (*or* ADV 3362, for advertising majors and minors only)	
Elective (selected from the following)	3
BL 3310, FINA 3312, *or* ITOM 3310	

Grading

Regular grading standards will be used. None of the courses may be completed pass/fail. A minimum 2.000 GPA on all business courses attempted is required for satisfactory completion of the minor in business.

Advising

The undergraduate program of the Cox School of Business is strongly committed to the academic advising process and believes that advising is effective only if the student actively participates in, and assumes responsibility for, the advising process. Cox academic advisers are available in 252 Maguire for student appointments. All students admitted to the Cox School are required to attend a two-part orientation session, which includes the B.B.A. Advising Office, B.B.A. Career Management Center and the Business Information Center. After the initial orientation, students are required to meet with a B.B.A. adviser every term until graduation.

Students are not assigned to a specific adviser; however, many students prefer to meet with the same adviser. It is the student's choice when scheduling an appointment to either select a particular adviser or schedule with the next available adviser.

Prior to each advising appointment, students are expected to carefully examine their electronic degree progress report, as it is the student's responsibility to help assure the eDPR's accuracy. After meeting with an adviser, students enroll, swap and drop courses on Access.SMU. The director of B.B.A. Advising and Student Records will add a student to a closed class only if the student is a graduating senior and there are no other course options for completing a degree requirement.

Cox faculty members provide assistance in the areas of their professional expertise, offering guidance in selecting and sequencing courses appropriate for meeting specific academic and career goals.

Education Abroad

Cox students may take no more than six credit hours of B.B.A. business core courses (out of 33 total credit hours of business core courses) in SMU Abroad programs. Students may take no more than six credit hours of courses required for their business major in SMU Abroad programs. Students may take no more than six credit hours of business courses that do not count for the business core or for the major in SMU Abroad programs.

Career Education and Services

The undergraduate Career Management Center fosters the development of lifelong career management skills, providing exposure to various careers and developing skills that will help students secure employment. Students learn career planning, personal marketing, resume and professional correspondence development, and interview and job search skills. Career management fundamentals are taught in the required BLI 3302 course. The career coaches meet with students one-on-one to develop individualized career plans and assist them with their internship or job search. Internships are strongly encouraged and are considered a key component of the undergraduate experience at Cox. SMU's location in Dallas allows students to pursue part-time internships during the academic year as well as part- and/or full-time internships during the summer worldwide. In addition, the Career Management Center provides opportunities for B.B.A. students to interact with employers at career-related events such as career fairs, workshops, panels and seminars focused on specific industries, professions or companies. Students are encouraged to start this process early and make an appointment with a career coach during the term they are accepted to Cox. Ongoing meetings with career coaches are important for students to continue polishing the professional skill sets necessary for a successful job search. The Career Management Center is located in 254 Maguire.

BBA Mentoring Alliance

The BBA Mentoring Alliance is a professional mentoring experience that pairs business undergraduates one-on-one with executives in the Dallas-area business community. The Mentoring Alliance enhances a student's collegiate experience by providing firsthand insights into the business world while teaching the value of effective networking. Eligibility for the mentoring program requires a declared major in business, junior or senior status, and good academic standing. B.B.A. students on academic probation are not eligible to participate. After acceptance into the program, students are matched with a mentor for an academic year.

Honors Program

The Cox B.B.A. Honors Program offers an enhanced curriculum to outstanding business students. B.B.A. students admitted to this program have the opportunity to take rigorous courses that challenge their intellectual abilities and sharpen their professional skills. These courses are taught by some of the outstanding professors at the Cox School and are similar to M.B.A. courses. Honors courses are structured to provide students with a greater understanding of current business practices and the academic theories that will help create the business practices of the future. In addition to honors courses, students in the Cox B.B.A. Honors Program have the opportunity to participate in extracurricular activities that complement their business education. Enrolling in the Cox B.B.A. Honors Program does not preclude participation in other honors programs at SMU.

Types of Honors Classes

The Cox School offers two types of undergraduate honors courses:

Core Courses. The B.B.A. program has 11 required core courses that introduce students to the basic disciplines in business, such as accounting, finance, marketing, management, communication, law and strategy. Honors sections of the B.B.A. core courses are open only to students in the B.B.A. Honors Program. It is expected that honors students will enroll in as many honors core courses as possible.

Electives. Business elective courses teach advanced concepts in one area of business. A number of honors sections of advanced electives are offered each year. Students in the B.B.A. Honors Program may apply to enroll in honors sections of elective courses. These sections are also open to students who are not in the B.B.A. Honors Program. Typically, all students in the honors electives may enroll only with the permission of the instructor. Students in the B.B.A. Honors Program are encouraged to enroll in electives related to their major.

Admission to the B.B.A. Honors Program

Students who are accepted into the B.B.A. Honors Program must maintain a minimum GPA of 3.500 in their B.B.A. Honors Program courses to remain in the program; this GPA requirement begins once a student has at least six credit hours of honors courses. Students whose GPA falls below 3.500 have a one term grace period to meet the requirement. There are two paths to entering the Cox B.B.A. Honors Program:

Entry by Invitation. High school students who apply for admission to SMU and who indicate business as their primary academic interest are automatically reviewed for admission to the Cox B.B.A. program as BBA Scholars. Admission to the Cox BBA Scholars Program is by invitation only. Selected BBA Scholars will be invited to join the B.B.A. Honors Program at the time of admission to SMU. There are no additional admissions materials that a student needs to complete to be considered for the B.B.A. Honors Program. BBA Scholars who are not selected for the B.B.A. Honors Program at the time of admission to SMU may apply to join the B.B.A. Honors Program at the time of completion of the business subset courses.

Entry by Application. All Cox students may apply for admission into the program at the end of the term in which the business subset courses are completed. In order to apply, students must have at least a 3.500 GPA in the seven-course subset and have at least a 3.500 SMU GPA. Applications are available in the B.B.A. Advising Office. Admission criteria for the B.B.A. Honors Program are updated periodically and are based on academic achievements and potential. Admission may not be offered to all students who apply.

The Honors Curriculum

The following is a sample schedule of honors sections for an honors student:

First Year	ITOM 2305	BLI 3302		
Sophomore Year	ACCT 2301	ACCT 2302	ITOM 2308	
Junior Year	FINA 3320	ITOM 3306	MKTG 3340	MNO 3370
Senior Year	BL 3335	STRA 5370	Honors Electives	

Additional information about the courses is in the Course Descriptions section.

Honors Notation on the Diploma

Students who are in the Cox B.B.A. Honors Program will receive an honors notation ("Honors in Business") on their transcript and diploma if they complete at least six honors courses (18 hours), at least four (12 hours) of which must be at the junior or senior level, and have both an SMU GPA and a Cox Honors Program GPA of at least 3.500. The Cox Honors distinction is separate from the cum laude distinctions awarded at graduation.

BBA Scholars Program

The BBA Scholars Program affords numerous special opportunities, including networking with Cox faculty and the Dallas business community, invitations to special events, and tailored academic advising and career services. Participation in this program enhances students' educational experience and helps develop the skills and connections necessary for professional success. BBA Scholars are encouraged to participate in honors-level business courses to enhance their education experience in the Cox School.

Business Direct Program

The Business Direct Program offers admission to the Cox School by invitation only based on students' high school performance and after completion of the Cox required subset courses with good academic standing (2.000 minimum GPA). The list of subset courses is found under Admission of SMU Students to a Business Major/B.B.A. Degree Program. Business Direct students may enter the Cox Honors Program if they qualify by their subset grades and SMU GPA; additional information is found under Entry by Application.

Directed Studies

Business students may pursue independent studies, a research-based project, in a specified department under the sponsorship of a full-time Cox faculty member. This project may involve further study by the student in some aspect not covered in regularly scheduled business courses. B.B.A. students must first complete the basic required course in the field of study. Business elective or free elective credit will be granted to a maximum of six hours and cannot be used to fulfill major requirements. Directed studies courses may be taken pass/fail without completion of the business major. Independent studies will be exempted from the maximum credit hour limit. Students on academic probation may not register for independent studies.

Internships

Business students can take up to three hours of general internship credit for work experience. The credit cannot be used towards the B.B.A. major or minor requirements. Internships are for pass/fail credit only.

Concurrent Degrees

B.B.A. students may simultaneously complete additional major(s) and/or minor(s) outside of business. Interested students should contact the Undergraduate Advising and Records Office in the Cox School in 252 Maguire and the appropriate representative of the dean of the school in which the additional major/minor will be earned.

PROGRAMS OF STUDY AND BUSINESS COURSES

The Cox School offers seven business majors, a specialization within one major, a minor in business administration and a minor in business. Declared business majors may choose to add one of three concentrations.

Majors

- Accounting
- Finance
- Financial Consulting
- General Business
- Management
- Marketing
- Real Estate Finance

Concentrations

- Energy Management
- Entrepreneurship
- Risk Management and Insurance

Specialization (Finance Major)

- Alternative Asset Management

The following business courses have been approved by the faculty of the Edwin L. Cox School of Business. It should be noted that not all courses described in this catalog are necessarily offered in any given academic year. Students should check published course schedules to see which courses are offered. From time to time, some courses may be changed and new courses added. Students should use caution in selecting courses to avoid repetition of courses previously taken.

Business Administration Core Requirements

In addition to the University-wide requirements, the required term credit hours for the B.B.A. degree are distributed as follows:

	Credit Hours
Business Core Requirements	
ACCT 2301, 2302	6
BL 3335	3
BLI 3302	3
FINA 3320	3
ITOM 2305, *or* STAT 2301, *or* EMIS 3340, *or* CSE/STAT 4340	3
ITOM 2308, 3306	6
MKTG 3340	3
MNO 3370	3
STRA 5370 *or* CISB 5397	3
Business Hours (toward major)	18–24
Total	**51–57**

Notes

- Test or transfer credit for STAT 2331 earned prior to SMU matriculation will count.
- Management science/business double majors take ITOM 2308 and either STRA 5370 or CISB 5397; however, they take EMIS 3360 and EMIS 5362 instead of ITOM 3306.

Concentrations for B.B.A. Students

SMU students who are declared business majors may choose to add one of three concentrations: energy management, entrepreneurship, or risk management and insurance. Each concentration consists of four courses (12 hours). Courses for the concentrations will not double count toward the business core or the majors with the exception of the general business major. No courses may be substituted for concentration courses.

Grading

Regular grading standards will be used. Grades in concentration courses will count in the student's business GPA and cumulative GPAs. None of the concentration courses may be completed pass/fail unless all requirements for the business major have been successfully completed.

Energy Management

BUSE 3331 From Prospect to Production to Kilowatts: The Business of Energy

BUSE 4332 Energy and Environmental Law

BUSE 4333 Business Management, Planning, and Analysis in Energy

BUSE 4334 Global Energy Markets, Business, and Policy: Spikes, Myths, and Risks

Entrepreneurship

BL 4340 Law for the Entrepreneur

CISB 3380 Business Decision-Making

CISB 4398 Managing the Entrepreneurial Business

CISB 5397 Entrepreneurship (Starting a Business)
(STRA 5370 must be taken to complete B.B.A. core requirements)

Risk Management and Insurance

MNO 3373 Negotiations

RMI 3360 Principles of Risk Management and Insurance

RMI 4340 Employee Benefits

RMI 4360 Insurance and Corporate Risk Management

Bachelor of Business Administration With a Major in General Business

To earn the B.B.A. degree with a major in general business, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

Business electives (any combination of Cox departments): 18 total credit hours.

Accounting

Professor Hemang Desai, **Department Chair**

Professors: Joseph Magliolo, Wayne Shaw. **Associate Professors:** Nilabhra Bhattacharya, J. Douglas Hanna. **Assistant Professors:** Ruihao Ke, Zining Li, Hyungshin Park, Dimitris Vrettos, Jeff Yu. **Professor of Practice:** Barry Bryan. **Clinical Professor:** Gregory Sommers. **Senior Lecturer:** Susan Riffe.

Bachelor of Business Administration With a Major in Accounting

All B.B.A. degree-seeking students should take ACCT 2301 and 2302 during their sophomore year. Matriculated students must take these courses through enrollment in courses offered by the Cox School of Business.

Most accounting majors also complete an accounting internship, ACCT 5325 and 5326, which does not count toward the B.B.A. degree requirements but is completed using additional available business credit hours.

To earn the B.B.A. degree with a major in accounting, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

	Credit Hours
Accounting Core	15
ACCT 3311, 3312, 4311, 4315, 5314	
Electives (selected from the following)	6
ACCT 3391, 4307, 5317	

Note: The core accounting courses above must be taken through enrollment at SMU.

The Courses (ACCT)

ACCT 2301 (3). INTRODUCTION TO FINANCIAL ACCOUNTING. Develops an understanding of how the fundamental activities of a business enterprise are reflected in its financial statements, and how financial accounting information can be used effectively for external decision-making purposes (decisions such as investment, credit, risk management, and financing). *Prerequisites:* ECO 1311, 1312 and MATH 1309 or 1337 (or for markets and culture majors, ECO 3355 and SOCI 2377).

ACCT 2302 (3). INTRODUCTION TO MANAGERIAL ACCOUNTING. Introduces the use of accounting information for management purposes, including decision-making, planning, and control of operations. Students learn to integrate topics in cost determination, economic analysis, budgeting, and management and financial control. *Prerequisite:* ACCT 2301.

ACCT 2310 (3). ACCOUNTING CONCEPTS. A broad introduction to financial, cost, and managerial accounting concepts and practices. Stresses the understanding of financial statements as contrasted to the preparation of these documents. Covers product cost, including estimating overhead and the underlying assumptions. Discusses using managerial accounting techniques for decision-making, including break-even analysis, relevant costing, and budgeting. Students who already have credit for ACCT 2301 will not receive credit for this course. Cox majors and minors in business administration will not receive credit for this course and may not enroll in it.

ACCT 3311 (3). INTERMEDIATE ACCOUNTING I. An overview of financial statements and revenue recognition that focuses on the left-hand side (assets) of the balance sheet. Provides the necessary foundation for comprehension by users and preparers of the information in financial statements. *Prerequisite:* ACCT 2302. Reserved for Cox majors.

ACCT 3312 (3). INTERMEDIATE ACCOUNTING II. Continuation of ACCT 3311. Focuses on items on the right-hand side (liabilities and stockbrokers' equity) of the balance sheet. *Prerequisite:* ACCT 3311. Reserved for Cox majors.

ACCT 3391/CFB 3375/MNO 3375 (3). ETHICS IN ACCOUNTING. Develops students' ability to identify and evaluate ethical issues related to accounting and business management in a corporate environment. Students who take CFB 3375 or MNO 3375 may not receive credit for ACCT 3391, nor may students taking ACCT 3391 take either CFB 3375 or MNO 3375 for credit. Students seeking accounting certification should note that ACCT 3391 is a gateway course for eligibility to take the CPA examination. *Prerequisite:* Accounting major with senior standing or ACCT 5325. Reserved for Cox majors.

ACCT 4307/ITOM 4307 (3). BUSINESS MODELING WITH SPREADSHEETS. Introduces advanced quantitative modeling techniques for business decision-making. Covers a variety of modeling techniques, business analytics concepts, and data analysis tools. Students learn to implement these techniques in spreadsheet models that assist businesses in understanding and managing risk and improving decision-making. Applications cover a broad range of functional areas, including accounting, finance, marketing, and operations. *Prerequisites:* ACCT 2302; ITOM 2308, 3306; FINA 3320. Reserved for Cox majors.

ACCT 4311 (3). COST ACCOUNTING I. Focuses on the measurement, accumulation, and control of costs. Topics include product cost accounting, cost behavior analysis, direct costing, standard cost variance analysis, and relevant cost analysis. *Prerequisite:* ACCT 2302. Reserved for Cox majors.

ACCT 4315 (3). FEDERAL INCOME TAX I. Covers the conceptual basis and structure for the determination of income taxes, including the tax research methods used in preparing tax returns, solving problems, and planning business decisions. *Prerequisite:* ACCT 2302. Reserved for Cox majors.

ACCT 5314 (3). AUDIT RISK AND CONTROLS. Covers understanding, developing, and analyzing financial and management accounting systems; applying fundamental concepts to contemporary issues; and analyzing management internal control functions. Presents the behavioral characteristics and mechanics of accounting fraud. *Prerequisite:* ACCT 3311. Reserved for Cox majors.

ACCT 5317 (3). ACCOUNTING THEORY. Study of selected topics and current issues in the area of accounting theory. *Prerequisite:* ACCT 3312. Reserved for Cox majors.

ACCT 5318 (3), 5319 (3). INDEPENDENT STUDIES IN ACCOUNTING. Directed research in accounting. *Prerequisites:* ACCT 3311, junior standing, and instructor approval.

ACCT 5325 (3), 5326 (3). ACCOUNTING INTERNSHIP. *Prerequisites:* Senior standing, departmental approval.

The Courses

Business Administration (BA)

BA 3200 (2). SPECIAL TOPICS: INTERNATIONAL BUSINESS ADMINISTRATION. Special topics in international business taught abroad.

BA 3300 (3). SPECIAL TOPICS: INTERNATIONAL BUSINESS ADMINISTRATION. Offered through SMU International Programs. *Prerequisite:* Junior standing.

BA 3301 (3). SPECIAL TOPICS: INTERNATIONAL BUSINESS II. Offered through SMU International Programs. *Prerequisite:* Junior standing.

BA 4111 (1), 4112 (1), 4113 (1). BUSINESS INTERNSHIP.

BA 4315 (3). EUROPEAN COMMON MARKET. Offered through SMU International Programs. *Prerequisite:* Junior standing.

BA 5180 (1). DIRECTED STUDY. Directed research in business. *Prerequisite:* Junior standing and permission of the instructor.

BA 5280 (2), 5380 (3). DIRECTED STUDY. Directed research in business. *Prerequisite:* ACCT 2312, junior standing, and permission of the instructor.

Business Leadership Institute (BLI)

BLI 1110 (1). SPECIAL TOPICS IN BUSINESS ADMINISTRATION: BBA SCHOLARS SEMINAR. Introduces various business topics, including an overview of business disciplines and careers in business. Restricted to BBA Scholars.

BLI 3302 (3). BUSINESS COMMUNICATIONS AND LEADER DEVELOPMENT. Promotes students' professional success by becoming more effective communicators and leaders. Improves career management, presentations, business writing, and interpersonal skills; enhances ability to plan and manage projects in a team setting; increases understanding of contemporary business issues; and increases appreciation for the vital role that ethics, integrity, and trust play in leading a successful business. Reserved for Cox majors and BBA Scholars.

Finance

Professor Kumar Venkataraman, **Department Chair**

Professors: James S. Linck, William F. Maxwell, Darius P. Miller, Albert W. Niemi, James L. Smith, Rex W. Thompson, Michel R. Vetsuypens. **Associate Professor:** Amar Gande. **Assistant Professors:** Indraneel Chakraborty, Stacey Elizabeth Jacobsen, Yian Liu, Andrew C. MacKinlay, Ravindra V. Sastry, Johan Sulaeman. **Professors of Practice:** Donald Shelly, Nathan G. Walcott. **Clinical Professors:** Jeffrey W. Allen, Michael L. Davis.

Bachelor of Business Administration With a Major in Finance

To earn the B.B.A. degree with a major in finance, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

	Credit Hours
Finance Core	18
FINA 4325, 4326, 4327, 4329 *or* 4335	
ACCT 3311, 3312	
Electives (selected from the following)	6
FINA 3330, 4328, 5132, 5232, 5340, 5341, 5348	

Note: The core finance courses above must be taken through enrollment at SMU.

Bachelor of Business Administration With a Major in Financial Consulting

To earn the B.B.A. degree with a major in financial consulting, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

	Credit Hours
Accounting Core	9
ACCT 3311, 3312, 4315	
Finance Core	9
FINA 4325, 4326, 4329 *or* 4335	
Electives (selected from the following)	6
ACCT 4307, 4311, 5317	
FINA 3330, 4327, 4328, 5132 *and* 5232, 5340, 5341	

Note: The core accounting and finance courses above must be taken through enrollment at SMU.

The Courses (FINA)

FINA 3300 (3). TOPICS IN INTERNATIONAL FINANCE. (Offered through SMU International Programs.) *Prerequisite:* Junior standing.

FINA 3310 (3). FINANCE CONCEPTS. Provides a solid foundation in key financial concepts and tools for managerial decision-making. Develops ability to analyze, decide, and communicate based on financial data and concepts. Topics include risk-return relationship in financial management, basic valuation models of financial securities, and decision rules used to value and choose between corporate projects. Required for the business minor. Students will not receive credit for FINA 3310 and 3320. Cox majors and business administration minors will not receive credit for this course and may not enroll in it.

FINA 3312 (3). PERSONAL FINANCE. Learn personal financial planning. Topics include setting up financial accounts at banks and brokerages; investments in stocks and mutual funds; personal income taxation; auto, property, life, and health insurance; and employee benefit plans. Elective for business minor. B.B.A. majors can take course for free elective credit only.

FINA 3320/ECO 4368 (3). FINANCIAL MANAGEMENT. Survey of concepts, practices, and problems surrounding financial markets, securities, and decision-making. Includes time value of money, market efficiency, evaluation of securities, and capital budgeting. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; MATH 1309 or 1337; STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors and minors in business administration. Students will not receive credit for this course and ECO 4368.

FINA 3330/ECO 3355 (3). MONEY AND CAPITAL MARKETS. Analyzes the structural interrelationships among the important participants in the U.S. financial markets. Topics include flow of funds, determinants of interest rates, monetary policy and interest rates, money and capital market instruments, and problems in managing financial institutions. *Prerequisite:* FINA 3320. Reserved for Cox majors. Students may not receive credit for this course and ECO 3355.

FINA 4325 (3). ADVANCED FINANCIAL MANAGEMENT. In-depth analysis of capital budgeting, cost of capital, sources of capital open to the firm, capital structure, dividend policy, mergers, and bankruptcy. Students may not receive credit for this course and ECO 4388. *Prerequisite:* FINA 3320. Reserved for Cox majors.

FINA 4326/ECO 4378 (3). INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT. Evaluates the interactive effects of economic, industry, company, and market considerations on the risk and return of individual assets. Analyzes the interrelationships of risky assets when combined in portfolios; also asset pricing theory and implications. *Prerequisite:* FINA 3320. Reserved for Cox majors. Students may not receive credit for this course and ECO 4378.

FINA 4327 (3). SPECULATIVE MARKETS. Introduces analysis of speculative securities such as options and futures. Covers the underlying theories explaining speculative markets and discusses strategies such as hedging and arbitrage. *Prerequisite:* FINA 3320. Reserved for Cox majors.

FINA 4328 (3). MANAGEMENT OF FINANCIAL INSTITUTIONS. Management of assets, liabilities, and capital accounts of financial institutions in general and commercial banks in particular. Emphasis on understanding the interrelationship among profitability, liquidity, and capital adequacy. *Prerequisite:* FINA 3330. Reserved for Cox majors.

FINA 4329 (3). INTERNATIONAL FINANCE. Analyzes the effects on financial transactions of dealing in international markets. Examines international financial markets and such issues as interest rate differences between countries' spot and forward transactions in international currencies, and the impact of international operations for the corporate financial manager. Students may not receive credit for this course and FINA 4335. *Prerequisite:* FINA 3320. Reserved for Cox majors.

FINA 4335 (3). GLOBAL BUSINESS. Covers the unique problems and opportunities presented by international business. Focuses on specific topics of international finance, including foreign exchange markets, management of exchange rate risk, the balance of payments and the role of central banks in setting exchange rates, and multinational strategy. Instruction includes a week in Beijing and Shanghai to visit Chinese companies, multinational companies doing business in China, and cultural sites to gain other experiences of life in these cities. Students may not receive credit for this course and FINA 4329. *Prerequisite:* FINA 3320. Reserved for Cox majors.

FINA 5132 (1). PORTFOLIO MANAGEMENT PRACTICUM. Offers practical experience in investments through management of the Ann Rife Cox Investment Fund. Economic and industry analysis and determining how that analysis affects investment decisions. Topics include money and capital market forecasts, selection of individual securities, and development of a portfolio strategy. Honors section. *Prerequisites or corequisites:* FINA 4326 plus an application process.

FINA 5232 (2). HONORS PRACTICUM IN PORTFOLIO MANAGEMENT. Offers practical experience in investments by managing an investment fund. *Prerequisite:* FINA 5132. Reserved for Cox majors.

FINA 5325 (3). INDEPENDENT STUDY. Directed research in finance. *Prerequisite:* FINA 3320, junior standing, and permission of the instructor

FINA 5326 (3). INDEPENDENT STUDY. Directed research in finance. *Prerequisites:* FINA 3320, junior standing, and instructor approval. Reserved for Cox majors.

FINA 5340 (3). ALTERNATIVE ASSETS I. Examines the theory and management of hedge funds. Topics include optimal portfolio selection, arbitrage pricing theory, controlled-risk strategies (e.g., event-driven, long-short equity; dedicated short bias; arbitrage), and performance measurement of hedge funds. Discusses operational issues such as implementation costs, leverage, and the mechanics of security lending. *Prerequisites:* FINA 4326, 5341. Reserved for Cox majors.

FINA 5341 (3). ALTERNATIVE ASSETS II. Focuses on leveraged finance, building the necessary skills to calculate total enterprise valuation and then moving to the different segments of leveraged finance: high-yield bonds, leveraged loans, credit default swaps, collateralized debt obligation, debtor-in-possession financing, and distressed investing. *Prerequisite:* FINA 3320. *Prerequisite or corequisite:* FINA 4326. Application required. Reserved for Cox majors.

FINA 5348 (3). FINANCIAL MODELING. Presents practical examples and real-world templates/tools used by investment bankers and private equity professionals in financial statement spreading and analysis. Also, valuation (using comparables, precedent transactions, and discounted cash flow analysis) of public and private companies in both minority interest and controlling interest situations. In addition, discusses construction and sensitivity of integrated cash flow models (financial statement projections), construction and analysis of leveraged buyout models, and construction and analysis of mergers and acquisitions (accretion/dilution) models. Classroom discussions blend lecture and case studies with a hands-on modeling approach by all students. Homework and projects provide additional real-world context and practice for in-class discussions and case studies. Reserved for Cox majors. *Prerequisites:* FINA 4325, 4326.

Information Systems

Professor Amit Basu, **Department Chair**

Professors: Bezalel Gavish, John H. Semple. **Associate Professors:** Sreekumar R. Bhaskaran, R. Canan Savaskan-Ebert, Ulrike Schultze. **Assistant Professor:** Fangyun T. Tan. **Clinical Professors:** Ellen Parker Allen, Amy V. Puelz. **Senior Lecturer:** James C. Collins, Jr.

All B.B.A. degree-seeking students should take ITOM 2305 (or STAT 2301) and ITOM 2308 during their sophomore year.

The Courses (ITOM)

ITOM 2305 (3). MANAGERIAL STATISTICS. Introduces probability and descriptive statistics, regression analysis, forecasting, decision-making under uncertainty, and use of data in decision-making. Includes problem-solving, case assignments, and the use of Excel in analyzing problems. Students may not receive credit for ITOM 2305 and STAT 2301 or 2331. Reserved for prebusiness and business students only.

ITOM 2308 (3). INFORMATION SYSTEMS FOR MANAGEMENT. Discusses computer technologies for the management of information resources in business. Covers spreadsheet analytical tools for data analysis, reporting, and forecasting. Also includes database design and implementation for data storage, retrieval, aggregation, and reporting as well as the creation of Web pages using HTML. Laptops equipped with the Windows operating system and Microsoft Office are required for use in class. *Prerequisite:* ITOM 2305 or one from the following: CSE 4340; EMIS 3340; STAT 2301, 2331, 4340. Reserved for prebusiness and Cox majors/minors only.

ITOM 3306 (3). OPERATIONS MANAGEMENT. Introduces several common business analytics models and their applications in solving operational business problems. Topics include optimization (particularly linear programming), decision analysis, computer simulation, and project scheduling. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; ITOM 2308; MATH 1309 or 1337; and STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors and business administration minors.

ITOM 3310 (3). BUSINESS DECISIONS AND PROCESSES. Focuses on two skill sets: developing spreadsheets to support decision-making in organizations and analyzing and improving business processes. Teaches relatively advanced Excel skills to format, manipulate, and visualize information in order to answer business questions; also how to represent business processes diagrammatically using flowcharts. Processes covered include sales, purchasing, and project management. Half of each class session takes place in the computer lab. Business minor elective. B.B.A. majors and business administration minors receive free elective credit for this course.

ITOM 4307/ACCT 4307 (3). BUSINESS MODELING WITH SPREADSHEETS. Introduces advanced quantitative modeling techniques for business decision-making. Covers a variety of modeling techniques, business analytics concepts, and data analysis tools. Students learn to implement these techniques in spreadsheet models that assist businesses in understanding and managing risk and improving decision-making. Applications cover a broad range of functional areas, including accounting, finance, marketing, and operations. *Prerequisites:* ACCT 2302; ITOM 2308, 3306; FINA 3320. Reserved for Cox majors.

Management and Organizations

Associate Professor Don VandeWalle, **Department Chair**

Professors: Robin L. Pinkley, Miguel A. Quiñones, Linda B. Stearns. **Associate Professors:** Mel Fugate, Maribeth Kuenzi, Ellen F. Jackofsky. **Assistant Professors:** Jay Carson, Robert W. Rasberry.

Bachelor of Business Administration With a Major in Management

To earn the B.B.A. degree with a major in management, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

	Credit Hours
Management Courses (two from the following)	6
MNO 3371, 4361, 4371	
Electives (selected from the following)	6
MNO 3373, 3375, 4330, 4340 (see RMI 4340 for class schedule), 4371 (if not taken for core requirement) CISB 3380, 4398, 5397 (if senior core is completed with STRA 5370) ITOM 4307 (ACCT 4307 will not count for the major) STRA 5370 (if senior core is completed with CISB 5397)	
Other Business Electives	6

Note: The core management courses above must be taken through enrollment at SMU.

The Courses (MNO)

MNO 3300 (3). SPECIAL TOPICS IN INTERNATIONAL MANAGEMENT I. Offered through SMU International Programs.

MNO 3301 (3). SPECIAL TOPICS IN INTERNATIONAL MANAGEMENT II. Offered through SMU Abroad. *Prerequisite:* Junior standing.

MNO 3310 (3). MANAGEMENT CONCEPTS. Provides a broad survey of key issues, theories, and practices that underpin how organizations function, evolve, and perform. Topics include motivation, job design, organizational theory, leadership, organizational culture, competitive strategy, and competitive advantage. Required for the business minor. Cox majors and minors in business administration will not receive credit for this course and may not enroll in it.

MNO 3370 (3). MANAGEMENT. Develops skills in managerial behavior that facilitate high performance and satisfaction as well as continued self-development for all organization members. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; MATH 1309 or 1337; and STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors, minors in business administration, and management science majors.

MNO 3371 (3). HUMAN RESOURCES MANAGEMENT. Develops an understanding of how organizations recruit, develop, and retain high-performing talent and facilitate a high quality of life in an organization. Insights gained can help facilitate one's initial job search, career management, and personal effectiveness. *Prerequisite:* MNO 3370. Reserved for Cox majors.

MNO 3373 (3). NEGOTIATIONS. Presents theories and processes of negotiation as practiced in a variety of settings. Focuses on understanding the behavior of individuals, groups, and organizations in the context of competitive situations. Emphasizes simulations, role-playing, and cases. *Prerequisite:* MNO 3370. Reserved for Cox majors.

MNO 3375/CFB 3375/ACCT 3391 (3). CORPORATE SOCIAL RESPONSIBILITY AND ETHICAL LEADERSHIP. Develops managerial decision-making and stakeholder analysis through a study of ethical dilemmas in contemporary business. Students who take CFB 3375 or MNO 3375 may not receive credit for ACCT 3391, nor may students taking ACCT 3391 take either CFB 3375 or MNO 3375 for credit. Students seeking accounting certification should note

that ACCT 3391 is a gateway course for eligibility to take the CPA examination. *Prerequisite:* Accounting major with senior standing or ACCT 5325. Reserved for Cox majors.

MNO 4330 (3). INTRODUCTION TO CONSULTING AND CHANGE MANAGEMENT. Develops understanding of the consulting process and change management. Examines the behaviors of effective consultants: how to define and diagnose client needs and implement change. Also studies prominent change and consulting frameworks. As a final project, teams provide consulting services to an organization. *Prerequisite:* MNO 3370. Reserved for Cox majors.

MNO 4361 (3). PROJECT MANAGEMENT. Presents a set of practices and interpersonal skills designed to deliver business results that are on time, on budget, and meet quality standards. Examines project management in modern industries and organizational structures as a preferred, standard process to achieve successful results. Discusses defining the project goals, developing a plan to achieve the goals, executing the plan, and evaluating progress. Covers interpersonal skills, including communication, collaboration, and team management. *Prerequisite:* MNO 3370. Reserved for Cox majors.

MNO 4371/CFB 3381 (3). LEADERSHIP AND CULTURE. Enhances effectiveness and success as a leader. Emphasizes core theories of motivation, leadership, interpersonal relationships, culture, and communication. *Prerequisite:* MNO 3370.

MNO 4378 (3). INDEPENDENT STUDIES IN ORGANIZATIONAL BEHAVIOR I. Considers contemporary issues (theoretical, ethical, methodological, social, etc.) that are currently of interest to organizational theorists and behavioral scientists. *Prerequisite:* MNO 3370. Reserved for Cox majors.

Marketing

Professor Raj Sethuraman, **Department Chair**

Professors: Thomas E. Barry, William R. Dillon, Daniel J. Howard, Roger A. Kerin, Glenn Voss, Zannie G. Voss. **Associate Professors:** Michael H. Braun, Richard A. Briesch, Edward J. Fox, Stanimir Markov, Tasadduq Shervani, Jacquelyn S. Thomas. **Assistant Professors:** Joonwook Park, T. Andrew Poehlman, Morgan K. Ward. **Senior Lecturers:** Charles A. Besio, Judith H. Foxman. **Executive-in-Residence:** Steven P. Dennis.

Bachelor of Business Administration With a Major in Marketing

To earn the B.B.A. degree with a major in marketing, students must comply with the core B.B.A. degree requirements (ADV 3362 can substitute for MKTG 3340) and satisfy the following additional requirements:

	Credit Hours
Marketing Core	9–10
MKTG 3342, 3343, 5050 *or* 5150, 5341	
Electives (selected from the following)	6
MKTG 3344, 3345, 3346, 3348, 3349, 4345, 5345	
Business Electives	3

Notes

- The core marketing courses above must be taken through enrollment at SMU.
- Students may choose to take zero or one credit for the required internship; if one credit is chosen, the required minimum hours for the major will be increased from 51 to 52.

The Courses (MKTG)

MKTG 3300 (3). TOPICS IN INTERNATIONAL MARKETING. (Offered through SMU International Programs) *Prerequisite:* Junior standing.

MKTG 3310 (3). MARKETING CONCEPTS. Covers the basic principles of consumer marketing and the role of each element of the marketing mix. Emphasizes creating a familiarity with the marketing strategy and planning processes and viewing marketing within a societal context. Required for business minor. Students who have already completed MKTG 3340 will not receive credit for this course. Cox majors and minors in business administration will not receive credit for this course and may not enroll in it.

MKTG 3340 (3). FUNDAMENTALS OF MARKETING. Examines the nature of marketing decisions; the environment in which these decisions are made; and the relationship of these decisions to the firm, business, and society. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; MATH 1309 or 1337; and STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors, business administration minors, or management science majors.

MKTG 3342 (3). MARKETING RESEARCH. Explores the nature and role of information in the decision-making process, the elements and relationships that constitute the research process, and the planning and execution of a research project. *Prerequisite:* MKTG 3340 or ADV 3362. Reserved for Cox majors.

MKTG 3343 (3). CONSUMER BEHAVIOR. Helps students understand the motivation and behavior of buyers and consumers. Discusses consumer behavior within a marketing framework and relates it to marketing management. *Prerequisite:* MKTG 3340. Reserved for Cox majors.

MKTG 3344 (3). INTEGRATED COMMUNICATION ADVERTISING MANAGEMENT. Explores key marketing communication concepts and management issues, including message strategy, advertising, sales promotion, direct marketing, social media, and media planning. *Prerequisite:* MKTG 3340 or ADV 3362. Reserved for Cox majors.

MKTG 3345 (3). SALES AND DISTRIBUTION MANAGEMENT. A multidisciplinary approach to the study of sales and sales force management. Focuses on the total sales process: selection, training, motivation, and compensation of personnel; sales forecasting; sales territory management; and analysis. Provides a fundamental understanding of the elements of the sales process and a management perspective to plan, organize, and direct a sales force. *Prerequisite:* MKTG 3340. Reserved for Cox majors.

MKTG 3346 (3). RETAILING. Focuses on the environment of retailing management, retail strategy, merchandise management, sales promotion and customer services, and expense and productivity management. *Prerequisite:* MKTG 3340 or ADV 3362. Reserved for Cox majors.

MKTG 3348 (3). INTERNATIONAL MARKETING. Examines international marketing from the evolved, underlying common nature of all humans, to the legal issues concerning export and import, to the subtle nuances of strategy in the subregions of international countries. Emphasizes novel problem-solving and an expanded worldview, with a focus on real-world approaches to understanding the global marketing environment. *Prerequisite:* MKTG 3340 or ADV 3362. Reserved for Cox majors.

MKTG 3349 (3). PRODUCT AND BRAND MANAGEMENT. Deals with the management of product development programs and the appraisal of the many factors that affect product decision-making. Examines policies concerning branding, product line strategy, and compliance with social and government restrictions. *Prerequisite:* MKTG 3340. Reserved for Cox majors.

MKTG 4345 (3). SPORTS MARKETING. Explores sports marketing from two perspectives: the marketing of sports and marketing through sports. Topics include fan segmentation, branding, licensing, and sponsorship. *Prerequisite:* MKTG 3340. Reserved for Cox majors.

MKTG 5050 (0). MARKETING INTERNSHIP. Requires students to work in a professional capacity in a marketing-oriented position within a company; the job and company to be approved by the Marketing Department. The internship must involve a minimum of 100 hours of work and meet the requirements determined by the internship adviser. Reserved for Cox majors. *Prerequisite:* MKTG 3340.

MKTG 5341 (3). MARKETING MANAGEMENT. Provides the student with a fundamental understanding of the marketing strategy-planning process within the firm and develops the student's abilities to cope with marketing management problems encountered by senior marketing managers, general management executives, and marketing consultants. Viewed as the capstone course for marketing majors. Heavy emphasis is placed on case analysis and class projects. *Prerequisite:* MKTG 3340. Reserved for senior marketing majors.

MKTG 5342 (3). DIRECTED STUDIES IN MARKETING. Directed research in marketing. *Prerequisites:* MKTG 3340, junior standing, and permission of the instructor

MKTG 5343 (3). DIRECTED STUDIES IN MARKETING II. Directed research in marketing. *Prerequisites:* MKTG 5342, junior standing, and instructor approval.

MKTG 5345 (3). HONORS MARKETING PRACTICUM. Students apply marketing concepts and theories learned in the classroom to a real-life business situation by working with a business entity where they are responsible for researching, designing, and presenting a comprehensive integrated marketing campaign. *Prerequisite:* By application only. Reserved for Cox majors.

Real Estate, Risk Management and Business Law

Professor William B. Brueggeman, **Department Chair**

Associate Professor: Robert Puelz. **Senior Lecturers:** Barbara W. Kincaid, Catherine Weber.

Bachelor of Business Administration With a Major in Real Estate Finance

To earn the B.B.A. degree with a major in real estate finance, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements: [The addendum has additional elective courses.]

	Credit Hours
Real Estate Core	12
RE 3381, 4338, 4382, 4389	
Electives (selected from the following)	6
ACCT/ITOM 4307	
FINA 3330, 4325, 4326, 4327, 4328, 4329, 5132 *and* 5232	

Note: The core real estate courses above must be taken through enrollment at SMU.

The Courses

Real Estate (RE)

RE 3381 (3). REAL ESTATE FUNDAMENTALS. Introduces all phases of real estate and serves as the foundation for other courses in real estate. *Prerequisite:* ACCT 2302. *Prerequisite or corequisite:* FINA 3320. Reserved for Cox majors.

RE 4338 (3). REAL ESTATE LAW. Surveys real estate law with emphasis on real estate transactions, financing, syndication, and land use regulation. *Prerequisites:* BL 3335 and RE 3381. Reserved for Cox majors.

RE 4382 (3). REAL ESTATE VALUATION. Presents principles and techniques of estimating the value of residential and income producing properties. Considers the economic base, structure, and distribution of land use in urban areas. *Prerequisites:* RE 3381 and FINA 3320. RE 3381 may be taken concurrently with the permission of the instructor. Reserved for Cox majors.

RE 4389 (3). REAL ESTATE FINANCE. Students develop the technical competence necessary to structure real estate transactions. Covers computation of periodic payments, amortization schedules, and true borrowing costs; the secondary mortgage market; and application of techniques for structuring real estate transactions (e.g., sales-leaseback, joint ventures, syndications). *Prerequisites:* RE 3381 and FINA 3320; RE 4382 recommended. Students cannot receive credit for RE 4381 and RE 4389. Reserved for Cox majors.

Business Law (BL)

BL 3300 (3). SPECIAL TOPICS: INTERNATIONAL BUSINESS LAW. Special topics in international business law taught abroad.

BL 3310 (3). LEGAL PERSPECTIVES AND BUSINESS LAW. Covers basic legal issues essential to working with attorneys in a business or personal environment. Topics include constitutional issues affecting business, litigation management, alternative dispute resolution, civil tort liability, contracts, intellectual property, white-collar crime, real estate acquisitions, land use, business formation, and employment law. Cox majors and minors in business administration will not receive credit for this course and may not enroll in it.

BL 3335 (3). BUSINESS LAW. Emphasizes the nature, formation, and application of law with a macro view; also public law and regulation of business. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; MATH 1309 or 1337; and STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors.

BL 4300 (3). SPECIAL TOPICS: INTERNATIONAL BUSINESS LAW. Offered through the SMU International Programs. *Prerequisite:* Junior standing.

BL 4340 (3). LAW FOR THE ENTREPRENEUR. Examines critical legal issues encountered by private domestic enterprises during the first years of operation. Topics include the hiring of counsel, alternatives for entity formation, establishment of a board of directors, debt and equity financing, real estate leases, criminal and civil liabilities, and litigation and risk management strategies. *Prerequisite:* BL 3335. Reserved for Cox majors.

Risk Management and Insurance Area (RMI)

RMI 3360 (3). PRINCIPLES OF RISK MANAGEMENT. Focuses on the principles of risk and the role of insurance in handling risk. Topics include insurance markets, personal insurance contracts, and legal principles that reinforce insurance contracts. Discusses employee benefit plans and social insurance. Reserved for Cox majors.

RMI 4340 (3). EMPLOYEE BENEFITS. Examines employee benefits as a strategic decision for employers and an important financial planning element for employees. Covers typical employee benefits and the ways these benefits integrate with Social Security. Discusses qualified and nonqualified plans that are of current importance to employers and employees. For practical experience, examines details of benefit offerings from actual job offers to SMU students. *Prerequisite:* MNO 3370. Reserved for Cox majors.

RMI 4360 (3). INSURANCE AND CORPORATE RISK MANAGEMENT. Explores the evolution of business risk management and offers insight into the risk management process by focusing on expense-inducing problems that exist for most businesses. Provides interaction with corporate risk managers representing a variety of industry sectors and perspectives. Topics include risk management, enterprise risk management, the role of the commercial insurance market, and the ways market changes affect decision-making. *Prerequisite or corequisite:* RMI 3360. Reserved for Cox majors.

RMI 5325 (3). RISK MANAGEMENT AND INSURANCE INTERNSHIP. An internship project that interacts the student with an organization and includes a research paper on a risk insurance topic. Cox students. Instructor approval required.

Strategy, Entrepreneurship and Business Economics

Professor Gordon Walker, **Department Chair**

Associate Professor: David T. Lei. **Assistant Professor:** Bo Kyung Kim. **Professors of Practice:** Robert A. Lawson, Simon S. Mak, Gary T. Moskowitz. **Clinical Professor:** David C. Croson. **Executive-in-Residence:** W. Michael Cox. **Scholar-in-Residence:** Dwight R. Lee. **Writer-in-Residence:** Richard G. Alm.

The Courses

Business Economics (BUSE)

BUSE 3310 (3). MARKETS AND FREEDOM. Discusses the indicators of economic freedom and the benefits of globalization. Explores how markets raise living standards, including the roles that technology, globalization, public policy, and economic growth play in a functioning market economy. This course can count as free elective credit for B.B.A. majors; however, students cannot receive credit for both BUSE 3310 and BUSE/FINA 4355.

BUSE 3311 (3). AMERICAN BUSINESS HISTORY. Provides an overview of the evolution of capitalism in the United States from Colonial times to the present, focusing on the post-World War II era. BUSE 3310 or 3311 is required for the minor in business core courses. Cox majors or business administration minors will not receive credit for this course and may not enroll in it.

BUSE 3331 (3). FROM PROSPECT TO PRODUCTION TO KILOWATTS: THE BUSINESS OF ENERGY. Provides an in-depth understanding of the petroleum, natural gas, coal, power generation, and alternative fuels market segments, with a focus on structure, key business drivers, and technologies. Explores key business issues facing the industry, including sustainability, globalization, and business and/or government relations. *Prerequisites:* ACCT 2301, FINA 3320, and GEOL 1301, or permission of instructor. Reserved for Cox majors.

BUSE 3357 (3). EVOLUTION OF AMERICAN CAPITALISM. Discusses the evolution of capitalism in the American economy from the Colonial period to the present, focusing the post-World War II era. Topics include government regulation of business, unions and their impact on competition, trends in inequality, discrimination in the workforce, structural changes and the disappearance of the middle class, the costs and benefits of free trade, the drift toward socialism, the intense competition among states for jobs, and global challenges to America's leadership in the world. *Prerequisites:* ECO 1311 and 1312, or permission of the instructor. Reserved for Cox majors or minors in business administration.

BUSE 4332 (3). ENERGY AND ENVIRONMENTAL LAW. Examines the legal and regulatory issues applicable to energy as they relate to finance, investment, and the economics of the business. Provides the basic tools of an energy professional to identify and analyze the legal and regulatory issues related to energy and resource development and operation, property acquisition and divestiture, and project valuation and financing. *Prerequisites:* BUSE 3331, BL 3335. Reserved for Cox majors.

BUSE 4333 (3). BUSINESS MANAGEMENT, PLANNING, AND ANALYSIS IN ENERGY. Examines analytical, economic, and financial concepts of the modern energy industry as they relate to planning and decision-making in the firm, with particular emphasis on oil and gas and power generation. Topics include capital structure, reserve valuation, royalties, production-sharing agreements, and management of risk and uncertainty. *Prerequisite:* BUSE 3331. Reserved for Cox majors.

BUSE 4334 (3). GLOBAL ENERGY MARKETS, BUSINESS, AND POLICY: SPIKES, MYTHS, AND RISKS. Examines the interrelationship among the economics of global energy markets, business profitability, and public policy as it relates to the energy business. Topics include the principles of exhaustible resource economics and their impact upon business decision-making, the impact of price shocks on the industry and the overall economy, and the global policy and regulatory environment faced by the industry. *Prerequisite:* BUSE 3331. Reserved for Cox majors.

Entrepreneurship (CISB)

CISB 2379 (3). IDENTIFYING ENTREPRENEURIAL OPPORTUNITIES. Recognizing entrepreneurial opportunities in a variety of settings. Emphasizes entrepreneurial orientation and entrepreneurship as a manageable process that can be applied in many organizational settings, including a family business. Identifies the ways in which entrepreneurship is manifested, and discusses the characteristics and implications of social, high-tech, corporate, and public sector entrepreneurship. Reserved for Cox majors.

CISB 3380 (3). BUSINESS DECISION-MAKING. Analyzes theories and practices of decision-making in a variety of business settings to help students make better business decisions. Emphasizes understanding the processes through which individuals and firms make decisions (and mistakes) in uncertain situations, processing information effectively, using rules of thumb, and detecting biased judgments. *Prerequisites:* ACCT 2301; ECO 1311 and 1312; MATH 1309 or 1337; and STAT 2301 or one from the following: CSE 4340; EMIS 3340; ITOM 2305; STAT 2331, 4340. Reserved for Cox majors or BBA Scholars.

CISB 4398 (3). MANAGING THE ENTREPRENEURIAL BUSINESS. Explores the unique challenges and opportunities involved in the management and ownership of a closely held enterprise. Examines key business, personal, and interpersonal issues relevant to the continuity and management of these firms. Topics include strategic management and corporate governance, life cycle and systems analyses, and leadership. *Prerequisite:* MNO 3370. Reserved for Cox majors.

CISB 5397 (3). ENTREPRENEURSHIP: STARTING A BUSINESS. Covers planning a new business or expanding an existing owner-managed or family-owned business. Topics include the personal characteristics of successful entrepreneurs, the career path of successful entrepreneurs, profit and cash flow forecasts, sources of information, forecasting sales and the importance of relevant experience, finding financing, and the business plan. *Prerequisites:* FINA 3320, MKTG 3340 and/or ADV 3362, MNO 3370, ITOM 2308/3306. Reserved for Cox majors.

Strategy (STRA)

STRA 4355 (3). DOING BUSINESS IN A GLOBALIZED WORLD. This course focuses on how globalization is rapidly changing the operating manual for running a successful business. The course explores which market sectors are experiencing the most global product demand, the business opportunities offered by China and India, which jobs are being outsourced (and how to make outsourcing work for, and not against the organization), which employee skills and talents are rising on the value added high-paying ladder, as well as changes in capital markets and the optimal market structure of industry. Students will not receive credit for FINA 3311 and FINA/STRA 4355. *Prerequisite:* FINA 3320.

STRA 5370 (3). STRATEGIC MANAGEMENT IN A GLOBAL ECONOMY. Analyzes the processes of building competitive advantage and strategy execution in single- and multi-business firms, with emphasis on industry evolution, the boundaries of the firm, and global competition. *Prerequisites:* ACCT 2301 and 2302; FINA 3320; MKTG 3340 and/or ADV 3362; MNO 3370; ITOM 3306; and ITOM 2305 or one from the following: CSE 4340, EMIS 3340, STAT 2301/2331, 4340. Reserved for Cox majors.

GENERAL INFORMATION

The Lyle School of Engineering, named in 2008 in honor of Dallas entrepreneur and industry leader Bobby B. Lyle, traces its roots to 1925, when the Technical Club of Dallas, a professional organization of practicing engineers, petitioned SMU to fulfill the need for an engineering school in the Southwest. In response to the club's request, the school began one of the first cooperative education programs in the United States, a program that continues today to put engineering students to work on real technical projects.

Included in the Lyle School of Engineering curricula are programs in civil engineering, computer engineering, computer science, electrical engineering, environmental engineering, mechanical engineering and management science. In 2000, a variety of programs known as Engineering and Beyond were introduced to provide the combination of a traditional engineering curriculum and selected leadership coursework. This leadership coursework is designed to train engineering students for futures in management, entrepreneurship and beyond.

The Dallas area's national prominence in high technology and research has been beneficial to the Lyle School of Engineering and its students. Corporate support for the Lyle School has generated a remarkable array of equipment and laboratories. Recent additions include the AT&T Mixed Signals Lab, the Texas Instruments Digital Signal Processing Lab, the Procter and Gamble Biomedical Research Lab, and the Nokia Wireless Communication Lab. Other laboratories include the Laser Micromachining Lab, the Nanoscale Electro-thermal Science Lab and the Enterprise Systems Design Laboratory. In addition, the Lyle School is the home of the following facilities:

Research Center for Advanced Manufacturing. RCAM provides the intellectual foundation for industry to collaborate with faculty and students to resolve generic, long-range challenges, thereby producing the knowledge base for steady advances in technology and their speedy transition to the marketplace.

Center for Laser-aided Manufacturing. CLAM addresses a number of research and development issues related to laser-aided intelligent manufacturing processes.

Center for Lasers and Plasmas for Advanced Manufacturing. The center conducts research of interest to the industry and SMU as part of a multi-university team and with support from the Industry and University Cooperative Research Centers Program of the National Science Foundation.

National Science Foundation Industrial/University Cooperation Research Center for Net-Centric Software and System. The Center for Net-Centric Software and Systems addresses fundamental software and systems research for the modeling, analysis, design, implementation, testing, deployment and evolution of net-centric and embedded systems.

Defense Advanced Research Projects Agency Neurophotonics Research Center. The Neurophotonics Research Center seeks to develop two-way fiber optic communication between prosthetic limbs and peripheral nerves so that realistic robotic arms, legs and hands not only move like the real thing, but also "feel" sensations like pressure and heat.

Professional Engineering Licensure

All senior-year engineering students are encouraged to take the first part of the examination for professional engineering licensure in the state of Texas. The Fundamentals of Engineering Examination is administered on campus once annually in early April. The Lyle School of Engineering provides a review course to prepare students for the exam. Application forms for the examination may be obtained from the Office of Undergraduate Studies.

Program Information

All programs of education and research in engineering are conducted through the Lyle School of Engineering. The school is organized into the following departments:

Civil and Environmental Engineering (CEE)
Computer Science and Engineering (CSE)
Electrical Engineering (EE)
Engineering Management, Information and Systems (EMIS)
Mechanical Engineering (ME)

The Lyle School of Engineering offers curricula leading to the Bachelor's degree in the following programs (the department responsible for each program is indicated in parentheses):

Civil Engineering (CEE)	Environmental Engineering (CEE)
Computer Engineering (CSE)	Management Science (EMIS)
Computer Science (CSE)	Mechanical Engineering (ME)
Electrical Engineering (EE)	

Each curriculum is under the jurisdiction of the faculty of the department in which the program is offered.

The Lyle School of Engineering also offers graduate programs toward the degrees of Master of Science, Doctor of Engineering and Doctor of Philosophy.

The departments are the Lyle School of Engineering's basic operating and budgetary units. Each department is responsible for the development and operation of its laboratories at all levels of activity and for all purposes; for the content, teaching and scheduling of its academic courses; and for the conduct of research programs. The chief administrative officer of each department is the department chair, who reports directly to the dean.

More information on the Lyle School of Engineering and its programs is available at www.smu.edu/lyle.

Undergraduate Engineering Internship Program

This program is intended to allow students who enroll as full-time students to include a minimum of three terms of professional work experience during their study. Students must have obtained junior-level class status prior to participating in work experience. Students cannot simultaneously enroll in a full-time load of coursework and participate in a full-time work experience. A "full-time" course of study is defined as 12 or more credit hours per term, and a "full-time" work experience is defined as a minimum of 37.5 hours worked per week. In order to maintain satisfactory academic achievement, students enrolled in a full-time course

load shall not work more than a maximum of 20 hours a week. Students who are actively participating in a full-time work experience shall not enroll in more than nine credit hours per term. Zero hours of credit will be awarded for each term of internship. Participation in this program will not jeopardize the full-time status of international students. Students who wish to participate in this program need to

- Receive an internship job offer relating to their major.
- Provide a job description to the Office of Undergraduate Professional Experience Programs.
- Complete the Undergraduate Engineering Internship Program Agreement form.
- Obtain the following approvals: faculty adviser, department chair, director of Undergraduate Professional Experience Programs, International Student Office (for all international students).

Once the necessary approvals are obtained, the student must register for the Undergraduate Internship Program course that is designated by the student's department (CEE 5050, CSE 5050, EE 5050, EMIS 5050, ME 5050).

Within two weeks of the end of the term or at the end of the internship, whichever comes first, the student must submit a report outlining the activities and duties of the internship. The student will submit a copy of the report to the faculty adviser, the International Office (if applicable) and the director of Undergraduate Professional Experience Programs of the Lyle School of Engineering. The director of Undergraduate Professional Experience Programs, in consultation with the student's adviser, will assess the report and recommend a grade of *S* (Satisfactory) or *U* (Unsatisfactory) to the associate dean for the Office of Academic Affairs within two weeks of receiving the report. The student's work experience will be validated and recognized on the permanent transcript.

COOPERATIVE EDUCATION

The Lyle School of Engineering has a history of demonstrating a commitment to the concept of cooperative education. When the school was established in 1925, it already had a close relationship with the Technical Club of Dallas. Members of this group owned factories and engineering consulting firms and wanted to participate in the training and development of their incoming employees. The Technical Club asked SMU to include the Cooperative Education Program in the original design of the school.

SMU was one of the first universities in the Southwest to adopt this concept of practical education. From 1925 to 1965, all engineering undergraduate students participated in the SMU Co-op Program. Since 1965, the program has been optional.

The SMU Co-op Program is designed so that each student can enhance his or her education and career by receiving professional training while alternating terms of classroom instruction. Participation in the program allows students to

- Confirm that they like working in their major.
- Discover the kind of work they like within their major.
- Establish a professional reputation.
- Earn the cumulative equivalent of one year of a new graduate's starting salary before graduation.
- Gain invaluable work experience when competing for full-time jobs upon graduation.

How the Cooperative Program Operates

Entry into the SMU Co-op Program is typically offered at the spring term of the sophomore year or the fall term of the junior year during the student's academic progression. Two sample terms of entry are shown below:

	5 Work Terms		
PLAN A	**Fall**	**Spring**	**Summer**
First Year	SMU	SMU	Free
Sophomore	SMU	SMU	Industry
Junior	Industry	SMU	Industry
Senior 4th	SMU	Industry	Industry
Senior 5th	SMU	SMU	

	4 Work Terms		
PLAN B	**Fall**	**Spring**	**Summer**
First Year	SMU	SMU	Free
Sophomore	SMU	SMU	Free
Junior	Industry	SMU	Industry
Senior 4th	SMU	Industry	Industry
Senior 5th	SMU	SMU	

Students who want to participate in the SMU Co-op Program should begin the application process during their first year to allow for career preparation. The application process includes attending Co-op Orientation, receiving interview skills training, résumé review, learning the job search process, and completing the Co-op Program application. The program director guides students through each step of the process.

Each applicant receives quality advising from the program's associate director. A direct result of advising is that the student gains a better understanding of individual options and a strategy for pursuing those options. The application process requires one or two hours per week for almost two terms. The process normally results in an offer of employment beginning in the spring term during the sophomore year or the fall term of the junior year.

Who May Apply?

Any Lyle School of Engineering undergraduate student in good standing who has enough time remaining before graduation to alternate at least three times between terms of full-time work and terms of full-time school may apply for the Co-op Program. Transfer students must be admitted and accepted to SMU before applying.

When to Apply

Many students choose to begin the application process during the first term of their first year. This early start is especially beneficial for students planning to participate in fraternity/sorority recruitment during the second term of their first year. Students should apply two or more terms before the work term begins. The first of these terms is for preparation; the second is for applying and interviewing with companies.

Policies of the Cooperative Engineering Education Program

Since 1925, the school has created and maintained numerous corporate relationships. Many factors contribute to these relationships, including the quality of SMU's academics and research, the achievements of alumni, and SMU's close proximity to high-tech corporations.

Each SMU Co-op Program student directly benefits from the program's strong corporate relationships and bears an obligation to preserve these relationships by following the Co-op Program Undergraduate Student Agreement. The agreement

balances the student's individual needs with the long-term goal of maintaining the program's corporate relationships for future SMU students.

The terms of the program include, but are not limited to, the following:

- Students must maintain good standing with SMU and their employer at all times.
- All training jobs must be approved in advance by the SMU Co-op Program associate director.
- Before each work term begins, undergraduate students in the program must enroll in the appropriate program course for the term when they work.
- SMU charges no fees or tuition for these courses. Each course is graded on a pass/fail basis by the program's associate director. The courses do not count toward graduation. The course numbers for each work term are, respectively, SS 1099, 2099, 3099, 4099, 5099, 6099.
- Students enroll at SMU each term, including summers, once they begin the program's rotation between work and school.
- Co-op students take full-time class loads at SMU during alternating school terms.
- Co-op students do not work part-time for the employer during school terms.
- Co-op students complete all work terms with the same company.
- Once a student accepts a Co-op Program position, the student may switch positions within the sponsoring company with the approval of the company.
- Each student in the program completes his or her originally planned number and sequence of alternating work terms. The term of graduation must be a term of full-time study at SMU.
- Each student in the program accepts responsibility for knowing and following all SMU Co-op Program regulations and those of the participating employer.

Co-op Certificate

SMU Co-op Program students who complete all of their originally planned and scheduled Co-op Program work terms in good standing with the University and the SMU Co-op Program Office receive a Cooperative Education Program Certificate to coincide with graduation.

For additional information, students should contact the associate director of the SMU Co-op Program: phone 214-768-1845; email smucoop@engr.smu.edu.

ADMISSION

Note: Detailed information regarding SMU's admission requirements, regulations and procedures is found in the Admission to the University section of this catalog.

Prospective students interested in undergraduate degrees in engineering apply for undergraduate admission to SMU as first-year or transfer students through the Office of Admissions, Southern Methodist University, PO Box 750181, Dallas TX 75275-0181.

All first-year applicants admitted to SMU initially enter Dedman College. For students interested in majoring in engineering, a personal interview with the Office of Admission and the Lyle School of Engineering Undergraduate Enrollment Office is highly recommended. The Lyle School of Engineering Office of Undergraduate Student Experience and Enrollment Management can be reached at 214-768-3041.

High School Preparation

Because of the high standards of the Lyle School of Engineering and the rigorous character of its curricula, it is essential that the entering student be well prepared in basic academic subjects in high school. To be successful in SMU engineering programs, the student should have the following academic strengths:

1. Enrollment in an appropriate program of study in high school.
2. Rank in the upper third of his or her graduating high school class.
3. A minimum SAT composite score of 1150 with at least a 600 math score. Equivalent scores for the ACT exam may also be submitted.

These guidelines should assist students interested in studying engineering at SMU.

Admission to Advanced Standing

Admission From Dedman College and Other Schools Within SMU

After completion of the first year, students are admitted to the Lyle School of Engineering through an interschool transfer. These transfers are approved by the appropriate department chair and the associate dean of the Lyle School of Engineering. For admission, a student must have completed 24 credit hours and must demonstrate the ability to achieve academic success in engineering or applied science by attaining a 2.000 or higher cumulative GPA. For admission into the civil engineering, computer engineering, computer science, electrical engineering, environmental engineering or mechanical engineering program, a 2.500 or higher GPA – and for management science, a 3.000 or higher GPA – is required in the following courses: DISC 1312/2305, 1313/2306 or equivalent, MATH 1337, 1338 and the courses as follows for each Lyle major:

Civil engineering	CEE 1302, CEE/ME 2310
Computer engineering	CSE 1341, 1342, KNW 2300, *C*- or better in all subset courses
Computer science	CSE 1341, 1342, KNW 2300, *C*- or better in all subset courses
Electrical engineering	EE 1322, 1382, CSE 1341 (minimum of two)
Environmental engineering	CEE 1302, CEE/ME 2310
Management science	CSE 1341, 1342 and *C* or better in all subset courses (Once a student enters SMU, all remaining subset courses must be completed through enrollment at SMU.)
Mechanical engineering	ME 1202/1102, ME 1305 *or* CSE 1341, ME/CEE 2310 (minimum of two)

With the exception of courses repeated using the First-Year Repeat Policy, all attempts of subset courses are used in computing the civil engineering, computer science, computer engineering, electrical engineering, environmental engineering and mechanical engineering subset GPA. For the management science subset GPA, only the first graded attempt is included in the subset GPA except for courses repeated using the First Year Repeat Policy. The subset GPA for students who have Advanced Placement or International Baccalaureate credit is based upon the remaining graded subset courses. Current University grading policy, as summarized under Academic Forgiveness in the Grade Policies section of this catalog, permits forgiveness of academic work taken 10 or more years prior to the term of admission. Academic work forgiven under this policy will not be included in the subset GPA.

Admission by Transfer From Another Institution

Prospective transfer students interested in undergraduate degrees in engineering apply for undergraduate admission to SMU through the Office of Admissions, Southern Methodist University, PO Box 750181, Dallas TX 75275-0181. An undergraduate at a junior college, college or university may apply for transfer admission to SMU and the Lyle School of Engineering. Admission will be granted provided the prior academic records and reasons for transfer are acceptable to the Lyle School of Engineering. Transfer credit will be awarded in courses that have identifiable counterparts in curricula of the Lyle School of Engineering, provided they carry grades of *C-* or better. Transfer students will be expected to meet requirements equivalent to students admitted from Dedman College and other schools within SMU.

Transfer credit is awarded only for work completed at institutions that have regional or comparable accreditation. Because of the 60-term-hour SMU credit requirement for a Bachelor's degree, there is a limit on the total amount of credit that may be applied toward a Lyle School of Engineering degree.

ACADEMIC REGULATIONS

Graduation Requirements for Baccalaureate Degrees

Graduation from the Lyle School of Engineering with a Bachelor's degree requires the following standards of academic performance:

1. A passing grade must be received in every course in the prescribed curriculum.
2. An overall GPA of 2.000 or better must be attained in all college and university courses.
3. An overall GPA of 2.000 or better must be attained in all coursework attempted for the degree through enrollment at SMU.
4. An overall GPA of 2.000 or better must be attained in all coursework attempted for the degree in the major field of study.
5. A minimum of 122 term hours of credit must be attained, including the University-wide requirements, and the requirements met for a major in engineering or applied science.

SMU and Lyle Credit Requirements

For graduation from the Lyle School of Engineering, 60 term credit hours must be earned as SMU credit, including 30 term credit hours in the major department or interdisciplinary program. Of the last 60 term credit hours earned toward a degree, 45 must be completed through enrollment in courses offered by the faculty of the Lyle School of Engineering. Exceptions to this requirement will be made only under unusual circumstances at the discretion of the Lyle School of Engineering faculty.

The Major

A candidate for a degree must complete the requirements for a major in one of the departments of the Lyle School of Engineering. The major requirements of each department and program are stated in the next section. The applicable requirements of the major are those in effect during the academic year of matriculation, or those of a subsequent academic year. Coursework counting toward a major may not be taken pass/fail. Majors must be officially declared (or changed) through the Office of Undergraduate Studies.

Departmental Distinction Program

Upon successful completion of a special program of study, students will be awarded departmental distinction by their major department, regardless of their eligibility for Latin graduation honors or for graduation honors in the liberal arts. The special program of study is undertaken in both the junior and senior years, and it requires independent reading and research beyond the regular departmental requirements for a degree. This award is conferred by the major department on the basis of certain criteria prescribed by the department, but all programs include the following requirements:

- A major GPA of 3.500 or higher.
- Successful completion of three hours of senior thesis approved by the academic adviser.
- Formation of a supervisory committee consisting of three members, with the chair being a resident tenured or tenure-track faculty member of the department, and a minimum of two full-time Lyle faculty members.
- Successful defense of the senior thesis, which consists of the presentation of the senior thesis in a public forum and subsequent oral examination by the supervisory committee to satisfy itself that the student performed the independent reading and conducted the research.

Currently, the Computer Science and Engineering Department and the Electrical Engineering Department offer departmental distinction programs.

University-wide Requirements

All SMU undergraduate students share a common program of study designed to assure them of a broad liberal education regardless of their major. This requirement is designed to help each student learn to reason and think for oneself, become skilled in communicating and understanding, understand both the social and the natural worlds and one's own place and responsibilities in these environments, and understand and appreciate human culture and history in various forms, including religion, philosophy and the arts. Students should see the University-wide requirements section of this catalog for more information.

Dual Degree Programs

The Lyle School of Engineering offers concurrent dual degree programs with other SMU schools. Students may design and pursue a second major or minor degree program in consultation with their academic adviser.

PROGRAMS OF STUDY

The Lyle School of Engineering offers the following degrees:

Bachelor of Science in Civil Engineering
Bachelor of Science in Computer Engineering
Bachelor of Science in Electrical Engineering
Bachelor of Science in Environmental Engineering
Bachelor of Science in Mechanical Engineering
Bachelor of Science (Computer Science)
Bachelor of Science (Management Science)
Bachelor of Arts (Computer Science)

Engineering work can be classified by function, regardless of the branch, as follows: research, development, design, production, testing, planning, sales, service, construction, operation, teaching, consulting and management. The function fulfilled by an engineer results in large measure from personal characteristics and motivations, and only partially from his or her curriculum of study. Nonetheless, while engineering curricula may be relatively uniform, the modes of presentation tend to point a student toward a particular large class of functions. Engineering curricula at SMU aim generally at engineering functions that include research, development, design, management and teaching – functions ordinarily associated with additional education beyond the Bachelor's degree.

The Lyle School of Engineering undergraduate programs in civil engineering, computer engineering, electrical engineering, environmental engineering and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The undergraduate computer science program that awards the degree Bachelor of Science (B.S.) is accredited by the Computing Accreditation Commission of ABET. The undergraduate computer science program that awards the degree Bachelor of Arts (B.A.) is not accredited by a Commission of ABET. ABET does not provide accreditation for the discipline of management science.

Description of Courses

Courses offered in the Lyle School of Engineering are identified by a two-, three- or four-letter prefix code designating the general subject area of the course, followed by a four-digit number. The first digit specifies the approximate level of the course as follows: 1 – first year, 2 – sophomore, 3 – junior, 4 – senior and 5 – senior. The second digit denotes the term hours associated with the course. The last two digits specify the course numbers. Thus, CSE 4381 denotes a course offered by the Department of Computer Science and Engineering at the senior (4) level, having three term hours, and with the course number 81. The prefix codes are as follows:

CEE	Department of Civil and Environmental Engineering
CSE	Department of Computer Science and Engineering
EE	Department of Electrical Engineering
EMIS	Department of Engineering Management, Information and Systems
ENGR	Lyle School of Engineering
ME	Department of Mechanical Engineering
SS	Center for Special Studies

Civil and Environmental Engineering

Associate Professor Khaled F. Abdelghany, **Chair**

Professors: Paul S. Krueger (Mechanical Engineering), Bijan Mohraz. **Associate Professors:** Khaled F. Abdelghany, Usama S. El Shamy, David A. Willis (Mechanical Engineering). **Assistant Professors:** Andrew N. Quicksall, S. Sevinc Sengor. **Senior Lecturer:** Roger O. Dickey. **Clinical Assistant Professor:** Arzhang Alimoradi. **Adjunct Faculty:** Jane C. Ahrens, Fatma Cakir Alptekinoglu, Arthur F. Beck, Samir Bougacha, Mark K. Boyd, Robert Casagrande, William S. Dahlstrom, Weiping Dai, H. Elizabeth del Monte, Leven T. Deputy, Theodore A. Dumas, John H. Easton, Carl E. Edlund, Fawzi E. Elghadamsi, Andrew A. Felder, Edward Forest, Sina Iman, Ronald W. Jackson, James E. Langford, Donald L. Legg, Paul M. Martin, Mehedy Mashnad, Shannon K. McCall, Mofid Nakhaei, Jennifer A. O'Brien, Sally R. Pinon, Jon D. Rauscher, D. Blair Spitzberg, John L. Stanley, Bennett Stokes, Hung-Ming (Sue) Sung, Patricia A. Taylor, Kenneth T. Thomas, Philip K. Turner, Dan Wittliff, Scott P. Woodrow, Rumanda K. Young, Jessie Marshall Zarazaga. **Emeritus Professor:** Cecil H. Smith.

Undergraduate programs within the Department of Civil and Environmental Engineering educate and train leaders in the fields of environmental protection, resource management, construction and engineering design. Programs are tailored to the individual needs and interests of CEE students, so that students with interests in studying global climate change, protecting the quality of the drinking water, or designing the next generation of high-rise buildings or smart highways receive the training they need to excel in their careers. As part of their education, CEE students are paired with CEOs, business leaders, professional engineers, Environmental Protection Agency directors or corporate attorneys in a mentoring program designed to propel students into promising careers.

Civil and environmental engineering are inextricably linked. While civil engineering focuses on the infrastructure of modern society, environmental engineering is concerned with the well-being and health of the population and the environment. Civil and environmental engineering functioned as a single integrated discipline in the early 1900s when it was critical to address sanitary problems to protect public health and to develop regional water supplies and the civil infrastructure to support rapid urbanization and early industrialization. Separate disciplines gradually emerged, evolving and broadening to address the overall quality and function of modern society – preserving the environment while enabling the realization of an enriched life through technology.

Civil Engineering Program

Civil engineers are engaged in planning, design, construction, maintenance and management of the infrastructure of modern society. They are responsible for the design of water supply and wastewater treatment systems; transportation systems such as highways, railways, waterways, mass transit, airports, ports and harbors; dams, reservoirs and hydroelectric power plants; thermoelectric power plants; transmission and communication towers; high-rise buildings; and even aircraft and aerospace structures, shuttles and space stations. Every major structure critical to this country, and global society, depends on the work of civil engineers.

The mission of the civil engineering program is to prepare graduates for professional practice and advanced studies by focusing on the following areas: structural engineering, geotechnical engineering, transportation planning, environmental engineering and water resources. Graduates will be equipped with the skills and knowledge necessary to be fully participatory members of civil engineering teams and contributors to civil engineering efforts conducted within the evolving global economy.

The mission and educational objectives of the civil engineering program are consistent with the missions of the Civil and Environmental Engineering Department, the Lyle School of Engineering, and the overall institutional mission of SMU, and were determined based on the needs of the program's various constituencies. The program prepares graduates to achieve the following educational objectives during the medium term of their professional careers:

1. Assume important leadership positions in a globally competitive world.
2. Fully participate either as engineering designers or as managers in the public or private sectors.
3. Pursue advanced academic or professional degrees in engineering, medicine, law, business, or public policy.
4. Licensing as professional engineers.

Environmental Engineering Program

The environmental field is dynamic and wide-ranging, comprising many different disciplines and professional roles. Environmental engineering and science involve not only traditional water and wastewater management, but also the management of hazardous and radioactive materials, pollution prevention and waste minimization, innovative hazardous waste treatment and site remediation processes, environmental and occupational health, resource conservation and recovery, sustainable development of natural resources, and air quality management and pollution control. In addition, modern manufacturing, both domestic and worldwide, focuses on using recycled and natural materials to fabricate products that are competitive in the marketplace and harmlessly degraded in the environment. The trend toward global manufacturing will grow stronger in the years ahead. Environmental challenges presented by this movement must be overcome if the economic and lifestyle benefits of globalization are to be extended to all peoples of the world.

The educational objectives of the environmental engineering program are consistent with the missions of the Civil and Environmental Engineering Department, the Lyle School of Engineering, and the overall institutional mission of SMU, and were determined based on the needs of the program's various constituencies. The program prepares graduates to achieve the following educational objectives during the medium term of their professional careers:

1. Assume important leadership positions in a globally competitive world.
2. Fully participate either as engineering designers or as managers in the public or private sectors.
3. Pursue advanced academic or professional degrees in engineering, medicine, law, business or public policy.
4. Licensing as professional engineers.

The environmental engineering program prepares graduates for professional practice and advanced study through a focus in the following areas: 1) water supply and resources, 2) environmental systems and process modeling, 3) environmental chemistry, 4) wastewater management, 5) solid waste management, 6) hazardous waste management, 7) atmospheric systems and air pollution control, and 8) environmental and occupational health.

Degrees Offered

The CEE Department offers undergraduate degrees as follows:

Bachelor of Science in Civil Engineering
Bachelor of Science in Civil Engineering and Bachelor of Science with a major in mathematics (dual degrees)
Bachelor of Science in Environmental Engineering
Bachelor of Science in Environmental Engineering and Bachelor of Science with a major in mathematics (dual degrees)
Bachelor of Science in Environmental Engineering with a premedical specialization

The Engineering Accreditation Commission of ABET, http://www.abet.org, has accredited the undergraduate programs in civil engineering and environmental engineering.

Both the civil and environmental engineering programs are designed to prepare students for the Fundamentals of Engineering Examination, the first step toward licensure as a professional engineer. Engineering design is integrated throughout the civil and environmental engineering curricula, each culminating in a major design experience based on the knowledge and skills acquired in earlier coursework. In their senior year, the department's engineering students are required to take two terms of design where teams of two to four students work closely on practical projects sponsored by industry and government. Senior design projects incorporate engineering standards and realistic constraints including most of the following considerations: economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political. The department's engineering curricula ensure that students develop an understanding of the concepts of professional engineering practice, including ethical responsibilities, effective oral and written communication, engineering management and entrepreneurship, participation on multidisciplinary teams, procurement, bidding, the interaction of design and construction professionals, professional licensing, and the need for lifelong learning.

Departmental Facilities

CEE departmental offices and instructional and research laboratories are located in the new, state-of-the-art J. Lindsay Embrey Engineering Building, which is certified as a Leadership in Energy and Environmental Design Gold Building in LEED's internationally recognized green building certification program. Environmental teaching and research laboratories include dedicated space for air quality and meteorology, industrial hygiene, environmental microbiology and water quality. The air quality and meteorology laboratory includes modern airflow, pressure and volume measurement instrumentation. The industrial hygiene laboratory includes an inventory of the latest personal monitoring equipment for assessing occupational exposure to a variety of industrial process stressors including asbestos, noise, total and respirable dust, metals, radiation, and heat stress.

The air quality/meteorology and water quality laboratories have sophisticated analytical capabilities for performing chemical analyses of air samples and for assessing the quality of water supplies and wastes and the effectiveness of water and waste treatment procedures. Major equipment includes an Agilent gas chroma-

tography and mass spectrometry unit for identifying and measuring organic compounds; a Dionex ion chromatography unit for measuring important ions in the environment, such as nitrate, nitrite and perchlorate; two Hewlett-Packard gas chromatographs; and a state-of-the-art UV-VIS machine that can perform many colorimetric analyses as well as study compounds that have a chromaphore. Other miscellaneous equipment includes continuous ambient air monitoring devices, a UV/visible spectrophotometer, pH and other specific ion meters, incubating ovens, microscopes, furnaces, centrifuges, dissolved oxygen meters, a Mettler titrator for chemical and acid/base surface experiments, several temperature control baths, and a tumbler for constant temperature studies. An autoclave and UV light reader support basic engineering microbiological work.

Civil engineering teaching and research laboratories include dedicated space for mechanics of materials and structural engineering, hydraulics and hydrology, soil mechanics and geotechnical engineering, transportation materials, and intelligent transportation systems. Mechanics of materials/structural engineering lab equipment includes a tension-compression testing machine with automatic data acquisition instrumentation and computer software, a torsion test machine, a bending test machine, and a set of impact test equipment. Major hydraulics and hydrology laboratory equipment includes a 5-meter open channel flume with various accessories (e.g., undershot weir, rotary undershot gate, and sharp and broad-crested weirs), a basic hydraulics bench for fundamental fluid mechanics experiments (e.g., hydrostatic pressure forces, Bernoulli's theorem and pipe friction losses), and a hydrology study system for hydrology experiments (e.g., simulating rainfall over watersheds and measuring resulting outflow hydrographs, and groundwater flow profiles). The geotechnical engineering laboratory has a fully automated, multipurpose testing machine that can be used to conduct triaxial, consolidation, flexible-wall permeability, swelling and unconfined compression tests. The lab also has a fully automated direct shear test machine. Traditional geotechnical testing equipment such as sieve analysis, hydrometer, constant head/falling head permeameter, liquid and plastic limits, compaction, and relative density are also available.

The Embrey Building also houses a dedicated computer-aided design laboratory with AutoCAD software and a general-use computer laboratory with personal computers, high-resolution color monitors and laser printers for use by the department's students. Computers in the CAD and general-use laboratories are connected through a high-speed network to the computer systems of the Lyle School of Engineering and SMU, as well as to off-campus systems via the Internet. The computer network provides access to general applications software and specialized software for engineering problems, including air dispersion modeling, AutoCAD, hydrologic and hydraulic modeling for water resource systems, statistical analysis and stochastic modeling, structural analysis and design, transportation systems planning and analysis, and water quality modeling.

Bachelor of Science in Civil Engineering

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within the civil engineering curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	34
MATH 1337, 1338, 2339, 2343 STAT 4340 *or* 5340 CHEM 1303/1113, 1304/1114 GEOL 1301 *or* 1315 PHYS 1303/1105, 1304/1106	
Engineering Science and Design	13
CEE 2320, 2331, 2342/2142, 3310	
Civil Engineering and Design	43
CEE 1302, 2304, 2310, 2340/2140, 2372, 3323, 3350, 3385, 4350, 4351, 4380, 4381, 5354, 5378	
Civil Engineering Technical Electives	6
Selected with adviser's approval.	
Engineering Leadership	6
CEE 3302; one from CSE 4360; EMIS 3308, 3309	
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Bachelor of Science in Civil Engineering and Bachelor of Science With a Major in Mathematics

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	46
MATH 1337, 1338, 2339, 2343, 3315, 3337 Two advanced MATH electives approved by math adviser STAT 4340 *or* 5340 CHEM 1303/1113, 1304/1114 GEOL 1301 *or* 1315 PHYS 1303/1105, 1304/1106	
Engineering Science and Design	13
CEE 2320, 2331, 2342/2142, 3310	
Civil Engineering and Design	43
CEE 1302, 2304, 2310, 2340/2140, 2372, 3323, 3350, 3385, 4350, 4351, 4380, 4381, 5354, 5378	
Advanced Civil Engineering/Mathematics	6
Two from CEE 5361, 5364; ME 5322	
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Bachelor of Science in Environmental Engineering

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within the environmental engineering curriculum are distributed as follows:

Requirements for the Degree	*Credit Hours*
Mathematics and Science	38
MATH 1337, 1338, 2339, 2343 STAT 4340 *or* 5340 CEE 1331, 5418 CHEM 1303/1113, 1304/1114 PHYS 1303/1105, 1304/1106	
Engineering Science and Design	12
CEE 2310, 2331, 2342, 3310	
Environmental Engineering and Design	39
CEE 1302, 2304, 2421, 2372, 3323, 3341, 3431, 3451, 4380, 4381, 5317, 5354	
Environmental Technical Electives	6
Selected with adviser's approval.	
Engineering Leadership	9
CEE 3302; two from CSE 4360; EMIS 3308, 3309	
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Bachelor of Science in Environmental Engineering and Bachelor of Science With a Major in Mathematics

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	50
MATH 1337, 1338, 2339, 2343, 3315, 3337 Two advanced MATH electives approved by math adviser STAT 4340 *or* 5340 CEE 1331, 5418 CHEM 1303/1113, 1304/1114 PHYS 1303/1105, 1304/1106	
Engineering Science and Design	12
CEE 2310, 2331, 2342, 3310	
Environmental Engineering and Design	39
CEE 1302, 2304, 2372, 2421, 3323, 3341, 3431, 3451, 4380, 4381, 5317, 5354	
Advanced Environmental/Mathematics Electives	6
Two from CEE 5331, 5332, 5334; ME 5336	
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Bachelor of Science in Environmental Engineering (Premedical Specialization)

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Specialization	*Credit Hours*
Mathematics and Science	56
MATH 1337, 1338, 2339, 2343 STAT 4340 *or* 5340 BIOL 1401, 1402, 3304, 3350 CEE 1331 CHEM 1303/1113, 1304/1114, 3371/3117, 3372/3118 PHYS 1303/1105, 1304/1106	
Engineering Science and Design	12
CEE 2310, 2331, 2342, 3310	
Environmental Engineering and Design	36
CEE 1302, 2304, 2372, 2421, 3323, 3341, 3431, 3451, 4380, 4381, 5354	
Environmental Technical Electives	6
Selected with adviser's approval.	
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Minor in Civil Engineering

For approval of a minor in civil engineering, the student should consult the Civil and Environmental Engineering Department. A minimum of 15 term credit hours in civil engineering courses are required. The following is an example of an approved set of courses, totaling 16 term credit hours, that provides an emphasis on structural analysis and design: **CEE 2310, 2340/2140, 3350, 3385, 4350.**

Based on the student's interests and background, other sets of civil engineering courses may be substituted with the approval of the Civil and Environmental Engineering Department.

Minor in Environmental Engineering

For approval of a minor in environmental engineering, the student should consult the Civil and Environmental Engineering Department. A minimum of 15 term credit hours in environmental engineering courses are required. The following is an example of an approved set of courses that provides a broad introduction to environmental engineering: **CEE 2304, 2421, 3431, 4329, 5354.** Based on the student's interests and background, other sets of environmental engineering courses may be substituted with the approval of the Civil and Environmental Engineering Department.

Minor in Global Development

Students may earn a minor in global development through the Civil and Environmental Engineering Department, supported by the Hunter and Stephanie Hunt Institute for Engineering and Humanity. A total of 18 term credit hours are required, with a minimum of six term credit hours at or above the 3000 level. All students are

required to complete the introductory course CEE 1326. A depth component of six term credit hours must be completed in one of the following concentration areas:

Environmental Resources: CEE 2304, 2421, 3323, 3341, 3353, 5321, 5322
Political, Cultural and Economic Issues: EMIS 3309; CEE 3355, 5311, 5325, 5328
Technology and Innovation: CEE 1302; ME 1303; CEE 5327, 5329–30, 5378, 5384

An additional six hours of breadth are required, satisfied by taking one course from each of the two remaining concentrations. Students complete the capstone experience requirement by taking CEE 5391. The primary intent of the capstone experience is to incorporate site-based service learning opportunities for students through internships arranged by the Hunter and Stephanie Hunt Institute for Engineering and Humanity at the Lyle School of Engineering. Other opportunities, such as research, may also be accommodated based on individual student interests and career goals.

The Courses (CEE)

CEE 1301 (3). ENVIRONMENT AND TECHNOLOGY: ECOLOGY AND ETHICS. Students are introduced to the economic, engineering, ethical, political, scientific, and social considerations of environmental decision-making and management. Local, regional, and global topics will be examined. Students will take off-campus field trips.

CEE 1302 (3). INTRODUCTION TO CIVIL AND ENVIRONMENTAL ENGINEERING. Introductory course that emphasizes fundamental science, engineering, and ecological principles. Students develop their analytical and critical thinking skills with real-world problem-solving. Many of the hallmarks of modern society (e.g., high-rise office buildings, increased life span, the virtual elimination of numerous diseases, and reliable long-distance and public transportation systems) are the result of work by environmental and civil engineers. Likewise, environmental and civil engineers are at work on the many problems currently confronting developing nations: housing supply, food production, air and water pollution, spread of disease, traffic congestion, and flood control.

CEE 1326 (3). INTRODUCTION TO GLOBAL DEVELOPMENT. An interdisciplinary approach in addressing issues of international development. Explores the role and impact of economic, socio-political, and scientific principles on issues of the developing world. Lectures focus on the historical underpinning of current trends, theory and practice of multidisciplinary development, modern issues facing the developing world, and potential courses of action.

CEE 1331 (3). METEOROLOGY. Meteorology is the science and study of the earth's atmosphere and its interaction with the earth and all forms of life. Meteorology seeks to understand and predict the properties of the atmosphere, weather, and climate from the surface of the planet to the edge of space. Appropriate for all interested undergraduates.

CEE 1378 (3). TRANSPORTATION INFRASTRUCTURE. An overview and definitions of infrastructure elements with concentration on transportation. Principals of infrastructure planning and management. Congestion and performance measures. Relationship with economy, environment, safety, homeland security and technology.

CEE 2140/ME 2140 (1). MECHANICS OF MATERIALS LABORATORY. Experiments in mechanics of deformable bodies, to complement CEE 2340. Simple tension tests on structural materials, simple shear tests on riveted joints, stress and strain measurements, engineering and true stress, engineering and true strain, torsion testing of cylinders, bending of simple supported beams, deflection of simply supported beams, buckling of columns, strain measurements of pressure vessels, Charpy impact tests, effect of stress concentrators. *Corequisite or prerequisite:* CEE/ME 2340.

CEE 2142/ME 2142 (1). FLUID MECHANICS LABORATORY. One three-hour laboratory session per week. Experiments in fluid friction, pumps, boundary layers, and other flow devices to complement lecture material of CEE 2342. *Corequisite or Prerequisite:* CEE/ME 2342.

CEE 2304 (3). INTRODUCTION TO ENVIRONMENTAL ENGINEERING AND SCIENCE. Introduction to a scientific and engineering basis for identifying, formulating, analyzing and understanding various environmental problems. Material and energy balances are emphasized for modeling environmental systems and processes. Although traditional materials in air and

water pollution are examined, emphasis is placed on contemporary topics such as hazardous waste, risk assessment, groundwater contamination, global climate change, stratospheric ozone depletion, and acid deposition. Where appropriate, pertinent environmental legislation is described, engineering models are derived and applied, and treatment technologies introduced. *Prerequisites:* CHEM 1303 and MATH 1338.

CEE 2310/ME 2310 (3). STATICS. Equilibrium of force systems; computations of reactions and internal forces; determinations of centroids and moments of inertia; introduction to vector mechanics. *Prerequisite:* MATH 1337 or equivalent.

CEE 2320/ME 2320 (3). DYNAMICS. Introduction to kinematics and dynamics of particles and rigid bodies; Newton's laws, kinetic and potential energy, linear and angular momentum, work, impulse, and inertia properties. *Prerequisite:* CEE/ME 2310 or equivalent.

CEE 2331/ME 2331 (3). FUNDAMENTALS OF THERMAL SCIENCE (THERMODYNAMICS). The first and second laws of thermodynamics and thermodynamics and thermodynamic properties of ideal gases, pure substances, and gaseous mixtures are applied to power production and refrigeration cycles. *Prerequisites:* MATH 2339, CHEM 1303, CEE/ME 2310 and PHYS 1303.

CEE 2340/ME 2340 (3). MECHANICS OF DEFORMABLE BODIES. Introduction to analysis of deformable bodies including stress, strain, stress-strain relations, torsion, beam bending and shearing stresses, stress transformations, beam deflections, statically indeterminate problems, energy methods, and column buckling. *Prerequisites:* CEE/ME 2310.

CEE 2342/ME 2342 (3). FLUID MECHANICS. Fluid statics, fluid motion, systems and control volumes, basic laws, irrotational flow, similitude and dimensional analysis, incompressible viscous flow, boundary layer theory, and an introduction to compressible flow. *Prerequisite:* CEE/ME 2310, MATH 2339, PHYS 1303. *Prerequisite or corequisite:* MATH 2343.

CEE 2372 (3). INTRODUCTION TO CAD. Provides students with hands-on, state-of-the-art experience with computer-aided drafting using AutoCAD to produce drawings used for engineering presentations and construction. Students learn how to draw lines and curvilinear lines; use blocks and external references; write text; create plot files; and apply many other commands necessary to produce engineering drawings as used to construct environmental, civil, and structural engineering projects.

CEE 2421 (4). AQUATIC CHEMISTRY. Aspects of chemistry that are particularly valuable to the practice of environmental engineering. Provides basic groundwork for the quantitative analysis of water and wastewater systems. Also, fundamental methods of instrumental analysis. Presents elements of thermodynamics, acid-base, redox, and colloidal chemistry as appropriate. Laboratory sessions emphasize design, hands-on conduct of experimental procedures, and interpretation and statistical analysis of derived data. *Prerequisites:* CHEM 1303, 1304.

CEE 3302 (3). ENGINEERING COMMUNICATIONS. Oral and written communications skills for engineers: engineering documents, writing standards, and presentations; audience analysis; graphics; collaborative skills; and ethical issues. Students prepare several documents and presentations common in engineering practice. *Prerequisite:* Junior or senior standing in engineering.

CEE 3310 (3). COMPUTATIONAL METHODS FOR CIVIL AND ENVIRONMENTAL ENGINEERING APPLICATIONS. Applications of numerical analysis and computer programming techniques to civil and environmental engineering problems. Review of mathematical background is presented with emphasis on numerical modeling and computer-oriented solutions for engineering applications. Topics covered include precision and accuracy, errors, roots of equations, solution of linear algebraic equations, statistics and curve fittings, and numerical integration and differentiation. Also reviews examples from different areas of practice in civil and environmental engineering, including stress transformation, numerical integration to obtain beam deflection, numerical solution of Euler's buckling equation, roots of the equation for fluid flow in frictional pipe, optimization techniques applied to minimum potential energy, and solutions to the system of equations representing force-displacement relationship of a structure or the concentration of carbon monoxide in a space. *Corequisite:* MATH 2343.

CEE 3323 (3). WATER RESOURCES ENGINEERING. The hydrologic cycle and associated atmospheric processes are introduced through derivation and practical application of the hydrologic budget equation encompassing precipitation, evaporation, transpiration, groundwater flow, and surface water runoff. Unit hydrographs and flood hydrograph routing are examined through application of hydrologic simulation models. Students are exposed to probabilistic

analysis and extreme value theory for determination of flood and drought hazard. Interpretation and statistical analysis of climatologic, hydrologic, and other environmental data are emphasized. Concepts of professional engineering practice are introduced with emphasis on the need for professional licensing and on project management through all phases of a typical project including conception, planning, preparation of design drawings and specifications for bidding and procurement purposes, the interaction of design and construction professionals, and water resource systems operation. *Prerequisite:* CEE 2304. *Pre or corequisite:* CEE/ME 2342.

CEE 3325 (3). GROUNDWATER HYDROLOGY. The hydrologic cycle and the subjects of porosity and permeability are introduced. Flow theory and its applications, storage properties, the Darcy equation, flow nets, mass conservation, the aquifer flow equation, heterogeneity and anisotropy, regional vertical circulation, unsaturated flow, and recharge are examined. Well hydraulics, stream-aquifer interaction, and distributed- and lumped-parameter numerical models are considered, as are groundwater quality, mixing cell models, contaminant transport processes, dispersion, decay and adsorption, and pollution sources. *Prerequisites:* MATH 2343 and CEE/ME 2342.

CEE 3327 (3). PRINCIPLES OF SURFACE WATER HYDROLOGY AND WATER QUALITY MODELING. The theory and applications of the physical processes of the hydrologic cycle are examined. Different types of water bodies – streams, rivers, estuaries, bays, harbors, and lakes – are reviewed. The principal quality problems associated with bacteria, pathogens, viruses, dissolved oxygen and eutrophication, toxic substances, and temperature are examined in detail. Theoretical model approaches are emphasized. *Prerequisites:* CEE 2421 and MATH 2343.

CEE 3341 (3). INTRODUCTION TO SOLID AND HAZARDOUS WASTE MANAGEMENT. Solid and hazardous waste are defined. Technology, health, and policy issues associated with solid waste and hazardous materials are examined. Methods of managing solid and hazardous waste are introduced and regulations presented where appropriate. The characteristics of hazardous and solid waste materials, health frameworks, and the distribution of contaminants in the environment are reviewed. *Prerequisites:* CEE 2304 and 2421.

CEE 3350/ME 3350 (3). STRUCTURAL ANALYSIS. Emphasis on the classical methods of analysis of statically determinate and indeterminate structural systems. Computation of reactions, shears, moments, and deflections of beams, trusses, and frames. Use of computers as an analytical tool. *Prerequisites:* CEE/ME 2340 and CEE/ME 2140.

CEE 3353 (3). INTRODUCTION TO ENVIRONMENTAL TOXICOLOGY. The physiological and biochemical effects of physical, chemical, and biological processes are linked to factors present in the environment. Natural phenomena are described in terms of the carbon, oxygen, sulfur, phosphorus, and heavy metal cycles. The processes by which anthropogenic chemicals enter the environment and their complex effects on living organisms are examined in detail. *Prerequisite:* BIOL 1401; *Corequisite or prerequisite:* CHEM 3371.

CEE 3355 (3). ENVIRONMENTAL IMPACT EVALUATION, POLICY AND REGULATION. Methods for evaluating engineering projects on environmental quality are reviewed, as are environmental legislation and environmental quality indices. The strengths and weaknesses of government methodologies to protect the environment are reviewed. Pollution standards, marketable rights, taxes, and citizen empowerment are considered. Economic analysis and other policy perspectives are considered. *Prerequisite:* CEE 2304.

CEE 3385 (3). SOIL MECHANICS AND FOUNDATIONS. Introduction to the basic principles that govern the behavior of soils, foundations, and other geotechnical engineering works. The central concepts covered include the index properties and classification of soils, soil permeability and pore water movement, stress distribution in soil and the effective stress concept, bearing capacity, compressibility, consolidation, settlement, shear strength, and soil engineering properties and their measurement. Geotechnical facilities introduced include foundations, retaining walls, tunnels, excavations, earth-fill dams, pavements, stable earth slopes, sanitary landfills, and environmental remediation projects. *Prerequisite:* CEE/ME 2340. *Corequisite or prerequisite:* CEE/ME 2342.

CEE 3431 (4). FUNDAMENTALS OF AIR QUALITY I. The science, engineering, public health, and economic aspects of air quality are covered. Topics include the sources of air pollutants, transport of pollutants in the environment, and atmospheric chemistry. The important properties and behavior of airborne particles and gases are reviewed. Also discussed are the science and national and international policies relating to greenhouse gas emissions, global

climate change, and stratospheric ozone depletion. *Prerequisites:* CHEM 1303, MATH 1337 or equivalent, PHYS 1303 or equivalent.

CEE 3451 (4). INDUSTRIAL HYGIENE AND OCCUPATIONAL HEALTH. The recognition, evaluation, and control of health hazards in the working environment are presented. Principles of industrial toxicology, risk assessment/management, occupational diseases, and occupational health standards are examined. The application of industrial hygiene principles and practice as well as the measurement and control of atmospheric contaminants are presented. The design and evaluation of occupational exposure controls are introduced. Lecture and three hours of laboratory. *Prerequisite:* CHEM 1304.

CEE 4329 (3). DESIGN OF WATER AND WASTEWATER SYSTEMS. Covers physical, chemical, and biological concepts and processes that are specific to public water supplies and municipal wastewater management. Reviews fluid mechanics and introduces hydraulic modeling for design of water distribution networks and wastewater collection networks. Design and operation of treatment systems for both drinking water and municipal wastewater pollution control are covered. Process modeling is employed for completion of two design projects, one for a public water supply treatment plant and the other for municipal wastewater treatment plant. Field trips are conducted to a public water supply treatment plant and to a municipal wastewater treatment plant. *Prerequisite:* CHEM 1303, CEE 2304 and CEE/ME 2342.

CEE 4333 (3). FUNDAMENTALS OF AIR QUALITY II. Fundamental and advanced topics in air quality are covered, building upon CEE 3431. Atmospheric dispersion of pollutants is examined and modern computer models are used to predict transport. A thorough review of energy technology and energy policy is presented, focusing on the economics and environmental impacts of conventional and alternative methods of energy generation. The importance of indoor air quality is discussed, including the risks from radon and biological aerosols. Additional topics of current interest are presented. Each student prepares a term paper related to energy policy and the environment. *Prerequisite:* CEE/ME 2331 or equivalent and CEE 3431.

CEE 4350/ME 4350 (3). DESIGN OF STEEL STRUCTURES. Study of strength, behavior and design of metal structures; flexural and axial members, bolted and welded connections, and composite beams. *Prerequisite:* CEE/ME 3350.

CEE 4351 (3). DESIGN OF CONCRETE STRUCTURES. Study of strength, behavior and design of reinforced concrete structures; members subjected to flexure. Shear and axial loads. Design of one-way slabs. *Prerequisite:* CEE/ME 3350.

CEE 4380 (3). CIVIL AND ENVIRONMENTAL ENGINEERING DESIGN I. Students are responsible for completing a term-long environmental or civil engineering project for an industrial or regulatory client. The nature of design problems, constraints, and analytical tools are examined in an applied setting. An integrated design process is employed including problem identification and formulation, project planning, evaluation of alternatives, internal peer review and design iterations, preparation of design drawings and specifications for bidding and procurement purposes, the interaction of design and construction professionals, and implementation of the completed project. *Prerequisite:* Senior standing and CEE 3302.

CEE 4381 (3). CIVIL AND ENVIRONMENTAL ENGINEERING DESIGN II. Students are responsible for completing a term-long environmental or civil engineering project for an industrial or regulatory client. Students function on multidisciplinary design teams that stress the need for personal and written communication skills, leadership, effective group participation, and creative problem solving. Concepts of professional engineering practice are reinforced by student participation in applied design problems including the need for professional licensing, the ethical responsibilities of licensed engineers, and the need for lifelong learning to stay abreast of changing technology and public policy through active participation in professional societies, self-study, and continuing education. Periodic progress reports and reviews and a final report are prepared and presented. Both the client and faculty assess the completed design project. *Prerequisite:* CEE 4380.

CEE 5050 (0). UNDERGRADUATE INTERNSHIP.

CEE 5090 (0). CEE SEMINAR. Lectures by invited speakers from industry and academia, including SMU faculty and students, dealing with engineering practice and research topics of current interest in environmental and civil engineering. All students, staff, and faculty are invited.

CEE 5191 (1), 5192 (1), 5291 (2), 5292 (2). SPECIAL PROJECTS. Intensive study of a particular subject or design project, not available in regular course offerings, under the supervision of a faculty member approved by the department chair.

CEE 5311 (3). ENVIRONMENTAL AND HAZARDOUS WASTE LAWS. Federal environmental laws, with emphasis on laws dealing with hazardous substances, such as CERCLA and RCRA; regulations and the regulatory framework; definitions and substantive requirements; roles of the States and the Federal EPA; compliance and enforcement; case studies.

CEE 5312 (3). RISK ASSESSMENT AND HEALTH EFFECTS. Introduction to toxicology as it relates to environmental and health effects of hazardous materials; toxicology methodology; risk management factors including legal aspects; human health and ecological risk assessment and risk communication; emergency response; computer databases.

CEE 5313 (3). ENVIRONMENTAL CHEMISTRY AND BIOLOGY. Chemical and biochemical processes; controlling fate and transport of hazardous materials with emphasis on chemical equilibria; chemical thermodynamics; acid-base equilibria; precipitation and dissolution; oxidation reduction processes; environmental transformations of organic materials; introductory taxonomy; microbial growth and kinetics; energy transfer; microbial ecosystems.

CEE 5315 (3). INTEGRATED WASTE MANAGEMENT. Comprehensive introduction to the fundamentals of the complex interdisciplinary field of hazardous waste management; current management practices; treatment and disposal methods; and site remediation. Topics include detailed case studies and design examples to evaluate the effectiveness of different treatment and containment technologies in addressing today's hazardous waste situations.

CEE 5317 (3). ENVIRONMENTAL ORGANIC CHEMISTRY. This course will examine the fundamental processes that govern transformation of organic chemicals in natural and engineering systems. The course will be divided into three parts: (1) organic chemistry overview, (2) physical transformations of organic compounds and (3) organic chemical reactions in the environment. The organic chemistry overview will provide knowledge regarding basic properties of organic compounds such as nomenclature and structures. Physical transformation of organic compounds will provide an understanding in processes (such as sorption and volatilization) that control the distribution of organic chemicals between different phases (such as air, water, and soil). Environmentally-mediated reactions (such as hydrolysis and photolysis) that control the breakdown of organic chemicals will be the focus of chemical reactions.

CEE 5321 (3). PHYSICAL AND CHEMICAL WASTE TREATMENT. Introduces waste minimization techniques and objectives, and thoroughly reviews chemical equilibrium and chemical reaction kinetics. Design and analysis equations and procedures are rigorously derived for chemical reactors and physical unit operations. The treatment objectives examined include 1) solids-liquid separation accomplished by coagulation and flocculation, sedimentation, filtration, flotation, and solids handling processes; 2) immiscible liquid separation brought about by emulsion-breaking chemicals and gravity and flotation oil/water separators; 3) phase and species transformations through pH neutralization, chemical precipitation, chemical oxidation/reduction, air stripping, and solidification/stabilization; and 4) solute separation and concentration achieved with activated carbon absorption, synthetic ion exchange resins, and membrane separation techniques.

CEE 5322 (3). BIOLOGICAL WASTE TREATMENT. Biological treatment topics include an overview of microbiology and microbial metabolism; kinetics of biological growth; aerobic suspended growth processes including the various modifications of the activated sludge process, aerated lagoons, and sequencing batch reactors; aerobic attached growth processes including trickling filters, biofilter towers, and rotating biological contactors; anaerobic processes including sludge digestion and liquid waste treatment with the anaerobic contact process and anaerobic filters; biosolids handling and disposal; composting; land treatment; in situ biotreatment and biotreatment of contaminated soils.

CEE 5323 (3). PROJECT MANAGEMENT. Role of project officer; systems and techniques for planning, scheduling, monitoring, reporting, and completing environmental projects; total quality management; project team management, development of winning proposals; contract management and logistics; case study application of project management to all environmental media and programs; community relations, risk communication, crisis management, consensus building, media, and public policy.

CEE 5325 (3). DISASTER MANAGEMENT. This course introduces the student to basic concepts in disaster management. Drawing on a range of sources from the textbook to the U.S. National Response plan to research papers, the course covers the fundamentals of preparedness, mitigation, response, and recovery. An all-hazards approach is taken, providing analysis of natural, technological, and man-made disasters. In addition to discussing the basic theories of disaster management, the course introduces the student to key methods in the field, including simulation modeling, consequence analysis tools, design criteria, statistical and case study methods (lessons learned), and risk analysis.

CEE 5327 (3). OPTIMIZATION AND RELIABILITY FOR INFRASTRUCTURE AND ENVIRONMENTAL SYSTEMS. Introduces the concepts of engineering systems optimization, reliability and risk assessment, and applies them to civil and environmental engineering systems. Includes an introduction to engineering systems definition, classical methods of optimization, linear programming, integer programming, dynamic programming, nonlinear optimization, and reliability and risk concepts in engineering planning and design. Engineering applications include transportation networks, fleet assignment, supply chain management, environmental engineering systems, fluid transport and water reservoir operation and structural engineering systems. Advance topics include an introduction to chance-constrained optimization and basic decomposition approaches and their application to real-world problems.

CEE 5328 (3). INTRODUCTION TO SUSTAINABILITY. Introduces basic concepts in sustainability. Drawing on a range of sources, including selected books and readings, the course explores the idea of total connectedness of resource use globally, with particular emphasis on the situation in north Texas. Addresses the issues of air quality and energy supply, sustainable construction, water use, transit and other related areas of resource use, and waste generation. The inclusion of multiple guest lecturers will provide a series of multiple viewpoints and areas of specific expertise. *Prerequisite:* Graduate standing or permission of instructor.

CEE 5329 (3). METHODS AND TECHNOLOGY FOR SUSTAINABILITY. This course covers technologies and methods used in sustainable design and analysis. Areas covered include the scientific understanding of alternative energy systems, water reuse and supply, and state-of-the-art materials created for sustainability. Also discussed are methods for assessing sustainability, including life cycle assessment and the development of sustainable indicators. *Prerequisite:* Graduate standing or permission of instructor.

CEE 5330 (3). DESIGN FOR SUSTAINABILITY. This course introduces the student to the issues involved in creating a sustainable built environment. The course will address issues of resource use at the regional and project specific level. Specific techniques for designing and constructing sustainable buildings will be addressed. Systems of measurement for sustainable properties will be discussed on a comparative level, and the USGBC's LEED system will be specifically addressed. *Prerequisite:* Graduate standing or permission of instructor.

CEE 5331 (3). AIR POLLUTION MANAGEMENT AND ENGINEERING. Covers the science, engineering, public health, and economic aspects of air quality. Students develop an in-depth understanding and broad knowledge of the sources and properties of air pollutants, air quality management, fate and transport of pollutants in the environment, regulations of air quality, and the operation and design of air pollution control systems. Reviews the current status of science, policy, and regulations on several selected topics such as urban smog, regional haze, greenhouse gas and global climate change, stratospheric ozone depletion, and mercury emissions and control. *Prerequisites:* CHEM 1304, MATH 1337 or equivalent, and PHYS 1303 or equivalent.

CEE 5332 (3). GROUNDWATER HYDROLOGY AND CONTAMINATION. Groundwater hydrology; aquifer and well hydraulics; flow equations and models; implications for landfill design; sources and nature of groundwater contaminants; monitoring and analysis; contaminant fate and transport; transport model for hazardous substances; groundwater pollution control measures; containment and treatment; groundwater quality management. *Prerequisite:* MATH 2343.

CEE 5334 (3). FATE AND TRANSPORT OF CONTAMINANTS. Development and application of fate and transport models for water-borne contaminants with focus on material balance principle; mass transport and transformation processes; modeling of lakes and reservoirs; stream modeling; general flow case; groundwater models; water-sediment, water-soil, and water-air interfaces; multiphase and integrated modeling approaches; case studies.

CEE 5335 (3). AEROSOL MECHANICS. Fundamental and advanced principles of airborne particles, including their physical properties, aerodynamic behavior, and their collection,

measurement, and analysis. The course emphasizes the origins and properties of atmospheric aerosols and the design of air pollution control equipment. *Prerequisite:* CEE 3431 or CEE/ME 2342 or equivalent.

CEE 5340/ (3). INTRODUCTION TO SOLID MECHANICS. Three dimensional stress and strain, failure theories, introduction to two-dimensional elasticity, torsion of prismatic members, beams on elastic foundation, introduction to plates and shells, and energy methods. *Prerequisite:* CEE/ME 2340 or equivalent and MATH 2343.

CEE 5350 (3). INTRODUCTION TO ENVIRONMENTAL MANAGEMENT SYSTEMS. In-depth introduction to environmental management systems. Includes systems such as EMAS, Responsible Care, OSHAS 18000, ISO 14000, and the Texas EMS program. Takes a step-by-step look at the ISO 14002 standard from the policy statement to the management review, and allow students to fully understand the Plan-Do-Check-Act approach of the system. Also introduces management system auditing, the requirements of a system auditor and the certification process.

CEE 5351 (3). INTRODUCTION TO ENVIRONMENTAL TOXICOLOGY. Toxicology is presented as it relates to environmental and health effects of hazardous materials. Toxicological methodologies, pharmacokinetics, mechanisms of action to toxicants, origin response to toxic substances, and relevant aspects of the occupational and regulatory environment will be examined. Specific topics include toxicology of metals, radiation, industrial solvents and vapors, pesticides, teratogens, mutagens, and carcinogens. Risk communication and risk assessment are examined as they related to toxic substance exposure.

CEE 5352 (3). MANAGEMENT OF RADIOACTIVE HAZARDS. Principles of radioactive material production, uses, and hazards are presented with emphasis on their safe control and management. Topics in health physics and radiation protection related to the commercial nuclear industry are examined including uranium fuel production, light water reactor technologies, and industrial and medical uses of radioactive byproduct materials. Risk assessment methods and hazard management connected to the fuel cycles will be developed. The regulation of radioactive materials will be studied with emphasis on licensing of regulated industries, radioactive material transportation, radioactive waste management and disposal, radiological emergency preparedness, and decommissioning. *Prerequisite:* CEE 5313.

CEE 5353 (3). ENVIRONMENTAL EPIDEMIOLOGY. Introduction to the science of epidemiology. Design and conduct of studies examining health effects of environmental exposures. Strengths and limitations of research strategies and interpretation of study results. Areas of interest include air and water pollution, lead, and biological marker outcomes.

CEE 5354 (3). ENVIRONMENTAL ENGINEERING PRINCIPLES AND PROCESSES. Waste minimization and pollution prevention techniques and objectives are introduced. A comprehensive study is made of biological, chemical, and physical principles and treatment strategies for controlling pollutant emissions. Equal emphasis is placed on underlying theory and practical engineering application of both common and innovative water and wastewater treatment processes. Design equations, procedures, and process models are rigorously derived for chemical/biological reactors and physical unit operations. Emphasis is placed on engineering analysis and application of process modeling techniques for design of unit processes to achieve specific treatment objectives *Prerequisites:* CHEM 1303, CEE 2304, CEE/ME 2342, and MATH 2343.

CEE 5361/ME 5361 (3). MATRIX STRUCTURAL ANALYSIS AND INTRODUCTION TO FINITE ELEMENT METHODS. A systematic approach to formulation of force and displacement method of analysis; representation of structures as assemblages of elements; computer solution of structural systems. *Prerequisite:* CEE/ME 3350.

CEE 5362 (3). ENGINEERING ANALYSIS WITH NUMERICAL METHODS. Applications of numerical and approximate methods in solving a variety of engineering problems. Examples include equilibrium, buckling, vibration, fluid mechanics, thermal science, and other engineering applications. *Prerequisite:* Permission of instructor.

CEE 5363 (3). ARCHITECTURAL AND STRUCTURAL ENGINEERING. Introduces the basic principles of structural analysis and mechanics of deformable bodies. Presents structural systems and principles, with an emphasis on architectural design. Provides a conceptual introduction to structures emphasizing the integration of structural and architectural design. Case studies of buildings are presented and discussed. *Prerequisites:* CEE/ME 2310 and CEE 2320.

CEE 5364 (3). INTRODUCTION TO STRUCTURAL DYNAMICS. Dynamic responses of structures and behavior of structural components to dynamic loads and foundation excitations; single- and multi-degree-of-freedom systems response and its applications to analysis of framed structures; introduction to systems with distributed mass and flexibility. *Prerequisite:* MATH 2343.

CEE 5365 (3). INTRODUCTION TO CONSTRUCTION MANAGEMENT. Construction practice techniques and current technological tools are examined. Included are cost estimating, bidding, contracts and contract bonds, risk and umbrella excess insurance, labor law and labor relations. Building codes and regulations are examined. Business methods with respect to managing project time and cost including typical forms used in construction are addressed.

CEE 5366 (3). INTRODUCTION TO FACILITIES ENGINEERING SYSTEMS. The interrelationships of fire protection, HVAC, electrical, plumbing, lighting, telecommunications, energy management systems for buildings are examined. A life-cycle approach examines each of these systems with respect to cost durability, maintainability, operability, and safety. Facility operations, facility maintenance and testing, and assessments are discussed.

CEE 5367 (3). TELECOMMUNICATIONS IN FACILITY PLANNING. A thorough description of telecommunications technology is presented. Provides the student with a working knowledge of the fundamental concepts of telecommunications technology for both voice and data. Topics presented include digital communications, standards and protocols, Ethernets, local area networks, fiber optics and voice technologies.

CEE 5368 (3). FACILITIES CONTRACT MANAGEMENT. A critical foundation and understanding is provided of the terminology, arts, and skills of contracts and contract negotiation, review and preparation, as well as insurance and risk management. Attention is also given to lease analysis, licensing and permits, when and how bidding contracts are warranted, how to prepare specifications and their role in contract creation, and supplier and vendor management in the post-contractual process.

CEE 5369 (3). ELECTRICAL, MECHANICAL AND PIPING SYSTEMS FOR BUILDINGS. Examines mechanical and electrical systems for buildings, with emphasis on practical aspects of the subjects. Presents space planning and architectural considerations, including cost and environmental impact of the mechanical and electrical systems. *Prerequisites:* Undergraduate introduction to electrical circuits, classical mechanics, and fluid dynamics or instructor approval.

CEE 5370 (3). FACILITY PLANNING. The overall planning process for construction projects is presented. The three divisions of planning: program planning, project planning, and activity planning are presented in an integrated manner. Included are different modeling approaches for the planning process.

CEE 5371 (3). FACILITY FINANCIAL AND ASSET MANAGEMENT. Financial analysis and reporting, concepts and methods of accounting, budgeting, and evaluation of projects are examined. The role of facility managers in affecting corporate earnings and valuations is presented. The management of the facility over its entire life-cycle extending from planning and budgeting to the management of its assets and construction projects is included.

CEE 5373 (3). PRESTRESSED CONCRETE. Theory and application of prestressed concrete members time-dependent deflections, and continuous prestressed beams. *Prerequisite:* CEE/ME 4350.

CEE 5375 (3). ADVANCED CONCRETE DESIGN. Behavior, analysis and design of concrete slender columns, two-way slab systems, and deep beams. Yield line analysis for slabs. Design and behavior of shear walls, retaining walls and foundation systems. *Prerequisite:* CEE/ME 4350.

CEE 5377/ME 5377 (3). ADVANCED STEEL DESIGN. Behavior and design of steel structures including general methods of plastic analysis, plastic moment distribution, steel frames, unbraced and braced frames, and composite construction. *Prerequisite:* CEE/ME 4350.

CEE 5378 (3). TRANSPORTATION PLANNING AND TRAFFIC ENGINEERING. Focus on the analysis and modeling of urban transportation systems. The course consists of three main parts. The first part provides an overview of main definitions and terminologies involved in the planning and modeling of urban transportation systems. The second part introduces the concept of urban transportation planning systems along with an overview of various models used in travel demand forecasting. The third part describes principles of traffic operations, analysis, and control. *Prerequisites:* Basic principles of probability and statistics.

CEE 5379 (3). HIGHWAYS DESIGN AND SAFETY. Provides an overview of the principals of highways design and traffic safety. Topics include highways functional classification, design control and criteria, driver performance, sight distance, horizontal and vertical alignments, cross section elements, design of freeways, intersections and interchanges, traffic safety, and environmental impact assessment.

CEE 5383 (3). HEATING, VENTILATING, AND AIR CONDITIONING. Examines the science and practice of controlling environmental conditions through the use of thermal process and systems. Specific applications include refrigeration, psychometrics, solar radiation, heating and cooling loads in buildings, and design of duct and piping systems. Theory and analysis are emphasized. *Prerequisite:* CEE/ME 2331, CEE 2342, and ME 3332.

CEE 5384 (3). ENERGY MANAGEMENT FOR BUILDINGS. Procedures to select energy savings options for buildings are examined with emphasis on the practical aspects of the subject. Space planning, architectural considerations, cost, and environmental impact of the mechanical and electrical systems are considered along with optimizing the life cycle cost of the proposed alternative. Software for life-cycle cost and energy analysis is used to calculate energy consumption and compare energy features of proposed, audit-determined feasible changes to a building.

CEE 5385 (3). ADVANCED SOIL MECHANICS. Physicochemical properties of soil and soil stabilization. Advanced theories of soil deformation and failure as applied to slope stability and lateral loads. Soil-water interaction in earthen dams. *Prerequisite:* CEE 3385.

CEE 5386 (3). FOUNDATION ENGINEERING. Application of soil mechanics principles to the design and construction of shallow and deep foundations. Topics include subsurface investigation procedures to obtain soil parameters for design and construction of structure foundations, bearing capacity and settlement analyses, construction procedures, and soil improvement techniques. *Prerequisite:* CEE 3385.

CEE 5387 (3). GEOTECHNICAL EARTHQUAKE ENGINEERING. This course provides fundamental knowledge and practical application of soil dynamics and geotechnical earthquake engineering. This includes an overview of seismic hazards, the fundamentals of vibration, wave propagation in elastic medium, properties of dynamically loaded soils, earthquake-induced ground motion, ground response analysis, lateral earth pressure on retaining walls, liquefaction of soils, and seismic stability of earth embankments. *Prerequisite:* CEE 5364 or approval of instructor.

CEE 5388 (3). GROUNDWATER AND SEEPAGE. Examines fundamental principles of flow through porous media and related engineering problems. Topics include the saturated seepage theory and flow nets; the unsaturated flow theory; suction-saturation and saturation-hydraulic conductivity relationships; the principle of effective stress; laboratory and field testing methods for determining material characteristics; and numerical models for flow-related engineering problems. *Prerequisite:* CEE 3385 or equivalent.

CEE 5391 (3), 5392 (3). SPECIAL PROJECTS. Intensive study of a particular subject or design project, not available in regular course offerings, under the supervision of a faculty member approved by the department chair. *Prerequisite:* Junior or senior standing required.

CEE 5418 (4). ENGINEERING MICROBIOLOGY. Aspects of microbiology that are particularly valuable to the practice of environmental engineering are examined. Specific areas of focus include enzyme and growth kinetics, cell structure and physiology, process of biotransformation, microbial/environmental interactions, and biogeochemical cycles. Elements of molecular biology and biotechnology are also presented as appropriate. The goal of this course is to provide a basic understanding and appreciation of microbial processes that are applicable in the field of environmental engineering. *Prerequisite:* CHEM 1303 and CHEM 1304, or equivalent.

CEE 5491 (4), 5492 (4). SPECIAL PROJECTS. Intensive study of a particular subject or design project, not available in regular course offerings, under the supervision of a faculty member approved by the department chair.

Computer Science and Engineering

Professor Sukumaran V.S. Nair, **Chair**

Professors: Delores M. Etter (Electrical Engineering), David W. Matula, Sukumaran V.S. Nair, Stephen A. Szygenda, Mitchell A. Thornton, Jeff Tian. **Associate Professors:** James G. Dunham (Electrical Engineering), Ira Greenberg, Ping Gui (Electrical Engineering), Richard V. Helgason (Engineering Management, Information and Systems), LiGuo Huang. **Assistant Professors:** Jennifer A. Dworak, Eric C. Larson, Tyler W. Moore. **Senior Lecturer:** Frank P. Coyle. **Lecturers:** Donald E. Evans, Mark E. Fontenot. **Visiting Fellow:** Daniel W. Engels. **Adjunct Faculty:** Jeffrey D. Alcantara, William A. Bralick, Jr., Ann E. Broihier, Hakki C. Cankaya, Christian P. Christensen, Aaron L. Estes, Dennis J. Frailey, Kenneth R. Howard, Bhanu Kapoor, Mohamed M.I. Khalil, Kamran Z. Khan, R. Mallik Kotamarti, Lun Li, D. Kall Loper, Matthew R. McBride, Lee D. McFearin, Freeman L. Moore, Padmaraj M.V. Nair, Robert S. Oshana, John J. Pfister, Leonid Popokh, Sohail Rafiqi, Mohamed O. Rayes, Gheorghe Spiride, Raymond E. Van Dyke. **Emeritus Professor:** Margaret H. Dunham.

The Department of Computer Science and Engineering at SMU offers academic programs in computer engineering and computer science. Faculty specializations include computer architecture, data mining, knowledge engineering, software engineering, design and analysis of algorithms, parallel processing, database management, very large-scale integration computer-aided design methods, bioinformatics, computer networks, data and network security, mobile computing, theory of computation, and computer arithmetic. The educational objectives of the undergraduate programs in the CSE Department are to produce graduates who are productive professionals in an information technology discipline, are pursuing (or have pursued) graduate or professional degrees, are successful entrepreneurs and managers, have a broad knowledge and wide range of interests, are valuable members of their general community, and take a leadership role in their chosen field. As such, the programs are designed to ensure that graduates have the following:

For graduates with degrees in computer science

a) The ability to apply knowledge of computing and mathematics to software design and computing problems.

b) The ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.

c) The ability to design, implement and evaluate a computer-based system, process, component or program to meet desired needs.

d) The ability to function effectively on teams to accomplish a common goal.

e) An understanding of professional, ethical, legal, security and social issues and responsibilities.

f) The ability to communicate effectively with a range of audiences both in an oral and written form.

g) The broad liberal arts education necessary to analyze the local and global impact of computing on individuals, organizations and society.

h) The recognition of the need for and the ability to engage in continuing professional development and lifelong learning.

i) The ability to use the techniques, skills and modern computing and software engineering tools necessary for computing practice.

For graduates with degrees in computer engineering

a) The ability to apply knowledge of mathematics, science and engineering to software and hardware design problems.

b) The ability to design and conduct experiments and to analyze and interpret data related to software and hardware design solutions.

c) The ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

d) The ability to function on multidisciplinary teams using current computer engineering tools and technologies.

e) The ability to identify, formulate and solve engineering problems based on a fundamental understanding of concepts of computer engineering topics.

f) An understanding of personal, professional and ethical responsibility.

g) The ability to communicate effectively both in an oral and written form.

h) The broad liberal arts education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.

i) The recognition of the need for and the ability to engage in lifelong learning.

j) A knowledge of contemporary issues in computer engineering.

k) The ability to use the techniques, skills and modern engineering tools necessary for computer engineering practice.

The CSE Department is engaged in an ongoing assessment process that evaluates the success in meeting these outcomes and enhances the development of the program.

Degrees

The CSE Department offers undergraduate degrees as follows:

Bachelor of Science – major in computer science
Bachelor of Science – major in computer science with a premedical specialization
Bachelor of Science in Computer Engineering
Bachelor of Arts – major in computer science

The undergraduate program in computer engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. The undergraduate computer science program that awards the degree Bachelor of Science (B.S.) is accredited by the Computing Accreditation Commission of ABET. The undergraduate computer science program that awards the degree Bachelor of Arts (B.A.) is not accredited by a Commission of ABET.

Dual Degree Program

The Lyle School of Engineering offers a dual degree with the Meadows School of the Arts that leads to the degrees of B.A. in music and B.A. in computer science. Students should contact the department for additional details.

4+1 Master's Degree Program

The 4+1 Program allows students to complete both B.S. and M.S. degrees in five years. In the CSE Department, students may participate in the 4+1 Program in either the computer science or computer engineering area. Up to nine total credit hours of graduate courses may be applied toward fulfilling the student's undergraduate program requirements. For additional information, students should contact the undergraduate program director.

Teaching Certification

The teacher certification program requires 24 hours of coursework and six hours of student teaching. A B.A. in computer science student is able to complete these requirements by taking all required education courses within the free electives area. In addition, the student would have to complete student teaching. For information on this program, students should contact the CSE Department.

Computer Facilities

Students in the CSE Department have access to a wide range of facilities and equipment. The department's computing environment has evolved into an Ethernet-based network of personal computers and servers. General-use UNIX servers that run OSF1 and Linux are available. A wireless network is also available throughout the CSE facilities. Windows-based PC labs are used during the first two years of coursework.

Curriculum in Computer Science

Computers play an ever-increasing role in society. Their use permeates all other academic disciplines and industrial arenas. Computer science is the study of the concepts and theory surrounding computer design and software construction. The SMU undergraduate program in computer science is designed to give students a solid understanding of these concepts, providing them with the technical knowledge needed to pursue either an advanced degree or a challenging career in the computer industry. The diversity of the Lyle School of Engineering computer environment exposes undergraduate computer science students to many different hardware and software systems.

To study and use computers, one must communicate with them through a variety of software interfaces, including programming languages. At SMU, the student will study several high-level languages – such as C++ and Java – that simplify the use of computers. In addition, students are exposed to a variety of computer-aided software engineering tools. Assembly languages and operating systems (such as Linux/UNIX) for microcomputers, mainframes and supercomputers are studied to provide an understanding of the architecture and organization of a digital computer. Mathematical topics such as discrete mathematics, graph theory, and Boolean and linear algebra are included in required undergraduate classes so that students may better understand the internal structure of the computer and the effective utilization of its languages.

Knowledge of the computer's internal structure is important to understanding its capabilities. Thus, computer science students take courses in assembly language, computer logic and computer organization. Courses in systems programming and operating systems extend this structural study into the "software" of the computer. A required sequence of software engineering courses prepares students for advanced systems and software applications.

Many of the computer science core courses (CSE 2341, 3345, 3353, 4345, 4351 and 4352) contain major project-oriented components to prepare students for applying their theoretical knowledge in teams.

The free electives in the B.A. in computer science program can also be used to individually tailor a student's study plan. For example, students who want a program even more intensive than the computer science major could satisfy their free electives with more computer science courses. Students interested in a broader education could satisfy these electives with courses offered by any department in the University.

The B.S. degree allows students to major in any of five concentration tracks or to pursue a general program where they can choose nine hours of computer science electives. The research track allows students to participate in an undergraduate research project of their choice. Like graduate students, undergraduate students majoring in research are required to perform independent research in an area of their choice (with a tenure-track faculty member as an adviser), document the research results and present the results of the research in a presentation open to the entire University community. The security track facilitates a more in-depth study of software security issues. The data-intensive computing track introduces concepts of data storage and analysis necessary for many modern applications. The software engineering track focuses on software design and testing. The game development track is provided in collaboration with The Guildhall at SMU.

Curriculum in Computer Engineering

Computer engineering deals with computers and computing systems. Computer engineers must be capable of addressing problems in hardware, software and algorithms, especially those problems whose solutions depend upon the interaction of these elements. Career opportunities for computer engineers require a broad range of knowledge. The design and analysis of logical and arithmetic processes that are the basis of computer science provide basic knowledge. Computer engineering courses are concentrated on the interacting nature of hardware and software. Basic electrical engineering is a clear foundation for computer engineers.

Bachelor of Science With a Major in Computer Science

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	32
MATH 1337, 1338, 3353	
CSE 2353, 3365, 4340	
(Students may fulfill the CSE 4340 requirement by taking any one of CSE/STAT 4340, EMIS 3340, *or* STAT 5340.)	
PHYS 1303/1105, 1304/1106	
6 credit hours from the following:	
ANTH 2315, 2363	
BIOL 1401, 1402	
CHEM 1303/1113, 1304/1114	
GEOL 1301, 1305, 1307, 1308, 1313	
PHYS 3305	

Requirements for the Major (continued)	*Credit Hours*
Computer Science	44
CSE 1341, 1342, 2240, 2341, 3330, 3342, 3345, 3353, 3381, 4344, 4345, 4351, 4352, 4381, 5343	
Tracks and Electives	9–18
Research (9 credit hours):	
CSE 4397, 5350	
3 credit hours of track electives approved by adviser	
Data-Intensive Computing (9 credit hours):	
CSE 5330, 5331	
3 credit hours of track electives approved by adviser	
Software Engineering (9 credit hours):	
CSE 5314, 5319	
3 credit hours of track electives approved by adviser	
Game Development (18 credit hours):	
CSE 4051 (but not CSE 4351, 4352 from the list above)	
HGAM 5200, 5201, 5202, 5221, 5222, 5292, 5311, 5312 (Must be admitted to Guildhall Professional Certificate program and attend class at The Guildhall at SMU.)	
Security (9 credit hours):	
CSE 5339, 5349	
3 credit hours of track electives approved by adviser	
General (9 credit hours):	
Three 3-hour, 4000-level or above CSE courses approved by adviser	
Electives	6
Advanced electives in the Lyle School of Engineering.	
Engineering Leadership	9
CEE 3302	
CSE 4360	
EMIS 3308 *or* CSE 5317	
	100–103

Note: Students choosing the game development track do not take CSE 4351 and 4352 and have a total degree requirement of 103 hours.

Bachelor of Science With a Major in Computer Science (Premedical Specialization)

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	56
MATH 1337, 1338, 3353	
CSE 2353, 3365, 4340	
(Students may fulfill the CSE 4340 requirement by taking any one of CSE/STAT 4340, EMIS 3340, *or* STAT 5340.)	
BIOL 1401, 1402, 3304, 3350	
CHEM 1303/1113, 1304/1114, 3371/3117, 3372/3118	
PHYS 1303/1105, 1304/1106	

Requirements for the Major (continued)	*Credit Hours*
Computer Science	44
CSE 1341, 1342, 2240, 2341, 3330, 3381,3342, 3345, 3353, 4344, 4345, 4351, 4352, 4381, 5343	
Engineering Leadership	6
CEE 3302 and CSE 4360	
	106

Bachelor of Arts With a Major in Computer Science

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	18
MATH 1337, 1338	
CSE 2353	
PHYS 1301 *or* 1303	
STAT 2331	
3 credit hours from the following:	
ANTH 2315, 2363	
BIOL 1303, 1304, 1308, 1401, 1402	
CHEM 1301, 1303, 1304	
GEOL 1301, 1305, 1307, 1308, 1313	
PHYS 1303, 1304, 1314, 3305	
Computer Science	47
CSE 1341, 1342, 2240, 2341, 3330, 3342, 3345, 3353, 3381, 4344, 4345, 4351, 4352, 4381, 5343	
3 credit hours from the following:	
CSE 5314, 5320, 5330, 5339, 5341, 5342, 5344, 5345, 5348, 5349, 5350, 5359, 5376, 5380, 5381, 5382, 5385, 5387	
Engineering Leadership	9
CEE 3302	
CSE 4360	
EMIS 3308 *or* CSE 5317	
Free Electives	19
Must be approved by adviser.	
	93

Bachelor of Science in Computer Engineering

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Degree	*Credit Hours*
Mathematics and Science	34
MATH 1337, 1338, 2343, 3353	
CSE 2353, 3365, 4340	
(Students may fulfill the CSE 4340 requirement by taking any one of CSE/STAT 4340, EMIS 3340, *or* STAT 5340.)	

Requirements for the Degree (continued)	*Credit Hours*
Mathematics and Science (continued)	34
CHEM 1303	
PHYS 1303, 1304/1106	
3 credit hours from the following:	
BIOL 1401, 1402	
CHEM 1304	
GEOL 1301	
PHYS 3305	
Engineering Leadership	9
CEE 3302	
CSE 4360	
EMIS 3308 *or* CSE 5317	
Computer Engineering	46
CSE 1341, 1342, 2240, 2341, 3353, 3381, 4344, 4351, 4352, 4381, 5343, 5387	
EE 2322/2122, 2350, 2370/2170	
Tracks	9
Hardware (three of the following):	
CSE 5380, 5381; CSE 5385 *or* EE 5385; CSE 5356 *or* EE 5356	
Software Engineering (three of the following):	
CSE 3345; 4345; 5314, *or* 5316, *or* 5319	
Networking (three of the following):	
CSE 5344, 5348, 5349; EE 5376	
Security:	
CSE 5339, 5349	
3 credit hours of track electives approved by adviser	
General:	
Three 3-hour, 4000-level or above CSE courses approved by adviser	
Electives	6
Advanced electives in the Lyle School of Engineering.	
	104

Minor in Computer Science

A student majoring in computer engineering may not minor in computer science. The following computer science courses are required: **CSE 1341, 1342, 2341, 2353.** Elective courses can be any six hours of CSE courses numbered 3000 or above as approved by the computer science minor adviser.

Minor in Computer Engineering

A student majoring in computer science may not minor in computer engineering. The following computer science courses are required: **CSE 1341, 1342, 2240, 2341, 2353, 3381.**

The Courses (CSE)

CSE 1340 (3). INTRODUCTION TO COMPUTING CONCEPTS. Introduction to computer concepts, program structures, object-oriented programming and interactive application development. Extensive programming projects emphasizing logical control structures and the use of libraries.

CSE 1341 (3). PRINCIPLES OF COMPUTER SCIENCE. Introduces the fundamental concepts of computer science and object-oriented design of reusable modules. Covers basic object-

oriented concepts of composition, inheritance, polymorphism, and containers. First course for computer science and computer engineering majors and minors.

CSE 1342 (3). PROGRAMMING CONCEPTS. Introduces the constructs provided in the C/C++ programming language for procedural and object-oriented programming. Computation, input and output, flow of control, functions, arrays and pointers, linked structures, use of dynamic storage, and implementation of abstract data types. *Prerequisite:* C- or better in CSE 1341 or equivalent, grade of at least a 4 on the AP Computer Science A Exam, or departmental consent.

CSE 2240 (2). ASSEMBLY LANGUAGE PROGRAMMING AND MACHINE ORGANIZATION. Computer-related number systems, machine arithmetic, computer instruction set, low-level programming, addressing modes and internal data representation. *Pre or Corequisite:* A grade of C- or better in 1341.

CSE 2337 (3). INTRODUCTION TO DATA MANAGEMENT. This course is designed to provide practical experience using a relational database system and spreadsheet system. The course emphasizes hands-on practical training in creation and access of relational databases as well as basic and intermediate data analysis using spreadsheet software. Integrating data from a spreadsheet and relational database into other document types is also covered. No credit for CS and CpE majors or minors.

CSE 2341 (3). DATA STRUCTURES. Emphasizes the object-oriented implementation of data structures and associated algorithms, including sorting algorithms, linked lists, stacks, queues, binary trees, and priority queues. Introduces graphs and algorithm analysis, and covers object-oriented software engineering strategies and approaches to programming. *Prerequisite:* C- or better in CSE 1342 or equivalent.

CSE 2353 (3). DISCRETE COMPUTATIONAL STRUCTURES. Logic, proofs, partially ordered sets, and algebraic structures. Introduction to graph theory and combinatorics. Applications of these structures to various areas of computer science. *Prerequisite:* C- or better in CSE 1341.

CSE 3330 (3). DATABASE CONCEPTS. Covers fundamental information management and database systems concepts, including information models and systems, data modeling, relational database design, query languages, and various language APIs for accessing database systems. Contains a major design and implementation project. May include topics from information privacy and security, information retrieval, data mining, and multimedia information systems. *Prerequisites:* C- or better in CSE 2341, 2353.

CSE 3342 (3). PROGRAMMING LANGUAGES. Introduction to basic concepts of programming languages and compilers, including formal syntax, regular languages and finite automata, lexical analysis, context-free grammar and parsing, static and dynamic scoping, equivalence and consistency of data types, control constructs, encapsulation and abstract data types, storage allocation, and run-time environment. Advanced programming techniques such as tail recursion, inheritance, polymorphism, static and dynamic binding, and exception handling. In-depth studies of representative languages of different programming paradigms – object-oriented, logic and functional programming. *Prerequisite:* A grade of C- or better in CSE 2341.

CSE 3345 (3). GRAPHICAL USER INTERFACE DESIGN AND IMPLEMENTATION. Introduction to the concepts underlying the design and implementation of graphical user interfaces with emphasis on the psychological aspects of human-computer interaction. The course is structured around lectures, case studies and student projects. This course will introduce event-driven programming concepts including the Java API, applications, applets, interfaces, graphics, basic and advanced GUI components, HTML and multithreading. *Prerequisites:* A grade of C- or better in CSE 2341 or equivalent.

CSE 3353 (3). FUNDAMENTALS OF ALGORITHMS. Introduction to algorithm analysis, big-Oh notation, and algorithm classification by efficiency. Basic algorithm design strategies and approaches to problem-solving. Sorting and searching algorithms. Introduction to graph theory and graph algorithms. *Prerequisites:* C- or better in CSE 2341, 2353.

CSE 3365/MATH 3315 (3). INTRODUCTION TO SCIENTIFIC COMPUTING. An elementary survey course that includes techniques for root-finding, interpolation, functional approximation, linear equations, and numerical integration. Special attention is given to MATLAB programming, algorithm implementations, and library codes. *Prerequisites:* A grade of C- or higher in MATH 1338. *Corequisite:* CSE 1340 or 1341. Students registering for this course must also register for an associated computer laboratory.

CSE 3381 (3). DIGITAL LOGIC DESIGN. Boolean functions, logic gates, memory elements, synchronous and asynchronous circuits, shift registers and computers, and logic and control. *Prerequisites:* C- or better in CSE 2240, 2353. *Corequisite:* Weekly no-credit lab.

CSE 4051 (0). GAMING DESIGN PROJECT. This course requires students enrolled in HGAM 5292 to produce appropriate reports and other design documentation material resulting from their HGAM 5292 design experience. Design requirements, specifications, test plans, and other relevant documentation as required for assessing the design experience are included in these materials. *Corequisite:* HGAM 5292.

CSE 4090 (0). SENIOR PROJECT.

CSE 4190 (1), 4191 (1), 4192 (1), 4193 (1), 4194 (1), 4290 (2). UNDERGRADUATE PROJECT. An opportunity for the advanced undergraduate student to undertake independent investigation, design, or development. Written permission of the supervising faculty member is required before registration.

CSE 4197 (1), 4297 (2). RESEARCH EXPERIENCE FOR UNDERGRADUATES. Provides research experience for junior/senior undergraduate students. Permission from the advising CSE faculty member is required before registration. *Prerequisites:* Junior/senior standing; computer science or computer engineering major with GPA above 3.000.

CSE 4291 (2), 4292 (2), 4293 (2), 4294 (2). UNDERGRADUATE SEMINAR. An opportunity for the advanced undergraduate student to undertake independent investigation, design, or development. Written permission of the supervising faculty member is required before registration. At least 0.5 of (1–4) TCH Design.

CSE 4340/EMIS 3340/STAT 4340 (3). STATISTICAL METHODS FOR ENGINEERS AND APPLIED SCIENTISTS. Basic concepts of probability and statistics useful in the solution of engineering and applied science problems. Topics include probability, probability distributions, data analysis, sampling distributions, estimation, and simple tests of hypothesis. *Prerequisites:* C- or better in MATH 1337, 1338.

CSE 4344 (3). COMPUTER NETWORKS AND DISTRIBUTED SYSTEMS. Introduction to network protocols, layered communication architecture, wired and wireless data transmission, data link protocols, network routing, TCP/IP and UDP, email and World Wide Web (www), introduction to distributed computing, mutual exclusion, linearizability, locks, multithreaded computing. *Prerequisite:* A grade of C- or better in CSE 2341.

CSE 4345 (3). SOFTWARE ENGINEERING PRINCIPLES. Introduction to software system development; overview of development models and their stages; system feasibility and requirements engineering, architecture and design, validation and verification, maintenance, and evolution; project management; and review of current software engineering literature. Student teams design and implement small-scale software systems. The course contains class presentations and a major design experience. *Prerequisite:* C- or better in CSE 2341.

CSE 4351 (3). SENIOR DESIGN I. First part of a project course, with a major design component. Students participate in a multidisciplinary group project team. Topical, project-related discussions include project team organization, project planning and scheduling, management, testing and validation methods, and the importance of lifelong learning. *Prerequisite:* CSE senior standing.

CSE 4352 (3). SENIOR DESIGN II. Second part of a project course, with a major design component. Students participate in a multidisciplinary group project team. Topical, project-related discussions include project team organization, project planning and scheduling, management, testing and validation methods, and the importance of lifelong learning. *Prerequisite:* CSE 4351.

CSE 4360 (3). TECHNICAL ENTREPRENEURSHIP. Demonstrates the concepts involved in the management and evolution of rapidly growing technical endeavors. As part of a team, the student participates in active learning by doing, by making mistakes and developing solutions, and by observing mistakes and approaches made by other teams. Credit will not be given for both CSE 4360 and EMIS 8358. *Prerequisite:* Senior standing or permission of instructor.

CSE 4381 (3). DIGITAL COMPUTER DESIGN. Machine organization, instruction set architecture design, memory design, control design: hardwired control and microprogrammed control, algorithms for computer arithmetic, microprocessors, and pipelining. *Prerequisite:* A grade of C- or better in CSE 3381.

CSE 4386 (3). HARDWARE DESIGN PROJECT. This is a project course, which has a major design component. Students participate in a multi-disciplinary group project team. There will be topical discussions in relationship with the project, which include the hardware design and manufacturing process, hardware description languages, modular design principles, quantitative analysis, industrial standards and interfaces, and the importance of lifelong learning. The group project will provide the major design experience for students in the Hardware track of the Computer Engineering program. *Prerequisite:* A grade of C- or better in CSE 4381.

CSE 4391 (3), 4392 (3), 4393 (3), 4394 (3), 4490 (4), 4491 (4), 4492 (4), 4493 (4), 4494 (4). UNDERGRADUATE PROJECT. An opportunity for the advanced undergraduate student to undertake independent investigation, design or development. Written permission of the supervising faculty member is required before registration.

CSE 4397 (3). RESEARCH EXPERIENCE FOR UNDERGRADUATES. Provides research experience for junior/senior undergraduate students. Permission from the advising CSE faculty member is required before registration. *Prerequisites:* Junior/senior standing; computer science or computer engineering major with GPA above 3.000.

CSE 5050 (0). UNDERGRADUATE INTERNSHIP.

CSE 5111 (1). INTELLECTUAL PROPERTY AND INFORMATION TECHNOLOGY. Presents fundamentals in the nature, protection, and fair use of intellectual property. Patent, copyright, trademark, trade secret, and antitrust principles are presented with an emphasis on Internet, software, databases, and digital transmission technologies. Investigates the open source and creative commons alternatives for disseminating intellectual property. Examines the engineer's, scientist's, manager's, and creative artist's professional and ethical responsibilities and opportunities regarding intellectual property. Also, investigates the rapid change in types and uses of intellectual property spawned by computers, digital media, e-commerce, and biotechnology.

CSE 5314 (3). SOFTWARE TESTING AND QUALITY ASSURANCE. Examines the relationship of software testing to quality, with an emphasis on testing techniques and the role of testing in the validation of system requirements. Topics include module and unit testing, integration, code inspection, peer reviews, verification and validation, statistical testing methods, preventing and detecting errors, selecting and implementing project metrics, defining test plans and strategies that map to system requirements, testing principles, formal models of testing, performance monitoring, and measurement. *Prerequisite:* It is strongly recommended that students have software engineering experience in industry. C- or better in all previous CSE courses and senior standing.

CSE 5316 (3). SOFTWARE REQUIREMENTS. This course focuses on defining and specifying software requirements that can be used as the basis for designing and testing software. Topics include use-cases for describing system behavior, formal methods, specifying functional vs. non-functional requirements and the relationship of requirements to software testing. *Prerequisite:* C- or better in all previous CSE courses, and senior-level standing.

CSE 5317 (3). LEADERSHIP FOR ARCHITECTING SOFTWARE SYSTEMS. Principles of leadership and software architecture in building large software systems or leading large teams. Involves a mix of personal assessment, reflection, and the development of leadership and influence skills and concepts unique to each student. Examines the process of developing large software systems in a constantly changing commercial environment. *Prerequisite:* Junior standing or higher.

CSE 5319 (3). SOFTWARE ARCHITECTURE AND DESIGN. Software development requires both an understanding of software design principles and a broader understanding of software architectures that provide a framework for design. The course explores the role of design in the software lifecycle including different approaches to design, design tradeoffs and the use of design patterns in modeling object-oriented solutions. It also focuses on important aspects of a system's architecture including the division of functions among system modules, synchronization, asynchronous and synchronous messaging, interfaces, and the representation of shared information. *Prerequisite:* C- or better in all CSE courses and senior standing.

CSE 5320 (3). ARTIFICIAL INTELLIGENCE. Introduces basic principles and current research topics in artificial intelligence. Formal representation of real-world problems, search of problem spaces for solutions, and deduction of knowledge in terms of predicate logic, nonmonotonic reasoning, and fuzzy sets. Application of these methods to important areas of artificial intelligence, including expert systems, planning, language understanding, machine learning, neural networks, computer vision, and robotics. *Prerequisites:* C- or better in CSE 3342, 3353.

CSE 5330 (3). FILE ORGANIZATION AND DATABASE MANAGEMENT. A survey of current database approaches and systems, principles of design and use of these systems. Query language design, implementation constraints. Applications of large databases. Includes a survey of file structures and access techniques. Use of a relational DBMS to implement a database design project. *Prerequisite:* A grade of C- or better in CSE 3330.

CSE 5331 (3). AN INTRODUCTION TO DATA MINING AND RELATED TOPICS. Introduces various data mining and related concepts. All material covered is reinforced through hands-on implementation exercises. In this introductory course, a high-level applied study of data mining techniques is used. *Prerequisite:* C- or better in CSE 3330.

CSE 5335 (3). INTRODUCTION TO BIOINFORMATICS. Up-to-date introduction to the field of bioinformatics. Covers a wide variety of bioinformatics topics from a computer science perspective, including algorithms for DNA/protein sequence analysis, protein 3-D structural alignment, gene expression microarray analysis, single nucleotide polymorphism microarray analysis, proteomics data analysis, and gene ontology. Assumes biology knowledge only at the high school level. Some related biological background beyond high school is included in the lectures. *Prerequisite:* C- or better in CSE 3353 or equivalent, or permission of the instructor.

CSE 5337 (3). INFORMATION RETRIEVAL AND WEB SEARCH. Introduces the field of information retrieval with an emphasis on its application in Web search. Introduces the basic concepts of stemming, tokenizing and inverted indices, text similarity metrics and the vector-space model. Popular Web search engines are studied and the concepts are applied in several Java-based programs. *Prerequisite:* CSE 3353.

CSE 5338 (3). SECURITY ECONOMICS. Introduces economics as a tool for understanding and managing information security. Reviews key information security challenges and technologies in order to reason about the topics economically. Students are introduced to techniques of analytic and empirical modeling. Economic concepts reviewed include rationality, markets, and information. Presents models and metrics of security investment, along with cost-benefit analysis techniques, and techniques for empirical investigation and measurement of cybercrime. Security games are designed to capture the strategic interaction between defenders, as well as between attacker and defenders. Implications for public policy are discussed. *Prerequisite:* CSE 3353 or junior standing if not a declared CSE major.

CSE 5339 (3). COMPUTER SYSTEM SECURITY. Investigates a broad selection of contemporary issues in computer security, including an assessment of state-of-the-art technology used to address security problems. Topics include sources for computer security threats and appropriate reactions; basic encryption and decryption; secure encryption systems; program security, trusted operating systems; database security, network and distributed systems security, administering security, legal and ethical issues.

CSE 5340 (3). SERVICE-ORIENTED COMPUTING. Service-oriented computing is the computing paradigm that utilizes services as fundamental elements for developing applications. Service providers expose capabilities through interfaces. Service-oriented architecture maps these capabilities and interfaces so they can be orchestrated into processes. Fundamental to the service model is the separation between the interface and the implementation, such that the invoker of a service need only (and should only) understand the interface; the implementation can evolve over time, without disturbing the clients of the service. *Prerequisites:* Senior or graduate standing. Programming experience is required.

CSE 5341 (3). COMPILER CONSTRUCTION. Review of programming language structures, loading, execution and storage allocation. Compilation of simple expressions and statements. Organization of a compiler including compile-time and run-time symbol tables, lexical analysis, syntax analysis, code generation, error diagnostics, and simple code optimization techniques. Use of a recursive high-level language to implement a complete compiler. *Prerequisites:* A grade of C- or better in both CSE 3342 and CSE 3353.

CSE 5342 (3). CONCEPTS OF LANGUAGE THEORY AND THEIR APPLICATIONS. Formal languages and their relation to automata. Introduction to finite state automata, context-free languages, and Turing machines. Theoretical capabilities of each model, and applications in terms of grammars, parsing, and operational semantics. Decidable and undecidable problems about computation. *Prerequisite:* C- or better in CSE 3342 or permission of instructor.

CSE 5343 (3). OPERATING SYSTEMS AND SYSTEMS SOFTWARE. Theoretical and practical aspects of operating systems: overview of system software, timesharing and multiprogramming

operating systems, network operating systems and the Internet, virtual memory management, interprocess communication and synchronization, file organization, and case studies. *Prerequisites:* C- or better in CSE 2240, 3353.

CSE 5344 (3). COMPUTER NETWORKS AND DISTRIBUTED SYSTEMS II. Introduces network protocols, layered communication architecture, multimedia applications and protocols, quality of service, congestion control, optical networks, DWDM, network survivability and provisioning, wireless networks. There will be an interdisciplinary project requiring the use of currently available network design and simulation tools. *Prerequisite:* C- or better in CSE 4344.

CSE 5345 (3). ADVANCED APPLICATION PROGRAMMING. Advanced programming techniques that span a range of programming languages and technologies. Includes server-side application development, client GUI implementation, application frameworks, design patterns, model-based development, and multithreading. The specific programming language or languages covered may vary from term to term. *Prerequisite:* CSE 3345 or consent of instructor.

CSE 5347 (3). XML AND THE ENTERPRISE. XML, the Extensible Markup Language, is widely used to define vocabularies for a wide range of applications, including software configuration, data exchange, and Web-based protocols. This course provides a detailed examination of XML as an enterprise technology. Focuses on APIs, interfaces, and standards that are driving this technology, including DTDs and XML Schema to structure XML data, XSLT to transform XML, XML protocols for distributed computing, and XML security initiatives. Students gain a broad understanding of XML and the technical issues and tradeoffs among different alternatives for processing XML. *Prerequisites:* An understanding of object-oriented concepts and familiarity with Java and/or C++.

CSE 5348 (3). INTERNETWORKING PROTOCOLS AND PROGRAMMING. Processing and interprocess communications, UNIX domain sockets, fundamentals of TCP/IP, Internet domain sockets, packet routing and filtering and firewall, SNMP and network management, client-server model and software design, remote procedure call (XDR, RPC, DCE), design of servers and clients, networking protocols for the World Wide Web, and internetworking over new networking technologies. *Prerequisites:* C- or better in CSE 4344, 5343 and C programming.

CSE 5349 (3). DATA AND NETWORK SECURITY. Covers conventional and state-of-the-art methods for achieving data and network security. Private key and public key encryption approaches are discussed in detail, with coverage of popular algorithms such as DES, Blowfish, and RSA. In the network security area, the course covers authentication protocols, IP security, Web security, and system-level security. *Prerequisite:* C- or better in CSE 4344.

CSE 5350 (3). ALGORITHM ENGINEERING. Algorithm design techniques. Methods for evaluating algorithm efficiency. Data structure specification and implementation. Applications to fundamental computational problems in sorting and selection, graphs and networks, scheduling and combinatorial optimization, computational geometry, arithmetic and matrix computation. Introduction to parallel algorithms. Introduction to computational complexity and a survey of NP-complete problems. Emphasis on developing student facility to design efficient algorithms. *Prerequisite:* A grade of C- or better in CSE 3353.

CSE 5356/EE 5356 (3). VLSI DESIGN AND LAB. Explores the design aspects involved in the realization of CMOS integrated circuits from device up to the register/subsystem level. Addresses major design methodologies with emphasis placed on structured, full-custom design. Also, the MOS device, CMOS inverter static characteristics, CMOS inverter dynamic characteristics, CMOS transistor fabrication technology, combination logic circuit, alternative static logic circuit, sequential logic circuit, dynamic logic circuit, propagation delay and interconnect, power dissipation and design for low power, memory device (DRAM/SRAM/ROM), ESD protection, packaging, testing, and VLSI design flow. Students use state-of-the art CAD tools to verify designs and develop efficient circuit layouts. *Prerequisites:* C- or better in EE 2181, 2381, 3311.

CSE 5359 (3). SOFTWARE SECURITY. As software is delivered across networks and Web-based environments, security is critical to successful software deployment. This course focuses on software security issues that pertain to the network application layer in the classic OSI model. At the network application layer, issues related to encryption, validation, and authentication are handled programmatically rather than at the network level. Students work with APIs for cryptography, digital signatures, and third-party certificate authorities. The course also explores issues related to XML and Web services security by examining standards and technologies for securing data and programs across collaborative networks. *Prerequisite:* Programming experience in Java and/or C++.

CSE 5360 (3). INTRODUCTION TO 3-D ANIMATION. Introduces computer graphics, with an emphasis on the popular software package Maya. Includes focus on the user interface, creation of 3-D geometry using polygonal techniques, materials and textures, kinematics, animation, and camera and lighting techniques. Explores the various aspects and fundamentals of computer graphics. Students gain a core understanding of the workflow necessary to create 3-D imagery. Assignments require students to combine a variety of techniques to become familiar with the computer animation production process. *Prerequisite:* Junior standing or higher. May not be used for credit in a graduate degree program in CSE without adviser's approval.

CSE 5369 (3). HARDWARE SECURITY AND TROJAN DETECTION. Introduces several contemporary topics in hardware security, with a particular emphasis on hardware Trojans. Other topics include physically unclonable functions, the problem of counterfeiting, security implications of design for testability in hardware, intellectual property protection, and secure coprocessors and smart cards. *Prerequisite:* C or better in CSE 3381 or equivalent.

CSE 5376 (3). INTRODUCTION TO TELECOMMUNICATIONS. Overview of public and private telecommunications systems, traffic engineering, switching, transmission, and signaling. Channel capacity; media characteristics; Fourier analysis and harmonics; modulation; electromagnetic wave propagation and antennae, modems, and interfaces; and digital transmission systems. T1 carriers, digital microwave, satellites, fiber optics and SONET, and integrated services digital networks. 0.5 TCH Design.

CSE 5380 (3). VLSI ALGORITHMS. Introduces problems, algorithms, and optimization techniques used in the design of high-performance VLSI design. Emphasis on algorithms for partitioning, placement, floor planning, wire routing, and layout compaction. *Prerequisites:* C- or better in CSE 3353, 3381.

CSE 5381 (3). COMPUTER ARCHITECTURE. Introduces the state of the art in uniprocessor computer architecture, with a focus on the quantitative analysis and cost-performance trade-offs in instruction set, pipeline, and memory designs. Covers quantitative analysis of performance and hardware costs, instruction set design, pipeline, delayed branch, memory organization, and advanced instruction-level parallelism. *Prerequisite:* C- or better in CSE 4381.

CSE 5382 (3). COMPUTER GRAPHICS. Hardware and software components of computer graphics systems: display files, 2-D and 3-D transformations, clipping and windowing, perspective, hidden-line elimination and shaping, interactive graphics, and applications. *Prerequisite:* C- or better in CSE 3353.

CSE 5385/EE 5385 (3). MICROCONTROLLER ARCHITECTURE AND INTERFACING. Emphasizes the design of microcontroller-based computer systems. Starts with the presentation of microcontroller architecture and continues with the design of computer systems with hierarchical memory, input-output peripherals, and industry-standard bus interfaces. Includes a required laboratory with design projects in which students learn to use state-of-the-art CAD tools and laboratory instruments for hardware design, simulation, implementation, and debugging. *Prerequisite(s):* CSE 3381 or both EE 3381, 3181.

CSE 5387 (3). DIGITAL SYSTEMS DESIGN. Modern topics in digital systems design including the use of HDLs for circuit specification and automated synthesis tools for realization. Programmable logic devices are emphasized and used throughout the course. This course has heavy laboratory assignment content and a design project. *Prerequisite:* C- or better in CSE 3381 or C- or better in EE 2381.

CSE 5190 (1), 5191 (1), 5192 (1), 5193 (1), 5194 (1), 5290 (2), 5291 (2), 5292 (2), 5293 (2), 5294 (2), 5390 (3), 5391 (3), 5392 (3), 5393 (3), 5394 (3). SPECIAL TOPICS. Individual or group study of selected topics in computer science. *Prerequisite:* Permission of instructor.

CSE 5096 (0), 5196 (1), 5296 (2), 5396 (3). SENIOR THESIS. This course is part of the departmental distinction program. *Prerequisite:* Admission to the departmental distinction program.

Electrical Engineering

Professor Dinesh Rajan, **Chair**

Professors: Jerome K. Butler, Marc P. Christensen, Scott C. Douglas, Delores M. Etter, Gary A. Evans, W. Milton Gosney, Alireza Khotanzad, Sukumaran V.S. Nair (Computer Science and Engineering), Panos E. Papamichalis, Behrouz Peikari, Dinesh Rajan, Mitchell A. Thornton (Computer Science and Engineering). **Associate Professors:** Jinghong Chen, Carlos E. Davila, James G. Dunham, Ping Gui, Choon S. Lee. **Assistant Professor:** Joseph D. Camp. **Lecturer:** M. Scott Kingsley. **Visiting Research Assistant Professor:** Manjunath Somayaji. **Visiting Fellow:** Maria A.G. Martinez. **Adjunct Faculty:** Ahmed H. H'mimy, Hossam H. H'mimy, Shantanu Kangude, Clark D. Kinnaird, Khiem V. Le, Nhut Nguyen. **Emeritus Professors:** Kenneth L. Ashley, H. Charles Baker, Robert R. Fossum, Someshwar C. Gupta, Mandyam D. Srinath.

The discipline of electrical engineering is at the core of today's technology-driven society. Personal computers, computer-communications networks, integrated circuits, optical technologies, digital signal processors and wireless communications systems have revolutionized the way people live and work, and extraordinary advances in these fields are announced every day. Because today's society truly is a technological one, a degree in electrical engineering offers exceptional opportunities for financial security, personal satisfaction and an expansion of the frontiers of technology. The Department of Electrical Engineering at SMU offers a full complement of courses at the Bachelor's degree level in communications, networks, digital signal processing, optoelectronics, electromagnetics, microelectronics, and systems and control.

The mission of the department is as follows:

Through quality instruction and scholarly research, to engage each student in a challenging electrical engineering education that prepares graduates for the full range of career opportunities in the high-technology marketplace and enables them to reach their fullest potential as a professional and as a member of society.

Departmental goals include the following:

- Becoming one of the nation's leading electrical engineering departments by building peaks of excellence in the fields of communications/signal processing and micro/optoelectronics and by being a leader in innovative educational programs.
- Offering undergraduate curricula that equips graduates for careers that require ingenuity, integrity, logical thinking, and the ability to work and communicate in teams, and for the pursuit of graduate degrees in engineering or other fields such as business, medicine and law.
- Offering world-class Ph.D. programs that prepare graduates for academic careers, for research careers in the high-technology industry or for technical entrepreneurship.
- Promoting lifelong learning animated by a passion for the never-ending advance of technology.

The educational objectives of the Electrical Engineering Department undergraduate program are to enable graduates to do the following:

- Be successful in understanding, formulating, analyzing and solving a variety of electrical engineering problems.
- Be successful in designing a variety of engineering systems, products or experiments.
- Be successful in careers and/or graduate study in engineering or other areas such as business, medicine and law.
- Have the ability to assume leadership and entrepreneurial positions.

- Successfully function and effectively communicate both individually and in multidisciplinary teams.
- Understand the importance of lifelong learning, ethics and professional accountability.

The Electrical Engineering Department undergraduate student outcomes as related to the above educational objectives are as follows:

All graduates of the electrical engineering program are expected to have the following:

a) The ability to apply knowledge of mathematics, science and engineering.
b) The ability to design and conduct experiments, as well as to analyze and interpret data.
c) The ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
d) The ability to function on multidisciplinary teams.
e) The ability to identify, formulate and solve engineering problems.
f) An understanding of professional and ethical responsibility.
g) The ability to communicate effectively.
h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.
i) The recognition of the need for and the ability to engage in lifelong learning.
j) A knowledge of contemporary issues.
k) The ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

The Electrical Engineering Department is engaged in an ongoing assessment process that evaluates the success in meeting the educational objectives and outcomes and enhances the development of the program.

The undergraduate program in electrical engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The Electrical Engineering Department emphasizes the following major areas of research interest:

1. **Biomedical Engineering.** Overview of biomedical engineering, biomedical devices and instrumentation, biomedical signal capture, processing, and modeling.
2. **Communications and Information Technology.** Detection and estimation theory, digital communications, computer networks, spread spectrum, cellular communications, coding, encryption, compression, and wireless and optical communications.
3. **Control Systems.** Linear and nonlinear systems control, robotics, and computer and robot vision.
4. **Digital Signal Processing.** Digital filter design, system identification, spectral estimation, adaptive filters, neural networks and DSP implementations.
5. **Image Processing and Computer Vision.** Digital image processing, computer vision and pattern recognition.
6. **Lasers, Optoelectronics, Electromagnetic Theory and Microwave Electronics.** Classical optics, fiber optics, laser recording, integrated optics, dielectric waveguides, antennas, transmission lines, laser diodes and signal processors, and superconductive microwave and optoelectronic devices.

7. **Solid State Circuits, Computer-Aided Circuit Design and VLSI Design**. Electronic circuits, computer-aided design, very-large-scale integration design and memory interfaces.
8. **Electronic Materials and Solid State Devices.** Fabrication and characterization of devices and materials, device physics, noise in solid state devices, infrared detectors, AlGaAs and GaAs devices and materials, thin films, superconductivity, superconductive devices and electronics, hybrid superconductor-semiconductor devices, ultrafast electronics, and applications of a scanning tunneling microscope.
9. **Telecommunications.** Overview of modern telecommunications components and systems, data communications, digital telephony, and digital switching.

Department Facilities

The department has access to the Lyle School of Engineering academic computing resources, consisting of shared-use computer servers and desktop client systems connected to a network backbone. All of the servers in the Lyle School of Engineering are running some variant of UNIX or Microsoft Windows. There is one primary file server that exports files using FNS or CIFS protocols. Each user, whether faculty, staff or student, has a "home" directory on the central file server. This directory is exported to other servers or desktop computers, regardless of operating systems, as needed. There are more than 40 servers whose purposes include the following: file service, UNIX mail, Exchange mail, firewall, UNIX authentication, NT authentication, printer management, lab image download, classroom-specific software, X windows service, news, domain name service, computational resources and general use. This primary file server allows a user's files to be used as a resource in both the UNIX and Microsoft PC environments. Almost all computing equipment within the Lyle School of Engineering is connected to the engineering network at 100 megabits and higher. The network backbone is running at a gigabit per second over fiber. Most servers and all engineering buildings are connected to this gigabit backbone network. The backbone within the Engineering School is connected to both the Internet 2 and the campus network that is then connected to the Internet at large. In addition to servers and shared computational resources, the Lyle School of Engineering maintains a number of individual computing laboratories associated with the departments. Specific department laboratory facilities for instruction and research include the following:

Antenna Laboratory. This laboratory consists of two facilities for fabrication and testing. Most of the antennas fabricated at the SMU antenna lab are microstrip antennas. Small and less complex antennas are made with milling machines, and a photolithic/chemical etching method is used to make more complex and large antennas. Fabricated antennas are characterized with a Hewlett-Packard 5810B network analyzer. Workstations are available for antenna design and theoretical computation. Radiation characteristics are measured at the Dallas-SMU Antenna Characterization Lab located in Richardson, Texas.

Biomedical Engineering Laboratory. This laboratory contains instrumentation for carrying out research in electrophysiology, psychophysics and medical ultrasound. Four Grass physiographs permit the measurement of electroencephalograms as well as visual and auditory evoked brain potentials. The lab also contains a state-of-the-art dual Purkinje eye tracker and image stabilizer made by Fourward Technologies Inc., a Vision Research Graphics 21-inch Digital Multisync Monitor for

displaying visual stimuli, and a Cambridge Research Systems visual stimulus generator capable of generating a variety of stimuli for use in psychophysical and electrophysiological experiments. Ultrasound data can also measure with a Physical Acoustics apparatus consisting of a water tank, radio frequency pulser/receiver and radio frequency data acquisition system. Several PCs are also available for instrumentation control and data acquisition.

Multimedia Systems Laboratory. This facility includes an acoustic chamber with adjoining recording studio to allow high-quality sound recordings to be made. The chamber is sound-isolating with double- or triple-wall sheet rock on all four sides, as well as an isolating ceiling barrier above the drop ceiling. The walls of the chamber have been constructed to be nonparallel to avoid flutter echo and dominant frequency modes. Acoustic paneling on the walls of the chamber are removable and allow the acoustic reverberation time to be adjusted to simulate different room acoustics. The control room next to the acoustic chamber includes a large, 4-foot-by-8-foot acoustic window and an inert acoustic door facing the acoustic chamber. Up to 16 channels of audio can be carried in or out of the chamber to the control room. Experiments to be conducted in the Multimedia Systems Laboratory include blind source separation, deconvolution and dereverberation. Several of the undergraduate courses in electrical engineering use sound and music to motivate system-level design and signal processing applications. The Multimedia Systems Laboratory can be used in these activities to develop data sets for use in classroom experiments and laboratory projects for students to complete.

Wireless Systems Laboratory. This laboratory contains an array of infrastructure for experimentation across a number of wireless frequency bands, platforms and environments for research and instruction in lab-based courses on wireless communications and networking. The infrastructure includes 1) state-of-the-art test equipment for repeatability, control and observability of wireless channels, including complex channel emulators, fixed and mobile spectrum analyzers, wide-band oscilloscopes, and signal generators; 2) a wide range of reprogrammable wireless testbeds that operate from 400 MHz to 6 GHz for IEEE 802.11, cellular, and Bluetooth network and protocol development; and 3) diverse mobile phones and tablets that enable participatory sensing, context-aware applications and large-scale deployment in the field. The in-lab infrastructure is also enhanced by multiple outdoor antennas deployed on campus buildings and buses for understanding real wireless channels.

Semiconductor Processing Cleanroom. The 2,800 square-foot cleanroom, consisting of a 2,400 square-foot, class 10,000 room and a class 1,000 lithography area of 400 square feet, is located in the Jerry R. Junkins Engineering Building. A partial list of equipment in this laboratory includes acid and solvent hoods, photoresist spinners, two contact mask aligners, a thermal evaporator, a plasma asher, a plasma etcher, a turbo-pumped methane hydrogen reactive ion etcher, a four-target sputtering system, a plasma-enhanced chemical vapor deposition reactor, a diffusion-pumped four pocket e-beam evaporator, an ellipsometer, and profilometers. Other equipment includes a boron-trichloride reactive ion etcher, a chemical-assisted ion-beam etcher and a four-tube diffusion furnace. The cleanroom is capable of processing silicon, compound semiconductors and piezo materials for microelectronic, photonic and nanotechnology devices.

Submicron Grating Laboratory. This laboratory is dedicated to holographic grating fabrication and has the capability of sub tenth-micron lines and spaces. Equip-

ment includes a floating air table, an argon ion laser (ultraviolet lines) and an Atomic Force Microscope. This laboratory is used to make photonic devices with periodic features, such as distributed feedback, distributed Bragg reflector, grating-outcoupled and photonic crystal semiconductor lasers.

Photonic Devices Laboratory. This laboratory is dedicated to characterizing the optical and electrical properties of photonic devices. Equipment includes an optical spectrum analyzer, an optical multimeter, visible and infrared cameras, an automated laser characterization system for edge-emitting lasers, a manual probe test system for surface-emitting lasers, a manual probe test system for edge-emitting laser die and bars, and a near- and far-field measurement system.

Photonics Simulation Laboratory. This laboratory has specific computer programs that have been developed and continue to be developed for modeling and designing semiconductor lasers and optical waveguides, couplers and switches. These programs include WAVEGUIDE (calculates near-field, far-field, and effective indices of dielectric waveguides and semiconductor lasers with up to 500 layers, and each layer can contain gain or loss), GAIN (calculates the gain as a function of energy, carrier density and current density for strained and unstrained quantum wells for a variety of material systems), GRATING (uses the Floquet Bloch approach and the boundary element method to calculate reflection, transmission and outcoupling of dielectric waveguides and laser structures with any number of layers), and FIBER (calculates the fields, effective index, group velocity and dispersion for fibers with a circularly symmetric index of refraction profiles). Additional software is under development to model the modulation characteristics of photonic devices.

Photonic Architectures Laboratory. This laboratory is a fully equipped opto-mechanical and electrical prototyping facility, supporting the activities of faculty and graduate students in experimental and analytical tasks. The lab is ideally suited for the packaging, integration and testing of devices, modules and prototypes of optical systems. It has three large vibration isolated tables, a variety of visible and infrared lasers, single element 1-D and 2-D detector arrays, and a large complement of optical and optomechanical components and mounting devices. In addition, the laboratory has extensive data acquisition and analysis equipment, including an IEEE 1394 FireWire-capable image capture and processing workstation, specifically designed to evaluate the electrical and optical characteristics of smart pixel devices and FSOI fiber-optic modules. Support electronics hardware includes various test instrumentation, such as arbitrary waveform generators and a variety of CAD tools for optical and electronic design, including optical ray trace and finite difference time domain software.

Curriculum in Electrical Engineering

The undergraduate curriculum in electrical engineering provides the student with basic principles through required courses, and specialization through a guided choice of elective courses.

Areas of Specialization

Due to the extensive latitude in course selection and to the wide variety of courses available within the Department of Electrical Engineering and within the University as a whole, it is possible for the electrical engineering student to concentrate his or her studies in a specific professional area such as biomedical, computer engineering, engineering leadership, or smart wireless and embedded systems.

Each student may select one specialization or may personalize his or her degree by a particular choice of advanced major electives. Students should choose a specialization as soon as possible; however, for many students, this process continues from term to term as the individual becomes better acquainted with the discipline of electrical engineering and with the choices available.

Bachelor of Science in Electrical Engineering

The electrical engineering curriculum is administered by the Department of Electrical Engineering.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within the electrical engineering curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	28
MATH 1337, 1338, 2339, 2343 One of MATH 3308 (unless taking CSE 2353), 3315, 3337, 3353; CSE 3365 CHEM 1303 PHYS 1303, 1304; 1105 *or* 1106 One elective from PHYS 3305, 3344, 3374; CHEM 1304	
Economics	3
ECO 1311	
Core Electrical Engineering	24
EE 1322, 1382, 2322/2122, 2350, 2370/2170, 2381/2181, 3360	
Junior Electrical Engineering Courses	17
EE 3322/3122, 3381/3181, 3311, 3330, 3372	
Senior Design Sequence	6
EE 4311, 4312	
General Sequence or Specialization	27
General Sequence:	
CSE 1341, 1342 One of EMIS 3308, 3309; CEE 3302; CSE 4360 One of ME 2310, 2320, 2331, 2342; CSE 2341, 2353; *or* any 5000-level EE course approved by adviser One of EE 5356, 5357, 5381, 5385, 5387 One of EE 5310, 5312, 5314, 5321, 5330, 5332, 5333 One of EE 5360, 5362, 5370, 5371, 5372, 5373, 5374, 5375, 5376, 5377, 5378 6 hours from any EE or CSE 5000-level course selected with adviser's approval	
Engineering Leadership Specialization:	
CSE 1341, 1342 Three of EMIS 3308, 3309; CEE 3302; CSE 4360 One of ME 2310, 2320, 2331, 2342; CSE 2341, 2353; *or* any 5000-level EE course approved by adviser One of EE 5356, 5357, 5381, 5385, 5387	

Requirements for the Major (continued)	*Credit Hours*
Engineering Leadership Specialization (continued):	
One of EE 5310, 5312, 5314, 5321, 5330, 5332, 5333	
One of EE 5360, 5362, 5370, 5371, 5372, 5373, 5374, 5375, 5376, 5377, 5378	
Computer Engineering Specialization:	
CSE 1341, 1342, 2341, 2353, 3353	
EE 5381, 5385	
Two of EE 5357, 5387 or CSE 5343	
Smart Wireless and Embedded Systems Specialization:	
CSE 1341, 1342, 2341, 2353	
Three of EE 5330, 5333, 5357, 5378, 5379, 5381, 5387	
EE 5377, 5385 (or CSE 5385)	
	105

Note: EE 8000-level courses are primarily for graduate students but may be taken by highly qualified undergraduates with the approval of the adviser and the instructor. Special topics courses also are available.

Each student is expected to complete and file a plan of study with his or her academic adviser. The plan should state specific choices to meet the foregoing requirements and develop an area of specialization when specialization is desired.

Bachelor of Science in Electrical Engineering and Bachelor of Science With a Major in Mathematics

The Electrical Engineering Department and the Mathematics Department offer an integrated curriculum that enables a student to obtain both a B.S.E.E. degree and a B.S. degree with a major in mathematics.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	34
MATH 1337, 1338, 2339, 2343, 3315, 3337, 3353	
One of MATH 5315, 5325, 5331, 5332, 5334	
CHEM 1303	
PHYS 1303, 1304; 1105 *or* 1106	
Economics	3
ECO 1311	
Computer Science	6
CSE 1341, 1342	
Core Electrical Engineering	24
EE 1322, 1382, 2322/2122, 2350, 2370/2170, 2381/2181, 3360	
Junior Electrical Engineering Courses	17
EE 3311, 3322/3122, 3330, 3372, 3381/3181	

Requirements for the Major (continued)	*Credit Hours*
Advanced Electives	15
One of EE 5360, 5362, 5370, 5371, 5372, 5373, 5374, 5375, 5376, 5377, 5378	
One of EE 5356, 5357, 5381, 5385, 5387	
One of EE 5310, 5312, 5314, 5321, 5330, 5332, 5333	
6 hours from any EE or CSE 5000-level course approved by adviser	
Senior Design Sequence	6
EE 4311, 4312	
	105

Bachelor of Science in Electrical Engineering and Bachelor of Science With a Major in Physics

The Electrical Engineering Department and the Physics Department offer an integrated curriculum that enables a student to obtain both a B.S.E.E. degree and a B.S. degree with a major in physics.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	48
MATH 1337, 1338, 2339, 2343, 3315	
CHEM 1303	
PHYS 1303/1105, 1304, 3305, 3344, 3374, 4211, 4321, 5337, 5382, 5383	
Economics	3
ECO 1311	
Computer Science	3
CSE 1341 *or* 1342	
Core Electrical Engineering	27
EE 1322, 1382, 2322/2122, 2350, 2370/2170, 2381/2181, 3360, 3372	
Junior Electrical Engineering Courses	14
EE 3311, 3322/3122, 3381/3181	
EE 3330 *or* PHYS 4392	
Advanced Electrical Engineering Electives	9
One of EE 5360, 5370–74, 5376–78	
One of EE 5356, 5357, 5381, 5385, 5387	
One of EE 5310, 5312, 5314, 5321, 5330, 5332, 5333	
Senior Design Sequence	6
EE 4311, 4312	
	110

Bachelor of Science in Electrical Engineering (Biomedical Specialization)

The Department of Electrical Engineering offers a B.S.E.E. degree with a specialization in biomedical engineering. This program enables students to satisfy requirements for admission to medical school.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Specialization	*Credit Hours*
Mathematics and Science	53
MATH 1337, 1338, 2339, 2343 3-hour elective MATH course at the 3000 level or above BIOL 1401, 1402, 3304, 3350 CHEM 1303/1113, 1304/1114, 3371/3117, 3372/3118 PHYS 1303/1105, 1304/1106	
Economics	3
ECO 1311	
Computer Science	3
CSE 1341 *or* 1342	
Core Electrical Engineering	31
EE 1322, 1382, 2322/2122, 2350, 2370/2170, 2381/2181, 3360, 3372, 3381/3181	
Junior Electrical Engineering	6–7
Two from EE 3311, 3322/3122, 3330	
Advanced Electrical Engineering Elective	3
Any EE 5000-level course approved by adviser.	
Biomedical Engineering	6
EE 5340, 5345	
Senior Design Sequence	6
EE 4311, 4312	
	111–112

Minor in Electrical Engineering

For information on a minor in electrical engineering, the student should consult the department. A total of 18 term credit hours in electrical engineering courses are required: **EE 2322, 3322, 2350, 2370** and six credit hours of elective electrical engineering courses at the 3000 level or above.

Electrical Engineering Courses (EETS)

The third digit in a course number designator represents the subject area of the course. The following designators are used:

XX1X Electronic Materials
XX2X Electronic Devices
XX3X Quantum Electronics and Electromagnetic Theory
XX4X Biomedical Science
XX5X Network Theory and Circuits
XX6X Systems
XX7X Information Science and Communication Theory
XX8X Computers and Digital Systems
XX9X Individual Instruction, Research, Seminar and Special Project

EE 1301 (3). MODERN ELECTRONIC TECHNOLOGY. A lecture and laboratory course examining a number of topics of general interest including the fundamentals of electricity, household electricity and electrical safety, an overview of microelectronics, concepts of frequency and spectrum, the phonograph and the compact disc, bar codes, and communication by radio and TV. The course is designed for nontechnical students who want to be more knowledgeable. (Not open to EE majors.)

EE 1322 (3). SURVEY OF ELECTRICAL AND ELECTRONIC DEVICES. Introduces beginning electrical engineering to contemporary electrical and electronic devices, including transformers, alternators, generators, motors, relays, loudspeakers, vacuum tubes, transistors, light-emitting diodes, photodetectors, and integrated circuits. Also, how these devices are used in contemporary products. Students research a device type, build a circuit application, and reverse engineer a product. *Prerequisites:* Admission as an engineering or physics student is recommended but not required; some knowledge of calculus is helpful.

EE 1382 (3). FUNDAMENTALS OF ELECTRICAL ENGINEERING. Introduces engineering students to the fundamentals of modern electrical engineering. The material covers the basics of the creation, manipulation, storage and transmission of information in electronic form. Topics will include time and frequency domain signal analysis, mathematics and physics of basic building blocks of electrical systems, sampling, filtering, data coding for compression and reliability, communications, digital imaging and storage technologies. Weekly laboratory and design assignments will be an integral part of the course.

EE 2122 (1). EE LABORATORY: ELECTRONIC CIRCUITS I. Experimental study of basic MOS and bipolar transistors in analog and digital applications. Logic gates and linear and nonlinear applications of operational amplifiers. 0.5 TCH Design. *Prerequisite:* C- or better in EE 2350. *Corequisite:* EE 2322.

EE 2170 (1). EE LABORATORY: DESIGN AND ANALYSIS OF SIGNALS AND SYSTEMS. This laboratory course introduces students to various techniques for analyzing real signals and designing various linear time-invariant systems. The labs incorporate both software-based simulations and actual circuit implementations. Web authoring tools are used for the production of multimedia lab reports. *Prerequisite:* CSE 1341. *Corequisite:* EE 2370.

EE 2181 (1). LABORATORY: DIGITAL COMPUTER LOGIC. Analysis and synthesis of combinational and sequential digital circuits. Basic digital computer logic circuits are designed, simulated using VERILOG HDL and implemented using Digi-Designer kit and integrated circuits. *Corequisite:* EE 2381

EE 2190 (1), 2290 (2), 2390 (3), 2490 (4). SOPHOMORE PROJECT.

EE 2322 (3). ELECTRONIC CIRCUITS I. An introduction to nonlinear devices used in electronic circuits. The course will cover the DC and AC analysis of circuits employing diodes, bipolar junction transistors (BJTs) and MOSFETs. Topics include device I–V characteristics, biasing, transfer characteristic, gain, power dissipation and the design of amplifier circuits and logic circuits. SPICE simulation will also be introduced in this course for DC and transient simulations. *Prerequisite:* EE 2350 (Grade of C- or better). Concurrent registration in EE 2122.

EE 2350 (3). CIRCUIT ANALYSIS I. Analysis of resistive electrical circuits, basic theorems governing electrical circuits, power consideration, analysis of circuits with energy storage elements. Transient and sinusoidal steady-state analysis of circuits with inductors and capacitors. *Corequisite:* MATH 2343 and PHYS 1304.

EE 2370 (3). DESIGN AND ANALYSIS OF SIGNALS AND SYSTEMS. This course introduces students to standard mathematical tools for analyzing and designing various continuous-time signals and systems. Frequency domain design and analysis techniques are studied as well as the Fourier and Laplace Transforms. Applications to be studied include modulation and demodulation in communications and processing of audio signals. *Prerequisite:* MATH 2343 and a C- or better in EE 2350. *Corequisite:* EE 2170.

EE 2381 (3). DIGITAL COMPUTER LOGIC. Digital computers and information; combinational logic circuits; combinational logic design; sequential circuits including finite-state machines; registers and counters; and memory and programmed logic design. Design and simulation of digital computer logic circuits are studied. *Corequisite:* EE 2181.

EE 3122 (1). EE LABORATORY: ELECTRONIC CIRCUITS II. Experiments in analog electronic circuit design. 0.5 TCH Design. *Prerequisite:* C- or better in EE 2322 and 2122. *Corequisite:* EE 3322.

EE 3181 (1). EE LABORATORY: MICROCONTROLLERS AND EMBEDDED SYSTEMS. Fundamentals of microprocessor design, assembly language programming, and embedded system implementation. Students study a widely used family of microprocessors for microcontroller-based system design, assembly-level programming, and hardware interfacing. *Prerequisites:* C- or better in EE 2181, 2381. *Corequisite:* EE 3381.

EE 3190 (1), 3290 (2), 3390 (3), 3490 (4). JUNIOR PROJECT.

EE 3311 (3). SOLID STATE DEVICES. This laboratory-oriented elective course introduces undergraduates to the working principles of semiconductor devices by fabricating and testing silicon MOSFET transistors and III–V based semiconductor lasers in the SMU clean room. Lectures will explain the basic operation of diodes, bipolar transistors, field effect transistors, light-emitting diodes, semiconductor lasers, and other photonic devices. Additional lectures will discuss the basics of device processing which include photolithography, oxidation, diffusion, ion-implantation, metalization and etching. Laboratory reports describing the fabrication and testing of devices will account for a major portion of the course grade. *Prerequisites:* CHEM 1303 and a C- or better in EE 2350.

EE 3322 (3). ELECTRONIC CIRCUITS II. Introduction to MOSFET analog electronic circuits. The course is designed to provide the student with a background for understanding modern electronic circuits such as digital-to-analog and analog-to-digital converters, active filters, switched-capacitor circuits and phase-locked loops. Topics include MOSFET SPICE models, basic MOSFET, single-stage amplifiers, current-mirrors, differential amplifier stages, source-follower buffer stages, high-gain common-source stages, operational amplifier, frequency response and negative feedback. *Prerequisites:* EE 2322 (Grade of C- or better), EE 2122 (Grade of C- or better) and EE 2350 (Grade of C- or better). Concurrent registration in EE 3122.

EE 3330 (3). ELECTROMAGNETIC FIELDS AND WAVES. Vector analysis applied to static electric and magnetic fields, development of Maxwell's equations, elementary boundary-value problems, and determination of capacity and inductance. Introduction to time-varying fields, plane waves, and transmission lines. *Prerequisites:* EE 2350 and MATH 2339.

EE 3352 (3). FUNDAMENTALS OF ELECTRIC POWER ENGINEERING. Introduction to electric power generation and distribution. Topics include energy resources such as fossil, hydraulic, wind, solar, and nuclear energies. Also, three-phase power generators and transformers, and electric machines such as induction motors, synchronous generators, DC and stepper motors, and power converters. *Prerequisite:* EE 2350 or permission of instructor.

EE 3360 (3). STATISTICAL METHODS IN ELECTRICAL ENGINEERING. This course is an introduction to probability, elementary statistics, and random processes. Topics include fundamental concepts of probability, random variables, probability distributions, sampling, estimation, elementary hypothesis testing, basic random processes, stationarity, correlation functions, power-spectral-density functions, and the effect of linear systems on such processes. *Prerequisite:* C- or better in both EE 2170 and EE 2370.

EE 3372 (3). INTRODUCTION TO SIGNAL PROCESSING. This course is designed to give juniors a thorough understanding of the techniques needed for the analysis of discrete-time systems. Topics include Fourier methods and Z-Transform techniques, discrete Fourier transform, fast Fourier transform and applications, and digital filters. *Prerequisite:* C- or better in both EE 2370 and EE 2170.

EE 3381 (3). MICROCONTROLLERS AND EMBEDDED SYSTEMS. An introduction to microcontrollers and embedded systems. Students study a widely used family of microprocessors as an introduction to architecture, software, and interfacing concepts. Topics include number systems and arithmetic operations for computers, assembly and C language programming, microprocessor organization and operation, memory and I/O port interfacing, and microprocessor-based controller design. Students write, assemble, and execute embedded programs designed for various applications. *Prerequisites:* C- or better in EE 2381. *Corequisite:* EE 3181.

EE 4090 (0), 4490 (4). SENIOR PROJECT.

EE 4096 (0), 4196 (1), 4296 (2), 4396 (3). SENIOR THESIS. Part of the departmental distinction program. *Prerequisite:* Admission to the departmental distinction program.

EE 4311 (3). SENIOR DESIGN I. Areas covered are tailored to the student's area of specialization. The student chooses a specific senior design project in electrical engineering from the available projects proposed by the faculty. Depending upon the specifics of the project,

each student designs, constructs, and tests a solution and then submits a formal report to the faculty in charge of the project. *Prerequisites:* EE 2322, 3381 and EE senior standing.

EE 4312 (3). SENIOR DESIGN II. Areas covered are tailored to the student's area of specialization. The design project selected may be a continuation of the project undertaken in EE 4311, a new project selected from the list of available projects offered by the faculty, or a project proposed by the student and approved by the faculty. Depending upon the specifics of the project, a team designs, constructs, and tests a solution and then submits a formal report to the faculty in charge of the project. *Prerequisite:* EE 4311.

EE 5050 (0). UNDERGRADUATE INDUSTRIAL INTERNSHIP. This course represents a term of industrial work experience for non-cooperative education students. The course designates a student as full time for the term, but carries no academic credit. Students register for the course in the same manner as other SMU courses except that no tuition is charged. The course grade is determined by the grading of a written report by the student's adviser at the end of the term.

EE 5176 (1). NETWORK SIMULATION LABORATORY. This is an introductory hands-on course in simulations of computer networks, intended to be taken simultaneously with EE 5376 or other networks courses. Lab exercises use OPNET and other simulation software to visualize network protocols and performance. Students run a number of simulation exercises to set up various network models, specify protocols, and collect statistics on network performance. These exercises will be designed to complement classroom instruction. General familiarity with PCs is recommended. *Corequisite:* EE 5376 and senior standing.

EE 5190 (1), 5290 (2). SPECIAL TOPICS. This special-topics course must have a section number associated with a faculty member. The second digit corresponds to the number of TCH, which ranges from 1 to 3. The last digit ranges from 0 to 9 and represents courses with different topics.

EE 5310 (3). INTRODUCTION TO SEMICONDUCTORS. The basic principles in physics and chemistry of semiconductors that have direct applications on device operation and fabrication are studied. Topics include basic semiconductor properties, elements of quantum mechanics, energy band theory, equilibrium carrier statistics, carrier transport, and generation-recombination processes. These physical principles are applied to semiconductor devices. Devices studied include metal-semiconductor junctions, p-n junctions, LEDs, semiconductor lasers, bipolar junction transistor, field-effect transistors, and integrated circuits. The emphasis will be on obtaining the governing equations of device operation based on physical properties. *Prerequisite:* EE 3311.

EE 5312 (3). COMPOUND SEMICONDUCTOR DEVICES AND PROCESSING. This is a laboratory-oriented elective course for upper level undergraduates and graduate students providing in depth coverage of processing of InP and GaAs based devices in addition to silicon integrated circuit processing. Students without fabrication experience will fabricate and characterize MOSFETS and semiconductor lasers. Students with some previous fabrication experience (such as EE 3311) will fabricate and test an advanced device mutually agreed upon by the student(s) and the instructor. Examples of such devices include High Electron Mobility Transistors (HEMTs), Heterojunction Bipolar Transistors (HBTs), phase shifters, distributed Bragg reflector (DBR) lasers, grating assisted directional couplers and semiconductor lasers from developing materials such as GaInNAs. The governing equations of photolithography, oxidation, diffusion, ion-implantation, metallization, and etching will be derived from fundamental concepts. Silicon process modeling will use the CAD tool SUPREM. Optical components will be modeled using the SMU developed software WAVEGUIDE, GAIN and GRATING. A laboratory report describing the projects will be peer-reviewed before final submission. *Prerequisite:* EE 3311 or equivalent.

EE 5313 (3). SOLAR CELLS AND APPLICATIONS. This laboratory-oriented course explores the sun's energy as a source of electrical power and the working principles of silicon and III–V solar cells. Covers characteristics of the sun, semiconductor properties, p-n junctions, solar cell fabrication, and photovoltaic system design. Students fabricate and test silicon solar cells in the SMU cleanroom. Lectures and class discussions explain the basic operation of p-n junction diodes and solar cells along with the basics of device processing, including photolithography, oxidation, diffusion, ion implantation, metallization, and etching. *Prerequisite:* EE 3311 or permission of instructor.

EE 5314 (3). INTRODUCTION TO MICROELECTROMECHANICAL SYSTEMS. This course develops the basics for microelectromechanical devices and systems, including microactuators,

microsensors, and micromotors; principles of operation; micromachining techniques (surface and bulk micromachining); IC-derived microfabrication techniques; and thin lm technologies as they apply to MEMS. *Prerequisite:* EE 3311.

EE 5321 (3). SEMICONDUCTOR DEVICES AND CIRCUITS. A study of the basics of CMOS integrated analog circuits design. Topics include MOSFET transistor characteristics, DC biasing, small-signal models, different amplifiers, current mirrors, single- and multi-stage electronic amplifiers, frequency response of electronic amplifiers, amplifiers with negative feedback and stability of amplifiers. Each student will complete one or more design projects by the end of the course. *Prerequisites:* EE 3122 and EE 3322.

EE 5330 (3). ELECTROMAGNETICS: GUIDED WAVES. Application of Maxwell's equations to guided waves. Transmission lines, and plane wave propagation and reflection. Hollow waveguides and dielectric waveguides. Fiber optics. Cavity and dielectric resonators. *Prerequisite:* EE 3330.

EE 5332 (3). ELECTROMAGNETICS: RADIATION AND ANTENNAS. Polarization, reflection, refraction, and diffraction of EM waves. Dipole, loop, and slot/reflector antennas. Array analysis and synthesis. Self and mutual impedance. Radiation resistance. *Prerequisite:* EE 3330.

EE 5333 (3). ANTENNAS AND RADIO WAVE PROPAGATION FOR PERSONAL COMMUNICATION. *Prerequisite:* EE 3330.

EE 5336 (3). INTRODUCTION TO INTEGRATED PHOTONICS. This course is directed at the issues of integrated photonics. Four major areas are covered: 1) fundamental principles of electromagnetic theory; 2) waveguides; 3) simulation of waveguide modes, and 4) photonic structures. The emphasis is slightly heavier into optical waveguides and numerical simulation techniques because advances in optical communications will be based on nanostructure waveguides coupled with new materials. Topics include Maxwell's equations; slab, step index, rectangular and graded index wave guides; dispersion; attenuations; non-linear effects; numerical methods; and coupled mode theory. Mathematical packages such as MATLAB and/or Mathematica will be used extensively in this class. *Prerequisites:* EE 3311 (Grade of C- or better) and EE 3330 (Grade of C- or better) or permission of instructor.

EE 5340 (3). BIOMEDICAL INSTRUMENTATION. Application of engineering principles to solving problems encountered in biomedical research. Topics include transducer principles, electrophysiology, and cardiopulmonary measurement systems. *Prerequisite:* C- or better in EE 2322 and EE 2122. Junior standing.

EE 5345 (3). MEDICAL SIGNAL ANALYSIS. Looks at the analysis of discrete-time medical signals and images. Topics include the design and of discrete-time filters, medical imaging and tomography, signal and image compression and spectrum estimation. The course project explores the application of these techniques to actual medical data. *Prerequisite:* EE 3372.

EE 5356/CSE 5356 (3). VLSI DESIGN AND LABORATORY. Explores the design aspects involved in the realization of CMOS integrated circuits from device up to the register/subsystem level. Addresses major design methodologies with emphasis placed on structured, full-custom design. Also, the MOS device, CMOS inverter static characteristics, CMOS inverter dynamic characteristics, CMOS transistor fabrication technology, combination logic circuit, alternative static logic circuit, sequential logic circuit, dynamic logic circuit, propagation delay and interconnect, power dissipation and design for low power, memory device (DRAM/SRAM/ROM), ESD protection, packaging, testing, and VLSI design flow. Students use state-of-the art CAD tools to verify designs and develop efficient circuit layouts. *Prerequisites:* C- or better in EE 2181, 2381, 3311.

EE 5357 (3). CAE TOOLS FOR STRUCTURED DIGITAL DESIGN. This course concentrates on the use of CAE tools for the design and simulation of complex digital systems. Verilog, a registered trademark of Cadence Design Systems, Inc., hardware description language will be discussed and used for behavioral and structural hardware modeling. Structured modeling and design will be emphasized. Design case studies include a pipelined processor, cache memory, UART, and a floppy disk controller. *Prerequisites:* C- or better in EE 2381, junior standing, or permission of instructor.

EE 5360 (3). ANALOG AND DIGITAL CONTROL SYSTEMS. Feedback control of linear continuous and digital systems in the time and frequency domain. Topics include plant representation, frequency response, stability, root locus, linear state variable feedback, and design of compensators. *Prerequisite:* EE 3372.

EE 5370 (3). COMMUNICATION AND INFORMATION SYSTEMS. An introduction to communication in modulation systems in discrete and continuous time, information content of signals, and the transition of signals in the presence of noise. Amplitude, frequency, phase and pulse modulation. Time and frequency division multiplexing. *Prerequisite:* EE 3360.

EE 5371 (3). ANALOG AND DIGITAL FILTER DESIGN. Approximation and analog design of Butterworth, Chebyshey, and Bessel filters. Basic frequency transformations for designing low-pass, band-pass, band-reject, and high-pass filters. Concept of IIR digital filters using impulse-invariant and bilinear transformations. Design of FIR digital filters using frequency sampling and window methods. Canonical realization of IIR and FIR digital filters. Wave digital filters. Introduction to two-dimensional filters. *Prerequisite:* EE 3372.

EE 5372 (3). TOPICS IN DIGITAL SIGNAL PROCESSING. This course is intended to provide an extended coverage of processing of discrete-time signals. Discrete-time signals and the analysis of systems in both the time and frequency domains are reviewed. Other topics covered will include multi-rate signal processing, digital filter structures, filter design and power spectral estimation. *Prerequisite:* EE 3372.

EE 5373 (3). DSP PROGRAMMING LABORATORY. Digital signal processors (DSPs) are programmable semiconductor devices used extensively in digital cellular phones, high-density disk drives, and high-speed modems. This laboratory course focuses on programming the Texas Instruments TMS320C50, a fixed-point processor. The emphasis is on assembly language programming, and the laboratories utilize a hands-on approach that will focus on the essentials of DSP programming while minimizing signal processing theory. Laboratory topics include implementation of FIR and IIR filters, the FFT, and a real-time spectrum analyzer. *Suggested:* Some basic knowledge of discrete-time signals and digital logic systems. *Prerequisite:* EE 3372.

EE 5374 (3). DIGITAL IMAGE PROCESSING. Provides an introduction to the basic concepts and techniques of digital image processing. Topics covered will include characterization and representation of images, image enhancement, image restoration, image analysis, image coding, and reconstruction. *Prerequisite:* EE 5372.

EE 5375 (3). RANDOM PROCESSES IN ENGINEERING. An introduction to probability and stochastic processes as used in communication and control. Topics include probability theory, random variables, expected values and moments, multivariate Gaussian distributions, stochastic processes, autocorrelation and power spectral densities, and an introduction to estimation and queuing theory. *Prerequisite:* EE 3360.

EE 5376/CSE 5376 (3). INTRODUCTION TO COMPUTER NETWORKS. This is an introductory course that surveys basic topics in communication networks with an emphasis on layered protocols and their design. Topics include OSI protocol reference model, data link protocols, local area networks, routing, congestion control, network management, security, and transport layer protocols. Network technologies include telephony, cellular, Ethernet, Internet protocol (IP), TCP, and ATM. Assignments may include lab exercises involving computer simulations. *Corequisite:* EE 5176 and senior standing.

EE 5377 (3). EMBEDDED WIRELESS DESIGN LABORATORY. A wide variety of real-world experiences in wireless communications and networking using FPGAs equipped with embedded microprocessors. Covers basic wireless concepts of scheduled and random access as well as modulation and power control via labs that enable implementation of cellular and 802.11-based wireless protocols such as TDMA, Aloha, CSMA, and CSMA/CA. Also, broader topics that range from embedded programming, interrupt-driven operation, and FPGA-based design are covered in some depth. In a course project, student teams design novel wireless protocols and carry out experiments to measure the performance. *Prerequisite:* C- or better in EE 3360 or equivalent, or permission of instructor.

EE 5378 (3). MOBILE PHONE EMBEDDED DESIGN. In this course, students learn how to develop embedded software for the most widely used smartphone platforms with an emphasis on wireless and sensing applications. Topics include user interface design such as multi-touch and basic HCI design tenets, storing and fetching data with local networked systems and databases, localization via GPS and wireless signal triangulation, sensing environmental and user characteristics, networking with various wireless protocols, graphics rendering, multimedia streaming, and designing for performance such as controlling memory leaks, object allocation, and multi-threading. Content from the course draws from various fields including wireless communications and networking, embedded programming, and computer architecture.

EE 5379 (3). OPTIMIZATION IN WIRELESS NETWORKS. Covers a wide variety of optimization problems in the design and operation of wireless networks. Introduces basic linear programming and integer linear programming concepts and explains these concepts using examples from wired and wireless networks. Also, the basic structure and design of various wireless networks, including cellular networks (such as GSM) and wireless LANs (e.g., those based on 802.11g/n). *Prerequisite:* EE 2170 or equivalent, or permission of instructor.

EE 5381 (3). DIGITAL COMPUTER DESIGN. Emphasizes design of digital systems and register transfer. Design conventions, addressing modes, interrupts, input-output, channel organization, high-speed arithmetic, hardwired and microprogrammed control. Central processor organization design and memory organization. Each student will complete one or more laboratory projects by the end of the course. *Prerequisites:* EE 2181 (grade of C- or better) and EE 2381 (grade of C- or better). Junior standing.

EE 5385/CSE 5385 (3). MICROCONTROLLER ARCHITECTURE AND INTERFACING. Emphasizes the design and interfacing of microprocessor computer systems. Topics cover processor architecture and interfacing, memory structure and interfacing, bus systems, support chips, tools for hardware design, analysis, simulation, implementation, and debugging. The theoretical part of the course is complemented by a laboratory in which students get practical experience in designing and analyzing interfaces to processors, memories, and peripherals. *Prerequisite(s):* C- or better in CSE 3381 or both EE 3181, 3381.

EE 5387/CSE 5387 (3). DIGITAL SYSTEMS DESIGN. Modern topics in digital systems design including the use of HDLs for circuit specification and automated synthesis tools for realization. Programmable logic devices are emphasized and used throughout the course. This course has heavy laboratory assignment content and a design project. *Prerequisite:* EE 2381 (grade of C- or better) or CSE 3381 (grade of C- or better).

EE 5390 (3), 5391 (3), 5392 (3), 5393 (3), 5395 (3), 5490 (4). SPECIAL TOPICS. This special-topics course must have a section number associated with a faculty member. The second digit corresponds to the number of TCH, which ranges from 1 to 3. The last digit ranges from 0 to 9 and represents courses with different topics.

Telecommunication Courses (EETS)

EETS XX0X. TELECOMMUNICATIONS. This special topics course must have a section number associated with a faculty member. The second digit, which ranges from 1 to 3, corresponds to the number of term credit hours. The last digit ranges from 0 to 9 and represents courses with different topics.

EETS 5301 (3). INTRODUCTION TO TELECOMMUNICATIONS. Overview of public and private telecommunications systems, traffic engineering, switching, transmission, and signaling. Channel capacity, media characteristics, Fourier analysis and harmonics, modulation, electromagnetic wave propagation and antennas, modems and interfaces, and digital transmission systems. T1 carriers, digital microwave, satellites, fiber optics and SONET, and Integrated Services Digital Networks.

EETS 5302 (3). TELECOMMUNICATIONS MANAGEMENT AND REGULATION. The managerial sequel to EETS 5301 (formerly EE 5301). It provides a historical review of the most significant regulation and management issues affecting the telecommunications industry over the past 100 years. Also explores the regulatory environment it operates in today through the study of current events, articles, and recent state and federal legislation. *Prerequisite:* EETS 5301 (formerly EE 5301) or experience in the telecommunications industry.

EETS 5303 (3). FIBER OPTIC TELECOMMUNICATIONS. Introductory course on the practical concepts involved in optical fiber communications systems. Covers basic optical principles; dielectric slab-waveguides, fiber waveguides, and integrated optics devices; and the major components of a fiber communications link, including optical sources, detectors, and fibers.

EETS 5304 (3). NETWORK PROTOCOLS. Introduces the protocol architecture of the Internet, following a bottom-up approach to the protocol layers. The objective of this core course is to provide an understanding of the internetworking concepts in preparation for advanced networking courses. It first covers networking technologies such as local area networks, packet switching, and ATM. Next, it examines the Internet protocol (IP) and TCP/UDP in-depth. The course finishes with an overview of important application protocols such as HTTP, client/server computing, SMTP, FTP, and SNMP. *Prerequisite:* EETS 5301 or equivalent.

Engineering Management, Information and Systems

Associate Professor Richard S. Barr, **Chair**

Professors: Jeffery L. Kennington, Stephen A. Szygenda, Jeff Tian (Computer Science and Engineering). **Associate Professors:** Richard V. Helgason, Eli V. Olinick, Jerrell T. Stracener. **Assistant Professors:** Michael Hahsler, Andrew Junfang Yu. **Senior Lecturer:** Thomas F. Siems. **Lecturers:** Leslie-Ann Asmus, Gretchen H. Coleman, Rachel P. Goodman. **Adjunct Faculty:** Karl J. Arunski, Chris L. Askew, John D. Baschab, Charles W. Beall, Robert L. Bell, William D. Bell, Ann E. Broihier, George W. Chollar, Randall J. Clendening, Eric B. Cluff, David S. Cochran, Howard S. Cowin, Christopher M. Davis, Matthew L. Durchholz, Dennis J. Frailey, John R. Graham, III, Ganesh L. Harpavat, James H. Hinderer, Michael E. Hopper, Gerard V.S. Ibarra, John I. Lipp, William H. Muto, William P. Nanry, Dario Nappa, Robert S. Oshana, David A. Peters, Oscar K. Pickels, Jon C. Piot, James B. Rodenkirch, Christopher A. Rynas, Mark E. Sampson, Nandlal M. Singh, Stephen C. Skinner, Gheorghe M. Spiride, John W. Via, III, Jeffery L. Williams, Timothy D. Woods, John R. Yarrow, Hossam A. Zaki.

The EMIS Department brings together the school's technical management and operations areas to offer a Bachelor of Science with a major in management science. This academic program in management science focuses on computer models for decision-making and the application of engineering principles and techniques to enhance organizational performance. Faculty specializations include optimization, advanced analytics, telecommunications network design and management, supply-chain systems, systems engineering, logistics, quality control, reliability engineering, data science, information engineering, benchmarking, operations planning and management, network optimization, and mathematical programming.

The same systems-oriented, mathematical-model-based approach that is the cornerstone of engineering also has powerful application within organizations and their operations. This is the field of management science – also termed "the science of better" – the discipline of applying advanced analytical methods to help make better decisions.

Dual Degree Programs and the 4+1 Program

Because of the flexibility of the curriculum, the majority of management science majors choose to receive a second major or one or more minors from a wide range of other disciplines. Examples include a Bachelor of Science; a major in management science; or a second Bachelor's degree in economics, mathematics, business, computer science, history, psychology, Spanish or French.

Other management science majors continue their studies to obtain a Master's of Science in Engineering Management, systems engineering, information engineering or operations research. The 4+1 Program permits management science majors to obtain both undergraduate and graduate degrees in a shorter time and with fewer courses than if taken separately or from different universities.

More information on these and other options available to management science majors is available at www.smu.edu/Lyle/Departments/EMIS. EMIS faculty and advisers are also available to answer questions about the program.

Computing Facilities

Students in the EMIS Department have access to a wide range of computing facilities and networking equipment. The department manages three PC-based computing labs, including the Enterprise Systems Design Laboratory created for students in the senior design course. General-use UNIX and Linux machines (including eight-processor 64-bit Xeon workstations) provide advanced computing, analytical software and Web hosting to all engineering students. Windows- and Linux-based PCs

and workstations are the primary desktop equipment. All computing facilities are networked via high-speed Ethernet, with Gigabit Ethernet connections to Internet 1, Internet 2 and the National Lambda Rail research network. Open computing labs and wireless services provide additional facilities access points for students.

Curriculum in Management Science

Management science deals with the development of mathematically based models for planning, managing, operating and decision-making. In the EMIS curriculum, these methods are also applied to the design and management of efficient systems for producing goods and delivering services.

A management scientist at a major airline would be concerned with building mathematical models to decide the best flight schedules, plane routes, and assignments of pilots and crews to specific flights and of flights to specific gates, as well as the best number of planes to own and operate, cities to fly to, cities to use as major hubs, layout for an airport terminal, overbooking policy, and location to refuel aircraft. Optimal and good usable solutions for such issues can be uncovered through analysis with computer-based mathematical models. The management scientist develops an understanding of a practical decision problem, then designs and constructs a model that incorporates data from the MIS department and produces a high-quality solution.

Because of its generality, management science has broad applications in all engineering disciplines and in the fields of computer science, economics, finance, marketing, medicine, logistics, production, information engineering and statistics. Management science methods are used extensively in industry and government, and SMU's EMIS program prepares the technically oriented student to excel in today's competitive business environment.

ABET, http://www.abet.org, does not provide accreditation for the discipline of management science.

Bachelor of Science With a Major in Management Science

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major *[This table is updated in the addendum]*	*Credit Hours*
Mathematics	12
MATH 1337, 1338, 3315, 3353	
Science/Social Science	21
ECO 1311, 1312	
3 hours in natural science from group 1	
3 hours in natural science or technology from groups 1 and 2	
9 hours from groups 1, 2, and 3	
Group 1:	
BIOL 1305, 1308, 1310, 1401, 1402	
CEE 1331	
CHEM 1303/1113, 1304/1114	
GEOL 1301, 1305, 1307, 1308, 1313, 1315, 2320	
PHYS 1303/1105, 1304/1106, 1307/1105, 1308/1106, 1320	

Requirements for the Major (continued)	*Credit Hours*
Science/Social Science (continued)	
Group 2:	
ANTH 2315, 2363	
CEE 1301, 1378	
CSE 1331	
EE 1301, 1382	
ME 1301, 1202/1102, 1303	
PHYS 1403, 1404	
Group 3: Other courses in ANTH, ECO, PSYC, or SOCI	
Major Concentration	45
EMIS 1360, 2360, 3308 (or MNO 3370), 3309, 3340, 3360, 3361, 4395, 5362	
CEE 3302	
CSE 1341, 1342, 4360	
6 hours from EMIS courses at the 5000 level or above	
Business	6
ACCT 2301	
MKTG 3340	
Electives	15
Adviser must approve electives.	
	99

Note: All management science majors must earn a grade of at least *C-* in all courses taken in fulfillment of the requirements for the major; however, a grade of *C* or better is required in all subset classes. All courses must be taken for a grade (not pass/fail), with the exception of those courses for which the student has received test credit.

Minor in Management Science

For information on a minor in management science, the student should consult the department. The minor in management science operates concurrently with the B.S. degree. Students seeking a minor in management science must meet the same admission and subset requirements as students seeking a B.S. degree as described in the "Admission to Advanced Standing" section, and they will be enrolled in the same sections of courses as B.S. management science majors. A total of 12 term credit hours (in addition to the required subset courses) are required for the minor in management science: **EMIS 1360, 2360, 3340, 3360.**

The Courses (EMIS)

EMIS 1305/EMIS 1307 (3). COMPUTERS AND INFORMATION TECHNOLOGY. A survey course in computers and information technology that introduces the college student to the architecture of the personal computer, software, hardware, telecommunications, and artificial intelligence, as well as the social and ethical implications of information technology. The classes meet in a computer laboratory where concepts learned are reinforced, including a survey of word processing, spreadsheet, database management, presentation, and network software. Credit is not allowed for a CS, CpE, or MS major or minor.

EMIS 1307/EMIS 1305 (3). INFORMATION TECHNOLOGY FOR BUSINESS. Focuses on the use of information technology in business; explains computer systems and component parts, terms used by technologists, and use of business software packages. No credit for EMIS majors or minors.

EMIS 1360 (3). INTRODUCTION TO MANAGEMENT SCIENCE. Management science is the application of mathematical modeling and scientific principles to solve problems and improve life in society. Students learn to develop plans, manage operations, and solve problems encountered in business and government. *Prerequisite:* Knowledge of college-level algebra. *Corequisites:* MATH 1337, CSE 1341.

EMIS 2360 (3). ENGINEERING ECONOMY. Evaluation of engineering alternatives by equivalent uniform annual cost, present worth, and rate-of-return analysis. Use of a computerized financial planning system. 0.5 TCH design. Credit not allowed for both EMIS 2360 and EMIS 8361. *Prerequisites:* C- or better in MATH 1337 and knowledge of introductory probability and statistics. *Corequisites:* MATH 1338 and CSE 1342 (must enroll in lab).

EMIS 3150 (1). ETHICS IN COMPUTING. Computer professionals have a special responsibility to ensure ethical behavior in the design, development, and use of computers and computer networks. This course focuses on the education of the undergraduate through the study of ethical concepts and the social, legal, and ethical implications involved in computing. Issues to be studied include computer crimes, software theft, hacking and viruses, intellectual property, unreliable computers, technology issues in the workplace, and professional codes of ethics. *Prerequisite:* Junior standing.

EMIS 3308 (3). ENGINEERING MANAGEMENT. Examines planning, financial analysis, organizational structures, management of the corporation (including its products, services, and people), transfer of ideas to the marketplace, and leadership skills. Credit is not allowed for both EMIS 3308 and the same course offered by another department; credit is not allowed for both EMIS 3308 and EMIS 7351. *Prerequisite:* Junior standing. Lyle undergraduate majors only.

EMIS 3309 (3). INFORMATION ENGINEERING AND GLOBAL PERSPECTIVES. Examines global and information aspects of technology- and information-based companies. Credit is not allowed for the same course offered by another department. *Prerequisite:* Junior standing. Lyle undergraduate majors only.

EMIS 3340/CSE 4340/STAT 4340 (3). STATISTICAL METHODS FOR ENGINEERING AND APPLIED SCIENTISTS. Basic concepts of probability and statistics useful in the solution of engineering and applied science problems. Topics: probability, probability distributions, data analysis, sampling distributions, estimations, and simple tests of hypothesis. Credit is not allowed for both EMIS 3340/STAT/CSE 4340 and EMIS 5370. *Prerequisite:* C- or better in MATH 1338.

EMIS 3360 (3). OPERATIONS RESEARCH. A survey of models and methods of operations research. Covers deterministic and stochastic models in a variety of areas. Credit is not allowed for both EMIS 3360 and 8360. Must enroll in lab. *Prerequisite:* C- or better in EMIS 1360. Management science majors, management science minors, or math operations research specialization majors only.

EMIS 3361 (3). STOCHASTIC MODELS IN OPERATIONS RESEARCH. Covers the formulation, solution, and application of models for decision-making under uncertainty. Probabilistic and statistical methodologies (e.g., decision analysis, queuing theory, stochastic process, Markov chains, and simulation models) address problems in the design, management, and usage of efficient systems for producing goods and delivering services. Students use specialized software and spreadsheet add-ins for model-building and problem-solving. There is a weekly 1-hour, 20-minute laboratory. *Prerequisite:* C- or better in EMIS 3340. Management science majors only.

EMIS 3375/CFB 3345 (3). CULTURAL AND ETHICAL IMPLICATIONS OF TECHNOLOGY. This course explores the pervasive use of technology in today's society, the impact of technology on daily life, and the tie between technology and ethical responsibility. Students learn how their lives are being shaped by technology and how they in turn help shape technology.

EMIS 4390 (3). UNDERGRADUATE PROJECT. An opportunity for the advanced undergraduate student to undertake independent investigation, design, or development. Variable credit from one to four term hours. Written permission of the supervising faculty member is required before registration. At least 0.5 of (1-4) TCH Design.

EMIS 4395 (3). SENIOR DESIGN. Consists of a large project involving the design of a management system, model building, data collection and analysis, and evaluation of alternatives. 3 TCH Design. *Prerequisites:* C- or better in EMIS 5362 and senior standing.

EMIS 5050 (0). UNDERGRADUATE INTERNSHIP.

EMIS 5300 (3). SYSTEMS ANALYSIS METHODS. Introduction to modeling and analysis concepts, methods and techniques used in systems engineering, design of products and associated production, and logistics systems and analysis of operational system performance. Specific topics include probabilistic and statistical methods, Monte Carlo simulation, optimization techniques, applications of utility and game theory, and decision analysis.

EMIS 5301 (3). SYSTEMS ENGINEERING PROCESS. The discipline, theory, economics, and methodology of systems engineering is examined. The historical evolution of the practice of systems engineering is reviewed, as are the principles that underpin modern systems methods. The economic benefits of investment in systems engineering and the risks of failure to adhere to sound principles are emphasized. An overview perspective distinct from the traditional design- and analytical-specific disciplines is developed.

EMIS 5303 (3). INTEGRATED RISK MANAGEMENT. Introduces risk management based upon integrated trade studies of program performance, cost, and schedule requirements. Topics include risk planning, risk identification and assessment, risk handling and abatement techniques, risk impact analysis, management of risk handling and abatement, and subcontractor risk management. Examines integrated risk management methods, procedures, and tools.

EMIS 5305 (3). SYSTEMS RELIABILITY, SUPPORTABILITY AND AVAILABILITY ANALYSIS. This course is an introduction to systems reliability, maintainability, supportability and availability (RMS/A) modeling and analysis with an application to systems requirements definition and systems design and development. Both deterministic and stochastic models are covered. Emphasis is placed on RMS/A analyses to establish a baseline for systems performance and to provide a quantitative basis for systems trade-offs. *Prerequisite:* EMIS 5300.

EMIS 5307 (3). SYSTEMS INTEGRATION AND TEST. The process of successively synthesizing and validating larger and larger segments of a partitioned system within a controlled and instrumented framework is examined. System integration and test is the structured process of building a complete system from its individual elements and is the final step in the development of a fully functional system. The significance of structuring and controlling integration and test activities is stressed. Formal methodologies for describing and measuring test coverage, as well as sufficiency and logical closure for test completeness, are presented. Interactions with system modeling techniques and risk management techniques are discussed. The subject material is based upon principles of specific engineering disciplines and best practices, which form a comprehensive basis for organizing, analyzing, and conducting integration and test activities.

EMIS 5310 (3). SYSTEMS ENGINEERING DESIGN. Introduces system design of complex hardware and software systems. Topics include design concept, design characterization, design elements, reviews, verification and validation, threads and incremental design, unknowns, performance, management of design, design metrics, and teams. The class centers on the development of real-world examples.

EMIS 5315 (3). SYSTEMS ARCHITECTURE DEVELOPMENT. A design-based methodological approach to system architecture development using emerging and current enterprise architecture frameworks. Topics include structured analysis and object-oriented analysis and design approaches are covered; enterprise architecture frameworks, including the Zachman framework, FEAF, DoDAF, and ANSI/IEE-1471; executable architecture model approaches as tools for system-level performance evaluation and tradeoff analyses; case studies in enterprise architecture development; and the integration of architecture design processes into the larger engineering-of-systems environment. *Prerequisite:* EMIS 5301.

EMIS 5320 (3). SYSTEMS ENGINEERING LEADERSHIP. Augments the management principles embedded in the systems engineering process with process design and leadership principles and practices. Emphasis is placed on leadership principles by introducing the underlying behavioral science components, theories and models. Demonstrates how the elements of systems engineering, project management, process design, and leadership integrate into an effective leadership system. *Prerequisite:* EMIS 5301.

EMIS 5330 (3). SYSTEMS RELIABILITY ENGINEERING. In-depth coverage of tasks, processes, methods and techniques for achieving and maintaining the required level of system reliability considering operational performance, customer satisfaction and affordability. Includes establishing system reliability requirements, reliability program planning, system reliability modeling and analysis, system reliability design guidelines and analysis, system reliability test and evaluation, and maintaining inherent system reliability during production and operation.

EMIS 5332 (3). DATA MINING FOR ANALYTICS. Analytics is based on collecting, managing, exploring, and acting on large amounts of data, and it has become a source of competitive advantage for many organizations. This course introduces data-mining techniques (classification, association analysis, and cluster analysis) used in analytics. All material covered is reinforced through hands-on experience using state-of-the art tools to design and execute data-mining processes. *Prerequisite:* Background in descriptive statistics and probability.

EMIS 5335 (3). HUMAN SYSTEMS INTEGRATION (HSI). This course advances the understanding and application of cognitive-science principles, analysis-of-alternatives methods and engineering-best practices for addressing the role of humans within the design of high-technology systems. In addition, HSI-specific processes (e.g., task-centered design; human-factors engineering; manpower, personnel and training; process analysis; usability testing and assessment) are presented and discussed. *Prerequisite:* EMIS 5301.

EMIS 5340 (3). LOGISTICS SYSTEMS ENGINEERING. An introduction to concepts, methods and techniques for engineering and development of logistics systems associated with product production/manufacturing, product order and service fulfillment, and product/service/customer support, utilizing system engineering principles and analyses. Specific topics include logistics systems requirements, logistics systems design and engineering concurrently with product and service development, transportation and distribution, supply/material support, supply Web design and management and product/service/customer support.

EMIS 5347 (3). CRITICAL INFRASTRUCTURE PROTECTION AND SECURITY SYSTEMS ENGINEERING. The purpose of the course is to present systems engineering (SE) concepts as applied to the protection of the United States' critical infrastructure (CI). A top-level systems viewpoint provides a greater understanding of this system-of-systems (SOS). Topics include the definition and advantages of SE practices and fundamentals; system objectives that include the viewpoint of the customer, users, and other stakeholders; the elements of the CI and their interdependencies; the impact transportation system disruptions; and system risk analysis. *Prerequisite:* EMIS 5301 and EMIS 5303.

EMIS 5352 (3). INFORMATION SYSTEM ARCHITECTURE. The architecture of an information system (IS) defines that system in terms of components and interactions among those components. This course addresses IS hardware and communications elements for information engineers, including computer networking and distributed computing. It addresses the principles, foundation technologies, standards, trends, and current practices in developing an appropriate architecture for Web-based and non-Internet information systems.

EMIS 5353 (3). INFORMATION SYSTEM DESIGN STRATEGIES. This course surveys the fundamentals of software engineering and database management systems (DBMS) for information engineers. It covers the principles, foundation technologies, standards, trends, and current practices in data-centric software engineering and systems design, including object-oriented approaches and relational DBMS. The focus is on system design, development, and implementation aspects, and not the implementation in code.

EMIS 5355 (3). ENGINEERING OPERATIONS. The management of a technical organization's operations can contribute to the strategic goals and objectives of the enterprise. By analyzing and managing operations as systems, strategic choices are shown to drive design and operating decisions. The course covers the tools and techniques for solving problems to achieve the overall goals and strategies of manufacturing and services organizations.

EMIS 5357 (3). DECISION-SUPPORT SYSTEM. Covers the development and implementation of a data-centric, decision-support system, the underlying technologies, and current applications and trends. Includes decision-making, DSS components, optimization models, expert systems, data mining and visualization, knowledge discovery and management, and executive information systems. *Prerequisites:* EMIS 5360 and 3360 recommended but not required.

EMIS 5359 (3). INFORMATION ENGINEERING SEMINAR. Topics in management of information in specific industries or application areas. May be repeated for credit when the topics vary. *Prerequisite:* EMIS 5360.

EMIS 5360 (3). MANAGEMENT OF INFORMATION TECHNOLOGIES. Defines the management activities of the overall computer resources within an organization or government entity. Consists of current topics in strategic planning of computer resources, budgeting and fiscal controls, design and development of information systems, personnel management, project management, rapid prototyping, and system life cycles.

EMIS 5361 (3). COMPUTER SIMULATION TECHNIQUES. Introduces the design and analysis of discrete probabilistic systems using simulation. Emphasizes model construction and a simulation language. *Prerequisites:* Programming ability, introduction to probability or statistics.

EMIS 5362 (3). PRODUCTION SYSTEMS ENGINEERING. Applies the principles of engineering, or "design under constraint," to modern production systems. Topics include production systems analysis and design considerations, system design and optimization models and methods, pull- and push-based production systems, quality engineering, and process improvement. Also, techniques for engineering and managing systems with specific architectures: batch-oriented, continuous-flow, projects, and just-in-time. *Prerequisite:* C- or better in EMIS 3360. Management science or math operations research specialization majors only.

EMIS 5364/STAT 5344 (3). STATISTICAL QUALITY CONTROL. A comprehensive introduction to the statistical quality-control methods that underlie the modern quality revolution. Statistics and simple probability are used to develop control charts to monitor and improve the quality of an ongoing process, and for acceptance-sampling plans (including MIL-STD). Control charts for attributes, variables, and Cusum procedures are defined and applied to everyday problems in manufacturing and service businesses. 0.5 TCH Design. *Prerequisite:* EMIS 3340 (STAT/CSE 4340), EMIS 5370, or STAT 5373.

EMIS 5365 (3). PROGRAM AND PROJECT MANAGEMENT. Development of principles and practical strategies for managing projects and programs of related projects for achieving broad goals. Topics include planning, organizing, scheduling, resource allocation, strategies, risk management, quality, communications, tools, and leadership for projects and programs.

EMIS 5366 (3). MARKETING ENGINEERING. Marketing engineering moves beyond traditional conceptual approaches to embrace the use of analytics, data, information technology, and decision models to help organizations effectively reach customers and make marketing decisions. Designed for technical individuals, the course applies engineering problem-solving approaches and computer tools to solve marketing problems from today's competitive work environment. *Prerequisites:* EMIS 3340 (STAT/CSE 4340) or EMIS 5370, and EMIS 3360 (or equivalent).

EMIS 5369 (3). RELIABILITY ENGINEERING. Introduction to reliability engineering concepts, principles, techniques, and methods required for design and development of affordable products and services that meet customer expectations. Topics include reliability concepts and definitions, figures-of-merit, mathematical models, design analysis and trade studies, reliability testing including types of tests, test planning and analysis of test results, and statistical analysis of reliability data. *Prerequisite:* C- or better in EMIS 4340 or 5370.

EMIS 5377/STAT 5377 (3). STATISTICAL DESIGN AND ANALYSIS OF EXPERIMENTS. Introduction to statistical principles in the design and analysis of industrial experiments. Completely randomized, randomized complete and incomplete block, Latin square, and Plackett-Burman screening designs. Complete and fractional factorial experiments. Descriptive and inferential statistics. Analysis of variance models. Mean comparisons. *Prerequisites/corequisites:* C- or better in EMIS 3340 and senior standing with a Science or Engineering major, or permission of instructor.

EMIS 5380 (3). MANAGING INFORMATION TECHNOLOGY CONTROLS. This course surveys current practices in information technology (IT) governance and controls, with approaches for balancing business needs with technology controls for high-risk processes. Major topic areas include introduction to technology controls, the process of IT governance, systems and infrastructure life cycle management, IT delivery and support, and records management.

EMIS 5382 (3). INFORMATION TECHNOLOGY SECURITY AND RISK MANAGEMENT. This course is for non-technical managers and executives with decision-making responsibility in information security governance and risk management. Topics include information security organizations and policies, governance, program development and management, information risk management, legal and regulatory compliance, and business continuity planning.

EMIS 5190 (1), 5290 (2), 5390 (3). SPECIAL TOPICS. Individual or group study of selected topics in management science. *Prerequisite:* Permission of instructor.

Mechanical Engineering

Professor Ali Beskok, **Chair**

Professor Radovan Kovacevic, **Director, Research Center for Advanced Manufacturing**

Professors: Yildirim Hürmüzlü, Radovan B. Kovacevic, Paul S. Krueger, José L. Lage, M. Volkan Otugen, Bijan Mohraz (Civil and Environmental Engineering), Peter E. Raad, Wei Tong. **Associate Professors:** Charles M. Lovas, Edmond Richer, David A. Willis. **Assistant Professors:** Tindaro Ioppolo, Jeong Ho You. **Senior Lecturers:** Elena V. Borzova, Dona T. Mularkey. **Clinical Research Assistant Professor:** Adam L. Cohen. **Adjunct Faculty:** Bogdan V. Antohe, Eric B. Cluff, Santos Garza, M. Wade Meaders, David J. Nowacki, Mauricio A. Salinas, Allen D. Tilley, Andrew K. Weaver, James M. Webb. **Emeritus Professors:** David B. Johnson, Paul F. Packman, Cecil H. Smith, Hal Watson, Jr.

Mechanical engineering is a diverse, dynamic and exciting field. Mechanical engineers have wide-ranging technical backgrounds and a high potential for employment that offers the mobility necessary for professional growth. They apply creative knowledge to solve critical problems in several different areas, such as bioengineering (e.g., drug-delivery; artificial organs), construction, design and manufacturing, electronics, energy (e.g., production, distribution and conservation), maintenance (individual machinery and complex installations), materials processing, medicine (diagnosis and therapy), national security and defense, packaging, pollution mitigation and control, robotics and automation, sensors, small-scale devices, and all aspects of transportation, including space travel and exploration.

The Mechanical Engineering Department at SMU has a long tradition of offering a superb engineering education within an environment fostering creativity and innovation. Small classes, a trademark of the program, not only provide for strong mentoring but also help achieve academic excellence through cooperation and teamwork. The exceptionally qualified faculty imparts knowledge using the most effective pedagogical skills, assisted in large by the SMU Center for Teaching Excellence and by the Emily C. Norwick Center for Digital Services. Leading by example, through encouragement and dedication, the faculty is committed to the success of every student. In addition to offering the introductory and advanced courses in their areas of specialization, faculty members teach courses that address the critical issues of technology and society, such as courses on machines and society and information technology and society.

The program prepares students to be genuinely creative by providing a solid background in fundamentals of science and engineering without compromising the practical aspects of mechanical engineering. Essential entrepreneurial know-how, interpersonal skills and the importance of lifelong learning complement the educational experience of students. The department stimulates professional and social leadership by providing, among others, opportunities for students to participate in the SMU Student Section of the American Society of Mechanical Engineers and in the SMU Tau-Sigma Chapter of Pi-Tau-Sigma, the National Honorary Mechanical Engineering Fraternity.

The curriculum consists of three major areas, namely, structures, thermal and fluids, and systems and dynamics and control, interlaced via practical mechanical engineering design throughout the curriculum. In the senior year, student teams are guided through a complete design project, from concept to construction to testing, with support from industries, foundations and volunteer professionals. State-of-the-art software, computers and laboratory equipment support the high-quality education provided to students. Moreover, undergraduate students are encouraged to

participate in research projects conducted by faculty and to consider extending their studies toward a graduate degree in mechanical engineering at SMU or elsewhere.

In conjunction with a solid liberal arts component, the program prepares students for graduate studies not only in engineering but also in other professional fields such as business, medicine and law. SMU mechanical engineering graduates have consistently and successfully attained higher degrees in engineering, medicine, business and law, besides gaining employment as engineers or consulting engineers for major engineering, pharmaceutical, environmental, financial, banking and real estate companies.

The undergraduate program in mechanical engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The program's mission is to educate mechanical engineers who are innovative, entrepreneurial and equipped to become global leaders in research and technology. Specific educational objectives of the mechanical engineering undergraduate program are to produce graduates who meet the following:

1. The ability to be innovative problem solvers and critical thinkers addressing technical and societal issues.
2. The ability to embrace professional development and lifelong learning relevant to their careers.
3. The ability to have entrepreneurial and leadership roles in industry, government and academia.

The Mechanical Engineering Undergraduate Program Outcomes and their relationships to the discipline-specific criteria are as follows:

a) The ability to apply knowledge of mathematics, science and engineering.

b) The ability to design and conduct experiments, as well as analyze and interpret data.

c) The ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

d) The ability to function on multidisciplinary teams.

e) The ability to identify, formulate and solve engineering problems.

f) An understanding of professional and ethical responsibility.

g) The ability to communicate effectively.

h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context.

i) The recognition of the need for and the ability to engage in lifelong learning

j) A knowledge of contemporary issues.

k) The ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

An outstanding cooperative education program is also available for students. For further information on the SMU Co-op Program, students should see Cooperative Education at the beginning of the Lyle School of Engineering section.

The Mechanical Engineering Department offers the following undergraduate degrees:

Bachelor of Science in Mechanical Engineering

Bachelor of Mechanical Engineering and Bachelor of Science with a major in math (dual degrees)

Bachelor of Mechanical Engineering and Bachelor of Science with a major in physics (dual degrees)

Bachelor of Science in Mechanical Engineering (with a minor in business administration)

Bachelor of Science in Mechanical Engineering (with a premedical/biomedical specialization)

Bachelor of Science in Mechanical Engineering (with an engineering management and entrepreneurship specialization)

In addition, a minor in mechanical engineering is available to interested students.

Departmental Facilities

In support of the teaching and research endeavors of the department, several research laboratories are available.

Laboratory for Porous Materials Applications. This laboratory is concerned with modeling; numerical simulation; and experimental testing of mass, energy and momentum transport in heterogeneous and porous media.

Nanoscale Electro-Thermal Sciences Laboratory. This facility focuses on noninvasive characterization of the thermal properties of thin-film materials.

Laser Micromachining Laboratory. This laboratory conducts studies of laser-assisted microfabrication, including high-power laser ablation and laser micromachining.

Experimental Fluid Mechanics Laboratory. This facility focuses on pulsed jet micropropulsion and flow-through porous media.

Micro, Nano, and Biomechanics of Materials Laboratory. This laboratory supports research primarily in the area of solid mechanics and materials engineering, with a focus on the combined experimental characterization as well as the computational analysis of mechanical properties, stress/strain, and microstructure of engineering and biological materials. Applications in advancing manufacturing and materials processing technologies, engineering design analyses, and biomedical sciences and engineering are also studied in this facility.

Systems, Measurement, and Control Laboratory. This facility is equipped for instruction in the design and analysis of analog and digital instrumentation and control systems. Modern measurement and instrumentation equipment is used for experimental control engineering, system identification, harmonic analysis, simulation and real-time control applications. Equipment also exists or microprocessor interfacing for control and instrumentation.

Micro-Sensor Laboratory. This laboratory focuses on research in the development of micro-optical sensors for a wide range of aerospace and mechanical engineering applications, including temperature, pressure, force, acceleration and concentration. A major research component in this lab is concentrated on the study of the optical phenomenon called the “whispering gallery modes” and its exploita-

tion for sensor development in the micro-size level with a nano-level measurement sensitivity.

Systems Laboratory. This facility is dedicated to analysis and modeling of bipedal gait dynamics, rigid body impact mechanics and the pneumatically operated haptic interface system.

Research Center for Advanced Manufacturing. The RCAM center supports research and development activities in areas of rapid prototyping and manufacturing (laser-based and welding-based deposition), laser materials processing (welding, forming, surface modification), welding (including electrical arc welding, variable polarity plasma arc welding, friction stir welding, and micro plasma arc welding), waterjet/abrasive waterjet materials processing, sensing and control of manufacturing processes, and numerical modeling of manufacturing processes.

Center for Laser-Aided Manufacturing. This facility, which is housed in the Research Center for Advanced Manufacturing facility, collaborates with RCAM.

Energy Harvesting Materials Laboratory. Due to the limited reserves of fossil fuels like coals, oil and natural gas, finding an efficient way to produce renewable energy from natural resources is in great demand. In the Energy Harvesting Materials Laboratory, research focuses on the investigation and design of materials to generate electricity from solar light (solar cells), from mechanical vibration (piezoelectric power generators) and from temperature difference (thermoelectric systems). Research focuses on small-scale materials (nanomaterials) to improve energy conversion efficiency in those systems based on atomic-scale and continuum approaches.

Biomedical Instrumentation and Robotics Laboratory. This laboratory's research activities promote strong interdisciplinary collaboration between several branches of engineering and biomedical sciences. The research interests are centered on two areas:

- Medical robotics, especially novel robotic applications in minimally invasive, natural orifice, and image-guided and haptic-assisted surgery.
- In vivo measurement of mechanical properties of biological tissue.

These areas of concentration touch upon fundamentals in analytical dynamics, nonlinear control of mechanical systems, computer-aided design and virtual prototyping, applied mathematics, data acquisition, signal processing, and high-performance actuators.

Microsystems Research Laboratory. The research carried out in this laboratory focuses in the area of optical actuators and sensors, micro-optofluidics, energy conversion, and smart materials.

Instructional Laboratories

In support of the teaching and research endeavors of the department, several instructional laboratories are available. They include the following:

Information Technology Computer Laboratory. The laboratory features 25 computer workstations, printers, scanners and an overhead projector with an Internet connection used to support mechanical engineering and non-Lyle School of Engineering undergraduates in meeting the SMU-wide IT requirement for all students.

Computational/Design Laboratory. Dedicated computational facilities that include personal computers and high-resolution color X-terminals, all connected through a high-speed network that allows communication with the school's and University's computers, as well as with off-campus systems via NSFNet. Available Lyle

School of Engineering computational facilities include several high-speed, multiprocessor workstations and servers. Educational software includes Parametric Technologies Pro-Engineer CAD system, MATLAB, ANSYS structural analysis package, MacroFlow and Fluent CFD packages.

Graphics Laboratory. Used primarily for first-year graphics, this facility is available for students working on design projects. A special design projects library is located adjacent to the drafting room.

Mechanics of Materials (Structures) Laboratory. This laboratory is equipped for instruction and research on the behavior of materials under various loading conditions such as fatigue, impact, hardness, creep, tension, compression and flexure.

Systems, Measurement and Control Laboratory. This facility is equipped for instruction in the design and analysis of analog and digital instrumentation and control systems. Modern measurement and instrumentation equipment is used for experimental control engineering, system identification, harmonic analysis, simulation and real-time control applications. Equipment also is used for microprocessor interfacing for control and instrumentation.

Thermal and Fluids Laboratory. Equipment in this laboratory is used for instruction in experimental heat transfer, thermodynamics and fluid mechanics. Modern equipment is available for conducting experiments on energy conservation; aerodynamics; internal combustion engines; heating, ventilation and air conditioning systems; convective cooling of electronics; heat exchangers; and interferometric visualization. State-of-the-art systems support automatic control and data acquisition. A partial list of the equipment in this lab includes a refrigeration training unit, heat transfer test unit with water boiler, airflow bench, kinematic viscosity bath, forced convection heat transfer experiment bench, low-pressure board, dead weight tester, vortex tube, free and forced heat transfer unit, hydraulic trainer and pneumatic trainer.

Shared Laboratory Space

Laboratories shared with the Civil and Environmental Engineering Department include the following:

Hydraulics/Hydrology, Thermal and Fluids Laboratory

CAD Computer Laboratory

Structural and Mechanics of Materials Laboratory

Project construction area

Curriculum in Mechanical Engineering

Mechanical engineering offers the broadest curriculum in engineering to reflect the wide range of mechanical engineering job opportunities in government and industry. The mechanical engineer is concerned with creation, research, design, analysis, production and marketing of devices for providing and using energy and materials. The major concentration areas of the program include the following:

Solid and Structural Mechanics. Concerned with the behavior of solid bodies under the action of applied forces. The solid body may be a simple mechanical linkage, an aerodynamic control surface, an airplane or space vehicle, or a component of a nuclear reactor. The applied forces may have a variety of origins, such as mechanical, aerodynamic, gravitational, electromotive and magnetic. Solid mechanics pro-

vides one element of the complete design process and interacts with all other subjects in the synthesis of a design.

Fluid Mechanics. Deals with the behavior of fluid under the action of forces applied to it. The subject proceeds from a study of basic fundamentals to a variety of applications, such as flow-through compressors, turbines and pumps, around an airplane or missile. Fluid mechanics interacts with solid mechanics in the practice of mechanical engineering because the fluid flow is generally bounded by solid surfaces. Fluid mechanics is also an element in the synthesis of a design.

Thermal Sciences. Concerned with the thermal behavior of all materials – solid, liquid and gaseous. The subject is divided into three important branches, namely, thermodynamics, energy conversion and heat transfer. Thermodynamics is the study of the interaction between a material and its environment when heat and/or work are involved. Energy conversion is a study of the transformation of one form of energy to another, such as the conversion of solar energy to electrical energy in a solar cell. Heat transfer is a study of the processes by which thermal energy is transferred from one body of material to another. Since energy is required to drive any apparatus and since some of the energy is thermal energy, the thermal sciences interact with all other areas of study as an integral part of the design process.

Materials Science and Engineering. Pertains to the properties of all materials – solid, liquid and gaseous. It deals with mechanical, fluid, thermal, electrical and other properties. Properties of interest include modulus of elasticity, compressibility, viscosity, thermal conductivity, electrical conductivity and many others. The study of materials proceeds from the characteristics of individual atoms of a material, through the cooperative behavior of small groups of atoms, up to the behavior and properties of the bulk material. Because all mechanical equipment is composed of materials, works in a material environment and is controlled by other material devices, it is clear that the materials sciences lie at the heart of the design synthesis process.

Control Systems. Provides necessary background for engineers in the dynamics of systems. In the study of controls, both the transient and steady-state behavior of the system are of interest. The transient behavior is particularly important in the starting and stopping of propulsion systems and in maneuvering flight, whereas the steady-state behavior describes the normal operating state. Some familiar examples of control systems include the flight controls of an airplane or space vehicle and the thermostat on a heating or cooling system.

Design Synthesis. The process by which practical engineering solutions are created to satisfy a need of society in an efficient, economical and practical way. This synthesis process is the culmination of the study of mechanical engineering and deals with all elements of science, mathematics and engineering.

Areas of Specialization

Mechanical engineering is a diverse field, and advanced major electives may be selected from a variety of advanced courses in mechanical engineering. In addition, specializations are offered in premedical/biomedical and engineering management and entrepreneurship, which includes required courses in engineering management, information engineering and global perspectives, technical entrepreneurship, and technical communications.

A student may also personalize his or her degree with the addition of a minor in business administration within the Bachelor of Science in Mechanical Engineering.

In addition to the required 87 credit hours in core mathematics, science and engineering courses, students must satisfy the minor in business administration requirements (listed in the Cox School of Business section of this catalog); three hours of ME courses at the 3000 level or higher approved by the student's adviser are also required. Admission requirements to the Cox School must also be satisfied and may include additional coursework.

Bachelor of Science in Mechanical Engineering

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within the mechanical engineering curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	31
MATH 1337, 1338, 2339, 2343, 3353	
STAT 4340 *or* equivalent	
CHEM 1303	
PHYS 1303/1105, 1304	
One from the following:	
BIOL 1401, 1402	
CHEM 1304	
GEOL 1301, 1305, 1307, 1308, 1313	
PHYS 3305, 3340, 4321	
3000-level *or* higher math course approved by adviser	
Engineering	56
ME 1202/1102, 1305 (or CSE 1341), 2310, 2320, 2331/2131, 2340/2140, 2342/2142, 3332/3132, 3340, 3370, 4338, 4360/4160, 4370, 4380, 4381, 5322	
EE 2350	
General Sequence or Specialization	15–18
General Sequence (15 credit hours):	
12 hours of ME courses at the 3000 level or higher approved by adviser	
One from EMIS 3308, 3309; CEE 3302; CSE 4360	
Engineering Management and Entrepreneurship Specialization (18 credit hours):	
EMIS 3308, 3309; CEE 3302; CSE 4360	
6 hours of ME courses at the 3000 level or higher approved by adviser	
	102–105

Any deviation from the mechanical engineering curriculum requires approval of a petition submitted by the student to the Mechanical Engineering faculty prior to the beginning of the term during which the student expects to complete the requirements for graduation.

Bachelor of Science in Mechanical Engineering and Bachelor of Science With a Major in Mathematics

The Mechanical Engineering Department and the Mathematics Department offer a curriculum that enables a student to obtain both a B.S.M.E. degree and B.S. with a major in mathematics.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	37
MATH 1337, 1338, 2339, 2343, 3315, 3337, 3353 STAT 4340 *or* equivalent One advanced elective as defined in the description of the mathematics major. CHEM 1303 PHYS 1303/1105, 1304	
Engineering	56
ME 1202/1102, 2310, 2320, 2331/2131, 2340/2140, 2342/2142, 3332/3132, 3340, 3370, 4338, 4360/4160, 4370, 4380, 4381, 5322; CSE 1341; EE 2350	
Advanced Major Electives	9
3000-level or higher ME courses approved by adviser.	
Engineering Leadership	3
One from CEE 3302; CSE 4360; EMIS 3308, 3309	
	105

Bachelor of Science in Mechanical Engineering and Bachelor of Science With a Major in Physics

The Mechanical Engineering Department and the Physics Department offer a curriculum that enables a student to obtain both a B.S.M.E. degree and a B.S. degree with a major in physics.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics and Science	58
MATH 1337, 1338, 2339, 2343, 3353 STAT 4340 *or* equivalent CHEM 1303 PHYS 1303/1105, 1304/1106, 3305, 3344, 3374, 4211, 4321, 4392, 5382, 5383 Two advanced physics electives.	
Engineering	53
ME 1202/1102, 2310, 2331/2131, 2340/2140, 2342/2142, 3332/3132, 3340, 3370, 4338, 4360/4160, 4370, 4380, 4381, 5322; CSE 1341; EE 2350	
	111

Any deviation from the mechanical engineering and/or physics curricula requires approval of a petition submitted by the student to the appropriate faculty prior to the beginning of the term during which the student expects to complete the requirements for graduation.

Bachelor of Science in Mechanical Engineering (Premedical/Biomedical Specialization)

The Mechanical Engineering Department offers a B.S.M.E. degree with a premedical/biomedical specialization. This program enables students to satisfy the premedical or predental requirements for admission to medical or dental school, while at the same time satisfying the requirements for an accredited degree in mechanical engineering.

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Specialization	*Credit Hours*
Mathematics and Science	56
MATH 1337, 1338, 2339, 2343, 3353 STAT 4340 *or* equivalent BIOL 1401, 1402, 3304, 3350 CHEM 1303/1113, 1304/1114, 3371/3117, 3372/3118 PHYS 1303/1105, 1304/1106	
Engineering	52
ME 1202/1102, 1305, 2310, 2320, 2331/2131, 2340/2140, 2342/2142, 3332/3132, 3340, 3370, 4338, 4370, 4380, 4381, 5322; EE 2350	
Advanced Major Elective	3
ME 5332 *or* any 3000-level or higher ME course	
	111

Any deviation from the mechanical engineering curriculum requires approval of a petition submitted by the student to the Mechanical Engineering faculty prior to the beginning of the term during which the student expects to complete the requirements for graduation.

Minor in Mechanical Engineering

For approval of a minor in mechanical engineering, the student should consult the department. A total of 15 term hours in mechanical engineering courses are required: **ME 1202/1102, 2310, 2320, 2331, 2340, 2342, 3340, 3370**. A choice of five of these courses represents a minor that provides a broad introduction to mechanical engineering. Based on the student's interests and background, other sets of mechanical engineering courses may be substituted with the department's approval.

ME 1302 (2). INTRODUCTION TO ENGINEERING. Introduction to mechanical engineering and the engineering profession. Topics include forces in structures and fluids, conservation laws and thermal systems, motion of machinery, engineering design, and basic concepts in intellectual property for mechanical engineers. Also, topics in mechanical engineering as appropriate for current events.

ME 1301 (3). MACHINES AND SOCIETY. Introduces engineering systems to nonengineering students. The course is divided into four parts: 1) What is engineering, and what do engineers do? In particular, what do mechanical engineers do? Historical perspective on engineering design, principles of design engineering, and energy conversion processes. 2) Engineered products. What do mechanical engineers produce? The basic principles of converting science to technology. 3) The development of technology for society and humanity. 4) The laboratory and workshop experience, including computer animation and simulation.

ME 1303 (3). ENERGY, TECHNOLOGY AND THE ENVIRONMENT. An elementary introduction to how energy is produced and distributed, energy resources, electrical power, heating and cooling, solar energy applications, and other topics related to people and the environment.

ME 1304 (3). GREEN ENGINEERING: DESIGNING TOMORROW TODAY. Presents how design choices for materials, manufacturing processes, energy usage, and end-of-life disposal affect economic and natural environments. Also, case studies in design for the environment for various industries. In lab, students use computer modeling to create designs and then analyze and compare the designs' total life cycle impact through eco-audits of energy and carbon footprints. Students also use software to compare and select materials best suited for a particular design and its constraints.

ME 1305 (3). INFORMATION TECHNOLOGY AND SOCIETY. A comprehensive survey of information technologies and the growing interconnectivity between them as currently utilized throughout society. Students acquire portable IT skills in the use of word processing, spreadsheets, presentation tools, graphics applications, and the Internet that will prepare them for success in the workplace and beyond. Issues surrounding IT, including history, ethics, legal questions, use in producing and maintaining a competitive advantage, effects on society, and associated costs and benefits.

ME 2131 (1). THERMODYNAMICS LAB. One 3-hour laboratory session per week. Basic thermal-property and power-device measurements to complement lecture material of ME 2331. *Prerequisite:* MATH 1337, sophomore standing.

ME 2140/CEE 2140 (1). MECHANICS OF MATERIALS LABORATORY. Experiments in mechanics of deformable bodies. Simple tension tests on structural materials, simple shear tests on riveted joints, stress and strain measurements, engineering and true stress, engineering and true strain, torsion testing of cylinders, bending of simple supported beams, deflection of simply supported beams, buckling of columns, strain measurements of pressure vessels, Charpy impact tests, effect of stress concentrators. Offered parallel to ME/CEE 2340.

ME 2142/CEE 2142 (1). FLUID MECHANICS LABORATORY. One three-hour laboratory session per week. Experiments in fluid friction, pumps, boundary layers, and other flow devices to complement lecture material of ME 2342. *Prerequisite or corequisite:* ME/CEE 2342.

ME 2310/CEE 2310 (3). STATICS. Equilibrium of force systems; computations of reactions and internal forces; determinations of centroids and moments of inertia; introduction to vector mechanics. *Prerequisite:* MATH 1337.

ME 2320/CEE 2320 (3). DYNAMICS. Introduction to kinematics and dynamics of particles and rigid bodies; Newton's laws, kinetic and potential energy, linear and angular momentum, work, impulse, and inertia properties. *Prerequisite:* ME/CEE 2310 or equivalent.

ME 2331/CEE 2331 (3). THERMODYNAMICS. The first and second laws of thermodynamics and thermodynamic properties of ideal gases, pure substances, and gaseous mixtures are applied to power production and refrigeration cycles. *Prerequisite:* CHEM 1303, ME/CEE 2310, and MATH 2339.

ME 2340/CEE 2340 (3). MECHANICS OF DEFORMABLE BODIES. Introduces analysis of deformable bodies, including stress, strain, stress-strain relations, torsion, beam bending and shearing stresses, stress transformations, beam deflections, statically indeterminate problems,

energy methods, and column buckling. *Prerequisite:* ME/CEE 2310. *Corequisite:* ME/CEE 2140.

ME 2342/CEE 2342 (3). FLUID MECHANICS. Fluid statics, fluid control volume, and applications; irrotational flow; Bernoulli's and Euler's equations; similitude and dimensional analysis; differential analysis of fluid flow; incompressible viscous flow; and boundary layer theory. *Prerequisites:* ME/CEE 2310, MATH 2339, PHYS 1303. *Corequisite:* MATH 2343. ME/CEE 2320 is recommended but not required.

ME 3132 (1). HEAT TRANSFER LABORATORY. One three-hour laboratory session per week. Experiments in conduction, convection, and radiation to complement lecture material of ME 3332 -- Heat and Mass Transfer. Prerequisite or *Corequisite:* ME 3332.

ME 3332 (3). HEAT AND MASS TRANSFER. Fundamental principles of heat transmission by conduction, convection, and radiation; mass transfer; and application of these principles to the solution of engineering problems. *Prerequisites:* ME/CEE 2331, 2342.

ME 3340 (3). ENGINEERING MATERIALS. A study of the fundamental factors influencing the structure and properties of structural materials, including metals, polymers, and ceramic. Covers phase diagrams, heat treatment, metallography, mechanical behavior, atomic bonding, and corrosion. *Prerequisites:* CHEM 1303 (or equivalent), ME/CEE 2310.

ME 3341 (3). INTERMEDIATE THERMAL SCIENCES. Application of the laws of thermodynamics, availability, irreversibility, real gases and mixtures, generalized thermodynamics relations and charts, and chemical equilibrium. *Prerequisite:* ME/CEE 2331.

ME 3350/CEE 3350 (3). STRUCTURAL ANALYSIS. Emphasis on the classical methods of analysis of statically determinate and indeterminate structural systems. Computation of reactions, shears, moments, and deflections of beams, trusses, and frames. Use of computers as an analytical tool. *Prerequisite:* ME/CEE 2340/2140.

ME 3360 (3). FLUID POWER SYSTEMS. Principles of operations, design criteria, and performance characteristics of fluid power systems components such as pumps, motors, valves, cylinders. Goals oriented circuit design and analysis, industrial standards, circuit representation, and maintenance. Practical/demo lectures, design project based on specialized software, industry speakers and site visits. *Prerequisites:* ME/CEE 2342 and ME 2320.

ME 3370 (3). MANUFACTURING PROCESSES. Comprehensive, balanced, and up-to-date coverage of the relevant fundamentals and real-world applications of manufacturing processes (e.g., casting, forming, machining, high-power laser beam materials processing, electrical discharge machining, abrasive water-jet machining). Also, rapid prototyping and manufacturing. A set of laboratories introduces students to the basics of manufacturing processes and reinforces lecture material. *Prerequisite:* ME 3340.

ME 3390. GERMAN TECHNOCULTURE. Fundamentals of German contemporary culture within the context of technology and study abroad experience. Emphasis is placed on reading and communication (writing and oral) skills. Field trips are an integral part of the course.

ME 4090 (0). SENIOR PROJECT.

ME 4160 (1). CONTROL LABORATORY. Experiments in control engineering. Digital and analog simulation of feedback control systems. Actuator saturation. Design and implementation of simple control systems on various laboratory equipment. *Corequisite:* ME 4360.

ME 4338 (3). THERMAL SYSTEMS DESIGN. Thermal systems designs are prepared, presented, and critiqued. Associated problems of simulation, optimization, and economics are solved. Solving problems and design with a thermal network analyzer is included. 3 TCH Design. *Prerequisite:* ME 3332.

ME 4350/CEE 4350 (3). DESIGN OF STEEL STRUCTURES. Study of strength, behavior, and design of steel structures and reinforced concrete structures: members subjected to flexure, shear, and axial loads. *Prerequisite:* ME/CEE 3350.

ME 4351 (3). ETHICAL DECISION-MAKING IN APPLIED SCIENCE AND ENGINEERING AND TECHNOLOGY. Ethical issues, hard choices, and human failures in notorious, historical cases such as the Space Shuttle Challenger, Grand Teton Dam, and Union Carbide-Bhopal disasters. Principles, methods, and bases for ethical decision-making and action. Application of classical ethical philosophy to hypothetical, modern problems and dilemmas in the business of control and implementation of technology.

ME 4360 (3). DESIGN AND CONTROL OF MECHANICAL SYSTEMS. Block modeling of mechanical systems. Mathematical models of linear systems. Solution of differential equations by use of Laplace transforms. Feedback control systems, time domain analysis, stability, frequency response, and root locus plots, Bode diagrams, performance criteria, and system compensation. Design of control systems for mechanical systems. 1 TCH Design. *Prerequisite:* ME 5322 or equivalent.

ME 4370 (3). ELEMENTS OF MECHANICAL DESIGN. Application of the principles of mechanics and physical properties of materials to the proportioning of machine elements, including consideration of fatigue, functioning, productivity, and economic factors. Computer applications. 3 TCH Design. *Prerequisites:* ME/CEE 2340 and ME 3370.

ME 4380 (3). MECHANICAL ENGINEERING DESIGN I. A study of design methodology and development of professional project-oriented skills including communication, team management, creative problem solving, interpersonal management, and leadership skills. Team-project activities are used to apply project-oriented skills to solution of design problems. Nontechnical considerations in design, including patents, ethics, aesthetics, safety, and economics are investigated. 3 TCH Design. *Pre/Corequisite:* ME 3370.

ME 4381 (3). MECHANICAL ENGINEERING DESIGN II. Student design teams have full responsibility for conducting a full term design project for an industrial client. Periodic design reports and design reviews are presented to, and critiqued by, the industrial client, the faculty, and the design team. 3 TCH Design. *Pre/Corequisite:* ME 4370. *Prerequisite:* ME 4380.

ME 5050 (0). UNDERGRADUATE INTERNSHIP.

ME 5190 (1). UNDERGRADUATE SEMINAR – ETHICS IN ENGINEERING AND TECHNOLOGY. This one-hour course will cover ethical issues, hard choices, and human failures in life. Practical, ethical issues will be discussed with examples from everyday life. Ethical issues encountered in copyright law and intellectual property, along with issues involved in telephone communications and email will be presented. Principles, methods, and bases for ethical decision-making and action will be discussed.

ME 5290 (2). UNDERGRADUATE SEMINAR. An opportunity for the advanced undergraduate student to undertake independent investigation, design, and development. The project, and the supervising faculty, must be approved by the chair of the department in which the student expects to receive the degree.

ME 5302 (3). LINEAR SYSTEM ANALYSIS. The course will introduce students to the topics within the domain of modern control theory. Special emphasis will be placed on the application of the developed concepts in designing linear systems and casting their responses in prescribed forms. Topics covered include state representation of linear systems, controllability, observability, and minimal representation, linear state variable feedback, observers, and quadratic regulator theory. 1 TCH Design.

ME 5303 (3). ORGANIZATIONAL LEADERSHIP. This is a course in personnel and organizational leadership. You will learn the scientific structure of organizations and methods used to improve the productivity and quality of life of people working in the organization. You will be introduced to industrial-organizational (I/O) psychology, as applied to the manufacturing organization. This course will focus on understanding individual behavior and experiences in industrial and organizational settings. You will be introduced to industrial psychology as it address the human resource functions of analyzing jobs, and appraising, selecting, placing, and training people. The organizational psychology portion of the course addresses the psychology of work, including employee attitudes, behavior, emotions, health, motivation, and well-being, as well as the social aspects of the workplace.

ME 5314 (3). INTRODUCTION TO MICROELECTROMECHANICAL SYSTEMS (MEMS) AND DEVICES. This course develops the basics for microelectromechanical devices and systems, including microactuators, microsensors, and micromotors; principles of operation; micromachining techniques (surface and bulk micromachining); IC-derived microfabrication techniques; and thin lm technologies as they apply to MEMS.

ME 5319 (3). ADVANCED MECHANICAL BEHAVIOR OF MATERIALS. A senior-graduate course that relates mechanical behavior on a macro and microscopic level to design. Topics include macroscopic elasticity and plasticity, viscoelasticity, yielding, yield surfaces, work hardening, geometric dislocation theory, creep, temperature-dependent and environment-dependent mechanical properties. 2 TCH Design. *Prerequisites:* ME/CEE 2340 and ME 3340.

ME 5320 (3). INTERMEDIATE DYNAMICS. Emphasizes methods of formulation and solution of the kinematical, dynamical, and motion constraint equations for three-dimensional, lumped-parameter, dynamical systems. Detailed discussions on differentiation of vectors, kinematics, inertia properties, momentum and energy principles, generalized forces, holonomic and non-holonomic constraints, constrained generalized coordinates, and Newton-Euler and Lagrange formulations of the equations of motion. The symbolic software Mathematica is used to reduce the time and effort required to derive the kinematical and dynamical equations. Practical examples of detailed motion analysis of mechanisms using CAD software augment the theoretical formulations. *Prerequisite:* ME/CEE 2320; MATH 2339, 2343.

ME 5321 (3). FAILURE ANALYSIS AND PREVENTION. A senior-graduate course in the evaluation of the failure of structural materials and components. Topics include site examination, macroscopic examination, optical microscopy, transmission electron and SEM interpretation, examination and interpretation of failure surfaces, failure modes, causes of failure. 2 TCH Design. *Prerequisite:* ME 3340.

ME 5322 (3). VIBRATIONS. Review of fundamentals of vibrations with application of simple machine and structural members. Topics include harmonic motion, free and forced vibration, resonance, damping, isolation, and transmissibility. Single, multiple and infinite degree-of-freedom systems are also examined. *Prerequisites:* ME/CEE 2320, MATH 3353, and MATH 2343 or equivalent.

ME 5323 (3). INTRODUCTION TO FRACTURE MECHANICS. Linear elastic fracture mechanics, application of theory to design and evaluation of critical components: elastic stress intensity calculations, plane strain fracture toughness, plane stress and transitional behavior, crack opening displacements, fracture resistance, fatigue crack propagation, transition temperature approach to fracture control, microstructure of fracture, and fracture control programs. 2 TCH Design. *Prerequisite:* ME/CEE 2340.

ME 5324 (3). FATIGUE THEORY AND DESIGN. A senior-graduate course. Includes continuum, statistical, and fracture mechanics treatments of fatigue, stress concentrators, planning and analysis of probit, SNP and response tests, mechanisms of fatigue design, fail safe vs. safe life design, crack propagation. Emphasizes engineering design aspects of fatigue rather than theoretical mechanisms. 2 TCH Design. *Prerequisite:* ME 3340.

ME 5326 (3). VEHICLE DYNAMICS. Modeling of wheeled vehicles to predict performance, handling, and ride. Effects of vehicle center of mass, tire-characteristic traction and slip, engine characteristics, and gear ratios of performance. Suspension design and steady-state handling models of four-wheeled vehicles and car-trailer systems to determine oversteer and understeer characteristics, critical speeds, and stability. Multi-degree-of-freedom ride models including tire and suspension compliance. Computer animation and simulations. *Prerequisite:* ME/CEE 2320 or permission of instructor.

ME 5329 (3). FLUID POWER SYSTEMS. This course will develop the fundamentals of a fluid power system design by introducing the basic building blocks such as pumps, motors, hydraulic cylinders, accumulators, multi-position directional valves, and other related components. Properties of the common hydraulic fluids will be studied to ascertain their influence on the behavior of typical fluid power system. Mathematical models of the individual components will be developed to aid in the simulation of a hydraulic system for a desired function. This will be complemented by the introduction of commercially available software for system simulation. A 1 credit hour lab will allow students to gain hands-on experience with hydraulic systems.

ME 5330 (3). HEAT TRANSFER. Application of the principles of conduction, convection, and radiation heat transfer. Steady and unsteady state, special configurations, numerical and analytical solutions, and design are topics included. *Prerequisite:* ME 3332 or equivalent.

ME 5331 (3). ADVANCED THERMODYNAMICS. Laws of thermodynamics, availability, irreversibility, real gases and mixtures, thermodynamic relations and generalized charts, combustion, chemical and phase equilibrium, and computational combustion. *Prerequisite:* ME/CEE 2331 and ME 2342.

ME 5332 (3). HEAT TRANSFER IN BIOMEDICAL SCIENCES. Fundamentals of heat transfer in medicine and biology. Biothermal properties. Thermal regulation processes. Biomedical heat transfer processes with applications in tissue laser radiation, freezing and thawing of biological materials, cryosurgery, and others. *Prerequisite:* ME/CEE 2342, ME 3332 or consent of instructor.

ME 5333 (3). TRANSPORT PHENOMENA IN POROUS MEDIA. Fractals and their role in characterizing complex structures. Fundamental concepts of momentum, heat, and mass transport through heterogeneous (e.g., composites, porous) materials. Emphasis is placed on the mathematical modeling of heat and mass transfer in heterogeneous and fully saturated systems. Relevant industrial and natural applications are presented throughout the course. *Prerequisite:* ME/CEE 2342, ME 3332 or consent of instructor.

ME 5334 (3). FUNDAMENTALS OF ELECTRONIC PACKAGING. This course covers: introduction to micro-systems packaging, role of packaging in microelectronics, role of packaging in micro-systems, electrical package design, design for reliability, thermal management, single-chip and multi-chip packaging, IC assembly, passive devices, optoelectronics, RF packaging, MEMs, sealing and encapsulation, system-level PWBs, PWB assembly, packaging materials and processes, and micro-system design for reliability.

ME 5335 (3). CONVECTIVE COOLING OF ELECTRONICS. This course will begin with a review of the fundamental concepts of convection heat transfer, followed by applications of these principals to the convective cooling of electronic components and systems. The following special topics will be emphasized: design of natural- and forced- convection heat sinks with both air- and liquid-cooling, fan and pump selection procedures, including piezoelectric fans and micropumps, acoustic fan noise and noise measurement techniques, augmentation of convection heat transfer in the form of plate-fin and pin-fin extended surfaces, spray cooling, jet-impingement cooling, microchannel cooling, heat pipes, and capillary pumped loops. In addition, the course will cover pool boiling and flow boiling as applied to the thermal management of electronics. The design of electronic chassis with flow through coldwalls and edge-cooled PWBs will be examined. Several industry-related applications will be used as examples. *Prerequisite:* ME 3332.

ME 5336 (3). INTERMEDIATE FLUID DYNAMICS. Review of fundamental concepts of undergraduate fluid mechanics and introduction to advanced fluid dynamics, including irrotational flow, tensor notation, and the Navier-Stokes equations. *Prerequisite:* ME/CEE 2342 or equivalent.

ME 5337 (3). INTRODUCTION TO COMPUTATIONAL FLUID DYNAMICS: FUNDAMENTALS OF FINITE DIFFERENCE METHODS. Concepts of stability, convergence, accuracy, and consistency. Applications to linear and nonlinear model partial differential equations. Curvilinear grid generation. Advanced topics in grid generation. Beam and Warming factored implicit technique. MacCormack techniques. Solution methods for the Reynolds equation of lubrication, the boundary layer equations, and the Navier-Stokes equations. *Prerequisites:* ME/CEE 2342 (or equivalent), and MATH 2343 (or equivalent), or permission of instructor.

ME 5340 (3). INTRODUCTION TO SOLID MECHANICS. Three dimensional stress and strain, failure theories, introduction to two-dimensional elasticity, torsion of prismatic members, beams on elastic foundation, introduction to plates and shells, and energy methods. *Prerequisite:* ME/CEE 2340 and MATH 2343.

ME 5341 (3). STRUCTURAL PROPERTIES OF SOLIDS. This course is designed to develop an understanding of the structural aspect of solids and their relationship to properties and applications. Topics include structural defects, bonding and crystal structure, solid state reactions and phase transformations, degradation, and deformation. *Prerequisite:* ME 3340 or permission of instructor.

ME 5342 (3). INTRODUCTION TO THERMAL MANAGEMENT OF ELECTRONICS. Emphasis on the thermal design of electronic packages and systems. Topics include the basics of conduction, convection (natural and forced), and radiation heat transfer. In addition, the following topics will also be covered: pool boiling and flow boiling, extended surfaces, as applied to the design of heat exchangers and cold plates, and thermal interface resistance, as applied to the design of electronic packages. Introduces modern cooling technologies, such as single-phase cooling and two-phase cooling, heat pipes, and thermoelectric coolers. *Prerequisite:* ME 3332.

ME 5343 (3). ELECTRONIC PACKAGING MATERIALS: PROCESSES, PROPERTIES, AND TESTING. Overview of materials used in electronic packaging. Examines solderability, microscopic processes, and alloy selection; composites and applying conducting polymer-matrix composites, metal films, and vacuum processes; and the importance of encapsulation, temperature humidity bias testing, and temperature cycle testing. Measurement of properties of material in electronic packaging, thermal properties, physical properties and manufacturing properties, and materials selection will also be covered. *Prerequisite:* ME 3340.

ME 5344 (3). CONDUCTIVE COOLING OF ELECTRONICS. This course will begin with a review of the fundamental concepts of conduction heat transfer, followed by applications of these principals to the conductive cooling of electronic components and systems. The following special topics will be emphasized: contact conductance, interface thermal resistance, heat spreaders, thermal interface materials (TIMs), phase change materials (PCMs), thermoelectric devices, Stirling cycle refrigerators, and the cooling of special electronic components, such as multi-chip modules, power modules, high density power supplies, and printed wiring boards. The thermal management by conduction of GaAs and GaN MMICs (monolithic microwave integrated circuits) will be featured. Both steady state and transient analyses will be employed, including a discussion of transient junction-to-case thermal resistance measurements. *Prerequisite:* ME 3332.

ME 5346 (3). APPLICATION OF COMPUTATIONAL TECHNIQUES TO THE MECHANICAL AND THERMAL DESIGN OF ELECTRONIC SYSTEMS. This course will develop the student's capability to characterize the mechanical and thermal performance of electronic devices and systems through the use of computational techniques. Commercial codes will be used to create a thermal model of a fan-cooled, rectangular geometry, electronics chassis, using direct air-cooling. Additional computer codes for thermal modeling of heat transfer and fluid flow systems will be featured. In addition, codes for the design of cold plates and heat exchangers will be utilized. The student will be exposed to concepts of structural modeling of components mounted on printed wiring boards in a vibration environment. A number of industry-related problems, ranging from first-level packages, printed wiring boards, and system-level electronics will be analyzed. At the end of the class, a student will be expected to formulate and model a complex industry-based problem. *Prerequisite:* ME/CEE 2320, 2340, ME 3332, 3340.

ME 5348 (3). THERMAL, FLUID, AND MECHANICAL MEASUREMENTS IN ELECTRONICS. The following thermal and fluid measurement topics will be covered: the need for experimentation in electronic design, use of similitude in electronics cooling, velocity, temperature, and pressure measurements, thermal conductivity and thermal diffusivity measurements, heat flux measurements, design of wind tunnels, flow visualization techniques, and characterization of electronic components. Experimental procedures used for vibration and shock testing of electronic equipment will be covered. The instrumentation and test procedures used for complex environmental testing to commercial and military specifications will be described. In addition, the basic principles of acoustics and the measurement techniques used to evaluate noise levels generated by electronic systems will be covered. *Prerequisite:* ME/CEE 2342, 2142, 2340, 2140, 3332, 3132.

ME 5355 (3). INTEGRATED DESIGN AND MANUFACTURING. Industrial performance is strongly correlated to success in integrating design and manufacturing. The interrelationships between the total product realization cycle, product generation, and manufacturing are examined with the objective of improving industrial performance.

ME 5356 (3). HUMAN FACTORS IN DESIGN AND MANUFACTURING. A senior-graduate course dealing with human factors or ergonomics relating to designing for human use. The lectures cover the empirical and analytic aspects of design and manufacturing as affected by the need to accommodate human use and abilities. Included are topics on visual displays of static and dynamic information, text, graphics, symbols, codes, auditory tactual and olfactory displays, speech and nonverbal communications, physical work/materials handling, motor skills, and hand tool devices and controls. Workplace design, anthropometry, component arrangement in space, lighting, sound, climate, and motion will be covered. 1.5 TCH Design. *Prerequisite:* Senior or graduate standing, or permission of instructor. *Recommended:* Understanding of simple statistical analysis.

ME 5357 (3). OPTIMIZED MECHANICAL DESIGN. Principles and methods for optimal design of machine elements (springs, shafts, gears, weldments of joints, etc.) and mechanical systems (transmissions, cam systems, inertia loads and balancing, etc.). Computer applications. 3 TCH Design. *Prerequisite:* ME 4370 or equivalent.

ME 5358 (3). DESIGN OF ELECTRONIC PACKAGING. A focus on thermal and mechanical design of electronic packaging. Fundamentals of heat transfer and fluid flow are applied to electronic packages and systems, including selection of fans, heat sinks, and other hardware important to good design. Mechanical designs of equipment that operates in more severe shock and vibration environments are developed using classical methods, with consideration given to selecting appropriate hardware. *Prerequisites:* ME/CEE 2320; MATH 2343, 3337.

ME 5359 (3). ANALYSIS AND DESIGN OF OPTOELECTRONIC PACKAGING. Provides an overview of optical fiber interconnections in telephone networks, packaging for high-density optical back planes, selection of fiber technologies; semi-conductor laser and optical amplifier packaging, optical characteristics and requirements, electrical properties, mechanical properties, waveguide technologies, optical alignment and packaging approaches, passive device fabrication and packaging, array device packaging; hybrid technology for optoelectronic packaging, and flip-chip assembly for smart pixel arrays.

ME 5360 (3). ELECTRONIC PRODUCT DESIGN AND RELIABILITY. This course will investigate the failures, failure modes, and failure mechanisms in electronic systems. It will cover the following subjects: failure detection, electrical simulation, and environmental stress tests. Failure analysis will be covered, including the use of X-rays, thermal imaging/infrared microscopy, acoustical imaging, scanning laser acoustic microscopy, infrared spectroscopy, differential scanning calorimeter, thermo-mechanical analyzer, and other testing procedures. In addition, solder joint reliability of balls grid array (BGA) assemblies, plastic ball grid array (PBGA) assemblies, flip-chip assemblies, chip-scale package (CSP) assemblies, and fine pitch, surface mount technology (SMT) assemblies will be discussed. In addition, this course will cover temperature as a reliability factor, an overview of high temperature electronics, the use of silicon devices at high temperatures, and selection of passive devices for use at high temperatures. *Prerequisite:* ME 3340 or graduate student standing.

ME 5361/CEE 5361 (3). MATRIX STRUCTURE ANALYSIS. A systematic approach to formulation of force and displacement method of analysis; representation of structures as assemblages of elements; computer solution of structural systems. *Prerequisite:* ME/CEE 3350 or permission of instructor.

ME 5362 (3). ENGINEERING ANALYSIS WITH NUMERICAL METHODS. Application of numerical and approximate methods in solving a variety of engineering problems. Examples include equilibrium, buckling, vibration, fluid mechanics, thermal science, and surveying problems. *Prerequisite:* Senior standing.

ME 5363 (3). ELECTRONIC MANUFACTURING TECHNOLOGY. Covers the complete field of electronics manufacturing. Topics include an introduction to the electronics industry; electronic components; the theory and methods of manufacture of solid-state devices; packaging techniques such as wire bonding, flip chip, and TAB; printed wiring board; soldering and solderability; leaded and surface-mounted components; electromagnetic interference; electrostatic discharge prevention; testability; and electronic stress screening. In each area, current technology as well as leading-edge tools are discussed.

ME 5364 (3). INTRODUCTION TO STRUCTURAL DYNAMICS. Dynamic responses of structures and behavior of structural components to dynamic loads and foundation excitations; single- and multi-degree-of-freedom systems response and its applications to analysis of framed structures; introduces systems with distributed mass and flexibility. *Prerequisites:* MATH 2343.

ME 5368 (3). PROJECT AND RISK MANAGEMENT. Focuses on specific concepts, techniques and tools for managing projects successfully. Network planning techniques, resource allocation, models for multi-project scheduling, methods of controlling costs, determining schedules and performance parameters. The basics of risk management including hard analysis, risk analysis, risk control, and risk financing are covered. The focus of the course is to integrate risk assessment with managerial decision making. Examples and case studies are emphasized.

ME 5371 (3). INTRODUCTION TO GAS DYNAMICS AND ANALYSIS OF PROPULSION SYSTEMS. Introduction to the mechanics and thermodynamics of high-speed compressible flows with application to the design of propulsion systems. Focus is on one-dimensional and quasi one-dimensional compressible flow, normal shocks, oblique shocks, and two-dimensional flow method of characteristics. Also includes analysis of air-breathing propulsion systems and design of air-breathing propulsion systems components such as inlets and nozzles. *Prerequisites:* ME/CEE 2342, 2331.

ME 5372 (3). INTRODUCTION TO CAD. Introduction to mechanical computer-aided design. Survey of technical topics related to CAD and computer-aided manufacturing. Emphasis on the hands-on use of interactive computer graphics in modeling, drafting, assembly, and analysis using a state-of-the-art CAD system. *Prerequisite:* Junior standing or consent of instructor.

ME 5376 (3). ROBOTICS: INTRODUCTION TO COMPUTER-AIDED MANUFACTURING. Introduction to industrial robotics and numerically controlled machines. Economics of CAM. Applications of robotics in industry. Robot safety. Addition of senses and intelligence. Research

in CAM Flexible manufacturing cells and systems. Hands-on laboratory work with industrial robots and NC machines. Independent study and report on a specific robot application. 2 TCH Design. *Prerequisites:* CSE 1341, PHYS 1303, 1105 and MATH 2343 or equivalent.

ME 5377/CEE 5377 (3). ADVANCED STEEL DESIGN. Behavior and design of steel structures including general methods of plastic analysis, plastic moment distribution, steel frames, unbraced and braced frames, and composite construction. *Prerequisite:* ME 4350.

ME 5383 (3). HEATING, VENTILATING, AND AIR CONDITIONING. Selection and design of basic refrigeration, air conditioning, and heating systems are treated. Load calculations, psychometrics, cooling coils, cooling towers, cryogenics, solar energy applications, and special topics are included. 1 TCH Design. *Prerequisites:* ME/CEE 2331 and ME 3332.

ME 5386 (3). CONVECTION HEAT TRANSFER. Advanced topics in forced convection heat transfer using analytical methods and boundary-layer analysis. Laminar and turbulent flow inside smooth tubes and over external surfaces. Convection processes in high-speed flows. *Prerequisite:* ME 3332 or equivalent.

ME 5390 (3), 5490 (4). UNDERGRADUATE SEMINAR. An opportunity for the advanced undergraduate student to undertake independent investigation, design, and development. The project, and the supervising faculty, must be approved by the chair of the department in which the student expects to receive the degree. Variable credit of one to four term hours. Variable TCH Design.

ME 5391 (3), 5392 (3), 5393 (3), 5394 (3), 5395 (3), 5491 (4). SPECIAL PROJECTS. Intensive study of a particular subject or design project not available in regular course offerings and under the supervision of a faculty member approved by the department chair.

The Courses (ENGR)

ENGR 1101 (1). ENGINEERING AND BEYOND. Explores the five engineering departments at SMU and how the areas work together. Includes case studies, departmental presentations, industry panels, and industry tours.

Center for Special Studies

The Special Studies designation accommodates academic programs and courses that do not typically fit within the departments of the Lyle School of Engineering. Included under this section are courses designed for Engineering Cooperative Education Program students and first-year students exploring engineering degree programs.

The Courses (SS)

SS 1099 (0), 2099 (0), 3099 (0), 4099 (0), 5099 (0). ENGINEERING INTERNSHIP. Each of these courses represents a term of industrial work activity in connection with the Engineering Cooperative Program. The courses are taken in numerical sequence and carry no credit. Students register for these courses in the same manner as other SMU courses except that no tuition is charged. Each course grade is determined by a written report by the student and from the scoring of the employer's evaluation form.

SS 2315 (3). ENGINEERING AND DESIGN FOR THE DEVELOPING WORLD. Engineering design in the developed world takes for granted the availability of several key resources such as construction material, water, and electricity. This course examines engineering design in the absence of these resources, with a focus on the development of shelter and sanitation in an efficient manner. Emphasis on understanding the total energy cycle of a structure and multiple alternative energy solutions. Additional topics include developing solutions for extreme low-cost, high-population densities and ecological sustainability. Students work in interdisciplinary teams to design and build energy-efficient homes and sustainable sanitation options and to investigate alternative energy systems. *Prerequisite:* PHYS 1303. *Corequisites:* SS 2320 and sophomore or above standing.

SS 2320 (3). ENVIRONMENTAL FIELD METHODS. Covers topics related to environmentally relevant fieldwork in the developing world, with emphasis on field and lab practical experiences that are supplemented with necessary lecture. Addresses surface water and groundwater collection as well as the analysis of coliform bacteria, basic water quality parameters, and inorganic contaminants. Topics also include soil collection and analysis, sanitation and water systems in the field, mapping, basic GIS, and systems planning. *Corequisites:* SS 2315 and sophomore or above standing.

SS 5090 (0), 5091 (0), 5092 (0), 5093 (0), 5094 (0). SPECIAL TOPICS. Individual or group study of selected topics in applied science. These are areas that do not belong strictly to any department, but nevertheless are meaningful to the Lyle School of Engineering. *Prerequisite:* Permission of instructor.

SS 5190 (1), 5191 (1), 5192 (1), 5193 (1), 5194 (1). SPECIAL TOPICS. Individual or group study of selected topics in applied science. These are areas that do not belong strictly to any department, but nevertheless are meaningful to the Lyle School of Engineering. *Prerequisite:* Permission of instructor.

SS 5290 (2), 5291 (2), 5292 (2), 5293 (2), 5294 (2). SPECIAL TOPICS. Individual or group study of selected topics in applied science. These are areas that do not belong strictly to any department, but nevertheless are meaningful to the Lyle School of Engineering. *Prerequisite:* Permission of instructor.

SS 5390 (3), 5391 (3), 5392 (3), 5393 (3), 5394 (3). SPECIAL TOPICS. Individual or group study of selected topics in applied science. These are areas that do not belong strictly to any department, but nevertheless are meaningful to the Lyle School of Engineering. *Prerequisite:* Permission of instructor.

SS 5490 (4), 5491 (4), 5492 (4), 5493 (4), 5494 (4). SPECIAL TOPICS. Individual or group study of selected topics in applied science. These are areas that do not belong strictly to any department, but nevertheless are meaningful to the Lyle School of Engineering. *Prerequisite:* Permission of instructor.

Army ROTC. While Army ROTC courses are not offered on the SMU campus, students can participate in the Army ROTC program at the University of Texas at Arlington by enrolling as they enroll for other SMU courses. Further program information and application procedures may be obtained by contacting the UTA Department of Military Science at 817-272-3281. Students who participate in the UTA Army ROTC program are responsible for their own travel and other physical arrangements.

Army ROTC offers students the opportunity to graduate as officers and serve in the U.S. Army, the Army National Guard or the U.S. Army Reserve. Army ROTC scholarships are awarded on a competitive basis. Each scholarship pays for tuition and required educational fees and provides a specified amount for textbooks, supplies and equipment. Each scholarship also includes a subsistence allowance of up to $1,000 for every year the scholarship is in effect.

Students can enroll in the Army ROTC on-campus program as they enroll for other SMU courses. Army ROTC courses are listed under ROTC in the Access.SMU schedule of classes, and permission to enroll must be obtained from Betsy Willis at bwillis@lyle.smu.edu or 214-768-1732.

The Courses (ROTC)

ROTC 1141 (1). FOUNDATIONS OF LEADERSHIP. Fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. The study of time management skills, basic drill and ceremony, physical fitness, repelling, leadership reaction course, first aid, making presentations and marksmanship. Concurrent enrollment in ROTC 1180 leadership lab and mandatory participation in independent physical fitness training, plus optional participation in a weekend field training exercise.

ROTC 1142 (1). INTRODUCTION TO LEADERSHIP. Application of principles of leadership through participation in physically and mentally challenging exercises with upper division ROTC students, with a focus on communication skills, organizational ethics, and study and time management techniques. Concurrent enrollment in ROTC 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

ROTC 1143 (1). ARMY ROTC INTRODUCTION TO LEADERSHIP I. Introduces basic military skills to include principles of emergency first aid and evacuation of casualties, map and compass reading, terrain association, and cross-country navigation. Principles of physical fitness training. Introduction to military inspections. Concurrent enrollment in SSR 1180 is mandatory.

ROTC 1180 (1). LEADERSHIP LABORATORY. A practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory topics include marksmanship, small unit tactics, multi-tiered programs focused on individual skill levels. Uniform and equipment provided. May be repeated for credit.

ROTC 2248 (2). EVOLUTION OF CONTEMPORARY MILITARY STRATEGY. A review of contemporary military conflicts. Selected battles from World War II, Korea, Vietnam, and the Yom Kippur War are examined for impact upon current U.S. military doctrine, strategy, and weapons systems. All military science students must enroll or participate in ROTC 1180 concurrently with this course unless exception is given by the PMS.

ROTC 2251 (2). INDIVIDUAL/TEAM DEVELOPMENT. Application of ethics-based leadership skills and fundamentals of ROTC's Leadership Development Program. Develop skills in oral presentations, concise writing, event planning, coordination of group efforts, advanced first aid, land navigation, and military tactics. Concurrent enrollment in ROTC 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

ROTC 2252 (2). INDIVIDUAL/TEAM MILITARY TACTICS. Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications,

making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in ROTC 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

ROTC 2291 (2). CONFERENCE COURSE. Independent study. Designed to supplement the military science curricula by a student's concentrated study in a narrower field of military skill or subject matter. May be repeated for credit. Does not count for PE credit. *Prerequisite:* Permission of the PMS.

ROTC 2343 (3). LEADERSHIP TRAINING CAMP (LTC). A rigorous five-week summer camp conducted at an Army post, stresses leadership, initiative and self-discipline. No military obligation incurred. Completion of ROTC 2343 qualifies a student for entry into the Advanced Course. Three different cycles offered during the summer, but spaces are limited by the Army. Candidates can apply for a space any time during the school year prior to the summer. Open only to students who have not taken all four of ROTC 1141, 1142, 2251, and 2252, and who pass an ROTC physical examination. P/F grade only.

ROTC 3341 (3). LEADERSHIP I. Development of ability to evaluate situations, plan and organize training, learn military tactics, review case studies in leadership management and develop teaching and briefing skills. Concurrent enrollment in ROTC 1180 mandatory. *Prerequisite:* Permission of PMS.

ROTC 3342 (3). LEADERSHIP II. Practical application of squad and platoon leadership in tactical situations; operation of small unit communications systems. Development of the leaders' ability to express themselves, analyze military problems, and prepare and deliver logical solutions. Demanding physical fitness training and performance-oriented instruction, in preparation for Summer Field Training. Concurrent enrollment in ROTC 1180 mandatory. *Prerequisite:* Permission of PMS.

ROTC 3443 (4). NATIONAL ADVANCED LEADERSHIP CAMP. A five-week off-campus field training course stressing the practical application of leadership management, with emphasis on tactical and technical military field skills. Open only to students who have successfully completed ROTC 3341 and 3342. P/F grade only.

ROTC 3495 (4). NURSING ADVANCED SUMMER TRAINING. Seven-week off-campus internship at a major U.S. Army hospital for ROTC nursing students. A nursing practicum with the focus on providing the student with hands-on experience that integrates clinical, interpersonal, and leadership knowledge and skills. Practical experience and familiarization with Army nursing in a variety of clinical tasks in the areas of medical-surgical nursing, pediatrics, obstetrics, and, in some cases, intensive care in ICUs. May be used for partial credit for NURS 3647 or NURS 3347 with prior arrangement and approval of the dean of nursing. *Prerequisite:* Completion of the junior year of a baccalaureate nursing program and permission of the PMS.

ROTC 4341 (3). ADVANCED LEADERSHIP I. Stresses leadership qualities necessary for Command and Staff functions and operations. Plan and conduct meetings, briefings and conferences. Introduction to the Army Logistical System and the Personnel Management System. Preparation of after-action reports. Plan and conduct physical training programs. Concurrent enrollment in ROTC 1180 mandatory. *Prerequisite:* Permission of PMS.

ROTC 4342 (3). ADVANCED LEADERSHIP II. Students examine the ethical standards, professional roles and responsibilities behind officership. Coursework includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a semester long Senior Leadership Project that requires them to plan, organize, and demonstrate their leadership skills. Following completion of this course, students are commissioned as second lieutenants in the Army. Provides students with a basic working knowledge of the Military Justice System with emphasis on company-level actions and requirements, including Law of Land Warfare. Examines the ethical standards, professional roles, responsibilities, and uniqueness of the profession of officership. Concurrent enrollment in ROTC 1180 mandatory. *Prerequisite:* Permission of PMS.

ROTC 4391 (3). CONFERENCE COURSE. Independent study on an individual basis on current topics in military science. Performance will be assessed by oral examination, written test, or research paper as arranged. May be repeated for credit. *Prerequisite:* Permission of PMS.

MEADOWS SCHOOL OF THE ARTS

GENERAL INFORMATION

The Meadows School of the Arts educates visionary artists, scholars, and arts and communication professionals so that they may have a sustainable, transformative impact on both local and global society.

Founded through the generosity of Algur H. Meadows, his family and the Meadows Foundation, the Meadows School is recognized as one of the nation's premier arts schools. It offers intense, specialized education in the communication, performing and visual arts to arts majors, and provides a rich variety of coursework for students from other disciplines exploring the arts as part of their liberal arts education.

In addition to working closely with a nationally renowned faculty, Meadows students have access to many eminent visiting professors, artists and scholars, as well as the annual winners of the Meadows Prize. The Meadows School also offers one of the nation's finest university complexes for instruction, performance and exhibition in advertising, art, art history, arts administration, communications, dance, digital media, film, journalism, music and theatre.

Academic, Performance and Exhibition Spaces

The Owen Arts Center houses the Greer Garson Theatre (a classical thrust stage), the Bob Hope Theatre (a proscenium theatre), the Margo Jones Theatre (a black box theatre), Caruth Auditorium (which includes a 51-stop, 3,681-pipe Fisk organ), the Charles S. Sharp Performing Arts Studio, the O'Donnell Lecture-Recital Hall and several smaller performance spaces, as well as classrooms, studios and rehearsal areas. The Doolin Gallery in the Owen Arts Center and the Pollock Gallery, housed in the Hughes-Trigg Student Center, are the art exhibition spaces of the Division of Art. Student work is exhibited and critiqued in the Doolin Gallery. Exhibitions organized in the Pollock Gallery provide students, faculty, staff and the community with opportunities to experience a thoughtful and wide array of exhibitions representing diverse artists, time periods and cultures.

The Meadows Museum exhibits one of the finest and most comprehensive collections of Spanish art outside of Spain, including works of such masters as El Greco, Velázquez, Ribera, Montañes, Murillo, Goya, Sorolla, Picasso, Gris, Miró and Tápies. The Elizabeth Meadows Sculpture Collection includes important works by such modern sculptors as Rodin, Maillol, Lipschitz, Henry Moore, Marini, Giacometti, Noguchi, David Smith and Claes Oldenburg.

The Umphrey Lee Center serves as home to several of the communication arts areas. A journalism complex, including a television studio, computer labs and editing suites, opened in 2002.

The four-story Jake and Nancy Hamon Arts Library is adjacent to the Owen Arts Center and houses all arts library collections, a slide library, an audio/visual center and the Center for Instructional Technology in the Arts. The G. William Jones Film and Video Collection, a part of the library's holdings, is housed in the Greer Garson Theatre's 3,800-square-foot refrigerated storage vault, with screening rooms also in the building.

National Center for Arts Research

SMU's National Center for Arts Research, the first of its kind in the nation, acts as a catalyst for the transformation and sustainability of the national arts and cultural community. The center will analyze the largest database of arts research ever assembled and make its findings available free of charge to arts leaders, funders, policymakers, researchers, students and the general public.

NCAR's mission is to be the leading provider of evidence-based insights that enable arts and cultural leaders to overcome challenges and increase impact. The scope of this work requires the collaboration of multiple national organizations such as the Cultural Data Project, the National Center for Charitable Statistics, the National Endowment for the Arts, the Theatre Communications Group, TRG Arts, IBM, the Nonprofit Finance Fund and the Boston Consulting Group.

Additional information is available at www.smu.edu/artsresearch.

Meadows Schools of the Arts and the Liberal Arts Education

All first-year undergraduates spend at least one year as SMU Pre-Majors before transferring officially to Meadows. Students are assigned an academic adviser in the University Advising Center based on their intended majors. Arts students have advisers who specialize in those disciplines. In the first year, students combine liberal arts courses with the introductory course requirements of their intended major. After entering Meadows, normally in the sophomore year, students continue to combine courses in the major with UC/GEC requirements.

Meadows Divisions

Meadows consists of 10 undergraduate and graduate divisions. Each is outlined in detail in individual sections of this publication. They are as follows:

Temerlin Advertising Institute for Education and Research
Art
Art History
Arts Management and Arts Entrepreneurship
Communication Studies
Dance
Film and Media Arts
Journalism
Music
Theatre

Programs of Study

Bachelor of Arts

- Advertising
- Art
- Art History
- Communication Studies
- Creative Computing
- Fashion Media
- Film and Media Arts
- Interdisciplinary Studies in the Arts
- Journalism
- Music
- Public Relations and Strategic Communication

Bachelor of Fine Arts

- Art
- Dance Performance
- Film and Media Arts
- Theatre

Bachelor of Music

- Music Composition
- Music Education *(includes Texas teacher certification)*
- Music Performance
- Music Therapy *(approved by the Amer. Music Therapy Association; leads to eligibility to sit for Music Therapy Board Certification exam)*

Academic Minors

University students may complete a minor in various divisions within Meadows School of the Arts. The minor will be noted on the student's transcript. Interested students should contact the office of the academic dean of their school of record for procedures concerning minor declaration. The minors are as follows:

Advertising
Art
Art History
Arts Entrepreneurship
Arts Management
Communication Studies
Creative Computing
Dance Performance
Fashion Media
Graphic Design
History of the Visual and Performing Arts
Journalism
Music
Musical Theatre
Photography
Songwriting

ADMISSION

Various divisions in Meadows School of the Arts have special admissions criteria such as auditions, portfolio reviews and specified coursework. Admissions criteria pertinent to each instructional unit are stated in the section of this publication devoted to that unit.

Admission Procedures

Prospective students interested in undergraduate degrees in Meadows School of the Arts apply for undergraduate admission to SMU as first-year students or transfer students through the SMU Division of Enrollment Services, Office of Undergraduate Admission, PO Box 750181, Dallas TX 75275-0181. Application deadlines and information on performing and visual arts consideration are in the Admission to the University section in the front of this catalog.

Admission as an SMU Interschool Transfer Student

SMU Pre-Major students enter Dedman College and then transfer to Meadows School of the Arts when they complete requirements for the major declaration. A student transferring from Dedman College (or other schools of the University) must secure a Student Change of Degree Program form from the office of the academic dean of the student's current school to present to the Student Academic Services Office of Meadows School of the Arts.

Students must have completed a minimum of 24 term hours of study with a minimum cumulative GPA of 2.000. Students in various divisions also must receive formal recognition of suitable scholarly or creative ability and talent in the performing arts. Art students must submit a portfolio (12 images) to SlideRoom, the online digital portfolio system (www.smu.slideroom.com), halfway through their second term of art study for admission to study for the B.F.A. or B.A. degree. Art students are considered for admission to the B.F.A. or B.A. based upon that portfolio and review of transcript courses. Art history students are strongly encouraged to contact the chair of the Art History Division for a conference. Advertising, communication studies, film and media arts, and journalism students must successfully complete the prerequisite subset of courses with the appropriate GPA to be admitted to their degree programs. Advertising students must additionally complete a written on-site

application to the program. It should be noted that all students in dance, music and theatre will have auditioned/interviewed prior to entering SMU.

Admission as an External Transfer Student

Students applying for admission to Meadows School of the Arts by transfer from another accredited educational institution should request a transfer application from the Division of Enrollment Services. Transfer applicants who have completed 30 transferable hours with a GPA of 2.700 or better are often successful in gaining admission to the University. Once admitted, a transfer student must be prepared to earn at least 60 hours of credit through enrollment at SMU. That is, 60 hours of credit must be earned in SMU courses or SMU-approved international programs.

Transfer credit is not given for correspondence courses or for work completed at a nonaccredited school. Only grades of *C-* or better in comparable courses are transferable to SMU.

Transfer into Meadows School of the Arts is not automatic. Consideration is also given to creative or scholarly potential for the program to be undertaken and to particular talent in performing areas. Admissions criteria pertinent to each instructional unit also must be satisfied.

Readmission

Students should contact the Division of Enrollment Services, Office of Undergraduate Admission regarding readmission. A student who has been readmitted after an absence of more than three years will be expected to meet all current requirements for graduation. Dance, music or theatre students may also be required to re-audition. Official transcripts from each college or university attended since last enrolled at SMU must also be forwarded to the Division of Enrollment Services. If five years have lapsed since the last term of enrollment at SMU, official transcripts from each college or university attended prior to SMU must also be forwarded to the Division of Enrollment Services. All data is due no later than the last business day prior to the first day of classes of the term of reentry. More detailed information is in the Admission to the University, Readmission of Students section of this catalog.

Undergraduate Student Financial Aid

For many SMU students, scholarships and other aid make the cost of attending a distinguished university no more, and often less, taxing on their families' financial resources than attending a public university. More than 75 percent of SMU students receive some type of financial aid. More information is available in the Student Financial Aid section of this catalog or through the Division of Enrollment Services, Office of Financial Aid: www.smu.edu/financial_aid; 214-768-3417.

SMU has a generous program of merit scholarships, grants, loans and part-time jobs to recognize academic achievement and talent in specific fields and to meet financial need.

Meadows Undergraduate Artistic Scholarships

The divisions and centers comprising Meadows School of the Arts annually award scholarships for outstanding achievement in a particular discipline. Candidacy for scholarship considerations may require an audition, review and/or interview. No student with ability should hesitate to apply to SMU and Meadows because of financial need.

For information regarding artistic scholarships, students should contact the director of financial aid and scholarships at Meadows School of the Arts, Southern Methodist University, PO Box 750356, Dallas TX 75275-0356; phone 214-768-3314.

To receive primary consideration for all SMU merit scholarships and other aid, students should comply with the following schedule:

By January 15

- Complete the SMU Application for Admission.
- Submit the Free Application for Federal Student Aid at www.fafsa.ed.gov and the CSS/Financial Aid Profile at www.collegeboard.org.

By March 1

- Complete auditions and/or interviews.

DEGREE REQUIREMENTS

Requirements for Graduation

Students who are candidates for a degree in Meadows School of the Arts must submit a formal application for graduation to the Student Academic Services Office by the end of the first week of class for December and May graduation, and by the second day of summer school for August graduation. In addition to University-wide requirements and requirements for the major, candidates for graduation must also fulfill the following requirements:

1. Credits
   A minimum total of 122 term credit hours. Additional term credit hours are required by some programs as needed to fulfill University-wide requirements. No more than two term credit hours from Personal Responsibility and Wellness courses count toward degree completion.
2. Grades
   a. A minimum cumulative GPA of 2.000 on all attempted SMU work and a minimum 2.000 GPA in the major area of study.
   b. A maximum of 12 term credit hours at the student's election with a grade of *P* (Pass).
3. Credit Requirements:
   a. A minimum total of 60 term credit hours through enrollment at SMU.
   b. A maximum of 30 term credit hours of transfer work after matriculation.

A degree from Meadows School of the Arts is awarded by the faculty only in recognition of developed abilities, demonstrated knowledge of the student's particular field of study and the capacity to express an understanding of the art medium. Merely passing all courses is not necessarily sufficient.

Requirements for the Major

Candidates for undergraduate degrees must complete the requirements for an academic major in one of the divisions in Meadows. Students usually declare a major at the end of the first year. Students may major in more than one program within Meadows or combine a major in Meadows with one in a different school. All coursework counting toward a major must be taken for a letter grade, except for those courses that are routinely designated as pass/fail. Students must process appropriate forms in the Student Academic Services Office to change majors or declare a second major.

University-wide Requirements

University-wide requirements (UC/GEC) must be met by all undergraduate students, regardless of degree program or major. All courses used to meet University-wide requirements must be taken for a letter grade, unless the course is offered only on a pass/fail basis. Questions concerning UC/GEC requirements may be directed to the Student Academic Services Office.

Double Majors

A student who wishes to double major (majors in two departmental areas or in two schools) must satisfy the requirements of each department or school.

Graduation Honors

There are three classes of graduation Latin honors: summa cum laude, magna cum laude and cum laude. Eligibility for graduation honors will be based upon a student's total academic program. All academic work attempted at other colleges or universities equivalent to SMU work will be included in the calculation of the GPA. For students who have transferred to SMU or who have transferred coursework following matriculation at SMU, two GPAs will be calculated: that for all work attempted and that for work completed through enrollment at SMU. Latin honors will be based on the lower of the two averages.

Commencement Activities Prior to Completion of Degree Requirements

Participation in May graduation activities is allowed for students who are within six hours of completing graduation requirements and are enrolled to complete all degree requirements during the summer following graduation activities. Students who meet the above requirements may petition to participate in commencement activities.

PROGRAMS OF STUDY IN MEADOWS

Advertising

Temerlin Advertising Institute for Education and Research

Professor Steven Edwards, **Director**

Professors: Patricia Alvey, Steven Edwards, Alice Kendrick, Carrie La Ferle. **Associate Professor:** Yong Jun Sung. **Assistant Professors:** Sidharth Muralidharan, Hye Jin Yoon. **Lecturers:** Dev Gupta, Cheryl Mendenhall. **Executives-in-Residence:** Brice Campbell, David Hadeler. **Visiting Executive-in-Residence:** Willie Baronet. **Adjunct Lecturers:** Belinda Baldwin, Lisa Haayen, Suzanne Larkin, Gordon Law, Carl Thompson.

The Temerlin Advertising Institute was endowed by the Dallas advertising community through a pledge to augment scholarships, faculty salaries and public programs that enrich student learning and practical experience in advertising. Established in 2001, it is the nation's only endowed advertising institute. The institute enjoys a strong relationship with the industry, as it is situated in a top media and advertising market – the Dallas/Fort Worth Metroplex. This location affords access to professionals of the highest caliber who serve as class clients, guest lecturers, executives-in-residence, adjunct faculty and internship sponsors. Students have access to high-profile internships at national and global agencies as well as client and media corporations. All undergraduate students admitted to the institute work toward a B.A. degree in advertising. In addition, students may apply for admission into the creative program after their first term at the institute. Students wishing to pursue a Master's degree in advertising may apply to the graduate program. Additional information is available in the Meadows School of the Arts graduate catalog or online at www.smu.edu/temerlin ("Graduate Studies" link).

Admission Requirements

For students wishing to pursue either a B.A. in advertising or a minor in advertising at SMU, admission into the Temerlin Advertising Institute is a two-step process.

STEP ONE: Students must complete a minimum of 30 hours with a cumulative GPA of 2.500 or better before they can apply for a major or minor in advertising. Advertising major or minor candidates must also complete the following four required subset courses with a minimum cumulative GPA of 3.000: STAT 1301, DISC 1312 and 1313 (or the equivalent), and ADV 2374. (STAT 2301 or STAT 2331 may replace STAT 1301. No other course exceptions will be granted.) Students transferring from other universities must have completed equivalent courses and obtained the equivalent cumulative GPA in those courses before they can progress to step two.

STEP TWO: Advertising major or minor candidates who have fulfilled step one also must complete a written on-site application that examines grammar, spelling, punctuation, critical thinking and writing skills. The application process is offered each fall, spring and summer term. Students who are not admitted during an application process may reapply during the next application period. Dates, times and location are posted at www.smu.edu/temerlin.

Bachelor of Arts in Advertising

The Temerlin Advertising Institute offers a general advertising curriculum. The general advertising program prepares students for careers in several areas of the profession, including advertising agencies and corporate and retail advertising departments. Graduates are also prepared for careers in major media outlets such as

newspapers, magazines, television, radio and interactive media. If students want to target their studies toward a particular area, they may choose to focus their elective courses, or they may apply for admission into the creative program if they wish to become advertising writers or art directors.

SMU advertising students receive a broad-based liberal arts degree with approximately 70 percent of their coursework taken outside the Temerlin Advertising Institute. All SMU advertising students are required to take a core of advertising courses that includes creative, research, ethics, media planning, marketing principles of advertising and advertising campaigns. In addition, advertising majors are required to complete eight hours of second language coursework, and all majors must declare and complete a second major or a minor of their choosing. Because SMU is in the center of a dynamic U.S. advertising market, many students participate in internships for course credit.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Required Advertising Courses ADV 2374, 2375, 3362 (or MKTG 3340), 3376, 3385, 3393, 4399	21
General Advertising Electives Two from ADV 3391, 4317, 4318, 4351, 4365, 4375, 4381, 4382, 4125 and 4225, 4325	6
Specialized Advertising Electives One from ADV 4362, 4374, 4376, 4393	3
Communication Electives Communication electives include any advertising, communication studies, film and media arts, or journalism course. A list of suggested communication electives is found in the *TAI Student Handbook* (www.smu.edu/temerlin).	6
Second Language Two terms of the same language.	8
Statistics STAT 1301, 2301, *or* 2331	3
Meadows Elective Meadows electives include any art, art history, dance, music, or theatre course. A list of suggested Meadows electives is found in the *TAI Student Handbook* (www.smu.edu/temerlin).	3
Second Major or Minor Choice Hours vary according to choice.	
Free Electives Hours vary as needed to meet University residency and degree requirements.	
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Creative Program

Overview. The Temerlin Advertising Institute's creative program prepares students for careers in art direction or copywriting. Admission to the program is selective and based upon a faculty panel's evaluation of an application used to assess a student's creative ability and potential. This screening process improves the quality of the ex-

perience each student receives in creative courses and helps ensure that the quality of work produced by students is of the highest caliber and competitive by industry standards.

Creative program applications are collected at the end of every fall and spring term. Most students' first opportunity to apply is near the end of their ADV 3385 course. Any student not admitted to the creative program on a first attempt may reapply during a subsequent application process.

Creative Program Application. The application requires students to submit two samples of creative work as evidence of their capabilities: one that demonstrates facility to solve a specific problem and another that permits a longitudinal examination of creative thinking ability:

Part I: The Big Question. Each term, members of the creative program faculty confer and propose a question that applicants are challenged to answer. The question is open to broad interpretation and responses may be crafted using words, images or a combination of both. Applicants must observe submission guidelines but are otherwise free to propose the most unique, intelligent and imaginative answers possible.

Part II: Idea Blog. Over the course of a term, all ADV 3385 students are required to maintain and submit a blog documenting their ideas and insights on a variety of topics, both assigned and voluntary. The blog conforms to certain parameters as a class assignment, but is designed to offer students the opportunity to document and showcase their identities as independent thinkers.

Student Progress. Students admitted to the creative program are required to produce work that meets artistic standards in order to continue taking courses in the program, consistent with Meadows School of the Arts policy. This evaluation is made by the creative program faculty, who regularly consult with industry professionals for each creative program student. Students who fail to meet artistic standards will discontinue coursework in the creative program and have the option to continue pursuing their general advertising degree.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Required Advertising Courses	30
ADV 2374, 2375, 3362 *or* MKTG 3340, 3376, 3385, 3390 (concurrent enrollment in ADV 3395 required), 3393, 3395 (concurrent enrollment in ADV 3390 required), 4385, 4399	
Communication/Meadows (Advertising Creative) Electives	9
ADV 4354 *or* 4355, 4395, other communication/Meadows electives	
Second Language	8
Two terms of the same language.	
Statistics	3
STAT 1301, 2301, *or* 2331	
Second Major or Minor Choice	
Hours vary according to choice.	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

Communication electives include any advertising, communication studies, film and media arts, or journalism course. Meadows electives include any art, art history, dance, music, or theatre course. For a list of suggested Meadows electives, students should consult the *TAI Student Handbook*, available at www.smu.edu/temerlin. Creative program students are strongly encouraged to take ADV 4354 or 4355 and ADV 4395 to satisfy the communication elective (three credits) and Meadows elective (three credits). A student who fails to meet the creative program's artistic standards (or discontinues work in the creative program for any reason) prior to taking these courses should select from other communication or Meadows electives as needed to complete the general advertising degree requirements.

Minor in Advertising

For students wishing to pursue a minor in advertising, admission is a two-part process. Additional information is found in the Advertising Admission Requirements section of this catalog. The minor in advertising offers the student a cogent overview of the social, economic, legal and marketing environments in which advertising functions. Courses offered in the minor are designed to satisfy the needs of the consumer of advertising messages, as well as those of a person who might choose advertising as a valuable adjunct to another career choice.

Requirements for the Minor	*Credit Hours*
Required Advertising Courses	12
ADV 2374, 2375, 3385, 3362 *or* MKTG 3340	
Advertising Elective	3
ADV 4382 *or* 4317	
Electives	9
Any 9 credit hours in advertising, anthropology, art history, English, or psychology.	
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The Courses (ADV)

ADV 2310/ASAG 1310 (3). WORD AND IMAGE, ART AND DESIGN: 1900–PRESENT. Contemporary designers and artists create meaningful, persuasive, and expressive works through a combination of images and text. These works of graphic design and art shape the visual culture of every aspect of life, from the look of media and information networks to people's experience of the cities in which they live. This course surveys the modern and contemporary history of works of art and design that demand to be read as much as seen, from the industrial age to the knowledge economy.

ADV 2374 (3). SURVEY OF ADVERTISING. Introductory course for majors and non-majors surveys the field of advertising and studies how it fits into society. Topics include history, law, ethics, social dynamics, economic implications, as well as the advertising campaign planning process. The process of advertising is examined from the perspectives of art, business and science. Required for all majors and minors.

ADV 2375 (3). ADVERTISING ETHICS. Students will gain a broad overview of the issues that relate to the ethical practice of advertising and marketing communications. In-depth exploration of ethical topics will be accomplished through directed reading assignments, class/small group discussions, guest speakers, and independent research. Required for all majors and minors. *Prerequisite:* ADV 2374. Restricted to advertising majors and minors.

ADV 3360 (3). INTRODUCTION TO GRAPHIC DESIGN STUDIO. An introduction to graphic design as a form of visual communication through the use of type, image, form, and color. Projects explore principles of perception, visual identity and communication, thematic structure

and hierarchy, creative problem-solving, and basic design practices of critique and discussion. *Prerequisite:* ADV 3390 or 3391.

ADV 3362 (3). MARKETING PRINCIPLES OF ADVERTISING. Students learn the basic principles of consumer marketing and the role of advertising in the marketing mix. The marketing and advertising strategy and planning processes are emphasized through case studies in which students develop advertising answers to marketing problems and opportunities. Required for all majors. *Prerequisite:* ADV 2374 . Restricted to advertising majors and minors.

ADV 3376 (3). ADVERTISING MEDIA. Principles covered are those essential to media planners, buyers, and sellers. Includes media audience analysis, media vehicle comparisons and budgeting. Students master the elements of media plans used in major advertising agencies. *Prerequisite:* ADV 2374. Restricted to advertising majors.

ADV 3385 (3). INTRODUCTION TO CREATIVITY. A survey of the theoretical, practical, and ethical issues associated with creative thinking. Examines both individual and organizational strategies for promoting creativity, and the creative thinker's role in shaping the culture. Also highlights the intellectual connections between the scholarship in creativity and advertising industry practice. Students who complete this course may apply for admission to the Temerlin Advertising Institute's Creative Program. Students must earn a B or better in ADV 3385 to be eligible for admission to Creative Program. *Prerequisite:* ADV 2374 . Restricted to advertising majors and minors.

ADV 3390 (3). CREATIVE PRODUCTION. Students learn the basic principles of advertising design and production in tandem with the use of industry-standard hardware/software programs, including the Adobe Creative Suite. *Prerequisites:* ADV 2374, 3385. Concurrent enrollment in ADV 3395 required. Restricted to advertising majors. Departmental consent required.

ADV 3391 (3). CREATIVE PRODUCTION FOR NON-CREATIVE TRACK. Students learn the basic principles of advertising design and production in tandem with the use of industry-standard hardware and software programs, including the Adobe Creative Suite.

ADV 3393 (3). ADVERTISING RESEARCH. The proper role of research in advertising planning is the focus. Students are exposed to a variety of research methods, sources, and issues. Primary and secondary research projects are designed, executed, analyzed and presented by students. *Prerequisites:* ADV 2374. Restricted to advertising majors.

ADV 3395 (3). CONCEPTING. A workshop for developing ideation skills and helping students self-identify as art directors or writers. Students acquire techniques and develop personal discipline inherent to the generation of novel, sophisticated creative work based on a solid concept – the distinctive, guiding idea that drives campaign messages. Assignments are evaluated in group critiques and each student completes a final portfolio by semester's end. *Prerequisites:* ADV 2374 and 3385. Concurrent enrollment in ADV 3390 required. Restricted to advertising majors. Departmental consent required.

ADV 4125 (1), 4225 (2), 4325 (3). INTERNSHIP. Off-campus opportunity for students to apply principles learned in various advertising courses in a professional setting. Students may be placed for the fall, spring, or summer terms. Through weekly, midterm, and final reports, the completion of an essay and the satisfactory accomplishment of 50, 100, or 150 hours of work, a student may earn one, two, or three academic credit hours respectively. Only three total credit hours may be earned through internships. *Prerequisites:* ADV 2374, 3362, 3376, 3385, 3393, and junior or senior standing. (MKTG 3340 may replace ADV 3362. No other exceptions will be granted.) Restricted to advertising majors. Departmental consent required.

ADV 4317 (3). CONSUMER BEHAVIOR. Draws upon the disciplines of psychology, social psychology, sociology, anthropology, economics, marketing, and communications to explore the consumer decision-making process. Includes theories of motivation, attitudes, beliefs, and learning, with a direct application to advertising. *Prerequisite:* ADV 2374.

ADV 4320 (3). TYPOGRAPHY. An introduction to the fundamentals of typography. Explores the history of typographic forms, typographic anatomy, vocabulary, principles of composition, the expressive potential of type, the intricacies of spacing between individual letterforms and lines of type, and legibility across a variety of media and across varying distances and speeds of delivery. *Prerequisites:* ADV 2310 or ASAG 1310, ADV 3360, and 3390 or 3391.

ADV 4330 (3). LOGO AND TRADEMARK DESIGN. An exploration of the theory and practice of personal and corporate identity systems, including symbol and logotype design and their

application to various media: stationery system, signage, website, display, packaging, etc. Also, issues of legibility, cross-cultural understanding, and integrity of representation across a variety of media. *Prerequisites:* ADV 3360, 3391; ASAG 1310.

ADV 4335 (3). PUBLICATION DESIGN. Examines the graphic designer's role in the layout and design of publications. Lectures and studio work cover historical and current practices and technologies used to produce multipage publications. Also, issues of legibility and enhanced storytelling. Students produce visualizations for several publications using the elements of layout with typography and art. *Prerequisites:* ADV 3360, 3391; ASAG 1310.

ADV 4351 (3). INTERACTIVE ADVERTISING DESIGN. This course focuses on the concepts, technologies and skills necessary to designing, developing and maintaining various forms of interactive web environments. This is more than just an HTML class. It is an investigation into design for interactive and strategic messaging. Students will learn how to use high-end software such as Dreamweaver and Flash applications to accomplish their design tasks. *Prerequisites:* ADV 2374 and ADV 3390. (ADV 3391 may replace ADV 3390. No other exceptions will be granted.) Restricted to advertising majors.

ADV 4354 (3). COPYWRITING STUDIO. Intensive exploration of the writer's craft across a variety of literary genres. Students gain an understanding of the power of words and the distinctive voices in poetry and prose, with implications for strategic advertising copywriting. *Prerequisites:* ADV 2374, 3385, 3390. Restricted to advertising majors. Department consent required.

ADV 4355 (3). ART DIRECTION STUDIO. Building upon the prerequisite course ADV 3390, students apply the fundamentals of advertising layout and design with the goal of preparing material for professional use. Intended for creative program majors choosing art direction careers. *Prerequisites:* ADV 2374, 3385, 3390. Restricted to advertising majors. Department consent required.

ADV 4360 (3). VISUALIZATION OF INFORMATION. Addresses visual problem-solving and emphasizes methods of translating complex data into clear, visually dynamic solutions. Topics include corporate communication systems, publication, way-finding, interaction design, and explanatory and interactive graphics for use in print and digital media. *Prerequisites:* ADV 2310 or ASAG 1310, ADV 3360, and 3390 or 3391.

ADV 4362 (3). ADVERTISING ACCOUNT MANAGEMENT. Students examine what makes advertising agency account managers, or account executives, successful. The personal and performance qualities that characterize successful account managers are examined. Coursework includes assigned reading, problem-solving exercises, lectures, and discussions of real-world situations. *Prerequisites:* ADV 2374, 3362. (MKTG 3340 may replace ADV 3362. No other exceptions will be granted.) Restricted to advertising majors.

ADV 4365 (3). SOCIAL MEDIA MARKETING. This course explores the game-changing nature of social media and its impact on traditional advertising. Topics include word-of-mouth marketing, social networks, wikis, multimedia sharing sites, bookmarking sites, and virtual worlds that allow people to interact with each other and share information about products and brands. *Prerequisite:* ADV 2374. Restricted to advertising majors.

ADV 4374 (3). INTERNATIONAL ADVERTISING. Students examine the principles, trends, and impact of advertising in a global environment. Focus will be on how the cultural, political, economic, legal, and social environments impact advertising decisions across global markets. *Prerequisite:* ADV 2374, 2375, and 3362. (MKTG 3340 may replace ADV 3362. No other exceptions will be granted.) Restricted to advertising majors.

ADV 4382 (3). INTEGRATED MARKETING COMMUNICATION. Introduces the concept of coordinating traditional advertising with a variety of alternative consumer contact points to produce communications campaigns that fulfill marketing and organizational goals with maximum clarity and impact. Students formulate strategies and use tools in the fields of advertising, sales promotion, public relations, direct marketing, interactive and mobile media, viral marketing, and other evolving elements of the marketing communication mix. Includes planning and implementing integrated marketing communications plans from the perspective of advertising agencies and businesses and nonprofit organizations. *Prerequisite:* ADV 2374.

ADV 4385 (3). PORTFOLIO. A workshop course devoted to the continued development and professional-level execution of an advertising portfolio reflecting mastery of strategic and conceptual thinking. Work is prepared and evaluated to satisfy highest industry standards for

placement. Portfolios are reviewed by a jury of creative professionals at an end-of-semester critique. *Prerequisites:* ADV 2374, 3385, 3390, and 3395. Restricted to advertising majors. Departmental consent required.

ADV 4393 (3). ADVERTISING ACCOUNT PLANNING. Focuses on the research-based and consumer-centered approach to strategic development of advertising known as account planning. Students review qualitative and quantitative research practices used in advertising and the planning techniques used by account planners. Includes the creation of strategic briefs, primary research among consumers, and reports that contribute to both creative and media elements of an advertising campaign. *Prerequisites:* ADV 2374, 3393. Restricted to advertising majors.

ADV 4395 (3). ADVANCED PORTFOLIO. Building on ADV 4385, students continue development of an advertising portfolio. Special focus is given to the development of nontraditional and alternative media strategies. Students are also required to develop self-promotional materials to complement the portfolio. Portfolios are reviewed by a jury of creative professionals at an end-of-semester critique. *Prerequisites:* ADV 2374, 3385, 3390, 3395, and 4385. Restricted to advertising majors. Departmental consent required.

ADV 4399 (3). ADVERTISING CAMPAIGNS. Integrating the major advertising principles, students develop and present an advertising campaign, including research, creative strategy, media plan and presentation of the campaign to a client. *Prerequisites:* ADV 2374, 3362, 3376, 3385, 3393. (MKTG 3340 may replace ADV 3362. No other exceptions will be granted.) Additional prerequisites for Creative Program students: ADV 3390 and 3395. Restricted to advertising majors.

ADV 5110 (1), 5210 (2), 5310 (3). DIRECTED STUDY. This is an independent study under the direction and supervision of a full-time faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed Directed Studies Approval Form to the Temerlin Advertising Institute office before the start of the term. Instructor and departmental consent required. *Prerequisite:* Junior standing. Restricted to advertising majors.

ADV 5113 (1). ADVERTISING PROFESSIONAL DEVELOPMENT. Guides graduating seniors from the classroom to the work force and encompasses all aspects of the job search. Includes resume and cover letter development, interview practice, networking through a sphere of influence and sourcing positions in the field of advertising. *Prerequisite:* Junior standing. Restricted to advertising majors.

ADV 5301 (3), 5302 (3), 5303 (3), 5304 (3). TOPICS IN ADVERTISING. Focuses on special topics in advertising such as timely, evolving, ethical and/or international issues immediately relevant to the advertising industry. *Prerequisite:* ADV 2374. Restricted to advertising majors.

Art

Professor Jay Sullivan, **Division Chair Ad Interim**

Professors: Michael Corris, Barnaby Fitzgerald, James W. Sullivan, Philip Van Keuren, Mary Vernon. **Associate Professors:** Debora Hunter, Noah Simblist. **Assistant Professors:** Mary Walling Blackburn, Brian Molanphy, Brittany Ransom. **Senior Lecturer:** Charles DeBus. **Adjunct Lecturers:** Kael Alford, Alejandro Borsani, David Dreyer, Misty Keasler, Margaret Meehan, Don Relyea.

The study and practice of art offers a unique experience for the exercise of imaginative freedom, the opportunity for the independent organization of work, and the promise of self-knowledge and personal satisfaction. Contemporary art is also increasingly a source of knowledge about the world and, for many, an active agent in the transformation of social life. The Division of Art embraces these values in its art courses leading to the B.A., B.F.A. and M.F.A. degrees.

At the heart of the student's experience is the acquisition of skills, concepts and strategies relevant to an expanded notion of studio culture in contemporary art. Students are encouraged to explore and develop art in a challenging environment that rewards experimentation and risk-taking. The Division of Art offers a program of study that prepares students for the successful continuation of professional practice as an artist, the pursuit of graduate study in art or the application of visual art to other fields of study.

The program is marked by its wide range of supporting resources: studio courses that offer grounding in techniques and concepts; courses in the critical and historical study of art; well-equipped workshops, galleries and exhibition areas that provide ample opportunities for the public presentation of student work; field trips to public and private collections of art and to artists' studios; and a lively series of lectures and seminars by distinguished contemporary practitioners, critics and curators. Small class size coupled with an approach that takes full advantage of the division's setting within a distinguished school of the arts of a major university offers a transdisciplinary educational experience that few, if any, specialist colleges of art can match. More information is available at www.meadows.smu.edu/art.

Instructional Facilities

The tree-lined SMU campus offers a beautiful setting for learning. Facilities for the study of art include well-lighted studios, individual workspaces and excellent equipment to support all media taught, as well as individual experimentation. Facilities span both new and traditional approaches to studio art, including digitally based studios for photography, video, computer-generated imaging, 3-D imaging and rapid prototyping (3-D printing), and physical computing (microcontrollers/Arduino boards and sensors). Art students work as broadly and as experimentally as they wish within an environment of open artistic exchange, surrounded by artists in dance, music, theatre, film and communications. Additional facilities comprise a variety of spaces for the installation of artwork, including the Pollock Gallery – the art exhibition space of the Division of Art located in Hughes-Trigg Student Center. The Pollock Gallery provides students, faculty, staff and the surrounding community with opportunities to experience a wide and thought-provoking array of exhibitions representing diverse artists, time periods and cultures, as well as the B.F.A. and M.F.A. qualifying exhibitions. The Meadows School and SMU offer excellent library and technological resources, including the Hamon Arts Library (incorporating the Meadows computer center), the Center of Creative Computation (an interdiscipli-

nary research center open to all Meadows' undergraduate and graduate students), as well as specific facilities within the Division of Art.

The division runs an extensive visiting artist program, ranging from visiting artist lectures and workshops to the Meadows Distinguished Visiting Professor. Through these programs, artists, critics and curators of note are brought to campus regularly throughout the year to teach, lecture and conduct upper-level undergraduate and graduate critiques.

The division also runs two special programs of importance to graduate and undergraduate students: the New York Colloquium (a winter interterm program in New York) and SMU-in-Taos, a summer program at SMU's campus near Taos, New Mexico. During the New York Colloquium, students visit a range of museums, galleries, artists' studios and other venues appropriate to the development of their critical and professional studies in art. The program at Fort Burgwin, Taos, offers coursework as well as independent and directed study each summer in a wide range of studio and external exhibition projects. The Meadows School and the University offer a range of programs for study abroad during all phases of study.

The Dallas/Fort Worth area has a large artistic community with rich and varied resources. These include many internationally and nationally significant museums and contemporary exhibition spaces: the Dallas Museum of Art, SMU's newly designed Meadows Museum, the Nasher Sculpture Center, the Dallas Contemporary, the Crow Collection of Asian Art, the Latino Cultural Center of Dallas, the McKinney Avenue Contemporary, the Arlington Museum, the Kimbell Museum, the Fort Worth Museum of Modern Art and the Amon Carter Museum. There are also vibrant, artist-run alternative and cooperative galleries, and a growing commercial gallery system.

Admission and Financial Aid

Students wishing to pursue the B.A. in art or B.F.A. in art degrees must submit a portfolio for admission to the degree program. After the first term of required study (ASAG 1300, 1304 or their equivalents), they will be asked to submit a final portfolio for consideration as a continuing student in either the B.A. in art or B.F.A. degree programs.

All students submitting portfolios and admitted to the B.A. in art or B.F.A. in art degree programs are considered for artistic scholarships based on merit as they enter the University. The deadline for incoming portfolios to be reviewed for scholarships is February 1 of every year for scholarships beginning in the fall term, and December 15 for early admission candidates. Portfolios must be submitted through SlideRoom (www.smu.slideroom.com), the online digital portfolio system, for full consideration. A guide to aid the student in the preparation of the portfolio of images is available through the Division of Art and on the division website. In addition, the Division of Art hosts regularly scheduled portfolio review days for prospective students where faculty critique and discuss student work in an open review. More information is available at www.meadows.smu.edu/art.

Students wishing to transfer to the B.A. or B.F.A. degree program from another university must be accepted by portfolio review for admission to study. For more information, students should contact the Division of Art.

Financial aid from the Division of Art for entering and continuing students is based upon artistic accomplishment. Continuing scholarships are reviewed through portfolio submissions each year, as well as satisfactory progress toward the degree.

To receive an award for artistic merit, students must submit either a Free Application for Federal Student Aid (www.fafsa.ed.gov) or a waiver, and a College Scholarship Service/Financial Aid Profile (www.collegeboard.com).

Programs of Study

The Division of Art offers two undergraduate degrees – the B.F.A. in art and the B.A. in art – and minors in art, creative computing (details in the Interdisciplinary Programs section) and photography. In addition, the Division of Art contributes to the continuous development and delivery of interdisciplinary courses throughout the Meadows School of the Arts. The division provides important course components in new minors such as fashion media (in collaboration with the Journalism and Communication Studies divisions) and graphic design (in collaboration with the Temerlin Advertising Institute).

Bachelor of Fine Arts in Art

The B.F.A. degree prepares students to become professional artists, engage in professions in the arts or continue studies at the graduate level. The division offers instruction in an integrated studio environment in the following media: ceramics, digital/hybrid media, drawing, painting, photography, printmaking, sculpture and video. There is also scope for the study of performance in art and to work in courses that focus on art and engagement with the city. Cross-disciplinary interaction is encouraged at every level. First-year students intending to major in art should take ASAG 1300, 1304 in fall and ASAG 1308, 1312 in spring, as the beginning of their B.F.A. studies.

To earn a B.F.A., the student is required to take a minimum of 66 hours in the Division of Art and nine to 12 hours in the Division of Art History. **Note:** All majors in art are strongly encouraged to enroll in the May term or summer term study of art at SMU-in-Taos in May or summer after declaring their major.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	Varies
Foundations	12
ASAG 1300, 1304, 1308, 1312	
Required Art Courses	15
ASAG 3310, 3380, 3390, 5310, 5315	
Advanced Art Studies	24
Division of Art courses at the 3000 level or higher.	
Additional Art Studies	15
Division of Art courses at any level.	
Art History	12
No more than 6 hours at the 1000 level. ASAG 3350 may substitute for one 3000-level ARHS course. Courses in visual culture studies from other divisions may substitute if approved.	
Community Experience	0–1
MSA 1101 *or* 1001	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

GEC students are required to complete a minimum of 125 term credit hours and are exempt from 3 hours of Perspectives and an additional 3 hours of either Perspectives or Cultural Formations courses.

Bachelor of Fine Arts/Master of Interactive Technology Program in Digital Game Development

The Guildhall at SMU provides an in-depth Master's degree and graduate certificate in digital game development tailored to students who wish to become actively involved in the game development industry as designers or programmers.

In conjunction with The Guildhall, the Division of Art offers a B.F.A. degree in art that coordinates with the art creation and design tracks in game development in the Master's degree program at The Guildhall. This program provides the breadth and rigor of a B.F.A. degree while simultaneously providing an in-depth investigation of digital game development fundamentals through the curriculum of the Master of Interactive Technology.

The B.F.A./M.I.T. program is designed to furnish students with significant studio art training and a clear curriculum to prepare them for specialized graduate-level study of art creation, game creation and simulation at The Guildhall at SMU.

Students apply for admission to The Guildhall in the fall of the senior year. Students admitted to this program spend seven terms at the Meadows School and the last term at The Guildhall, located at SMU's Plano campus. The first two modules of Guildhall courses complete the B.F.A. The student can then apply to the Master's program, which requires three additional terms and one summer term to complete the M.I.T. degree. More information about the B.F.A./M.I.T. program is available online at www.smu.edu/meadows-guildhall.

Bachelor of Arts in Art

The B.A. in art is designed to offer students a degree in art that allows time for significant study in another discipline as well. This makes room for double majors and extensive study in the humanities, sciences or other degree programs. The B.A. degree gives students with varied interests in university study a sound footing in the visual, tactile and conceptual capabilities; historical and cultural knowledge; and a range of theoretical and analytical bases for making art. To earn a B.A., the student is required to take a minimum of 48 hours in the Division of Art and nine to 12 hours in the Division of Art History.

Students may choose the B.A. degree in art upon the completion of ASAG 1300, 1304 or their equivalent.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Foundations	9
ASAG 1300, 1304 (fall term) and one 1300-level course in ASCE, ASDR, ASIM, ASPH, ASPR, ASPT, or ASSC *or* three 1300-level courses in ASAG, ASCE, ASDR, ASIM, ASPH, ASPR, ASPT, or ASSC (for the student who declares the major in art after taking a number of introductory courses)	9

Requirements for the Degree (continued)	*Credit Hours*
Required Art Courses	6
ASAG 3310, 5315	
Advanced Art Studies	15
Division of Art courses at the 3000 level or higher.	
Additional Art Studies	6
Division of Art courses at any level.	
Art History	12
No more than 6 hours at the 1000 level. ASAG 3350 may substitute for one 3000-level ARHS course. Courses in visual culture studies from other divisions may substitute if approved.	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Minor in Art

The minor in art is designed to give a coherent structure to a brief but serious investigation of studio art. In this minor, students should grow to understand the formation of visual imagery and gain confidence in studio practice. The minor is designed for students who wish to incorporate more intensive visual studio training with studies in other areas, such as art history or advertising, or for those who want a basic studio curriculum.

Requirements for the Minor	*Credit Hours*
Any two courses at the 1300 level in ASAG, ASCE, ASDR, ASIM, ASPH, ASPR, ASPT, and ASSC	6
Any four art courses at the 3000 level or higher	12
	18

Minor in Photography

Students completing 18 hours in photographic study can expect to obtain a sophisticated understanding of the photographically derived image and the technical and creative skills necessary for its production. Classes in photography offered by the Division of Art integrate the technical aspects of the medium with the aesthetic concerns appropriate to art. Through the use of photography, students learn to think and express themselves visually. A minor in photography prepares one for further work in fine arts or commercial photography and other areas where knowledge of photography is helpful. Beyond vocational applications, a minor in photography creates a firm foundation for future creative development.

Requirements for the Minor	*Credit Hours*
ASPH 1300	3
Two from ASPH 3300, 3303, 3304	6
ARHS 3355, *or* 3367, *or* an approved substitution	3
Additional coursework in ASPH at the 3000 level or above	6
	18

Studio courses generally require six hours per week of in-class work and critical discussion. Students should enroll with a firm commitment to regular attendance and should expect to spend an additional four to six hours per week, per class, to complete their coursework.

Prerequisites and Course Fees. In enrolling for courses in art, it is necessary that the course number be preceded by the appropriate subject code prefix for credit to be properly recorded. Many courses at the 3000 level and all courses at the 5000 level have prerequisite coursework required. All directed studies courses require instructor approval before enrollment. All courses in studio art, except lectures and seminars, have a laboratory fee of $30 per credit hour, which is added to the tuition and fees assigned at the time of enrollment.

Foundations and Art, General Studio (ASAG)

Foundations courses are ASAG 1300, 1304, 1308 and 1312. This sequence of courses is for art majors or any student who seeks an intensive study of the visual arts. The remaining ASAG courses are organized thematically to explore a range of assumptions and practices – from the historical to the contemporary – that inform the making and display of art; these general studio courses have been designed to provide students with intensive training in studio practice, exposure to a range of materials, processes and research methods, and an introduction to the theoretical issues that frame contemporary art.

ASAG 1300 (3). OBSERVATION. Seeing is not as simple as it looks. What people see, how they see, and how and why they chose to represent their experience of the world in a particular form and through a particular medium are fundamental questions for the artist. Students experiment with various media while exploring the history, theory, and application of these resources of representation in visual art; they learn the differences among looking, scanning, and seeing; and they encounter a range of resources, from theories of perspective in drawing and painting through 3-D modeling and digital simulations of reality. *Corequisite:* ASAG 1304.

ASAG 1304 (3). SPACES. Our apprehension of space is tied to the fact that we ourselves occupy space and invest various kinds of spaces with meaning. Our expression of spaces through art may include a range of media and situations, from sculpted forms, constructions, architecture, and installations to 2-D renderings and virtual representations of space. In this course, students explore this multivalent conception of space and understand how our embodied conception of the world is made manifest through visual art. *Corequisite:* ASAG 1300.

ASAG 1308 (3). NARRATIVE. Narrative is the simple act of recounting a story. The ability to depict and connect events in an aesthetic and persuasive manner is at the heart of some of the most compelling visual art. This course introduces the student to a wide variety of media and issues that relate to art that includes – explicitly or implicitly – the dimension of time. This can be the literal time of a moving image (film, video, animation), the duration of a performance, the time required for the reading of a text, the depiction of an event through a single image, or a sequence of still images as found in the illustrated novel or comic strip. *Prerequisite:* ASAG 1300 and ASAG 1304. *Corequisite:* ASAG 1312.

ASAG 1310/ADV 2310 (3). WORD AND IMAGE, ART AND DESIGN: 1900–PRESENT. Contemporary designers and artists create meaningful, persuasive, and expressive works through a combination of images and text. These works of graphic design and art shape the visual culture of every aspect of life, from the look of media and information networks to people's experience of the cities in which they live. This course surveys the modern and contemporary history of works of art and design that demand to be read as much as seen, from the industrial age to the knowledge economy.

ASAG 1312 (3). SYSTEMS. In the course of modern and contemporary art, many artists have chosen to take a systematic approach toward making their art. Systems in art are a set of rules or constraints that function as a machine for making art. In this course, students encounter a

wide range of systematic art practices, from the elegant serial works of impressionism to art that incorporates models taken from communication theory and linguistics. Students also explore the concept of systems in art drawn from the realm of social and political theory, where the work of artist may be done in collaboration with others in order to understand and possibly change social relations that characterize everyday life. *Corequisite:* ASAG 1308.

ASAG 1375 (3). ART AND URBANISM. There is a long history of artists making work in or about the city. This class draws from historical and theoretical models, including social sculpture, relational aesthetics, and social practice, to create works that are situational and participatory. Students from all levels and disciplines are welcome in this highly interdisciplinary class.

ASAG 3305 (3). ART, WORD, AND IMAGE IN CONTEMPORARY ART. Contemporary artists create meaningful and expressive art through the combination of images and text: artwork that demands to be read as much as seen. Students learn about the recent history of language in art and create of works of art for a variety of sites of display – real and virtual – such as the gallery, social media, printed ephemera, the fabric of the campus, and the city at large. *Prerequisite:* One 1300-level studio art course.

ASAG 3310 (3). ART IN THE WORLD. Works are made in the world of art and in the world of history, not in the world of school. Students study the world of art by visiting museums, galleries, notable architecture, public lectures, installations, symposia, etc. All student work is written or made in relation to the experiences in these venues.

ASAG 3315 (3). ART AND SOCIAL PRACTICE. Research in a variety of areas that support practices in art outside the studio, including contemporary developments in criticism and theory, approaches to media, social and community contexts, and specific geographic or cultural contexts. Focused seminar discussion, research, and group projects. *Prerequisite:* Permission of instructor.

ASAG 3325 (3). STUDIO WORKSHOP. An intensive investigation in arts by students engaged in independent work, group collaboration, and analytical study. *Prerequisite:* 15 credit hours in art or permission of instructor.

ASAG 3350 (3). ART COLLOQUIUM: NEW YORK. Involves intensive analysis, discussion, and writing concerning works of art in museum collections and exhibitions, and in alternative exhibition spaces. Students study the philosophical as well as the practical to define and understand the nature of the art society produces and values. The colloquium meets in New York City for 2 weeks in January.

ASAG 3360 (3). COLOR AND THE VISUAL IMAGE. Color systems of Munsell, Itten, Photoshop palettes, etc. are studied in the light of contemporary neurobiology and the capabilities of media. Klee, Albers, Matisse, and other masters of color focus the course on color modes. *Prerequisite:* 24 credit hours in art or permission of instructor.

ASAG 3370 (3). SPECIAL TOPICS IN STUDIO ART. To be announced by the Division of Art. *Prerequisite:* Permission of instructor.

ASAG 3380 (3). CRITICAL ISSUES. A seminar for art majors in their 3rd year of studies. This course investigates topics in current critical theory in the arts as well as the historical context of their development. Readings are taken from philosophy, literary criticism, art theory, and art criticism. *Prerequisite:* 24 credit hours in art.

ASAG 3390 (3). GROUP JUNIOR TUTORIAL. A forum for art majors in the 3rd year of studies that facilitates the student's ability to articulate his or her work as an artist and to defend and present it in a peer-group setting. *Prerequisite:* ASAG 3380.

ASAG 5001 (0). B.F.A. QUALIFYING EXHIBITION. (for students who entered prior to fall 2010) Participation in the qualifying exhibition is required for all candidates for the degree of B.F.A. in art.

ASAG 5100 (1), 5200 (2), 5300 (3). INTERNSHIP IN STUDIO ART. Students work in internship positions that relate to their individual studio studies, including internships in teaching, in galleries, as assistants to established artists, or with businesses in the arts. Students should sign up for 1, 2, or 3 credit hours for internships of 3, 6, or 10 hours per week. Internships are supervised and evaluated by a member of the Division of Art faculty. *Prerequisite:* Approval of departmental chair or adviser.

ASAG 5310 (3). PROFESSIONAL PRACTICE IN ART. For art majors in their final year of studies. A practical and informed approach to understanding the competencies that are required to sustain practice as an artist beyond the undergraduate experience. Students learn how to negotiate the professional aspects of art and to identify and take advantage of a host of opportunities. Topics include establishing a studio; applying for residencies and grants; exhibiting work; intellectual property law; the contemporary art market; and alternative models of production, distribution, and exchange of art. *Prerequisite:* ASAG 3390.

ASAG 5315 (3). ART CAPSTONE PROJECT. A culmination of the study of art in support of the production of a body of work for exhibition. Required for the B.A. in art and the B.F.A. in art. *Prerequisite:* ASAG 3390.

ASAG 5325 (3). STUDIO WORKSHOP. An intensive investigation in arts by students engaged in independent work, group collaboration, and analytical study. *Prerequisite:* 15 credit hours in art or permission of instructor.

ASAG 5350 (3). ART COLLOQUIUM: NEW YORK. Involves intensive analysis, discussion, and writing concerning works of art in museum collections and exhibitions, and in alternative exhibition spaces. Students study the philosophical as well as the practical to define and understand the nature of the art society produces and values. The colloquium meets in New York City for 2 weeks in January.

Ceramics (ASCE)

ASCE 1300 (3). INTRODUCTION TO CERAMICS. Introduces the discipline of ceramics through projects, readings, and field trips. The motto of the ceramics area is *panta rhei* (everything flows) because the deformation of matter and the flowing across disciplines determine what one makes in ceramics. Students engage the Dallas community by making pots for the annual Empty Bowls food bank benefit, and they learn to use ceramic materials to analyze the ceramics they produce and to judge them critically.

ASCE 3300 (3). INTERMEDIATE CERAMICS. Further engages the discipline of ceramics through projects, readings, and field trips. Students form independent projects in which they may pursue a particular interest of their own (e.g., to depict the human figure in ceramic, to copy in clay an object that exists in another material, to create a set of tableware in a particular style, to use ceramic as a complement to artwork being made concurrently in other disciplines such as painting, or to employ ceramics as a part of an installation). *Prerequisite:* ASCE 1300 or permission of instructor.

ASCE 3310 (3), 5310 (3). SPECIAL TOPICS IN CERAMICS. To be announced by the Division of Art. *Prerequisite:* ASCE 1300 or permission of instructor.

ASCE 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN CERAMICS. Students may take one course per term only. *Prerequisite:* ASCE 3300.

ASCE 5300 (3). ADVANCED CERAMICS. Students refine their understanding of the discipline of ceramics based on their grasp of techniques and principles from the first two courses. Employing the fluid nature of ceramics to flow across disciplines, students select a common ground (for example, architecture, food service, or the human figure) and identify specific techniques (for example, printing, throwing, or painting) to accomplish primarily self-initiated projects of research and making. *Prerequisite:* ASCE 3300 or permission of instructor.

Digital and Hybrid Media (ASIM)

ASIM 1300 (3). INTRODUCTION TO DIGITAL HYBRID MEDIA. An introduction to computational media and digital processes as the basis of creative practice. Students gain proficiency in digital imaging, computer-generated animation, and digital video using popular graphics software such as Adobe Creative Suite. Includes an overview of the history of digital/hybrid art from the mid-20th century onward, including Internet art, mobile and ubiquitous computing, sonic art, virtual worlds, interactive installation, and augmented performance.

ASIM 1310 (3). ART AND CODE I. Explores computation as a powerful generative medium. Working with the open-source processing development environment and Java programming language, students learn the fundamentals of creative coding and computational thinking, including object-oriented programming. Hands-on topics include algorithmic drawing, procedural imaging, 2-D and 3-D animation, visualization, interactivity, and gaming.

ASIM 1330 (3). RESPONSIVE ARTS. Students use advanced processing tools to experiment and generate interactive pieces, art robots, and works that respond to stimuli. This studio class introduces students to nonscreen-based digital art that exists in real space. For students interested in installation, sculpture, performance, robotics, and electronics in art. *Prerequisite:* Meadows student or permission of instructor.

ASIM 1340 (3). COMPUTATIONAL SCULPTURE. An introduction to 3-D modeling, with a focus on modeling and physical object output using sophisticated 3-D software and rapid prototype production using a 3-D printer. For students interested in sculpture, design, architecture, computer science, and biovisualization. Students develop a multidisciplinary skill set and learn to model objects and environments and to apply surface texturing, lighting, rapid prototyping, rigging, and rendering. Includes lectures, field trips, in-class studio time, and assignments. *Prerequisite:* Meadows student or permission of instructor.

ASIM 3305 (3). ART AND CODE II. Introduces advanced creative coding principles using the C++ programming language and OpenGL and openFrameworks graphics libraries. Students learn how to design software systems for real-time performance, 3-D virtual environments, interactive applications, mobile games, and augmented installations. *Prerequisite:* ASIM 1310, or CSE 1341, or permission of instructor.

ASIM 3310 (3). COMPUTATIONAL MEDIA WORKSHOP. An intensive study designed to further integrate computational media and digital processes into creative practice. The focus is on developing independent work, group collaboration, and analytical study. Depending on the topic and work completed, study may be applied to different media concentrations. *Prerequisite:* ASIM 1310, CSE 1341, or CSE 1342.

ASIM 3315 (3). SPECIAL TOPICS IN DIGITAL AND HYBRID MEDIA. Intermediate to advanced research in a variety of areas that support digital/hybrid media practice and research. Focused research topics, studio projects, seminar discussions, and the introduction to various computational tools are used as vehicles for personal aesthetic expression. *Prerequisite(s):* ASIM 1310, 3320 or permission of instructor.

ASIM 3320 (3). RESPONSIVE ARTS II. Introduces advanced physical computing principles using microcontrollers, custom circuit design, and advanced code to generate interactive art pieces that respond to stimuli. Students further their mastery of nonscreen-based digital art that exists in real space. For students interested in installation, sculpture, performance, robotics, and electronic art. *Prerequisite:* ASIM 1330.

ASIM 3325 (3). SPECIAL PROJECTS IN DIGITAL AND HYBRID MEDIA. Intensive study of a particular subject or design project.

ASIM 3340 (3). INTRODUCTION TO INTERACTIVE GRAPHICAL PROGRAMMING. Using the graphical programming languages Pd/GEM and Max/MSP/Jitter and object-oriented programming software, students explore sound and video and strategies for creating generative creative art while connecting computation to the physical world. Also, the ways in which data from external input sources can be used to create interactive projects, algorithmic compositions, screen-based work, installations, and objects and experiences in real space. *Prerequisite:* Completion of any ASIM course.

ASIM 3350 (3). TECHNOLOGY AND THE BODY: EXPLORATION IN WEARABLES AND E-TEXTILES. Introduces wearable art and wearable-based performance art through survey lectures, video documentation, reading, technical instruction, and off-campus research trips. Students explore the intersection of material, interactivity, technology, the body (human and nonhuman), and the conceptual potentials within the context of wearable art. Includes programming at the introductory level through LilyPad and other Arduino microcontrollers as well as basic electronics. Students produce their own wearable prototypes both individually and collaboratively, working up to one final completed piece. *Prerequisite:* ASIM 1330.

ASIM 3370 (3). BIOART SEMINAR: NATURE AS MATERIAL. A combined seminar and studio course introducing artists and collaborative groups working with nature, science, and alternative organic methods as material to produce sculpture, installations, and performance-based work. Students explore nature as material and research-based art practices that engage in biology; the environment; genetics; technoscience; and the use of and collaboration with plants, animals, and organic and synthetically organic materials. Includes visits to various laboratories and exhibitions as well as lectures from visiting guest speakers. *Prerequisite:* Completion of any ASIM course.

ASIM 5302 (3). INTERMEDIA DIRECTED STUDIES. Students may take one course per term only. *Prerequisite:* Permission of instructor.

ASIM 5325 (3). SPECIAL PROJECTS IN DIGITAL AND HYBRID MEDIA. Intensive study of a particular subject or design project.

Drawing (ASDR)

ASDR 1300 (3). INTRODUCTION TO DRAWING. Drawing from life objects and concepts. Work in class is supplemented by outside assignments and readings. Emphasis placed on space, materials, analysis of form, and critical judgment.

ASDR 1310 (3). DRAWING IN ITALY. This course introduces students to plein-air drawing of the ruins, monuments, and landscape of central Italy, with an emphasis on development of light, space, and compositional structure. Offered at SMU-in-Italy.

ASDR 3300 (3). DRAWING: INTERMEDIATE LEVEL. Studio and outside work in drawing that further develops vision and individual approaches to drawing. *Prerequisite:* ASDR 2300.

ASDR 3305 (3). DRAWING AS CONCEPT AND PERFORMANCE. This course begins with the premise that the contemporary artist conceives of drawing as an expanded field of expressive and conceptual possibilities. Drawing understood as concept or performance is neither solely preparatory nor descriptive. Rather, drawing is constructed using a variety of means, including imaginative systems of notation, graphic conventions drawn from visual culture at large, and scripted physical actions. *Prerequisite:* ASAG 1300 or ASDR 1300.

ASDR 3320 (3). MATERIAL STUDIES: THE BOOK ART. An interdisciplinary course for creating artworks based on the form of the book. Considers the relationships among materiality, time, and an extended field of image making. Students are encouraged to utilize constructed and found materials in their exploration of concepts and processes central to contemporary book works, including sequence, repetition, and viewer participation; the embodiment of ideas through the book; book as tool and as art object; and the variety of formats clustered around the scroll and the codex. *Prerequisite:* ASAG 1300 or ASDR 1300.

ASDR 3330 (3). THE MIRRORING LINE: INTERDISCIPLINARY MARK MAKING. Interdisciplinary mark making (be it movement, sculpture, sound, drawing, or text) enables research on what might be termed the "mirroring line." By locating and engaging a series of borders (legal, social, physical, psychic, sonic, environmental, theoretical, and imaginary) that striate Dallas, its environs, and the multiple communities that intersect within the city, students expand the concepts of what it means to make a line (using graphite, blood, router, string, etc.) and of the kinds of substrate that take a line (be it paper, street, water, or human beings).

ASDR 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN DRAWING. Students may take one course per term only. *Prerequisite:* ASDR 3300.

ASDR 5300 (3). DRAWING ADVANCED. Drawing at the senior level exemplifying independent development in drawing. *Prerequisite:* ASDR 3300 or permission of instructor.

ASDR 5303 (3). DIRECTED STUDIES IN ITALY: ADVANCED STUDENTS. Offers senior-level development in drawing and individual responses to the ruins, monuments, and landscape of Italy, which are themselves the subjects of many masterpieces encountered in churches, museums, and archaeological sites. Students are allowed the freedom to explore formal issues and expressive means in response to these subjects, producing a visual record of their perceptions and thoughts in representational, abstract, or conceptual modes. Critiques allow students to demonstrate skills in formal analysis and interpretation. Enrollment is limited. *Prerequisite:* ASDR 3300.

ASDR 5305 (3). DRAWING AS CONCEPT AND PERFORMANCE. This course begins with the premise that the contemporary artist conceives of drawing as an expanded field of expressive and conceptual possibilities. Drawing understood as concept or performance is neither solely preparatory nor descriptive. Rather, drawing is constructed using a variety of means, including imaginative systems of notation, graphic conventions drawn from visual culture at large, and scripted physical actions. *Prerequisite:* ASDR 3305.

Painting (ASPT)

ASPT 1300 (3). INTRODUCTION TO PAINTING. A first course in painting from life, objects, and concepts. Emphasis is placed on space, materials, color, analysis of form, and critical judgment.

ASPT 3300 (3). PAINTING INTERMEDIATE. Includes study of the materials, capabilities, processes, and essential meaning of painting, as well as the qualities of color, vision, and composition. Subjects are drawn from life, objects, and concepts. Extensive studio and outside work is required. *Prerequisite:* ASPT 1300 or permission of instructor.

ASPT 3305 (3). STUDIO WORKSHOP: COLOR AND MEANING. A painting workshop in which theoretical works on color are discussed and employed, but the central concern remains the development of color relationships within each student's work. Extensive reading and written presentations are required. *Prerequisite:* ASPT 3300.

ASPT 3306 (3). PAINTING IN TAOS I. An intermediate study of painting in the physical and cultural environment of the Fort Burgwin Research Center. *Prerequisite:* ASPT 1300 or permission of instructor.

ASPT 3309 (3). PAINTING IN ROME. A study of painting among the monuments and landscapes of central Italy. *Prerequisite:* ASPT 1300 or permission of instructor. (SMU-in-Italy)

ASPT 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN PAINTING. Students may take one course per term only. *Prerequisite:* ASPT 3300.

ASPT 5300 (3). ADVANCED PAINTING. An intensive studio experience for students who wish to develop a significant body of work in painting. Independent development is stressed alongside a program of readings and individual and group critiques. *Prerequisite:* 6 credit hours in painting at the 3000 level or permission of instructor.

ASPT 5306 (3). PAINTING IN TAOS II. An advanced study of painting in the physical and cultural environment of the Fort Burgwin Research Center. *Prerequisite:* ASPT 3300, or 3306, or permission of instructor.

Photography (ASPH)

ASPH 1300 (3). THE BASICS OF PHOTOGRAPHY. Thorough discussion of camera operation and the elements of visual design (space, composition, color, and light). Emphasis is placed upon the creative application of aperture, shutter speed, framing, and lighting. Students must supply their own digital single-lens reflex cameras or advanced compact digital cameras that allow for manual exposure control. Assignments submitted digitally. Written examination. No darkroom or computer lab.

ASPH 1310 (3). INTRODUCTION TO VIDEO. Provides an opportunity to understand and master the craft of video production in the context of art. Using Final Cut Pro and higher-end cameras with full manual controls, students experiment with the many ways to generate moving images. Covers methods and concepts derived from film and video: point of view, shot composition, spatial and time continuity, lighting, and superimposition. Encourages the comparison of narrative and non-narrative formal systems. Also, the most important practitioners of video as art and the intersection of video with film, theatre, installation art, and architecture.

ASPH 3300 (3). BLACK-AND-WHITE PHOTOGRAPHY I. Exploration of the creative possibilities of silver-based photographic materials in the darkroom. Special attention is given to black and white film development, negative enlarging, and a variety of manipulative techniques. Students provide their own film camera in any format. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3302 (3). BLACK AND WHITE PHOTOGRAPHY II. Continuation of ASPH 3300 with emphasis on the zone system, film manipulation, chemical printing, and matting techniques. Includes the possibility of working in medium-to-large film formats, zone system, and bi-filter printing. *Prerequisite:* ASPH 3300 or permission of instructor.

ASPH 3303 (3). COLOR PHOTOGRAPHY. Exploration of the aesthetic issues and technical concerns of digital color photography. Students use Adobe Photoshop to produce fine-quality inkjet prints and supply their own digital single-lens reflex cameras. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3304 (3). DIGITAL TOOLS. Exploration of the experimental use of image-capture devices, software manipulation, output material, and presentation. Topics can include flatbed scanners, large-format inkjet printing, and text and collage techniques. Students provide their own single-lens reflex digital cameras. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3306 (3). PHOTOGRAPHY IN TAOS. Intermediate and advanced study of photography in the physical and cultural environment of the Fort Burgwin Research Center. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3310 (3). LARGE-FORMAT PHOTOGRAPHY. Exploration of the mechanics, creative possibilities, and aesthetics of silver-based photographs made with the 4x5 view camera. Fully examines adjustments unique to the view camera allowing for maximum image control. Subjects covered include still life, landscape, portraiture, and architecture. View cameras available for student use. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3315 (3). INTERMEDIATE VIDEO. Studio class for the creation of video art. Students complete guided and independent projects with a focus on the application of more advanced postproduction techniques. For students who are interested in using video as their primary expressive medium, to incorporate video into their studio practice, or to explore in depth the transmedia potential of video. Students are required to attain technical proficiency and develop individual ideas and personal concepts within each video project. *Prerequisite:* ASPH 1310.

ASPH 3320 (3). THE DOCUMENTARY IMPULSE. Traditional and contemporary approaches to documentary photography through shooting assignments, lectures, and readings. Using print-on-demand technology, each student produces a book of images and text on a self-defined project. Students work with digital cameras. *Prerequisite:* ASPH 1300 or instructor permission.

ASPH 3325 (3). THE PHOTOGRAPHIC PORTRAIT. Explores traditional and contemporary approaches to the photographic portrait through shooting assignments, lectures, and readings. Students work in available light on location and with SMU's electronic strobe equipment in studio. Includes work with digital cameras. *Prerequisite:* ASPH 1300 or instructor permission.

ASPH 3330 (3). FASHION PHOTOGRAPHY. Students photograph on location and in studio. Topics covered include on- and off-camera lighting techniques, concept development, art direction, working with talent, styling the shot, fees, publication rights, model releases, editing, portfolio presentation, and the history of fashion photography. Students work with digital cameras. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3340 (3). ALTERED AND ALTERNATIVE PHOTOGRAPHIC IMAGES. Exploration of the specialized chemical techniques that alter the gelatin silver print, including line drop, Sabattier effect, and hand coloring. Also, alternative nonsilver-based printmaking methods, including cyanotype, Van Dyke brown, gum bichromate, and platinum/palladium. *Prerequisite:* ASPH 1300 or permission of instructor.

ASPH 3350 (3). THE PHOTOGRAPHIC BOOK. Exploration of the creative presentation of photographs in traditional and contemporary book form using conventional and alternative bookbinding techniques. Field trips to local rare book collections supplement the student's understanding of the nature of the photographic book. Students may work with film and/or digital cameras. *Prerequisite:* ASPH 3300, 3303, or 3304 or permission of instructor.

ASPH 3360 (3). SPECIAL TOPICS IN PHOTOGRAPHY. Topics to be announced by the Division of Art. *Prerequisite:* Permission of instructor.

ASPH 3390/FILM 3301 (3). EXPERIMENTAL CAMERA. Pushing the technical boundaries of cameras as capture devices, students experiment with the creative aesthetic possibilities therein (still and/or motion) and then draw from a variety of genres to create short, experimental films. Exploring diverse concepts such as storytelling, portraiture, documentary, poetry, and abstraction, students combine elements including still photography, animation, graphics, narration, sound effects, and original music to create motion picture media. *Prerequisite(s):* FILM 1304; or ASPH 1300, 1310; or instructor permission is available for students with a working knowledge of the camera (aperture, shutter speed, focal length) and a basic understanding of video editing. Students are required to have access to at least a digital still camera.

ASPH 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN PHOTOGRAPHY. Students may take one course per term only. *Prerequisite:* Permission of instructor.

ASPH 5101 (1), 5201 (2), 5303 (3). DIRECTED STUDIES IN VIDEO. Students may take one course per term only. *Prerequisite:* Permission of instructor.

Printmaking (ASPR)

ASPR 1300 (3). INTRODUCTION TO PRINTMAKING. Introduction to historical and contemporary printmaking in a wide variety of media, including intaglio printing, etching, engraving, drypoint, aquatint, monotype, silkscreen, woodcut, and numerous digital possibilities presented by the medium.

ASPR 1321 (3). PRINTMAKING: WOODCUT. Introduces the process of relief printing.

ASPR 3300 (3). PRINTMAKING WORKSHOP. Intermediate and advanced-level exploration of the printing medium as an expressive tool. The ambience of the workshop, with no fixed structure, encourages the freedom to experiment in all directions (emotionally, intellectually, and technically) and to seek inspiration from any source. The goals are to gain the self-discipline necessary for coherent results and mastery of the craft of printing. *Prerequisite:* ASPR 1300, or 1321, or permission of instructor.

ASPR 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN PRINTMAKING. *Prerequisite:* Permission of instructor.

ASPR 5300 (3). PRINTMAKING WORKSHOP. Further exploration of the possibilities of the printing medium as an expressive tool at the intermediate and advanced level. The ambience of the workshop, with no fixed structure, encourages the freedom to experiment in all directions (emotionally, intellectually, and technically) and to seek inspiration from any source. The self-discipline necessary for coherent results, and mastery of the craft of printing, are the goals of the workshop. *Prerequisite:* ASPR 3300 or permission of instructor.

Sculpture (ASSC)

ASSC 1300 (3). INTRODUCTION TO SCULPTURE. An introduction to working in three dimensions from a variety of approaches, investigating sculpture's purposes, materiality, and spatial nature. Students examine historical and contemporary approaches to sculpture to understand how to manipulate form, space, and expressive content in three dimensions.

ASSC 1320 (3). MATERIALS AND PROCESSES. Introductory survey of the manipulation of a variety of media (clay, plaster, wood, metal, etc.) and the contemporary and historical approaches to the use of these materials in art. Focuses on expressive potential and studio safety.

ASSC 3300 (3). INTERMEDIATE SCULPTURE. A continuation of study of problems in sculpture, including analysis of form, theory, and technical processes. Emphasis on sustained investigation using a number of perspectives, critical discussion, analysis of contemporary and historical work, and concentrated studio practice. Students gain confidence with and understanding of the tools, materials, and concepts of sculpture. *Prerequisites:* ASSC 1300, 1320 or permission of instructor.

ASSC 3310 (3). MATERIAL AND FORM. An intensive investigation of material processes (construction, metal casting, and subtractive techniques) and the ramifications of material choice and method in the formal and stylistic development of sculptural work. Explores the traditional development and contemporary practice of each process. This intensive class requires 6 hours of studio work outside scheduled meeting times. *Prerequisites:* 6 credit hours in ASSC courses and 12 credit hours in ASAG courses, or permission of instructor.

ASSC 3320 (3). BODY AND OBJECT. A sculptural study of the body and figure with the aim of addressing the body through its objective structure and its social and psychological meanings, and discovering how these issues questions can be conveyed in contemporary practice. In class, work focuses on observation and direct study of the figure and its tactile translation into material. Out of class, students work on independent projects and consider the question of the body as a metaphoric and performative subject and its material and immaterial nature, creating work about the figure without literal reference to it. This intensive class requires 6 hours of studio work outside scheduled meeting times. *Prerequisites:* 6 credit hours in ASSC courses and 12 credit hours in ASAG courses, or permission of instructor.

ASSC 3330 (3). TIME AND MATERIAL. An interdisciplinary course that considers the relationships among materiality, time, and drawing, using both constructed and found materials. Investigates time, movement, and repetitive action; work that documents the process of making; the relationship between digital and material form; and the formats of installation and documentation. *Prerequisites:* 6 credit hours in ASSC courses and 12 credit hours in ASAG courses, or permission of instructor.

ASSC 3340 (3). SHELTER AND PLACE. An intensive interdisciplinary investigation into social forms and environments, both constructed and natural, in order to question what it is to dwell, how a sense of place is described and enacted, and how forms and events can influence and be influenced by structures. Work is based upon the identification of and location within a specific site within the urban or natural landscape. Includes collaborative work, drawing, analytical study of sites and environments, and construction. Paradigm examples are drawn from installation, architectural, and sculptural practice. This intensive class requires 6 hours of studio work outside scheduled meeting times. *Prerequisites:* 6 credit hours in ASSC courses and 12 credit hours in ASAG courses, or permission of instructor.

ASSC 3350 (3). XSCULPTURE. Investigation into the creation of three-dimensional form and environments using experimental methods, including digital modeling, processing, computer-based manufacture, and electronic output. A primary goal of the course is to enable students to interact with different knowledge bases and purposes in an investigation of the problem of how to image 3-D in contemporary practice. *Prerequisite:* 9 credit hours in art courses at the 3000 level or permission of instructor.

ASSC 5100 (1), 5200 (2), 5302 (3). DIRECTED STUDIES IN SCULPTURE. Students may take one course per term only. *Prerequisite:* Permission of instructor.

ASSC 5300 (3). ADVANCED SEMINAR IN SCULPTURE. Advanced investigation of contemporary practice in sculpture, including methods of research, means of production, and the critical and theoretical contexts of contemporary sculpture. *Prerequisite:* 9 credit hours in art courses at the 3000 level or permission of instructor.

Art History

Associate Professor Pamela A. Patton, **Department Chair**

Professors: Randall C. Griffin, Roberto Tejada. **Associate Professors:** Janis Bergman-Carton, Adam Herring, Pamela A. Patton, Lisa Pon. **Assistant Professors:** Beatriz Balanta, Amy Buono, Eric Stryker. **Adjunct Professor:** Eric White. **Adjunct Associate Professor:** Mark Roglán.

Honors Program

The Art History Honors Program is available to majors with an exceptional academic record who seek a greater intellectual challenge at the end of their four years at SMU. It is conducted as a two-term sequence (fall: ARHS 4391, and spring: ARHS 4392) during senior year, and culminates in a 30-page thesis and faculty review. Students should contact the art history undergraduate adviser for more information.

Bachelor of Arts in Art History

The B.A. degree in art history trains students to negotiate a world saturated with images. It challenges students to confront critically the issues posed by the visual culture that mediates their understanding of the past, present and future. Built on the fertile exchange between the arts and the humanities, art history at SMU subscribes to an interdisciplinary and intercultural approach to learning. Students are taught to think across current categories and boundaries and practice a socially responsible art history.

In addition to developing acute visual sensibilities, students acquire the ability to evaluate and organize information, conduct scholarly research and articulate their ideas in both written and spoken language. Students completing this course of study are prepared for advanced training in the field of art history; museum and gallery professions; or work in a broad range of other fields, including publishing, arts administration, teaching and public policy.

Foundation Courses. All students must enroll in a two-class art history foundations sequence beginning in the first fall term following declaration of the major: ARHS 1307, 4399 (AP credit may substituted for ARHS 1307).

Temporalities/Global Perspectives Courses. Temporalities courses are upper-level art history courses that offer frameworks for a broad understanding of temporal dimensions: a duration of time, the power of some areas over others, the telescoping of past into present and vice versa, or questions of recurrence across time. At least six of the 12 hours that satisfy this requirement must have a global perspectives designation. The global perspectives designation is used for courses that are structured around distinctive spatial dimensions: a geographic feature like an ocean, territorial boundaries, colonial expansion, national imaginaries, subcultures, or other social spaces of artistic production.

Required Methods and Theories Courses. These small, upper-level art history classes are reading and writing intensive and offer the occasion to think critically and carefully about the dynamics of historical change and to engage with issues and debates in art history.

Note: Only courses passed with a grade of *C* or better will count toward the major in art history. Courses passed with a grade of *C-* or less may count toward other, elective requirements in a student's degree plan.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Foundations	6
ARHS 1307, 4399 (AP credit may substituted for 1307)	
Temporalities	12
6 credit hours must cover a period pre-1500 C.E. and 6 must cover a period post-1500 C.E.; 6 of these 12 credit hours must have a global perspectives designation.	
Methods and Theories	6
At least one seminar course, in addition to ARHS 4399.	
Art History Electives	12
No more than 6 credit hours at the 1000 level.	
Studio Art	3
Second Language	12
Students must complete the intermediate level in a single second language.	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Many art history majors use free elective hours to complete minors or second majors in, anthropology, chemistry (for conservation), English, history, international business, international studies, languages, and psychology.

Minor in Art History

The minor in art history enables all students in the University to extend their study into the realm of the visual arts. As a discipline dedicated to the examination of art in context, art history is a natural complement to a major in history, languages, anthropology, political science, sociology, psychology, philosophy, religion, music or any of the humanities.

Requirements: Eighteen credit hours in art history, with a maximum of nine credit hours at the 1000 level. **Note:** Only classes passed with a grade of *C-* or better will count for credit toward the minor.

Temporalities Pre-1500	ARHS 3306, 3307, 3311–25, 3328, 3330–33, 3335, 3349, 3370, 3383, 3385, 3390, 3392, 3394–96, 3399, 3603, 4304
Temporalities Post-1500	ARHS 3330, 3332, 3333, 3336, 3337, 3339, 3344–48, 3351, 3354–56, 3358, 3360, 3363–65, 3367–70, 3374–77, 3379–82, 3391, 3396, 4304
Global Perspectives	ARHS 3321, 3324, 3354, 3363, 3376, 3377, 3379–83, 3385, 3388, 3390–96, 3399
Methods and Theories	ARHS 3350, 3358, 3362, 3365, 3388, 4300, 4304, 4310, 4320–22, 4324, 4330–32, 4349–52, 4386, 4399

ARHS 1303 (3). INTRODUCTION TO WESTERN ART I. Prehistoric through Medieval. An introduction in lecture form to the fundamentals of art history. Includes observations of historical styles, techniques, and media of cultures.

ARHS 1304 (3). INTRODUCTION TO WESTERN ART II. Renaissance through Modern. A continuation of ARHS 1303. Can be taken separately or as part of a two-term survey of the history of Western art. No prerequisite.

ARHS 1306 (3). INTRODUCTION TO ARCHITECTURE. A contextual history of European and North American architecture from classical antiquity to the present century, with particular emphasis on 1400 to the present. Students will be introduced to basic principles and terminology, but the course will focus on the social and cultural meanings of the built environment in its urban context.

ARHS 1307 (3). INTRODUCTION TO ART HISTORY. A one-term introduction to the history of art and architecture, emphasizing the challenges inherent in the evaluation of archaeological, material, and documentary evidence; the identification and analysis of canonical monuments; and the construction of historical narrative. Fulfills the introductory course requirement for the art history major and serves as a prerequisite for ARHS 4399.

ARHS 1308 (3). EPIC OF LATIN AMERICA. Examines art, society, and culture in Latin America, 1450-1950. The course presents art as a broad and multifaceted cultural problematic, and considers both the enduring legacies and the dynamic processes of change that have shaped the region and its art. Topics include pre-Columbian empires; royal Spanish cities and revolution, reform, and modernism; Umbanda, Santeria, and Vodou; and Native-American and gendered identities. This course is an introductory survey intended for underclassmen of all academic and professional interests; no previous art history courses or experience with Latin America necessary. Slide lectures, classroom discussions, visits to SMU and Dallas museums.

ARHS 1312 (3). PICTURING THE AMERICAN WEST. This class will examine the different ways the American West has been depicted over time in photography, painting, film, and fiction, from Lewis and Clark to Clint Eastwood.

ARHS 1315 (3). MEDIEVAL MESSAGES: SYMBOL AND STORYTELLING IN MEDIEVAL ART. Introduces nonmajors to the many questions surrounding the making, meaning, and interpretation of images in medieval art, with emphasis on developing visual and critical skills through writing and discussion exercises. Weekly case studies are drawn both from the medieval secular and Christian West and from Byzantine, Islamic, and Jewish artistic traditions.

ARHS 1333 (3). INTRODUCTION TO VISUAL CULTURE. Designed to help students develop the skills necessary to negotiate the visual culture in which they now live. Organized as an introduction to the media, methods, and issues of visual culture through the dialectic of copies and originals. Questions of originality and authenticity are particularly resonant today in the age of video and electronic media where digital technology has generated a world of endlessly reproducible, transmittable images. The class is particularly well-suited to students interested in art, art history, advertising, film, and electronic media.

ARHS 1335 (3). MONSTERS, MAYHEM, AND MIRACLES: LIFE IN THE MEDIEVAL WORLD. Explores the medieval world – ranging from the miraculous to the preposterous – through art, architecture, music, and literature. Sorcerers and werewolves, crusaders and inquisitors, soaring cathedrals, priceless books, and miracle-making saints are all creations of the Middle Ages and part of a vibrant legacy that is still alive today.

ARHS 1336 (3). RHETORICS OF ART, SPACE, AND CULTURE: WAYS OF KNOWING. Exposes students to the interdisciplinary field of art history, analyzing its points of intersection with anthropology, English, film studies, geography, history, and religious studies. Also, introduces the diverse media of art history (painting, sculpture, the built environment, printmaking, video, decorative arts); the major debates within the field; and the role played by curators, archivists, and librarians in the production of art knowledge.

ARHS 1338 (3). CHICANO ART AND THE POLITICS OF PLACE. Examines the historical context that led to the emergence of the Chicano art movement of the 1960s and 1970s with the United Farm Workers of America labor union in California and the Raza Unida Party in Texas.

ARHS 1340 (3). URBAN VISIONS: PLACE, CULTURE, AND THE THEORIES OF CITIES. A history of ideas about city making, this course explores critiques of the spatial, environmental, social, and cultural life of cities, introducing Dallas as an urban laboratory.

ARHS 1350 (3). ART IN PORTUGUESE EMPIRE. During 1494–1654, Portugal created the world's first truly global empire, using the arts to help project a combination of political, economic, and especially cultural hegemony. Students focus on issues of cultural globalization and concepts of empire in the visual cultures of Portugal, West and East Africa, Brazil, India, Sri Lanka, China, and Japan, paying particular attention to the rich, new artistic traditions that arose as these diverse cultures intermingled.

ARHS 1351 (3). VISUAL CULTURES: TOPICS IN WESTERN ART. This course introduces the art, architecture, and other visual production of a region, period, or culture within its historical context. Designed for non-majors; no prerequisites.

ARHS 3307 (3). ART AND SOCIETY IN LATE ANTIQUITY, 300–700. The complex artistic, religious, and cultural transformations that occurred in the Roman Empire from the time of Constantine to the rise of Islam. Lectures focus on artistic and architectural creations of the era; readings include selections from its major primary documents. (Temporalities pre-1500)

ARHS 3311/CLAS 3311 (3). MORTALS, MYTHS, AND MONUMENTS OF ANCIENT GREECE. A visual analysis of the rich tapestry of ancient Greek culture, fountainhead of Western civilization, with emphasis on mythological, archaeological, and historical settings in which the art and architecture occur. Touches on various aspects of ancient Greek life such as religious practices, Olympic contests, theatrical performances, and artistic perfection. (Temporalities pre-1500)

ARHS 3312 (3). ROMAN ART AND IDENTITY. The various contexts of Roman art, literature, and material culture, including the built environment, from the early republic to the 4th century CE. Special emphasis on the social aspects of Roman art in public and private spheres and the way that material culture shaped the ideologies of the Roman state and its citizens. Examines, in the context of current scholarly trends and debate, issues of periodization, social class, sex and gender, cultural identity, geographic diversity, and ethnicity. (Temporalities pre-1500)

ARHS 3313/ANTH 3309 (3). THE ETRUSCANS AND IRON AGE ITALY. Covers the cultural context and environment of the art and architecture of early Italy, including Etruscan art, early Roman art, and Italic art. (Temporalities pre-1500)

ARHS 3314 (3). THE ART AND ARCHITECTURE OF ANCIENT POMPEII. A survey of the history, monuments, and society of Campania from the Iron Age to A.D. 79 as reconstructed from the excavations of Pompeii, Herculaneum, and neighboring sites. Also, the influence of the Pompeian discoveries on 18th- and 19th-century art. (Temporalities pre-1500)

ARHS 3315 (3). CLASSICAL SCULPTURE. A study of the styles, subjects, and techniques of the sculptor's art during the ancient Greek, Hellenistic, and Roman eras. Focuses on the functions of sculpture in the round and in relief, free-standing, and in architectural settings, with particular attention to historical background. (Temporalities pre-1500)

ARHS 3316 (3). ART IN ROME. A broad survey of the wide range of ancient, medieval, Renaissance, and Baroque art works in Rome. Stresses art historical methodologies in looking at painting, sculpture, and architecture. Includes on-site lectures. (Temporalities pre-1500) (SMU-in-Italy)

ARHS 3320 (3). MEDIEVAL ART. Introduces the art of Byzantium, Islam, and the medieval West through the study of five genres to which each of these cultures made distinctive contributions: the congregational worship space, imaging the sacred word, the court and its objects, the pilgrimage site, and the urban religious complex. (Temporalities pre-1500)

ARHS 3321 (3). AGE OF THE CRUSADES: POWER AND PIETY IN THE ANCIENT AND MEDIEVAL NEAR EAST. The art of the various cultures (western European, Byzantine, etc.) that were swept into the Crusades. Also, the changes and the interchanges that characterize the period between 1096 and 1291. (Temporalities pre-1500; global perspectives)

ARHS 3322 (3). ART AND THE ITALIAN COMMUNE. The interplay of artistic styles, workshop practice, religious change, and political controversy in the century between St. Francis and the Black Death, emphasizing the art of the Pisani, Cimabue, Cavallini, Giotto, Duccio, and the Lorenzetti. (Temporalities pre-1500)

ARHS 3324 (3). ART AND CULTURES OF MEDIEVAL SPAIN. Introduces the visual traditions of the diverse medieval cultures that coexisted from the fall of Roman Hispania to the cultural and political consolidations of Ferdinand and Isabella. Emphasizes instances of cultural coexistence and rivalry (*convivencia*) among Spain's medieval Islamic, Christian, and Jewish cultures. Also, the interplay of foreign and indigenous traditions, the expression of religious and ethnic identity, and the reuse and reconception of artistic forms and objects. Direct study of medieval Spanish painting, sculpture, and manuscripts in the Meadows Museum and Bridwell Library supplement classroom lectures, discussion, and research projects. (Temporalities pre-1500; global perspectives)

ARHS 3325 (3). THE GOTHIC CATHEDRAL AND ITS WORLD. The social and spiritual centerpiece of medieval European life, the Gothic cathedral was also one of the greatest multimedia creations of its age. This lecture course uses the cathedral as a springing point for the investigation of the rich architectural and artistic traditions of the high and late Middle Ages in Europe. (Temporalities pre-1500)

ARHS 3328 (3). BYZANTINE ART. The art of the Byzantine Empire from the end of Iconoclasm through the 14th century, examining major media (gold mosaics, mural painting, manuscript illumination, ivory carving, and enamel) and the role that this art played in the lives, thoughts, and writings of its contemporaries. (Temporalities pre-1500)

ARHS 3329 (3). PARIS ART AND ARCHITECTURE I. This course will interweave an investigation of the development of Paris from Roman times to the Renaissance with a history of French architecture during this period, revealing the major trends of both and their reciprocal relationship. This course will take advantage of its Paris location to visit important monuments, buildings, and features of urban design. (SMU-in-Paris)

ARHS 3330 (3). RENAISSANCE AND BAROQUE ARCHITECTURE. An introduction to Renaissance and Baroque architecture through a focus on the fashioning of religious spaces in Italy from the 15th to 17th centuries. Considers the work of artists and architects such as Bramante, Sangallo, Raphael, Michelangelo, Vasari, Bernini, Borromini, Tintoretto, Caravaggio, and Guarini. (Temporalities pre- or post-1500)

ARHS 3331 (3). ART AND CULTURE OF THE ITALIAN RENAISSANCE. Surveys major artistic developments of the Renaissance (1300–1600), with special attention to the work of Giotto, Donatello, Leonardo, Raphael, Titian, and Michelangelo. Includes study of the customs, literature, and philosophy of the period through selected readings of primary sources. (Temporalities pre-1500)

ARHS 3332 (3). SIXTEENTH-CENTURY ITALIAN ART. Topics include the dominance of Leonardo, Michelangelo, Raphael, and Titian in the 16th century; the High Renaissance in Florence and Rome and its aftermath, Mannerism, in Catholic courts across Europe; the development of art history as a discipline in conjunction with the rise of academics, art collecting, and the search for elevated status; and the challenge of women artists such as Sofonisba Anguissola to prevailing notions of creativity. (Temporalities pre- and post-1500)

ARHS 3333 (3). ART AND ARCHITECTURE IN ITALY. Surveys major monuments of Italian painting, sculpture, and architecture. The SMU-in-Italy summer course includes visits to actual sites. (Temporalities pre-1500)

ARHS 3334 (3). THE LOOK OF FREEDOM. This course investigates the visual history of freedom. The idea of freedom as a fundamental human right became prominent in the 18th century, during the same time "vision" became an essential tool in science, the main axis of

politics, and the leading sensitivity in art and aesthetics. To complicate matters, both liberty and vision emerged at a time of heightened colonialism and the expansion of empire. Students investigate the manner in which different visual media facilitated, documented, and articulated debates regarding freedom. Particular attention is given to the representation of the body, as this exercise negotiated a range of specific aesthetic, artistic, and cultural concerns regarding the social and political world: To what extent is the idea of freedom, both in historical actuality and in the cultural imagination, determined by the colonial system? What is the political history of freedom? How is freedom coded visually? What are the political limits of freedom? The course readings are organized to consider a range of theoretical and methodological approaches that show the complex history of the concept of freedom in the West.

ARHS 3335 (3). NORTHERN RENAISSANCE ART. A survey of major artists and monuments in France, Germany, and the Low Countries from 1400 to 1700. (Temporalities pre-1500)

ARHS 3336 (3). SEVENTEENTH-CENTURY DUTCH ART. An examination of visual culture of the Netherlands during the 17th century as an art of describing through the work of such painters as Hals, Vermeer, van Ruisdael, and Rembrandt, the major figures of the period. (Temporalities post-1500)

ARHS 3337 (3). THE BAROQUE FROM A NORTHERN PERSPECTIVE. Explores the world of Rembrandt, Rubens, Leyster, Vermeer, Van Dyck, De la Tour, Le Brun, Jones, and Wren in the context of such contemporary events as the Thirty Years' War and the Reformation, as well as such issues as art vs. craft, nationalism vs. internationalism, individual genius vs. market, colourism vs. classicism, and collector vs. connoisseur. By considering a broad range of artworks – from tapestry to painting, from etching to architecture – in terms of the maker, patron/client, and market, this survey seeks the underlying whys for this absorbing period. (Temporalities post-1500)

ARHS 3339 (3). EL GRECO TO GOYA: SPANISH PAINTING OF THE GOLDEN AGE. A survey of the painting traditions of Spain's 15th through early 19th centuries, including such artists as El Greco, Velazquez, Ribera, Murillo, and Goya. Lectures are supplemented by direct study of Spanish paintings and prints in the Meadows Museum. (Temporalities post-1500)

ARHS 3344 (3). PAINTINGS AT THE PRADO. A study of Spanish paintings at the Prado Museum. Familiarizes students with the most relevant Spanish artists and offers a general European view through differences and affinities between Spain and the rest of the continent. (Temporalities post-1500) (SMU-in-Spain)

ARHS 3346 (3). PARIS ART AND ARCHITECTURE II. Interweaves an investigation of the development of Paris from the Renaissance to the present with a history of French architecture during this period, revealing the major trends of both and their reciprocal relationship. Takes advantage of the Paris location to visit important monuments, buildings, and features of urban design. (Temporalities post-1500) (SMU-in-Paris)

ARHS 3347 (3). EIGHTEENTH-CENTURY EUROPEAN ART AND THEATRE: STAGING REVOLUTION. Considers intersections between the visual arts and the theatre in Western Europe between 1770 and 1850. In addition to looking at the obvious genres of the actor portrait and the costume piece, students examine the impact of changing theories of acting, gesture, set design, and lighting on neoclassical, romantic, and realist art. Case studies include the work of Canova, David, Delacroix, Fuseli, Goya, Millais, Reynolds, Vigee-Lebrun, and Watteau. (Temporalities post-1500)

ARHS 3348 (3). EIGHTEENTH-CENTURY ART. A study of European visual culture, 1700–1800, in its many contexts. Topics include art and the public sphere; the rise of museums, exhibitions, criticism, and theory; shifts in patronage and artistic practice; connections among commerce, industry, and the arts; questions of identity; stylistic revivals and innovations; explorations of the past; and encounters with cultures outside Europe. (Temporalities post-1500)

ARHS 3349 (3). HIEROGLYPHS TO HYPERTEXT: THE ART AND HISTORY OF THE BOOK. Examines the early development and the enduring cultural impact of the book – that is, the physical format of written communication known as the codex, which has dominated the intellectual landscape for the past two millennia. This survey traverses the historical forms of written communication, including cuneiform, hieroglyphs, calligraphy, woodblock, and letterpress printing, as well as the new dematerialized forms stored in digital information retrieval technologies. (Temporalities pre-1500)

ARHS 3350/ARHS 4351 (3). MODERN ART AND MEDIA CULTURE, 1789–1870. Examines the emergence of a public sphere and a culture of looking in the 19th century. Discusses European visual art in relation to the rise of museum and gallery culture, journalistic illustration, the department store display window, photography and the panorama, the art critic, and early cinema. (Methods and theories)

ARHS 3352 (3). IMPRESSIONISM, SYMBOLISM, AND THE DEVIANT BODY: MAKING A DIFFERENCE. Examines impressionist and symbolist art in relation to the emergence of the modern metropolis and the concept of modernity in Europe during 1870–1940. The discourse of degeneration that emerged in the context of 19th-century racial theory, criminology, and medical science forms the framework for discussion. (Methods and theories) (Also SMU-in-Paris)

ARHS 3355 (3). HISTORY OF PHOTOGRAPHY II: 1940–PRESENT. A survey of the history of photographic media from 1940 to the present, with particular emphasis on the still photograph in its various uses as art, document, aide-memoire, amateur pursuit, and social practice. Examines photographic images and image-makers in relation to the social historical contexts in which they are produced; the evolution of photographic technologies; and the idea of the photographic image as it appears in and is transformed through TV, video, film, conceptual art, and new media. (Temporalities post-1500)

ARHS 3356 (3). MODERN ARCHITECTURE. Western architecture from the late 19th century to the present, focusing on the proto-modern trends of the late 19th century and the major masters of the modern movement: Sullivan, Wright, Gropius, Le Corbusier, and Mies van der Rohe. (Temporalities post-1500)

ARHS 3358 (3). WOMEN IN THE VISUAL ARTS: BOTH SIDES OF THE EASEL. In-depth study the visual arts, by and of women, in Europe and the Americas from 1850 to the present. Also, introductory lectures on the historical exclusion of women from the canon. Topics include feminist challenges to the history of art, abstraction and the female nude, the use of self as material for art, and feminist filmmaking. (Temporalities post-1500; methods and theories)

ARHS 3359 (3). TOPICS IN ART HISTORY: INTERNATIONAL STUDIES. Specific topics for investigation will be chosen by instructor.

ARHS 3360 (3). MODERN PAINTERS IN SPAIN. Spanish art since the beginning of modernity in Spain from the early 19th century to the present. Focuses on the most important and internationally recognized Spanish painters of the 20th century (Picasso, Dali, and Miro) and trends in painting. Special attention is given to integrating program activities into the syllabus, such as the study of Gaudi's architecture. (Temporalities post-1500) (SMU-in-Spain)

ARHS 3361 (3). SPECIAL STUDIES IN ART HISTORY. Specific topics for investigation will be chosen by the instructor.

ARHS 3362 (3). THE FAMILY IN EUROPEAN PAINTING AND PHOTOGRAPHY. Examines European art between 1789 and 1916 in relation to modern ideas about family, parenting, and children. Focuses on changes in portraiture through the study of paintings by such figures as Renoir and Picasso and the photography of Lewis Carroll, author of "Alice in Wonderland." (Methods and theories)

ARHS 3363/CFB 3343 (3). TOPICS IN BRAZILIAN ART AND ARCHITECTURE. Explores Brazilian art and architecture from the encounter of the Portuguese with native peoples of the New World in 1500, through the long period of colonial history, to the vibrant contemporary arts of Brazil today. Topics include the complex tapestry of artistic and intercultural exchange among Brazil's Amerindian, African, and European populations; indigenous terra-forming; Tupi feather work, ceramics, and urban planning; European mapping of Brazil and the Amazon; religious art and architecture; Afro-Brazilian art forms and religious practices; Carnival and other performances of popular culture; the artistic production of the colonial period and the foundations of Brazilian modern art; video art during the dictatorship and contemporary allegories of underdevelopment; and historical artistic practices and their link to different national and international models for representing Brazilian national identity today, as well as their ethical, aesthetic, political, and/or social repercussions. (Temporalities post-1500; global perspectives)

ARHS 3364 (3). HISTORY AND THEORY OF PRINTS. Covers how prints are made and how they can function (newspapers, postage stamps, maps, works of art, etc.). Also, the history of printmaking; established and emerging printmakers and major printmaking techniques from

the 15th through 21st centuries; and fundamental issues regarding originality/copying, uniqueness/multiplicity, display, and collecting as raised by the medium of print. Provides first-hand experience of prints through looking assignments, visits to local collections, and in-class exercises. (Temporalities post-1500)

ARHS 3365 (3). RACE AND GENDER IN VISUAL CULTURE. The body is not just a compilation of organs. It is a site through which this era's most contentious political discussions (e.g., human rights violations, racism, and sexism) are experienced. This course explores the complex interconnections among race, gender, and politics in visual culture. The main objective is to analyze how these identities, locations, and markers are constructed and deployed in various media, including painting, photography, and TV. (Temporalities post-1500; methods and theories)

ARHS 3367 (3). HISTORY OF PHOTOGRAPHY I: ORIGINS–1940. Examines the origins of photography in the early 19th century, when photography emerged as part of a late-Enlightenment scientific discourse and was interwoven with a wide array of new institutional spaces, including botany, anthropology, and geology. Also, photography on the battlefield and in prisons; the emergence of documentary photography and the role that medium played in shaping consumer culture; and the emergence of art photography, from Victorian peasant imagery to Precisionist portrayals of skyscrapers in the 1930s. (Temporalities post-1500)

ARHS 3368 (3). ART AND CONTEXT: 1940–1970. An international survey of modern art during 1940–1970 that looks at the postwar development of modernist, formalist, figurative, realist, and antimodernist art in a social historical context, with particular attention to the cultural impact of World War II, the ideological conflicts and geopolitics of the Cold War, and the social and political upheaval of the 1960s. Also, the relevant histories of gender, sexual, racial, regional, and national identity in America and other industrialized nations (Britain, France, Germany, Italy, the Soviet Union, and Japan.) (Temporalities post-1500)

ARHS 3369 (3). CONTEMPORARY ART: 1965–PRESENT. An international survey of contemporary art from 1965 to the present, with specific attention to the rise of the current proliferation of new modes and new media in art (multimedia, installation, performance, site-specificity, video, interactive, and digital art), locating its origins in the social upheaval and shifting artistic practices at the close of the 1960s. Also, contemporary art practices as they relate to a range of influential developments in critical theory, social history, and local and global visual cultures. (Temporalities post-1500)

ARHS 3373 (3). AMERICAN ART AND ARCHITECTURE TO 1865. A survey of American painting, sculpture, and architecture from the Colonial period through the Civil War.

ARHS 3374 (3). AMERICAN ART AND ARCHITECTURE, 1865–1940. Provides a stylistic and iconographic survey of American painting, sculpture, photography, and architecture from 1865 to 1940 and attempts to situate the images within their specific cultural contexts. Also, broad underlying issues such as nationalism, class, race, and gender. Group discussions on the strengths, assumptions, and weaknesses of these interpretations are relevant for the students' research, thinking, and writing. (Temporalities post-1500)

ARHS 3376 (3). LATIN-AMERICAN ART. A survey of art and architecture in Latin America from the initial contacts between European and American civilizations until the 20th century. (Temporalities post-1500; global perspectives)

ARHS 3377/CF 3375 (3). ART AND ARCHITECTURE OF HISPANIC NEW MEXICO. Examines the artistic and cultural legacies of colonial New Mexico: Spanish city planning and church design; *retablos*, *santos*, and their place in religious experience; and art in the secular life of towns and haciendas of colonial and postcolonial New Mexico. Field trips to galleries, collections, and historical sites of northern Mexico. (Temporalities post-1500; global perspectives) (SMU-in-Taos)

ARHS 3379 (3). POWER AND SPECTACLE: THE ARTS OF SPAIN AND NEW SPAIN. Examines the visual arts of early modern Spain and colonial Mexico. Emphasis on the interplay and creative synthesis of European and New World visual cultures within the colonial sphere. (Temporalities post-1500; global perspectives)

ARHS 3382 (3). ART AND EXPERIENCE IN INKA PERU. The ritual and everyday objects of the native inhabitants of North America, and the architecture of the Mound Builders and the Southwestern Indians. (Temporalities post-1500; global perspectives)

ARHS 3383 (3). THE ANCIENT MAYA: ART AND HISTORY. Introduces the art and history of the Maya of Central America. Also, addresses the principal sites and monuments of the ancient Maya civilization, imparts a working understanding of the Maya hieroglyphic writing system, and surveys the political history of the fractious ancient Maya cities. (Temporalities pre-1500; global perspectives)

ARHS 3384 (3). LAND ART. Focuses on site-specific art made in the landscape. Special attention is given to land art made in the American West. The contemporary practice of land art is studied in relation to historical examples of site-specific works, including petroglyphs from the ancient and Colonial periods, as well as modern alterations of the landscape. Discussion of these works parallels the consideration of philosophical concepts of space, place, and time. Travel to specific sites in New Mexico is a component of this course.

ARHS 3385 (3). THE AZTECS BEFORE AND AFTER THE CONQUEST: MESOAMERICA, 1400–1600. Examines the art and cultural history of Mexico in the centuries immediately before and after the Spanish arrival in Mesoamerica. Topics include the art and ceremony of the imperial Aztec state; the nature of the conflict between 1519 and 1521 that ended in the fall of the Aztec capital to the Spanish; and the monuments of Spanish conquerors, missionaries, and the native elite in Mexico's early colonial period. (Temporalities pre-1500; global perspectives)

ARHS 3388 (3). WHY WE GO TO AUSCHWITZ: ART, TRAUMA, AND MEMORY. Examines how societal memory of the Holocaust is shaped by visual media and public spaces of remembrance like museums, memorials, and artistic monuments. Also, the close ties between fascism and visual culture in the 1930s (Leni Riefenstahl's propaganda films for Hitler and the Degenerate Art Exhibition of 1937) and the emergence of a Holocaust consciousness in philosophy, literature, art, and film in the 1960s, stimulated by Eichmann's trial in Israel. The primary focus is the preoccupation with the Holocaust in the last two decades by artists and intellectuals born after World War II whose knowledge of Shoah (the Holocaust) derives from its representation in books, photographs, and film. (Methods and theories; global perspectives)

ARHS 3390 (3). TRADITIONAL ARTS OF AFRICA. Surveys the art produced in traditional African societies, with special emphasis on the sculpture of West and Central Africa. (Temporalities pre-1500; global perspectives)

ARHS 3391 (3). VISUAL CULTURE IN COLONIAL MEXICO. The arrival of Europeans in the Americas in 1492 inaugurated one of the most remarkable and violent encounters in human history. This course examines the visual and material culture created in the aftermath of this cultural collision in Mexico, the former Viceroyalty of New Spain, from the 16th to 18th centuries. Topics include the interplay and creative synthesis of discrete European and indigenous visual cultures within the colonial sphere; the role of the arts in empire building; and feather work, manuscripts, painting, sculpture, architecture, urban planning, etc. as visual practices. (Temporalities post-1500; global perspectives)

ARHS 3392/CFA 3313 (3). ISLAMIC ART AND ARCHITECTURE: THE CREATION OF A NEW ART. Issues significant to the creation and expansion of Islamic art from the 7th to the 15th century, e.g., the cultural and political exchange and conflict between Muslims and Christians, religious concerns and the artistic forms created to meet them, the importance of the book in Muslim culture, the distinctions between religious and secular art, and the appropriation of sacred space in Muslim architecture. (Temporalities pre-1500; global perspectives)

ARHS 3393/CF 3358 (3). CULTURE OF OAXACA: A SENSE OF PLACE. Learning adventure in Oaxaca: exploration of multilayered cultural history through field trips to artists' workshops, museums, archaeological sites, and religious fiestas. The focus is on art, art history, folklore, and religion. Lectures, readings, discussion, essays, interviews and photographs of artists for student projects, and numerous field trips provide a broad exposure to Oaxacan culture. (Global perspectives) (SMU-in-Oaxaca)

ARHS 3394 (3). ART AND ARCHITECTURE OF JAPAN. A survey of religious and secular arts from prehistoric times through the Edo period. Field trips to Kyoto and Nara. (Temporalities pre-1500; global perspectives) (SMU-in-Japan)

ARHS 3395 (3). ART AND ARCHITECTURE OF INDIA. Introduces the major artistic expressions of India from the Indus Valley civilization through the time of the Mughals. (Temporalities pre-1500; global perspectives)

ARHS 3396 (3). ART AND ARCHITECTURE OF CHINA. Important monuments in China, dating from 2000 B.C. to the present day, in a variety of media: cast bronze, stone, sculpture,

painting on silk and paper, porcelain, wooden architecture, etc. Selected objects and sites illuminate the concept of monument from differing perspectives of technology, aesthetics, labor, religion, ethnicity, and politics. Also, comparisons to analogous monuments outside China and visits to collections of Chinese art in Dallas/Fort Worth. (Temporalities pre- and post-1500; global perspectives)

ARHS 3397 (3). BYZANTINE ART. Surveys the art, architecture, and ritual traditions of the Byzantine empire from the age of Constantine the Great to the fall of Constantinople in 1453.

ARHS 3398 (3). INTRODUCTION TO MUSEUM STUDIES. This course endeavors to introduce art history majors and graduate students to the basic principles of connoisseurship, conservation, framing, lighting, and exhibition design in the context of the art museum today, with emphasis upon the interpretative, cultural, and social role of museums over time. The course will evaluate specific collections and exhibitions in area museums and will examine a number of private collections, challenging students to make quality judgments based upon objective criteria and intuitive response. Students will be required to assess the meaning of art through visual analysis and comparison. The efficacy and ethics of museum management will be considered.

ARHS 3399/CFB 3399 (3). THE MEDIEVAL JEWISH-CHRISTIAN DIALOGUE IN ART AND TEXT. Examines the mutual perceptions, conflicts, and commonalities among medieval European Christians and Jews as reflected in works of visual art and in philosophical, theological, legal, and literary texts. (Temporalities pre-1500; global perspectives)

ARHS 3603 (6). ARCHAEOLOGICAL FIELD METHODS OF ITALY. Archaeological field experience in classical archaeology in Italy. Introduces the principles of archaeological field method through lectures and field experience. Also, lectures on Etruscan history, art, and culture. (Temporalities pre-1500) (SMU-in-Italy: Archaeology)

ARHS 4101 (1), 4102 (1), 4201 (2), 4202 (2). DIRECTED STUDIES AND TUTORIALS. Independent study for undergraduate majors under the direction and supervision of a faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. Instructor permission required.

ARHS 4111 (1), 4211 (2). UNDERGRADUATE MUSEUM INTERNSHIP. A credit-bearing museum internship available to majors with a GPA of 3.000 or higher.

ARHS 4300/CFA 3300 (3). CALLIGRAPHY AND CULTURE: VISION, LINE, AND DESIGN IN WORLD ARTISTIC TRADITIONS. A multidisciplinary inquiry into the cultural history of calligraphy and line in several major cultural traditions of the world. Readings and discussions encompass philosophical, anthropological, archaeological, materialist, cultural–historical, and art–historical perspectives on line and cultural signification in the visual arts. (Methods and theories)

ARHS 4301 (3), 4302 (3). DIRECTED STUDIES AND TUTORIALS. Independent study for undergraduate majors under the direction and supervision of a faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed directed studies form to the Center for Communication Arts office before the start of the term during which the study is to be undertaken.

ARHS 4304/CFB 3314 (3). THE CITY AS PLACE. Given to us by ancient Roman reality and myth, the distinction between the city as a physical place (*urbs*) and the city as an idea (*orbis*) created a long-standing link between territory and ritual, locale and law, nation and citizen, and homeland and world. Students investigate the city in Italy in space and time as it is the locus of such cultural to-and-fro. The goal is to better understand the complexities of the Italian city as a living entity. The period of study spans some 3,000 years, from the Etruscan foundations of Rome to Richard Meier's Jubilee Church, located along the suburban periphery of the city. Topics include the Italian city of antiquity, early Christianity, the Middle Ages, the Renaissance, the Baroque era, and modernism. Includes city and museum tours, lecture, readings, discussion, and short essays. (Temporalities pre- and post-1500) (SMU-in-Italy)

ARHS 4310 (3). SEMINAR IN ANCIENT ART. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4311 (3). UNDERGRADUATE MUSEUM INTERNSHIP. A credit-bearing museum internship available to majors with a GPA of 3.000 or higher.

ARHS 4315 (3). SEMINAR ON NORTHERN RENAISSANCE ART. Specific topics for investigation will be chosen by the instructor.

ARHS 4320 (3). SEMINAR IN MEDIEVAL ART. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4321 (3). WORD AND IMAGE IN THE EARLY MIDDLE AGES. There are three purposes to this seminar: to encounter a distant but crucial moment in the history of the understanding of the image; to join powerful minds in thinking about the nature of the image; and to ask how it was that different stances to the image came to divide Byzantium, Islam, and the medieval West in the decades between 692 and 843. (Methods and theories)

ARHS 4322 (3). MUSEUM THEORY. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4330 (3). SEMINAR IN EARLY MODERN ART. Specific topics for investigation are chosen by the instructor. (Methods/theories seminar.)

ARHS 4331 (3). SEMINAR ON SPANISH ART. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4344 (3). IMAGES OF POWER: KINGS, NOBLES, AND ELITES IN 17TH-CENTURY FRANCE. Using art, literature, history, and philosophy, this course explores the social, political, and intellectual life of the French monarchy, aristocracy, and elites of the 17th century in and around Paris. Students visit monuments and museums to make immediate connections between what they read and what they see. (SMU-in-Paris)

ARHS 4349 (3). SEMINAR IN CONTEMPORARY ART. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4350 (3). SEMINAR IN MODERN ART. Specific topics for investigation are chosen by the instructor. (Methods and theories)

ARHS 4351/ARHS 3350 (3). MODERN ART AND MEDIA CULTURE, 1789–1870. Examines the emergence of a public sphere and a culture of looking in the 19th century. Discusses European visual art in relation to the rise of museum and gallery culture, journalistic illustration, the department store display window, photography and the panorama, the art critic, and early cinema. (Methods and theories)

ARHS 4352 (3). PARIS AND LONDON: INDUSTRIAL CAPITALISM AND THE CITY. A cultural history of Paris and London between 1850 and 1920; the architectural and social transformation of the cities into modern metropolises; and responses to those transformations in the visual arts, music, and literature. Also, the architecture, sculpture, and photography of the period, and other topics ranging from the operas of Offenbach to the novels of Flaubert and to the world expositions of 1867 and 1889. (Methods and theories)

ARHS 4362 (3). THE CITY OF NEW YORK. This course examines the changing art and architecture of the city of New York from the 18th century to the present.

ARHS 4380 (3). SEMINAR IN WORLD ART. Specific topics for investigation will be chosen by the instructor.

ARHS 4391 (3). ART HISTORY HONORS THESIS. Part I of two-semester Art History Honors Program sequence. Research-based directed study with thesis adviser. Enrollment by permission of instructor only.

ARHS 4392 (3). ART HISTORY HONORS THESIS. Part II of two-semester Art History Honors Program sequence. Completion of writing honors thesis. Enrollment by permission of instructor only following successful completion of ARHS 4391.

ARHS 4399 (3). RESEARCH AND METHODS IN ART HISTORY. Introduces seminal texts and contemporary debates in the research and writing of art history. Each week is devoted to a fundamental critical issue raised in the study of images and objects, including form, materials, content, context, connoisseurship, taste, biography, iconography, social identity, politics, ideology, class, and economics. Students read, discuss, and compare the many methods adopted by art historians and use those methods in discussions of objects in DFW collections. Contains a research and writing workshop component that introduces research tools, writing skills specific

to art history, and the process of conducting scholarly research. Enrollment is required for art history majors and is a prerequisite to all other 4000-level seminars. (Methods and theories)

ARHS 5011 (0), 5012 (0). MUSEUM INTERNSHIP. A museum internship available to majors with a GPA of 3.000 or higher.

ARHS 5101 (1), 5102 (1), 5201 (2), 5202 (2), 5301 (3), 5302 (3). DIRECTED STUDIES. To be arranged with permission of the adviser and the faculty members directing the studies project.

ARHS 5303 (3). HISTORY AND METHODS OF ART HISTORY. Introduction to the history of the discipline with discussion of major methodological approaches as they have shaped past scholarship and the present sense of crisis in the discipline. Exercise in methods of research and its presentation in good form. Required of all first-year graduate students.

ARHS 5304 (3). SEMINAR IN ANCIENT ART. Specific topics for investigation will be chosen by the instructors. Student reports will be discussed by seminar members.

ARHS 5305 (3). SEMINAR IN GREEK ART. Specific topics for investigation will be chosen by the instructors. Student reports will be discussed by seminar members.

ARHS 5307 (3). SEMINAR ON CLASSICAL ART AND THEATRE. A comparative examination of art, architecture, and theatre in Classical Greece and Rome, with particular attention to representational structures and strategies in Classical performance and the visual arts. Topics include the uses of art and performance as a forum for addressing issues of local and universal concern and for reflecting upon mythic and historical events. Taught jointly by faculty in Art History and Theatre.

ARHS 5308 (3). SEMINAR IN ETRUSCAN ART. Specific topics for investigation will be chosen by the instructors. Student reports will be discussed by seminar members.

ARHS 5309 (3). SEMINAR IN ROMAN ART. Specific topics for investigation chosen by the instructors. Student reports will be discussed by seminar members.

ARHS 5310 (3). SEMINAR ON CLASSICAL MYTH IN ART. Specific topics for investigation will be chosen by the instructors. Student reports will be discussed by seminar members.

ARHS 5316 (3). SEMINAR IN NON-WESTERN ART. Specific topics chosen by the instructor.

ARHS 5320 (3). SEMINAR IN MEDIEVAL ART. Specific topics chosen by the instructor.

ARHS 5322 (3). SEMINAR ON CONVIVENCIA: JEWISH, ISLAMIC, AND CHRISTIAN ART IN MEDIEVAL SPAIN. The art and architecture produced by the Christians, Jews and Muslims of Iberia during the 10th through 15th centuries, studying the cultural contacts, conflicts, and compromises that affected each culture's artistic traditions and contributed the diverse heritage of what now is called Spanish art.

ARHS 5323 (3). SEMINAR IN BYZANTINE ART. Specific topics chosen by the instructor.

ARHS 5330 (3). SEMINAR IN ITALIAN RENAISSANCE ART. Specific topics for investigation chosen by the instructor.

ARHS 5331 (3). SEMINAR IN EARLY MODERN ART. Special topics for investigation will be chosen by the instructor.

ARHS 5332 (3). SEMINAR IN NORTHERN RENAISSANCE ART. Specific topics for investigation chosen by the instructor.

ARHS 5333 (3). SEMINAR IN 18TH-CENTURY ART. Specific topics on 18th-century art and/or architecture chosen by the instructor.

ARHS 5334 (3). SEMINAR IN ITALIAN ART: ROME. Specific topics chosen by the instructor.

ARHS 5340 (3). SEMINAR IN SPANISH ART. Specific topics chosen by the instructor.

ARHS 5348 (3). BAROQUE SEMINAR.

ARHS 5350 (3). SEMINAR ON ROMANTICISM. An interdisciplinary investigation of the cultural sources and subject matter of Romanticism in Europe and America. Students will present oral reports on topics of their choice.

ARHS 5354 (3). SEMINAR IN 19TH-CENTURY ART. Specific topics for investigation chosen by the instructor.

ARHS 5355 (3). SEMINAR IN 20TH-CENTURY ART. Specific topics for investigation chosen by the instructor.

ARHS 5358 (3). SEMINAR ON MODERN ART. Specific topics chosen by the instructor.

ARHS 5359 (3). SEMINAR ON CONTEMPORARY ART. Specific topics for investigation chosen by the instructor.

ARHS 5360 (3). SEMINAR IN BRITISH ART. Specific topics chosen by the instructor.

ARHS 5361 (3), 5362 (3). SEMINAR IN AMERICAN ART. Specific topics for investigation chosen by the instructor.

ARHS 5366 (3). SEMINAR IN PRE-COLUMBIAN ART. Specific topics for investigation chosen by the instructor.

ARHS 5368 (3). SEMINAR ON THE MAYA CITY: ART AND CULTURE. Specific topics for investigation chosen by the instructor.

ARHS 5369 (3). SEMINAR IN THE ART OF THE INCA. Specific topics for investigation will be chosen by the instructor.

ARHS 5391 (3). SEMINAR IN ASIAN ART. Specific topics chosen by the instructor.

Arts Management and Arts Entrepreneurship

Professor Zannie Giraud Voss, **Division Chair**

Assistant Professors: Susan Benton Bruning, Kathleen Gallagher. **Assistant Professor of Practice:** Jim Hart. **Adjunct Lecturers:** Trey Bowles, JoLynne Jensen, Rick Lester, Maureen Mixtacki, Amy Wagliardo.

The Division of Arts Management and Arts Entrepreneurship offers two undergraduate minors. The minor in arts entrepreneurship provides an overview of how to develop and launch a new arts venture, either for-profit or nonprofit. The minor in arts management provides an overview of how professional arts organizations are managed, with an emphasis on understanding the practical issues facing today's arts manager.

Minor in Arts Entrepreneurship

Requirements for the Minor	*Credit Hours*
Core Requirements	12
AMAE 3301, 3305, 3387, 4390	
Elective Course (one from the following)	3
ADV 2374, 3391, 4317, 4318, 4365, 4382	
AMAE 3322	
COMM 3355	
Additional Elective Course (one from the following)	3
AMAE 3370, 4321, 4375	
ASAG 3350	
COMM 3360, 5302	
FILM 4316	
MNO 3375/CFB 3375, MNO 4371/CFB 3381	

Minor in Arts Management

Requirements for the Minor	*Credit Hours*
Core Requirements:	12
AMAE 3301, 3305, 3387, 4326 (may substitute COMM 3387 for AMAE 3387)	
Elective Course (one from the following)	3
ADV 2374, 3391, 4317, 4318, 4365, 4382	
AMAE 3322	
APSM 4372	
COMM 3355, 3380	
Additional Elective Course	3
One additional course from the list above or one from the following with instructor approval:	
AMAE 4321	
ARHS 1333	
ASAG 3350	
COMM 3360, 3365	
FILM 3328, 3330, 3335, 4316, 4399	
MNO 3375/CFB 3375, MNO 4371/CFB 3381	
THEA 4309	

AMAE 3301 (3). INTRODUCTION TO ARTS MANAGEMENT. Introduces students to arts management theory, practices, and trends affecting a variety of disciplines across the visual and performing arts. It explores key issues in management of arts organizations and events at local, regional, national, and international levels. Topics include organizational formation and structure, governance, funding, strategic planning and implementation, and organizational relationships with artists, employees, audiences, supporters, and other sectors of the public.

AMAE 3305 (3). ARTS BUDGETING AND FINANCIAL MANAGEMENT. The primary emphasis of this course is financial management of arts organizations. Emphasis will be placed on budgeting as a reflection of the art form; as a means of fiscal prediction and control; and as a vehicle of communication among staff, trustees, investors, donors, and other constituencies.

AMAE 3322 (3). MARKETING THE ARTS. This course introduces students to the fundamental concepts of marketing and their practical implementation by arts organizations and arts professionals. The discussion of examples and cases will help to illustrate applications of theory and familiarize students with essentials such as the production, pricing, promotion and delivering of arts goods and services to audiences, markets and the community.

AMAE 3370 (3). ENTREPRENEURSHIP AND THE HERO ADVENTURE. Considering the risk, obstacles, competition, and demands for change and adaptability in today's ever-evolving arts market, how do artists and arts entrepreneurs not only survive, but thrive? Students draw parallels between the "hero journey" structure in storytelling and the grand adventure of entrepreneurship to gain perspective and a practical structure and lens that they can utilize to help build a unique career and life in the arts. The class teaches students how to take bold but educated risks, how to carve out a niche within the market, and how to persevere in the face of seemingly insurmountable odds.

AMAE 3387 (3). ATTRACTING CAPITAL: DONORS, INVESTORS AND PUBLIC FUNDS. The strategies for attracting capital for new arts-related ventures, whether for-profit or nonprofit. Each capital market is explored for its defining characteristics, mechanisms, and motivations. Students develop skills in preparing funding proposals and pitching ideas to potential funders.

AMAE 4321 (3). LAW AND THE ARTS. Students examine, debate and critically assess legal and ethical aspects of the creation, collection, and preservation of works of art and antiquity; the management of intellectual property and related rights in works of visual and performing arts; relationships between and among creators, performers, dealers, collectors, theatres, museums, and the public; and broader domestic and international issues impacting the art world.

AMAE 4326/MSA 5326 (3). CULTURAL POLICY. Overview of policy analysis and practice of the cultural sector in its different areas (heritage, visual and performing arts, etc.) and perspectives. Specifically, the following issues will be analyzed: Historical and theoretical backgrounds of cultural policy; cultural policies in practice – stylized facts and geographical and political divergence at local, national and international level; evaluation of cultural policies and their socio-economic impact; culture, diversity and development; cultural access and arts education.

AMAE 4375 (3). SOCIAL ENTREPRENEURSHIP: CREATING A MOVEMENT AND INNOVATING THROUGH SOCIAL GOOD. Explores how to use one's talents, passions, and interests to address world problems with innovative solutions that result in movements and cultural change. Focuses on building a business that realizes success and aides those in need.

AMAE 4390 (3). DEVELOPING AN ARTS VENTURE PLAN: LEGAL, STRATEGIC AND PRACTICAL ISSUES. Students 1) develop an idea for an unmet need in the marketplace; 2) create a plan for the intended impact of their service or product and the model for how that change will take place; 3) analyze the environmental, industry-related, legal, and market-related factors that will influence the success of their new venture; 4) analyze the risks involved with launching their new venture; and 5) develop a plan for the human, financial, space-related, and other resource needs that will be necessary to launch their venture.

Communication Studies

Associate Professor Sandra C. Duhé, **Division Chair**

Professor: Rita Kirk. **Associate Professors:** Maria Dixon, Sandra C. Duhé, Owen Lynch, Ben Voth. **Assistant Professor:** Linjuan Rita Men. **Senior Lecturer:** Christopher Salinas. **Visiting Lecturers:** Nina Flournoy, Cara Jacocks. **Adjunct Lecturers:** Steve Lee, Cecilia Stubbs Norwood.

The Division of Communication Studies offers students a foundational understanding of the theories, methods and history of communication; its relationship to liberal education; and its disciplinary and professional applications. The division offers a B.A. in communication studies and a B.A. in public relations and strategic communication. In each of these programs, the division educates students in research, critical thinking, writing and advocacy who apply intellectual rigor and integrity to communication theory and practice. The curriculum emphasizes an approach to communication study that stresses the ethical and philosophical relationships of the individual to society. A broad review of advocacy, political communication, organizational communication, public relations and contemporary studies of communication undergird the curriculum. Students may pursue a double major in communication studies and in public relations and strategic communication; certain restrictions apply. The division is accredited through the American Communication Association.

The curriculum has the following strategic goals:

- **Goal of Teaching:** To create competent communicators and citizens who are equipped to serve and transform business, government, civil society or education sectors here and around the world.
- **Goals on Campus:** To be rigorous, relevant and transformative.
- **Goals for Students:** To have upon graduation the ability to apply communication theory in a variety of contexts, including business, civil society, education, public affairs, or graduate or professional studies; the ability to bridge differences of identity through communication competency; and the ability to have a voice in the affairs of those who are silenced.

The curriculum takes a unique approach, building upon solid in-class studies and taking students outside the classroom and around the world (Africa, London and Washington, D.C.) for profound and lasting learning experiences. Award-winning programs such as the SMU chapter of the Public Relations Student Society of America; the in-house communication consulting group, Mustang Consulting; and programs in debate, speech and mock trial help students discover their excellence in competitive contexts. Students are expected to create an electronic portfolio of their work demonstrating their excellence in writing and speaking.

Students seeking an undergraduate degree in communication studies and/or public relations and strategic communication receive a broad background in the liberal arts, followed by a major curriculum that prepares them for graduate and professional studies and/or work in agencies; corporations; nonprofit organizations; cultural, legal and educational institutions; associations; and government. The curriculum is designed to introduce students to the historical development of the communication field and educate them about the principles and theories behind organizational and public communication. Students also develop requisite communication skills, gain awareness of the ethical responsibilities of professional

communicators, and develop the communication and management capabilities required for success in a global environment. After developing a strong core of fundamental communication skills and knowledge, students learn how to apply those skills in organizational and public contexts. Communication studies programs emphasize critical thinking, problem-solving, research and writing.

In addition to major coursework in the division, communication studies students must complete a minor. Determination of the minor should be considered carefully and should enhance and broaden the student's learning experience at SMU beyond the major. In keeping with the recommendations of the American Communication Association, the Public Relations Society of America's Task Force on Undergraduate Education, and the standards of the Accrediting Council for Education in Journalism and Mass Communications, students should select minors that emphasize the liberal arts. Students seeking to double major or minor in another communication-related field may need to complete more than the minimum 122 total hours required for graduation.

Students are encouraged to participate in service-learning opportunities and make important career connections through supervised internships with a range of businesses globally and locally.

More information about these degree programs can be found online at www.meadows.smu.edu.

Admission. In addition to those requirements of the University and Meadows School of the Arts, undergraduate students planning to major or minor in communication studies or major in public relations and strategic communication must meet minimum GPA requirements in core courses, and they will also participate in a competitive application review process that will consider academic performance, faculty recommendations and a divisional writing examination.

Students planning to major or minor in communication studies must complete DISC 1312 and 1313 (or equivalents); and one math course chosen from STAT 1301, 2301, 2331 with a minimum 3.000 GPA among those classes; and six hours of communication studies core coursework: COMM 2310, 2327 with a minimum 3.000 GPA between those courses. Once declared, students must successfully complete the remaining six hours of communication studies core coursework (COMM 2308, 2375) before taking any upper-division electives, with the exception of COMM 2300, 3300, which are open to all majors. Students planning to major in public relations and strategic communication must complete DISC 1312 and 1313 (or equivalents) and one math course chosen from STAT 1301, 2301 or 2331 with a minimum 3.000 GPA among those courses; and six hours of communication studies core coursework: COMM 2327 and 2328 (or equivalent) with a minimum 3.000 GPA between those two courses. Once declared, students must successfully complete the remaining six hours of communication studies core coursework (COMM 2375, 3355) before taking any upper-division electives, with the exception of COMM 3300, which is open to all majors.

Core coursework may not be repeated to meet the requirements to declare communication studies as a major or minor or public relations and strategic communication as a major.

Admission to both majors is highly competitive. Major selection will be based on subset and core requirement standings, faculty recommendations, and a passing score on the divisional writing exam.

Special Requirements. Transfer hours for core course requirements may be considered on petition and approval of the faculty. Courses satisfying major requirements should be taken through the SMU program.

Communication studies coursework may not be double-counted toward the requirements for a second major or minor in advertising, film and media arts, or journalism, or a minor in fashion media. Students must earn a grade of *C* or better for coursework toward their communications studies major or minor requirements. Public relations and strategic communication majors may choose to double major in advertising, journalism or communication studies; restrictions apply to which courses may be double counted. **Note:** Attendance is required on the first day of class to prevent being dropped from the course.

Students majoring in communication studies and/or public relations and strategic communication must take an approved ethics course, eight hours of a single second language and two Meadows electives (one of which must be in the arts) as part of their degree requirements.

Scholarships. Communication honors scholarships are awarded each year to outstanding majors in the division. The Charles Douglas Bauer Scholarship Fund and the Memorial Fund for Communication Arts provide competitive scholarships available to division majors through an annual application process.

Division of Communication Studies Honors Program. Students may apply for admission to the honors track after completion of 45 hours with a 3.500 overall GPA or better. To graduate with distinction, students must take six hours of honors-designated communication studies courses and COMM 4375. Students accepted to the honors track must maintain a 3.500 or higher overall GPA in all SMU coursework to graduate with the honors distinction. The top 10 percent of each class is eligible for faculty nomination to Kappa Tau Alpha, the national communication honorary society.

Pre-Law Scholars Program. The Division of Communication Studies offers a one credit hour elective course exclusively for students in SMU's Pre-Law Scholars Program. This program prepares students in any SMU major for law school enrollment at competitive programs throughout the country, including SMU's. The Pre-Law Scholars Program is unique in that enrollment provides preferred access for admission to the highly rated Dedman School of Law at SMU. Pre-Law Scholars are selected based on their application for admission to SMU, prior to their matriculation to the University. Additional information is available from SMU's Division of Enrollment Services.

Bachelor of Arts in Communication Studies

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Core Requirements	12
COMM 2308 2310, 2327, 3375 (COMM 2310 and 2327 are required prior to entry into the major.)	
Course Requirements	6
COMM 4323 *or* 4324 and COMM 4325 *or* 4326 (Enrollment is contingent upon successful completion core of all requirements.)	

Requirements for the Degree (continued)	*Credit Hours*
Upper-level Electives	18
COMM 3302, 3321, 3341, *or* 4385 *Five courses from the following:* COMM 2300, 3300, 3310, 3342, 3345, 3347, 3350, 3355, 3360, 3365, 3380, 3382, 3385, 3387, 4300, 4375, 4386, 4395, 5301–09, other approved COMM course (No more than 6 term credit hours in COMM 4375, 5301–5304 may apply toward the major.)	
Meadows Elective/Core Requirement	6
No more than 3 hours in advertising, film and media arts, or journalism may count toward this requirement.	
Second Language	8
Two terms of the same language.	
Ethics Course Requirement	3
Second Major or Minor Choice	
To be determined with counsel of adviser; hours vary according to choice.	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Bachelor of Arts in Public Relations and Strategic Communication

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	Varies
Core Requirements	12
COMM 2327 *or* ADV 4317 (for declared advertising majors) COMM 3300 *or* ADV 2375 (for declared advertising majors) *or* CCJN 4316 (for declared journalism majors) (COMM 2327 and 3300 are required prior to entry into the major.) COMM 2375 *or* ADV 3393 (for declared advertising majors) *or* MKTG 3343 COMM 3355	
Course Requirements	13
(Enrollment is contingent upon successful completion of all core requirements.) COMM 2308 *or* CCJN 2312 (for declared journalism majors) COMM 3382 *or* CCJN 2313, 3362, 3382, or 4310 (for declared journalism majors) COMM 3310, 4130 COMM 4340 *or* ADV 4362 (for declared advertising majors) *or* CCJN 4306 (for declared journalism majors)	

Requirements for the Degree (continued)	*Credit Hours*
Upper-division Electives	9
Two from ADV 3391, CCJN 2304, CCJN 3357, COMM 3335, FILM 1304, MSA 1315 (Declared advertising majors may also choose ADV 3390 or 4365; declared journalism majors may also choose CCJN 2380.) COMM 4395 *or* 4396 (or ADV 4399 for declared advertising majors)	
Meadows Elective	6
No more than 3 hours in advertising, film and media arts, or journalism may count toward this requirement.	
Second Language	8
Two terms of the same language.	
Second Major or Minor	
To be determined with counsel of adviser; hours vary according to choice.	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

Public relations and strategic communication majors are required to meet the following additional requirements as part of the communication studies curriculum or as part of the University Curriculum. CCJN 4316 may not count as both an ethics course and a substitute for COMM 3300.

- CCJN 2302 *or* COMM 2328 (or ADV 2375 for declared advertising majors or CCJN 4316 for declared journalism majors).
- COMM 4125, *or* 4225, *or* 4320.
- CCJN 4360, *or* COMM 3321 and 3341, *or* COMM 4390 (or ADV 4374 for declared advertising majors).

Minor in Communication Studies

To minor in communication studies, students must meet all the requirements for declaring the major and also be evaluated by faculty. Students must be accepted into the program prior to enrollment in upper-division courses.

Requirements for the Minor	*Credit Hours*
Core Requirements	12
COMM 2308, 2310, 2327, 3375	
Electives	9
Selected from COMM courses at the 3000 level or higher.	
	21

COMM 2300 (3). PUBLIC SPEAKING IN CONTEXT. This course introduces students to the theory and practice of public speaking. Students learn important rhetorical principals for studying an audience and a situation to create and perform an effective public presentation. Students learn important abilities for public presentation regarding evidence, nonverbal communication, visual aids, and more.

COMM 2308 (3). STRATEGIC COMMUNICATION AND PUBLIC RELATIONS. Introduces basic media writing skills commonly used by communication professionals to communicate messages to the mass media. Students develop research, interviewing, writing, and speaking skills by writing and presenting news stories, feature stories, and press releases. *Prerequisites:* C or better in COMM 2310 (or 3300) and 2327.

COMM 2310 (3). RHETORIC, COMMUNITY, AND PUBLIC DELIBERATION. This course examines the role of rhetoric and public deliberation in the production and maintenance of communities and the larger public sphere, and includes such topics as the formation and rhetoric of the Civil Rights movement, the structural factors impacting the modern public sphere, and the skills necessary to be an informed citizen.

COMM 2327 (3). COMMUNICATION THEORY. This course introduces the foundational concepts, theories and approaches to the study and practice of human communication. It includes a historical overview as well as discussions of contemporary ethical questions.

COMM 2328 (3). COMMUNICATION ETHICS. Through readings, case studies, and the application of philosophical approaches to ethics, students examine the ethical challenges of strategic communication, explore the historic development of the field, and develop their own personal code of ethics to guide them through the ethical dilemmas they will encounter in the working world.

COMM 2375 (3). COMMUNICATION RESEARCH AND METRICS. Students learn how to conduct professional research utilizing primary and secondary data, statistics, and analytics. *Prerequisites:* C or better in COMM 2310 (or 3300) and 2327.

COMM 3101 (1). PRE-LAW SCHOLARS SEMINAR. This course introduces SMU Pre-Law Scholars to various legal topics, including an overview of legal subjects and careers in law. It also provides information relating to the Law School admissions process. Restricted to Pre-Law Scholars who have completed their first two full-time academic terms.

COMM 3300 (3). FREE SPEECH AND THE FIRST AMENDMENT. This course examines the philosophy, cases, and issues relevant to the First Amendment right to free expression, with a focus on issues relevant to internal security, obscenity, pornography, slander, and the regulation of communication. Foundations of legal argumentation will also be discussed.

COMM 3302/WL 3302/SOCI 3350/CFB 3350 (3). ETHNOVIOLENCE: INTERDISCIPLINARY PERSPECTIVES. Introduction to ethnoviolence – violence or the threat of violence based on one's race, ethnicity, religion, gender, or sexual orientation – from a comparative, global and critical framework that synthesizes sociology, colonial studies, communications, and ethnic, religious, historical, and gender studies.

COMM 3310 (3). CRISIS MANAGEMENT. Examines different strategies, tactics, and theories relevant to how organizations communicate with internal and external audiences before, during, and after a crisis. *Prerequisites:* C or better in COMM 2310 (or 2328), 2327, and 3355.

COMM 3321 (3). COMMUNICATION IN GLOBAL CONTEXTS. This course provides an international perspective to the study of corporate communication and public affairs. Emphasis on experiential study allows students exposure to professional practitioners in both political and corporate arenas. Students explore opportunities and challenges involved in working in corporate communication in an international forum. *Prerequisite:* C or better in COMM 2310 (or 3300), 2327, 2308 (or 3355), and 2375.

COMM 3327 (3). ARGUMENTATION AND ADVOCACY. Explores concepts characterizing rational discourse with a concern for examining validity and fallacy. Students consider traditional and contemporary models for analyzing argument, including an examination of the philosophy of argument and practical inquiry into the uses of debates on contemporary social issues. Reserved for communication studies majors or minors.

COMM 3335 (3). DIGITAL COMMUNICATION. Introduces the infrastructure, planning, analysis, and use of various media, including mobile and social network applications. Reserved for communication studies majors and minors.

COMM 3341/CFB 3341 (3). ETHNICITY, CULTURE, AND GENDER: INTRODUCTION TO CRITICAL STUDIES IN COMMUNICATION. Explores the impact of culture on the understanding and practice of human communication in interpersonal, organizational, and mass media contexts. Strong emphasis is placed on the role of globalization, race, and socio-economic dynamics as impediments and conduits of cross-cultural collaboration and interaction. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375 or 3375.

COMM 3342/CFB 3342 (3). RACE AND IDENTITY CONSTRUCTION IN GLOBAL CONTEXTS. Explores what impact communication practices in organizational, interpersonal, and mass media contexts have on the construction of ethnicity, gender, and sexuality in U.S. and post-Colonial settings.

COMM 3345 (3). PERSUASION THEORY AND PRACTICE. This course provides a survey of major theories that explain how to influence attitudes and behaviors. Applications to persuasion within a variety of contexts, including relationships, organizations, legal campaigns, and the mass culture. *Prerequisites:* C or better in COMM 2308, 2310, 2327, 2375.

COMM 3347 (3). POLITICAL COMMUNICATION. This course examines political communication as it evolves throughout a political campaign, and includes such topics as political communication theory and research, communication strategies, the influence of the mass media, television advertising, candidate debates, news management, polling, and the use of new technologies in political campaigns. *Prerequisites:* C or better in COMM 2308, 2310, 2327, 2375.

COMM 3350 (3). INTEGRATED MARKETING COMMUNICATION. This course explores the concept of planning that recognizes the value of coordinating the media mix within a communication campaign to create maximum clarity and impact. This course covers the ways that a firm or brand communicates with its publics. *Prerequisite:* C or better in COMM 2308 (or 3355), 2310 (or 3300), 2327, and 2375.

COMM 3355 (3). INTRODUCTION TO PUBLIC RELATIONS. Introduces theories, concepts, and approaches to public relations including research, objectives, programming, evaluation, and stewardship. Includes a historical overview as well as discussions of the professional and ethical demands on practitioners. *Prerequisites:* C or better in COMM 2310 (or 2328) and 2327.

COMM 3360 (3). BUSINESS AND MANAGEMENT COMMUNICATION. Emphasizes the role that communication plays in recruiting and selecting project team members, motivating employees, and understanding how to make a project team productive. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375.

COMM 3365 (3). ORGANIZATIONAL COMMUNICATION. Explores the role of communication in key organizational processes in corporate and nonprofit settings. Students examine the multiple approaches to organizing and their implications for human communication. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375.

COMM 3380 (3). INTRODUCTION TO NONPROFIT COMMUNICATION. Explores the unique discursive context of not-for-profit organizations. Students examine the role of communication in the various stages of nonprofit organizational life, including founding and incorporation, recruitment and retention of staff volunteers, and external funding and philanthropic development. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375.

COMM 3382 (3). ADVANCED STRATEGIC COMMUNICATION AND PUBLIC RELATIONS. This experiential course teaches students to strategize, develop, research, and write in-depth articles, newsletters, speeches, press releases, and position papers. Reserved for communication studies majors or minors and public relations and strategic communication majors. *Prerequisite:* C or better in COMM 2308.

COMM 3387 (3). ADVANCED NONPROFIT COMMUNICATION: DONOR AND PHILANTHROPIC COMMUNICATION. Introduces the fundamentals of philanthropy in a nonprofit's organizational processes and reviews historical, economic, and political forces that formed and continue to influence the development and funding of nonprofit organizations. Building on persuasion, interpersonal, and organizational communication theory, students explore the unique communication of philanthropy, grant writing, and donor relations. *Prerequisites:* C or better in COMM 2308, 2310, 2327, 2375, 3365, and 3380.

COMM 3390 (3). EMPLOYEE COMMUNICATION. Introduces the theories, ethics, and methods of creating and measuring communication to employees and work groups. Topics include employee campaigns, communication with unionized work groups, and use of social media for employee and leadership interaction and collaboration. Students explore how employee discourse can shape perceptions of organizational culture and trust, employee retention and satisfaction, and external branding. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375.

COMM 3393 (3). RHETORIC, POLITICS, AND MASS MEDIA. Examines the dynamic and interpersonal relationship between the news media and politics: the media's influence on the political process, the relationship between reporters and public officials, the impact of media-based campaigns, and the ethical impact of media manipulation by political strategists. *Prerequisite:* Reserved for communication studies majors or minors.

COMM 3395 (3). PUBLIC OPINION, THE PRESS, AND PUBLIC POLICY. Examines the interdependent relationships among media coverage, public opinion, and public policy. Students consider the influence of press coverage on electoral and policymaking processes in which public voice is presumed to affect democratic outcomes. Reserved for communication studies majors and minors.

COMM 4025 (0). ORGANIZATIONAL INTERNSHIP. Students in approved positions gain career-related experience and establish professional contacts. At the conclusion of the internship, students prepare a report that allows for academic reflection on their experience. Offered as pass/fail only. *Prerequisites:* Major standing, 90 or more hours of coursework, 2.750 overall GPA, 3.000 GPA in COMM coursework, and permission of faculty adviser.

COMM 4125 (1). PUBLIC RELATIONS IN LOCAL CONTEXTS. Provides students with 50 hours of experience working with public relations professionals. Offered on a pass/fail basis only. *Prerequisites:* 90 or more hours of coursework, 2.750 overall GPA, 3.000 GPA in COMM coursework, and permission of faculty adviser. Reserved for public relations majors.

COMM 4130 (1). PROFESSIONAL SEMINAR. Prepares a student to meet the expectations and demands of working as a strategic communications professional in various organizational contexts, including corporate, agency, nonprofit, government, and public affairs. Topics addressed by instructors and industry professionals include ethics, issues in professional development, interviewing and resume construction, and power and politics for the new employee. *Prerequisites:* C or better in COMM 2308 (or 3355), 2310 or 3300, 2327, 2375 and junior standing.

COMM 4225 (2). PUBLIC RELATIONS IN LOCAL CONTEXT. Provides students with 100 hours of experience working with public relations professionals. Offered on a pass/fail basis only. *Prerequisites:* 90 or more hours of coursework, 2.750 overall GPA, 3.000 GPA in COMM coursework, and permission of faculty adviser. Reserved for public relations majors.

COMM 4300 (3). SEMINAR IN POLITICAL COMMUNICATION. This course is offered only as appropriate occasions arise. It provides advanced study of the role of communication within specific public affairs settings such as political summits, party conventions, or other major venues. *Prerequisite:* COMM major or minor standing.

COMM 4302 (3), 4303 (3), 4304 (3). WASHINGTON TERM STUDIES. This course offers students an opportunity to study and work in Washington, D.C., as part of American University's Washington semester. *Prerequisites:* C or better in COMM 2308, 2310, 2327, 2375 and junior standing.

COMM 4305 (3). WASHINGTON TERM DIRECTED STUDIES. This is an independent study with the goal of producing original research while students are enrolled in American University's Washington semester. *Prerequisites:* C or better in COMM 2308, 2310, 2327, 2375 and junior standing.

COMM 4310 (3). HISTORY AND PHILOSOPHY OF FREE SPEECH. Examines the philosophical debates on the existence, extent, and effect of free speech on society, including the rights of the individual versus the rights of the collective body politic.

COMM 4320 (3). PUBLIC RELATIONS IN LOCAL CONTEXT. Provides students with 150 hours of experience working with public relations professionals. Offered on a pass/fail basis only. *Prerequisites:* 90 or more hours of coursework, 2.750 overall GPA, 3.000 GPA in COMM coursework, and permission of faculty adviser. Reserved for public relations majors.

COMM 4323 (3). FORENSICS WORKSHOP. This course explores the pedagogy of competitive forensics. Students will examine methods, theories and techniques of competitive debate and individual events, tournament administration, and professional responsibilities of the forensic educator, and gain practical experience in forensics and debate competition. Instructor approval required. *Prerequisite:* Major or minor standing.

COMM 4324 (3). COMPETITIVE MOCK TRIAL. Provides the opportunity to investigate and explore principles of legal advocacy within a competitive environment. Students are trained to represent SMU as members of the SMU Mock Trial Team before invitational, regional, and national trial competitions. *Prerequisite:* Major or minor standing; instructor approval.

COMM 4325 (3). ORGANIZATIONS IN LOCAL CONTEXT. Students in approved positions gain career-related experience and establish professional contacts. At the conclusion of the internship, students prepare a report that allows for academic reflection on that experience. Offered on a pass/fail basis only. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375; 90 hours or more of coursework; 2.750 overall GPA; 3.000 GPA in COMM coursework; and permission of faculty adviser. Reserved for communication studies majors.

COMM 4326 (3). WASHINGTON TERM INTERNSHIP. This course is offered in conjunction with courses taken in Washington, D.C. This internship provides students with experience working in public affairs in the nation's capitol, supervised by a faculty member there. *Prerequisites:* C or better in COMM 2308, 2310, 2327, and 2375; 90+ hours of coursework; 2.750 overall GPA; 3.000 GPA in COMM coursework; and permission of faculty adviser.

COMM 4340 (3). PUBLIC RELATIONS MANAGEMENT. Covers the business practices necessary for the operation and maintenance of a strategic communication organization, including case studies, financial and accounting basics, marketing and client presentations, strategic planning, requests for proposals, and professional ethics. *Prerequisites:* C or better in COMM 2310 (or 3300), 2327, 2375, and 3355.

COMM 4375 (3). HONORS THESIS IN COMMUNICATION. Provides advanced students with the opportunity to do original research on a topic related to communication. Students learn how to write research questions, conduct a literature review, engage in qualitative or quantitative methodologies, and present findings. *Prerequisite:* Honors standing. Reserved for communication studies majors and minors and public relations and strategic communications majors.

COMM 4385 (3). COMMUNICATION, TECHNOLOGY, AND GLOBALIZATION. This course examines how various communication technologies are used within a strategic communication context. Historical, ethical, and legal issues surrounding the use of these technologies are addressed. Reserved for COMM majors or minors.

COMM 4386 (3). FINANCIAL COMMUNICATION. This course familiarizes students with terms, principles, theories, and practices in financial communications. Students examine techniques used in investor relations and consider the legal and ethical responsibilities.

COMM 4390 (3). GLOBALIZATION, ECONOMICS, AND COMMUNICATION. The globalization of economic and communicative activity entails a new type of organizing structure as well as an understanding of self and one's connection (interdependence) to the global marketplace. Examines the rise of globalization and the social, political, and economic activity that has significance for every individual and community across the globe.

COMM 4392 (3). MUSTANG CONSULTING I: INTRODUCTION TO COMMUNICATION CONSULTING. Provides a hands-on opportunity to learn and implement the theories and skills necessary to engage in the task of communication consulting. Unlike other models of consulting, the art of communication consultation emphasizes the centrality of organizational communication as a means of assisting clients in addressing their organizational concerns and opportunities. Covers applying communication theory and research to the practice of communication consultation; distinguishing the difference between academic research and communication consulting; and proposing, planning, and implementing a consulting project. Instructor consent only.

COMM 4393 (3). MUSTANG CONSULTING II: CAPSTONE. This advanced communication consulting course provides the opportunity for students to manage their own communication consulting clients under the supervision of the faculty principal. Students are responsible for all client contact, presentations, and resolutions and are required to implement an entire strategic communication solution on behalf of the client, from planning through evaluation. Instructor consent only.

COMM 4395 (3). BOULEVARD CONSULTING PRACTICUM. This capstone course demonstrates how strategic communication contributes to problem-solving in corporate and public relations settings. Students work in teams, conduct original research, and develop and present a comprehensive communication campaign for an actual client. *Prerequisites:* Senior standing and C or better in COMM 2310 (or 3300), 2327, 2375, 3355, and 3382. Reserved for communication studies majors.

COMM 4396 (3). PUBLIC RELATIONS CAMPAIGNS IN NONPROFIT SETTINGS. This capstone course must be taken in conjunction with an internship at an approved nonprofit organization to complete the required 150 hours in a service learning environment. Students utilize their classroom experience to create a comprehensive strategic communication campaign for a nonprofit, with materials directed at the organization's specific public (e.g., the media, donors, volunteers, client base, board, foundations, and corporations). *Prerequisite:* COMM 3382. Reserved for communication studies majors and minors.

COMM 5110 (1), 5210 (2) 5310 (3). DIRECTED STUDY. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed directed studies form to the Corporate Communications and Public Affairs Office before the start of the term during which the study is to be undertaken. *Prerequisites:* COMM major or minor standing, junior standing, and permission of instructor.

COMM 5301 (3), 5302 (3), 5303 (3). TOPICS IN COMMUNICATIONS. These courses encourage students to examine the role of communication within contemporary issues and social problems. Topics vary by instructor. Reserved for COMM majors or minors.

COMM 5304 (3). TOPICS IN COMMUNICATIONS. These courses encourage students to examine the role of communication within contemporary issues and social problems. Topics vary by instructor.

COMM 5305 (3). TOPICS IN COMMUNICATION. Study of timely issues.

Creative Computing

Center of Creative Computation

Professor Ira Greenberg, **Center Director**

Professor: Ira Greenberg. **Visiting Professor:** Yong Bakos.

Creative computing is a new, highly interdisciplinary major combining theory and methodology from computer science and engineering with aesthetic principles and creative practice from the arts. The program is rigorous in its interdisciplinary integration, requiring students to pursue core coursework in both the Lyle School of Engineering and the Meadows School of the Arts. In addition, the program requires a capstone project and either a minor concentration or a second major. Study abroad is also highly recommended.

The major in creative computing crosses traditional disciplinary boundaries bridging not only divisions and departments but entire schools across the University; it does so in response to technological innovation, contemporary arts practices and demands of the global marketplace. An underlying principle at the philosophical core of the major is the integration of creative and analytical study and practice – championing an integrated "whole brain" approach. The major in creative computing enables students to consider problems from many angles and conceptual frameworks, integrating widely disparate approaches and practices.

The program's breadth enables students to target many different segments and vocational opportunities within the digital economy, including software engineering, Web design, interactive design/development, mobile application development, 3-D modeling and animation, scientific visualization, social media, and many, many others. It is anticipated that opportunities will continue to increase for the foreseeable future, as the application of computation and digital processes continues to proliferate across all segments of the global economy.

Graduates of the program will

- Be fully literate in at least one major programming language (Java, C/C++, etc.) and a secondary scripting language (JavaScript, Python, etc.), and will be capable of developing a fully functional software project from concept through deployment, including platform integration, installation, debugging and maintenance.
- Have a conceptual, technical and aesthetic direction informing their creative development and research.
- Be capable of bridging multiple disciplines and synthesizing original, technology-driven solutions.
- Be equally comfortable and competent applying creative and computational methods, approaches and processes in solving problems.
- Be capable of working across multiple segments of the digital economy, in roles such as interactive designers/developers, software engineers, project managers, fine artists and entrepreneurs.

Bachelor of Arts in Creative Computing

Admission to the program is competitive. A minimum overall GPA of 3.000 is required, as well as at least a 3.500 GPA in courses listed under "Computing Fundamentals" in the table below. Students are admitted to the major through consultation with the program director.

The major requires a final capstone project, where students, working with a faculty adviser, develop an independent project in creative computing. Projects may include an art installation, performance, original software (tool, library or application) or a scholarly article. It is expected that students will present their projects in a public forum.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Computing Fundamentals	9
CSE 1341 Principles of Computer Science I	
or **ASIM 1310** Art and Code I	
CSE 1342 Programming Concepts	
CSE 2341 Data Structures	
Creative Fundamentals (three from the following)	9
(Any 1000- or 2000-level courses in the Meadows School of the Arts may be substituted for up to 6 hours of the courses listed below, with adviser approval.)	
ASCE 1300 Introduction to Ceramics	
ASDR 1300 Introduction to Drawing	
ASPH 1300 Basics of Photography	
ASPR 3300 Printmaking Workshop	
ASPT 1300 Introduction to Painting	
ASSC 1300 Introduction to Sculpture	
ENGL 2391 Introductory Poetry Writing	
ENGL 2392 Introductory Fiction Writing	
FILM 1301 Art of Film and Media	
FILM 1302 Media and Culture	
Creative Computing	21
ASIM 1300 Creative Computation 1	
Six from the following:	
ASIM 1330 Responsive Arts I	
ASIM 1340 Computational Sculpture	
ASIM 2305 Video and Image for Performance/Real-time Visual Manipulation	
ASIM 3310 Computational Media Workshop (topic: international digital atelier)	
ASIM 3305 Art and Code II	
ASIM 3320 Physical Computing	
ASIM 3350 Technology and the Body	
ASIM 5302 Intermedia Directed Studies	
ASPH 3304 Digital Tools	
ASPH 3390 Experimental Camera	
CEE 5373 Introduction to CAD	
CRCP 1330 Sound and Code	
CRCP 1350 Art of 3-D Animation	
or **CSE 5360** Introduction to 3-D Animation	
CRCP 2310 Nature and Code	
CSE 1319 Introduction to Digital Imaging	
CSE 1331 Introduction to Web Programming	
CSE 3345 Graphical User Interface Design/Implementation	
CSE 5382 Computer Graphics	

Creative Computing (continued)

EE 1301 Modern Electronic Technology
EE 1322 Survey of Electrical and Electronic Devices
EE 5390 Mobile Phone Application Programming
FILM 1304 Production 1
FILM 3309 Multicamera Production
FILM 3384 Film Audio
FILM 4304 New Media Distribution
FILM 4308 Post-Production Visual FX
FILM 4385 Advanced Sound Design
MSA 3310, 3330
(topics: creative visualization or synthesizing nature)
MUTH 4310 Introduction to Electro-Acoustic Music
MUTH 4311 Advanced Topics in Music Technology
PHYS 3320 Physics of Music
PHYS 3340 Computational Physics
PHYS 1320 Musical Acoustics
THEA 2275 Technical Theatre Laboratory
THEA 2333 Technical Drawing for Theatre
THEA 3379 Computer-Assisted Design I
THEA 3380 Computer-Assisted Design II

Math, Sciences and Engineering 9

(Any courses within the math, sciences or engineering disciplines may be substituted for up to 6 credit hours of the courses listed below, with adviser approval.)

One from the following:

MATH 3308 Introduction to Discrete Mathematics
MATH 3353 Introduction to Linear Algebra
PHYS 1313 Fundamentals of Physics

At least 6 credit hours from the following:

CSE 2353 Discrete Computational Structures
CSE 2240 Assembly Language
ANTH 2315 Human Evolution
ANTH 2363 Introduction to Archaeology
BIOL 1303 Essentials of Biology
BIOL 1305 Our Natural Environment
BIOL 1308 Plant Biology
BIOL 1401, 1402 Introductory Biology
CHEM 1301 Chemistry for Liberal Arts
CHEM 1303, 1304 General Chemistry
GEOL 1301 Earth Systems
GEOL 1305 Oceanography
GEOL 1307 The Solar System
GEOL 1308 Evolution and Life History
GEOL 1313 Earthquakes and Volcanoes
PHYS 1303 Introductory Mechanics
PHYS 1304 Introductory Electricity and Magnetism
PHYS 1314 The Physical Perspective
PHYS 3305 Introduction to Modern Physics

Requirements for the Degree (continued)	*Credit Hours*
Advanced Engineering	9
Any Lyle applied technology courses at the 3000 level or above, with adviser approval.	
Advanced Arts	9
Any Meadows studio or performance arts courses at the 3000 level or above, with adviser approval.	
Theory (one from the following)	3
ARHS 1332 Twentieth Century Art	
ARHS 3369 Contemporary Art: 1965–Present	
CSE 2240 Assembly Language Programming/ Machine Organization	
CSE 3353 Fundamentals of Algorithms	
MATH 3308 Introduction to Discrete Mathematics	
MATH 3353 Introduction to Linear Algebra	
PHIL 1301 Elementary Logic	
PHIL 3363 Aesthetic Experience and Judgment	
PSYC 3310 Memory and Cognition	
SOCI 3345 Media Ethics and Gender	
Capstone	3
CRCP 5301 Creative Coding Major Capstone	
Minor or Second Major and Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Minor in Creative Computing

The minor in creative computing is highly interdisciplinary, championing a "whole brain" approach. Combining study, creative practice and research, students explore computing as a universal creative medium, integrating aesthetic principles and practices from the arts with analytical theories and processes from computer science and engineering.

Requirements for the Minor	*Credit Hours*
Core Course Requirements	6
CSE 1341 Principles of Computer Science *or* **ASIM 1310** Art and Code I	
ASIM 1300 Introduction to Creative Computation	
Creative Computation (at least 9 hours from the following)	9
ASAG 3360 Color and the Visual Image	
ASIM 1310 Art and Code	
ASIM 1320 Interactive Art and Performance	
ASIM 1330 Responsive Arts I	
ASIM 1340 Computational Sculpture	
ASIM 3305 Art and Code II	
ASIM 3310 Computational Media Workshop (topic: international digital atelier) (recommended course)	
ASIM 3320 Responsive Arts II	
ASIM 3350 Technology and the Body	
ASIM 5302 Intermedia Directed Studies	

Requirements for the Minor (continued)	*Credit Hours*
Creative Computation (continued)	
ASPH 1310 Introduction to Video	
ASPH 3304 Digital Tools	
ASPH 3390 Experimental Camera	
CEE 2372 Introduction to CAD	
CSE 1319 Introduction to Digital Imaging	
CSE 1331 Introduction to Web Programming	
CRCP 1330 Sound and Code	
CRCP 2310 Nature and Code	
CSE 1342 Programming Concepts	
CSE 3345 Graphical User Interface Design/Implementation	
CSE 5360 Introduction to 3-D Animation	
CSE 5382 Computer Graphics	
EE 1301 Modern Electronic Technology	
EE 1322 Survey of Electrical and Electronic Devices	
EE 7390 Mobile Phone Application Programming	
FILM 1304 Production 1	
FILM 3309 Multicamera Production	
FILM 4385 Advanced Sound Design	
FILM 3384 Film Audio	
FILM 4304 New Media Distribution	
FILM 4308 Postproduction Visual FX	
MSA 3330 (topics: creative visualization or synthesizing nature)	
MUTH 4310 Introduction to Electro-Acoustic Music	
MUTH 4311 Topics in Electro-Acoustic Music	
PHYS 1320 Musical Acoustics	
PHYS 3320 Physics of Music	
PHYS 3340 Computational Physics	
THEA 2275 Technical Theatre Laboratory	
THEA 2333 Technical Drawing for Theatre	
THEA 3379, 3380 Computer-Assisted Design I and II	
THEA 4357 Designing With Computers: Stage Production	
Theory (one from the following)	3
ARHS 1332 20th-Century Art	
ARHS 3369 Contemporary Art: 1965–Present	
CSE 2240 Assembly Language Programming/Machine Organization	
CSE 2353 Discrete Computational Structures	
CSE 3353 Fundamentals of Algorithms	
MATH 3308 Introduction to Discrete Mathematics	
MATH 3353 Introduction to Linear Algebra	
PHIL 1301 Elementary Logic	
PHIL 3363 Aesthetic Experience and Judgment	
Capstone Project	1
CRCP 5101 Creative Coding Minor Capstone	
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CRCP 1330 (3). SOUND AND CODE. Explores computation as a powerful creative medium. Working with the visual programming environment MAX/MSP, students learn the fundamentals of aural programming in the context of creative development. Course examples include algorithmic music, sound synthesis, waveform analysis, sound effects, sound detection, and midi. Laptop computer required.

CRCP 1350 (3). THE ART OF 3-D MODELING AND ANIMATION. Students explore 3-D modeling and animation using Maya, the industry standard 3-D software package. Topics include virtual sculpting, texture maps, transformations, procedural shaders, virtual lights and cameras, timeline-based animation, and special effects. Laptop computer required.

CRCP 2310 (3). NATURE AND CODE. Students explore patterns, systems, and underlying emergent structures found in nature through code experiments, simulations, and sketches. Course topics include swarming, growth, motility, chaos, complexity, predation, cellular automata, L-systems, and fractals. *Prerequisite:* ASIM 1310, CSE 1341, CSE 1342, a score of 4 or above on the computer science AP exam, or instructor permission. Laptop computer required.

CRCP 4391 (3). SPECIAL TOPICS. Designed to cover topics that may have temporary or limited interest. *Prerequisite:* CSE 1342 or instructor approval.

CRCP 5101 (1). CREATIVE COMPUTING MINOR CAPSTONE. In consultation with a faculty adviser, students propose, design, and implement an independent creative computing project. Projects may include performance, exhibition, and hardware/software development. Completion of a paper summarizing significant project outcomes and results is required. For declared creative computing majors only, the course is to be completed in the student's last term of the creative computing major. *Prerequisite:* Permission of instructor.

CRCP 5301 (3). CREATIVE COMPUTING MAJOR CAPSTONE. In consultation with a faculty adviser, students propose, design, and implement an independent creative computing project. Projects may include performance, exhibition, and hardware/software development. Completion of a paper summarizing significant project outcomes and results is required. For declared creative computing majors only, the course is to be completed in the student's last term of the creative computing major. *Prerequisite:* Permission of instructor.

Dance

Associate Professor Patty Harrington Delaney, **Division Chair**

Professors: Shelley C. Berg, Danny Buraczeski, Myra Woodruff. **Associate Professors:** Patty Harrington Delaney, Leslie Peck. **Assistant Professors:** Christopher Dolder, Millicent Johnnie. **Visiting Lecturer:** Anne Westwick. **Adjunct Lecturers:** Shelley Estes, Josh Peugh. **Musicians:** Dick Abrahamson, Jamal Mohamed, Mina Polevoy, Edward Smith, Janeen Vestal.

The Division of Dance offers professional dance training within the context of a comprehensive liberal arts education. The goal is to develop the disciplined, versatile dance artist through a balanced study of ballet, modern dance and jazz dance techniques, complemented and reinforced by a broad range of theoretical studies and performance opportunities. The program provides an atmosphere in which students are nurtured and stimulated in their quest for artistic achievement, technical mastery and scholarly excellence. Undergraduate majors study dance as a performing art with the intent to become practicing artists. The core of the dance curriculum is designed with this goal in mind. The combination of performance and liberal arts education courses serves to develop the articulate dancer.

The Division of Dance has four dance studios, three of which are located in the Owen Arts Center. Each studio is equipped with a sprung floor, vinyl covering, sound system, grand piano, ballet barres and mirrors. The Charles S. Sharp Performing Arts Studio doubles as a performing space and is equipped with an adjustable black traveler, a control booth, state-of-the-art sound equipment and a theatrical lighting system. Adjacent to the Sharp Studio (B100) is Studio B120. The third facility in the Owen Arts Center is Studio 1430, adjacent to the Margo Jones Theatre and the stage of the Bob Hope Theatre. A fourth studio is located in McFarlin Auditorium. Live accompaniment is provided for all studio classes.

Admission, Audition and Financial Aid

Acceptance as a dance major or minor requires a performance audition. This is a separate process from application to the University and is the principal factor in determining an applicant's eligibility to major or minor in dance. Campus and national auditions occur throughout the year and serve to establish a candidate's level of competence, class placement and merit scholarship recommendation.

Applicants who audition in Dallas are observed in a ballet class, in modern dance sequences and in a jazz dance combination. Faculty representatives from the Division of Dance also conduct an annual audition tour to selected cities.

At auditions, select candidates are asked to perform a brief (90-second) improvised or prepared solo dance. Students are expected to bring to the audition a brief résumé, a wallet-sized photograph, applicable recorded music, and appropriate studio clothes and footwear. To confirm a campus audition, students should call the Dance Division Office at 214-768-2718. Additional information regarding admission procedures for the University, a national audition or financial aid is available from the Recruiting Office at 214-768-3217.

Undergraduate applicants are encouraged to seek early admission to the University. Important factors in the evaluation of an applicant are the quality of the applicant's high school academic program, the student's record of performance, class rank and scores from the SAT or ACT exam or both. Transfer applicants are evaluated by the Office of Admission.

Admission procedures for transfer students are the same as those for first-year applicants, including the audition. With few exceptions, all new students begin work in the fall term.

Performance

All dance majors have opportunities to perform and choreograph as an integral part of their performance studies. The Dance Performance Series includes main stage concerts in the Bob Hope Theatre, concerts in the Sharp Studio and noontime Brown Bag performances in the Owen Arts Center lobby. Other opportunities include special events, outreach programs and interdisciplinary projects within and beyond the Meadows community. Dance majors are required to participate in Dance Performance Series events as partial fulfillment of the degree program.

Bachelor of Fine Arts in Dance Performance

The Bachelor of Fine Arts degree in dance performance is accredited by the National Association of Schools of Dance. Successful completion of this program will enhance the student's personal growth as well as technical development in ballet, modern dance and jazz dance. The degree requires 73 credit hours in dance, of which a minimum of 44 are in studio training. The remaining 29 credit hours provide students with the opportunity to develop scholarly and creative abilities in dance and related areas of interest.

Curriculum Notes: Students must be enrolled in a minimum of three credit hours of performance technique class each term in order to be considered for casting in any curricular performances. A minimum of four terms of ensemble work (**DANC 1080, 2080, 3080, 4080**) are required for a grade without credit; enrollment will be processed by the administration after casting is determined for each term. Four terms (**DANC 2241, 2242, 3243, 3244**) of coursework in dance composition are required beginning in the sophomore year.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	Varies
Performance Technique	32
To be taken during the first 2–3 years of study: Ballet Courses: 12 credit hours Modern Dance Courses: 12 credit hours Jazz Dance Courses: 8 credit hours	
Advanced Performance Technique	12
Must be at the 3000–4000 level of proficiency in at least one major area of performance technique.	
Ensemble Performance	0
DANC 1080, 2080, 3080, 4080	
Composition:	8
DANC 2241, 2242, 3243, 3244	
Theoretical and Applied Studies	20
DANC 1151, 1152, 1244, 1326, 2160, 2361, 4363, 4373, 4374	
Dance Electives (hours needed depends on capstone choice)	5–8
Selected from advanced performance technique, theoretical and applied studies, directed studies, or other elective courses taken within the Meadows School.	

Requirements for the Degree (continued)	*Credit Hours*
Dance Capstone	0–3
DANC 4090, 4190, 4290, or 4390	
Community Experience	0–1
MSA 1001 *or* 1101	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

GEC students are required to complete a minimum of 123 term credit hours and are exempt from 3 hours of Perspectives and an additional 3 hours of either Perspectives or Cultural Formations courses.

Regulations

The faculty expects dance majors to apply themselves scholastically and to assume responsibilities conscientiously. Students are required to maintain a minimum GPA of 2.700 in dance courses to continue in the dance major. Grades lower than *C* are not acceptable in any required dance course and will necessitate repeat enrollments. If requirements are not met, the student is placed on academic probation. To be eligible for scholarship, students are required to maintain a minimum cumulative GPA of 2.700 in dance courses, and they must be enrolled in a minimum of six credit hours in dance. Full participation in the program and in division performances is expected of every student who receives a merit scholarship award. Performance studies and production activities take precedence over dance work outside of the division.

Evaluation

High standards of discipline and execution are essential for artistic growth, progress and success. Regular class attendance, attendance at auditions, classroom and theatre etiquette, punctuality and attendance at student meetings are essential. Students meet with individual faculty at midterm to receive a progress report and to establish individual goals. At the close of each term, each student receives a performance evaluation by the collective faculty. Various aspects of a student's work are examined, including technical progress, capacity for and commitment to class work, personal growth and maturity, attitude, academic performance, production support, program participation, performance artistry, and health and fitness. When standards are not met, a student is advised that significant improvement must take place to remain in the program. Poor critiques may result in immediate dismissal from the dance major program, and/or loss of dance scholarship funding. All dance scholarships are reviewed annually. Further details on standards and requirements for the dance major are included in the *Division of Dance Student Handbook.*

Minor in Dance Performance

The minor in dance performance is available to majors in all disciplines and is designed for students with previous dance training who wish to continue the pursuit of their interests within the context of their liberal arts studies. Acceptance criteria for the dance minor include audition and class placement prior to enrollment in studio classes. Students also selectively engage in the study of the creative process/

performance, dance history/literature and/or theory/analysis. The minor requires a minimum of 18 credit hours in dance as outlined below.

Requirements for the Minor	*Credit Hours*
Dance Classes	9
DANC 2370, 4373, *or* 4374	
6 credit hours from the following:	
DANC 1151, 1326, 2107, 2160, 2241, 2361, 2370, 4260, 4363, 4366, 4373, 4374	
Performance Technique Classes (three from the following)	9
Ballet: DANC 1311–1314; 2311–2316; 3311–3318	
Modern Dance: DANC 1321–1324; 2321–2324; 3321–3324	
Jazz Dance: DANC 1231–1234; 2231–2234; 3231–3234	
Partnering: DANC 4003–4008; 4103–4108	
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The Courses (DANC)

Dance courses open to all students from any field of study are not all offered every year. The remaining dance courses are restricted to dance majors unless otherwise indicated in the course descriptions. Dance minors must obtain departmental approval to enroll in courses restricted to dance majors. Dance minors must qualify for performance technique classes by audition.

Dance Courses Open to All Students	
	DANC 1301–06, 2107–08, 2301–06, 2345, 2370–72, 3374, 4370
Dance Courses for Dance Performance Majors	
Performance Technique	DANC 1311–14, 1321–24, 1231–34, 2311–16, 2321–24, 2231–34
Advanced Performance Technique	DANC 3311–18, 3231–34, 3321–24, 4210–11, 4219–24, 4226, 4229, 4246–49
Ensemble Performance	DANC 1080, 2080, 3080, 4080–84
Composition	DANC 2241–42, 3243–44
Theoretical Studies	DANC 2370, 4190, 4290, 4390, 4363, 4365–66, 4370, 4373–74
Applied Studies	DANC 1151–52, 1244, 1326, 2107–08, 2160, 2345, 2361–62, 2381–82, 3381–82, 4003–08, 4045, 4103–08, 4145, 4245, 4260

DANC 1030 (0). PARTNERING I LABORATORY. A focus on the development of weight sharing skills, with methodology based in techniques associated with contact improvisation and Bartenieff fundamentals. Covers repertory from Pilobolus, one of the most internationally renowned dance companies that bases its work in contact improvisation. Restricted to first-year students.

DANC 1080 (0). ENSEMBLE PERFORMANCE I. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Required.

DANC 1151 (1). DANCE PRODUCTION I. Introduction to the technical preparation, production, and running of dance performances. Scheduled classes provide orientation and information for providing support in areas of lighting, sound, costumes, and scenery. In addition, in-service assignments provide hands-on training in mounting a mainstage production, as well as load-in and strike of dance productions in other venues. Required of all first-year Dance majors.

DANC 1152 (1). DANCE PRODUCTION II. Service assignments for performance activities as a continuation of material introduced in the previous term. Development of production skills through verbal and visual communication. This course includes lab hours outside of and in addition to the regularly scheduled class meeting times. Required.

DANC 1231 (2), 1232 (2), 1233 (2), 1234 (2). JAZZ DANCE I. Exploration of the basics of jazz dance technique and styles (classic, musical theatre, and contemporary forms), including studies in basic positions, placement, isolations, and jazz rhythms.

DANC 1244 (2). THE DANCER'S TOOLBOX. Introduces healthy and effective practices that serve to develop a vibrant and successful dance artist. Focus on physical well-being, artistic protocols, intellectual and cultural perspectives, and diverse approaches to creating and sustaining motivation and inspiration. Also, collaboration with other orientation courses and projects.

DANC 1301 (3), 1302 (3). BEGINNING BALLET. Introduction to the fundamentals of classical ballet. Not for credit in the dance major.

DANC 1303/1311 (3), 1304 (3). BEGINNING MODERN DANCE. Introduction to basic movement skills, experiences, and concepts of modern dance. Not for credit in the dance major.

DANC 1305/2311 (3), 1306/2312 (3). BEGINNING JAZZ DANCE. Introduction to the fundamentals of jazz dance with emphasis on rhythm and theatrical style. Not for credit in the dance major.

DANC 1311/1303 (3), 1312 (3), 1313 (3), 1314 (3). BALLET I. Introduces and develops the fundamentals of classical ballet and pointe technique. Inclusive of pointe class, men's class, and partnering class. *Prerequisite:* Restricted to dance majors and minors only.

DANC 1321 (3), 1322 (3), 1323 (3), 1324 (3). MODERN DANCE I. Introduction to and development of the fundamentals of contemporary dance.

DANC 1326 (3). FOUNDATIONS OF MUSIC: HISTORY AND THEORY. A course designed to introduce students to basic listening skills, historic musical literature, methods for exploring multiple genres of music and basic music theory related to rhythm and dynamics. The theoretical materials introduced in this class will be reinforced and practiced in the composition track (three terms of composition and one term of choreo-lab), which begins in the sophomore year.

DANC 2080 (0). ENSEMBLE PERFORMANCE II. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Required. *Prerequisite:* DANC 1080.

DANC 2160 (1). INTRODUCTION TO PILATES. Introduction to Pilates, a nonimpact body conditioning method based on principles of abdominal and scapular stabilization. Emphasis on nonweight-bearing exercises, proper alignment, full range of motion, and patterned breathing.

DANC 2170 (1). YOGA FOR DANCERS. An introduction to the fundamentals of hatha yoga taught through vinyasa, a fluid series of physical poses initiated by focused breathing. Designed to cultivate mental clarity, to improve strength and flexibility, and to reduce muscular and metal tension.

DANC 2231 (2), 2232 (2), 2233 (2), 2234 (2). JAZZ DANCE II. Continuing development of jazz dance technique and styles with focus on dynamics, rhythm, and directional changes. Explores classic jazz, blues, and contemporary jazz styles. Admission by placement.

DANC 2242 (2). DANCE COMPOSITION II. Generation of solo movement through improvisation, recognizing spontaneous structures, and working with stage space, groups, and inspiration from other media, including music. Required. *Prerequisites:* DANC 2241, 2361 or instructor approval.

DANC 2311/1305 (3), 2312/1306 (3), 2313 (3), 2314 (3), 2315 (3), 2316 (3), 2317 (3). BALLET II. Continuing exploration of classical ballet technique on the intermediate level with an emphasis on more complex port de bras, adagio, tourner, enchainement, and allegro

batterie. Inclusive of pointe class, men's class, and partnering class. *Prerequisite:* Admission by placement.

DANC 2321 (3), 2322 (3), 2323 (3), 2324 (3). MODERN DANCE II. Continuing exploration of contemporary dance technique at an intermediate level with emphasis on more complex movement phrasing, rhythmic variation, and use of space. Admission by placement.

DANC 2341 (3). DANCE COMPOSITION I. Introduction to fundamental compositional concepts, including improvisation, abstraction, gesture, motivation, movement manipulation, and phrasing. Students create solo, duet, and group studies. *Prerequisite:* DANC 1326.

DANC 2361 (3). DANCE THEORY AND PRACTICE WITH AN EMPHASIS ON LABAN MOVEMENT STUDIES. An introduction to established theoretical concepts and their practical application to the performance and creation of movement. Areas of concentration include Somatics, Laban Movement Analysis, Motif Writing and Labanotation.

DANC 3080 (0). ENSEMBLE PERFORMANCE III. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Required. *Prerequisite:* DANC 2080.

DANC 3086 (0). EXPLORATIONS IN STYLE. This course offers exploration of a variety of dance forms. It is designed to broaden exposure of students to styles and techniques beyond the foundation of the standing curriculum. *Prerequisites:* Junior or senior class standing and technique level placement of II or IV in the appropriate technique.

DANC 3216/DANC 3232 (2). MEN'S BALLET TECHNIQUE. Emphasis on the virtuosity specific to the male dancer in the balletic idiom. The class objective is to strengthen and develop the dancer to his utmost potential. Includes variations. Admission by placement.

DANC 3218 (2). WOMEN'S POINTE TECHNIQUE. Emphasis on the virtuosity specific to the female dancer in the balletic idiom. The class objective is to strengthen and develop the dancer to her utmost potential. Includes variations. Admission by placement.

DANC 3231 (2). JAZZ DANCE III. Exploration of more advanced technique and styles of jazz dance, performance projection, individual style, characterizations, and musical theatre themes. Focus on retaining extensive combination sequences. Admission by placement.

DANC 3232/3216 (2), 3233 (2), 3234 (2). JAZZ DANCE III. Exploration of more advanced technique and styles of jazz dance, performance projection, individual style, characterizations, and musical theatre themes. Focus on retaining extensive combination sequences. Admission by placement.

DANC 3243 (2). DANCE COMPOSITION III. Exploration of elements of choreographic form with emphasis on sequencing, balance, phrasing, transition, choreographic device and compositional structure. Introduction to Life Forms computer software for choreography. Utilization of videotape for self-analysis and critique. Opportunity for visits to the Meadows Museum for the study of form. Required. *Prerequisite:* DANC 2242.

DANC 3244 (2). DANCE COMPOSITION IV. Synthesis, application and elaboration of previously introduced choreographic principles and concepts. Exploration of ethical issues and social responsibilities of the choreographer. Emphasis placed on collaborative, multidisciplinary, and community service projects. Areas for collaboration may include music, visual arts, video, spoken and written text, elements of design, and emergent technology. Required. *Prerequisite:* DANC 3243.

DANC 3311 (3), 3312 (3), 3313 (3), 3314 (3), 3315 (3), 3316 (3), 3317 (3), 3318 (3). BALLET III. Continuing development of classical ballet technique on the advanced level with an emphasis on technical proficiency, musicality, and movement dynamics. May be inclusive of pointe class, men's class, and/or partnering class. *Prerequisite:* Admission by placement.

DANC 3321 (3), 3322 (3), 3323 (3), 3324 (3). MODERN DANCE III. Continuing development of contemporary dance technique at an advanced intermediate level with emphasis on refining performance quality, depth of physicality, dramatic expression, and individual style.

DANC 3354 (3). DANCE AND CAMERA. Instruction in basic camera and editing skills and techniques designed to broaden and empower the dancer's understanding of the moving dance image on camera, and the ways this imagery may be modified and presented as digital media. A variety of modes of digital capture are covered, including single-camera archival, performer viewpoint, multicamera, and site-specific capture techniques. Students also learn basic

nonlinear editing skills in support of creating a dancer/choreographer reel and digital portfolio. *Prerequisite:* Junior or senior standing.

DANC 3374/CFA 3337 (3). THE EVOLUTION OF AMERICAN MUSICAL THEATER. This course examines the evolution of the American Musical Theater from its roots in minstrelsy, burlesque and vaudeville, to its adolescence in comic opera, operetta and musical comedy to its codification as musical theater. The first unit of the class examines the early forms of popular entertainment, the second unit looks at the development of the integration of dance, music and drama into the form we know as musical theater and the last unit examines the figures of the 20th century who refined this integration both on Broadway and in Hollywood.

DANC 3381 (3). REPERTORY AND PERFORMANCE III. Rehearsal and performance of master works of choreography, with emphasis on renement of detail, clarity of phrasing, expression, musicality, and versatility within a broad range of styles. *Prerequisite:* DANC 2382 or instructor approval.

DANC 3382 (3). REPERTORY AND PERFORMANCE IV. Rehearsal and performance of additional master works of choreography, with emphasis on renement of detail, clarity of phrasing, expression, musicality, and versatility within a broad range of styles. *Prerequisite:* DANC 3381 or instructor approval.

DANC 4045 (0). ADVANCED CHOREOGRAPHIC PROJECTS. Individual directed studies in choreography with a culminating performance. *Prerequisites:* DANC 3244 and instructor approval.

DANC 4080 (0). ENSEMBLE PERFORMANCE IV. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Required. *Prerequisite:* DANC 3080.

DANC 4081 (0). ENSEMBLE PERFORMANCE V. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. *Prerequisite:* DANC 4080.

DANC 4082 (0). ENSEMBLE PERFORMANCE VI. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. *Prerequisite:* DANC 4081.

DANC 4083 (0). ENSEMBLE PERFORMANCE VII. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. *Prerequisite:* DANC 4082.

DANC 4084 (0). ENSEMBLE PERFORMANCE VIII. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. *Prerequisite:* DANC 4083.

DANC 4090 (0). DIRECTED STUDIES. Supervised projects and/or research in theoretical studies, inclusive of community service projects. Arranged. *Prerequisite:* Instructor approval.

DANC 4091 (0). DANCE CAPSTONE. Collaborative work and activities leading to the creation, preparation, and performance of a dance project. Required of all dance majors. *Prerequisite:* Restricted to dance majors only.

DANC 4104 (1). PARTNERING. Introduction to the basic elements of partnering inherent in classical ballet. Emphasis on technical skills and classical style. Includes excerpts from classical repertory. Admission by invitation. *Prerequisite:* Instructor approval.

DANC 4145 (1). ADVANCED CHOREOGRAPHIC PROJECTS. Individual directed studies in choreography with a culminating performance. *Prerequisites:* DANC 3244 and instructor approval.

DANC 4190 (1). DIRECTED STUDIES. Supervised projects and/or research in theoretical studies, inclusive of community service projects. Arranged. *Prerequisite:* Instructor approval.

DANC 4191 (1). DANCE CAPSTONE. Collaborative work and activities leading to the creation, preparation, and performance of a dance project. Required of all dance majors. *Prerequisite:* Restricted to dance majors only.

DANC 4210 (2). BALLET IMMERSIVE. Advanced ballet technique. May be taken as a stand-alone course or as an immersive supplement to Ballet III, Ballet IV, Men's Ballet Technique, or Women's Pointe Technique. *Prerequisites:* Junior or senior standing, Ballet III or IV placement, and instructor approval.

DANC 4211 (2). BALLET IMMERSIVE II. Advanced ballet technique. May be taken as a stand-alone course or as an immersive supplement to Ballet III, Ballet IV, Men's Ballet Technique, or Women's Pointe Technique. *Prerequisites:* Junior or senior standing, Ballet III or IV placement, and instructor approval.

DANC 4212 (2), 4213 (2), 4214 (2). ADVANCED BALLET ELECTIVE. Advanced ballet technique offering a transition from dance study to professional-level work.

DANC 4216 (2). MEN'S BALLET TECHNIQUE. Emphasis on the virtuosity specific to the male dancer in the balletic idiom. The class objective is to strengthen and develop the dancer to his utmost potential. Includes variations. Admission by placement. *Prerequisite:* Restricted to dance majors and minors only.

DANC 4218 (2). WOMEN'S POINTE TECHNIQUE. Emphasis on the virtuosity specific to the female dancer in the balletic idiom. The class objective is to strengthen and develop the dancer to her utmost potential. Includes variations. Admission by placement.

DANC 4219 (2). BALLET IMMERSIVE III. Advanced ballet technique. May be taken as a stand-alone course or as an immersive supplement to Ballet III, Ballet IV, Men's Ballet Technique, or Women's Pointe Technique. *Prerequisites:* Junior or senior standing, Ballet III or IV placement, and instructor approval.

DANC 4220 (2). MODERN DANCE IMMERSIVE. Advanced contemporary dance technique. May be taken as a stand-alone course or as an immersive supplement to Modern Dance III or IV. *Prerequisites:* Junior or senior standing, Modern Dance III or IV placement, and instructor approval.

DANC 4221 (2), 4222 (2), 4223 (2), 4224 (2). ADVANCED MODERN ELECTIVE. Advanced modern technique offering a transition from dance study to professional-level work.

DANC 4226 (2), 4229 (2). MODERN DANCE IMMERSIVE II, III. Advanced contemporary dance technique. May be taken as a stand-alone course or as an immersive supplement to Modern Dance III or IV. *Prerequisites:* Junior or senior standing, Modern Dance III or IV placement, and instructor approval.

DANC 4230 (2). JAZZ DANCE IMMERSIVE. Advanced jazz dance techniques and styles. May be taken as a stand-alone course or as an immersive supplement to Jazz Dance III or IV. *Prerequisites:* Junior or senior standing, Jazz Dance III or IV placement, and instructor approval.

DANC 4236 (2), 4239 (2). JAZZ DANCE IMMERSIVE II, III. Advanced jazz dance techniques and styles. May be taken as a stand-alone course or as an immersive supplement to Jazz Dance III or IV. *Prerequisites:* Junior or senior standing, Jazz Dance III or IV placement, and instructor approval.

DANC 4245 (2). ADVANCED CHOREOGRAPHIC PROJECTS. Individual directed studies in choreography with a culminating performance. *Prerequisites:* DANC 3244 and instructor approval.

DANC 4246 (2), 4247 (2), 4248 (2), 4249 (2). ADVANCED JAZZ ELECTIVE. Advanced jazz technique offering a transition from dance study to professional-level work.

DANC 4270 (2), 4271 (2). ADVANCED TECHNIQUE ELECTIVE. For advanced-level dancers. Presents local dance artists of the highest caliber in many genres of dance. Each term, the class offers one dance form such as modern, jazz, tap, ballroom, or flamenco. *Prerequisite/ Corequisite:* Level III class in the corresponding dance technique.

DANC 4290 (2). DIRECTED STUDIES. Supervised projects and/or research in theoretical studies, inclusive of community service projects. Arranged. *Prerequisite:* Instructor approval.

DANC 4291 (2). DANCE CAPSTONE. Collaborative work and activities leading to the creation, preparation, and performance of a dance project. Required of all dance majors. *Prerequisite:* Restricted to dance majors only.

DANC 4322 (3), 4324 (3). MODERN DANCE IV. Advanced contemporary dance technique, offering a transition from dance study to professional-level work. Admission by placement.

DANC 4363 (3). KINESIOLOGY FOR DANCE. Exploration of basic anatomy and the human body in motion. Normal and deviated skeletal structures and muscular development are assessed in regard to movement efficiency, injury potential, and dance aesthetics. Required.

DANC 4370 (3). DANCE CRITICISM AND AESTHETIC. A practical introduction to writing about dance performance. Works of master critics are examined to gain a historical perspective and to become familiar with a variety of methodologies in analyzing dance texts. Emphasis placed on observation and writing skills. *Prerequisites:* DANC 2371 or 2372 and instructor approval.

DANC 4373 (3). DANCE HISTORY I: BALLET. The development of ballet as a Western theatre art, from its roots in the French court to contemporary ballet in Europe and America. Emphasis will be placed on choreographic schools and styles as well as the consideration of the ballet aesthetic in a broader cultural context. Required.

DANC 4374 (3). DANCE HISTORY II: MODERNISM. The development of modernism in dance from the turn of the century to the present. Emphasis will be placed on the evolution of choreographic schools and styles as well as the relationship of dance to the arts and humanities and to the culture in which it is created. Required *Prerequisite:* DANC 4373 or instructor approval.

DANC 4390 (3). DIRECTED STUDIES. Supervised projects and/or research in theoretical studies, inclusive of community service projects. Arranged. *Prerequisite:* Instructor approval.

DANC 4391 (3). DANCE CAPSTONE. Collaborative work and activities leading to the creation, preparation, and performance of a dance project. Required of all dance majors. *Prerequisite:* Restricted to dance majors only.

Film and Media Arts

Associate Professor Sean Griffin, **Division Chair**

Professor: Rick Worland. **Associate Professors:** Kevin Heffernan, Mark Kerins, Derek Kompare, Carolyn Macartney, David Sedman. **Assistant Professor:** Lisa Kaselak. **Lecturer:** Paula Goldberg. **Adjunct Lecturers:** Sally Helppie, Tearlach Hutcheson.

The Division of Film and Media Arts offers students intensive training and close mentorship in the art of cinema and electronic/digital media, helping students develop their own artistic voice and vision. Production courses focus on fostering individual creativity and imagination while simultaneously developing technical skills (screenwriting, cinematography, editing, sound). History and critical studies courses expose students to the key artists and theorists of film and media, as well as to the various aesthetic movements that have developed across the globe. Students are also taught the business aspects of film/media, exposing them to how industrial concerns affect technological and artistic choices, and preparing them to successfully negotiate their place in the industry upon graduation. As such, students are encouraged to take an internship in the professional sector to gain practical experience in the field and establish professional contacts.

The B.A. in film and media arts requires 33 credit hours; it is designed to prepare students for careers in professional media industries or for postgraduate work in film and media studies. The B.A. is also designed to allow time for significant study in another discipline, making room for double majors and multiple minors in other fields. A wide variety of courses in cinema and media history, theory and criticism provide extensive insight into these media as art forms and as vibrant social and cultural institutions. Courses that focus on the business of film, television and new media initiate students into the diverse aspects of these industries. Additionally, courses in production offer experience in writing, shooting, directing and editing film and video projects. Finally, a capstone course provides final preparation for either entrance into a career in the media industries or further graduate studies.

The B.F.A. in film and media arts requires 48 credit hours and emphasizes developing the unique creative voice of each student. The B.F.A. is designed to prepare students for careers in professional film/television/new media production and to develop their creative abilities in the art form. Courses in production offer experience in writing, shooting, directing and editing film and video projects. Courses that focus on the business of film, television and new media initiate students into the diverse aspects of the industries they plan to enter. Additionally, courses in cinema and media history and criticism provide a basic and necessary knowledge of these media as art forms and as vibrant social and cultural institutions. Finally, a capstone program culminates in a yearlong creation of a thesis film/media project.

Instructional Facilities

The Division of Film and Media Arts is located in the Umphrey Lee Center, which houses faculty offices, classrooms, audio, video and film production, and media support areas. Computer labs with a full suite of editing, audio and graphics software are available to majors seven days a week through ID card access; other facilities include a recording studio, an audio mixing suite, storage and equipment checkout, a seminar room, and production classrooms. The division also has screening classrooms equipped for film, video and DVD projection in the Owen Arts Center, and a shooting stage in McFarlin Auditorium.

Admission and Degree Requirements

To be admitted to the B.A. in film and media arts, a student must complete FILM 1301 and 1302 with a cumulative 2.750 or better GPA. Students transferring from other universities must have completed equivalent courses and obtained the equivalent GPA in those courses before they can be admitted to the major. Upon acceptance into the major, students are required to pass the following courses with a grade of *C-* or better to receive their degree: FILM 1304 and 2351.

To be provisionally accepted to the B.F.A. in film and media arts prior to matriculation at SMU, a student must submit a portfolio of film/video work, which will be reviewed by a faculty committee to determine acceptance into the B.F.A. program. Upon matriculation, a pre-admitted student must complete FILM 1304 and 2354 with a cumulative 2.750 or better GPA in order to be fully admitted into the B.F.A. To be considered for acceptance into the B.F.A. program while in attendance at SMU, students must have completed FILM 1304 and 2354 with a cumulative 2.750 or better GPA, and they must submit a portfolio. Students transferring from other universities must submit a portfolio, and must have completed equivalent courses to FILM 1304, 2354 and obtained the equivalent GPA in those courses before they can be considered for admission to the major. Upon acceptance into the B.F.A., students are required to pass FILM 1301 with a grade of *C-* or better to receive their degree.

Internships

Upon attaining junior-level status (60 credit hours), qualified students are encouraged to pursue internships that enable them to work under the guidance of professionals in the motion picture, television, cable and other electronic media industries. Nonclassroom internship credit is limited to three credit hours taken as an elective on a pass/fail basis. Students must be a declared film and media arts major, must have taken FILM 1304, and must obtain permission from the division's internship coordinator.

B.A. Research Thesis

B.A. students wishing to pursue a senior thesis project (FILM 5214) must identify a proposed research project and then apply to FILM 5214 the spring term before they plan to do the thesis project; specifically, applications are due by the end of the first school week after spring break. Details about what to include in the application packet are available in the department office. **Note:** Thesis registration should take place the final fall of a student's SMU career, and application should take place the spring before that (i.e., for those graduating in May, application and registration will occur the spring term of the student's junior year).

Applications will be reviewed by a faculty committee, and students whose proposals are accepted will be notified by the end of the spring term so they can move forward on the projects during the summer break. Applications for a senior thesis are competitive and only a small number of proposals will be accepted each year.

The ensuing fall, approved students will register for FILM 5214 and complete their projects largely independently, though with advice and help from their committees as necessary. Thesis students will be required to register for FILM 5199 either concurrently or, ideally, the spring following the thesis course, and they will present the finished project in FILM 5199. (Students may also choose to present an unfinished version of the work earlier in the term for feedback, but this does not replace the requirement to present the finished work.)

Each student registered for FILM 5214 in a given term will have, at most, until the end of the following term of that academic year to complete the proposed project to the satisfaction of his/her committee. This means thesis defenses should be scheduled no later than mid-April to allow time to address any issues or concerns raised by the committee at the defense.

B.F.A. Thesis Film

The B.F.A. degree *requires* enrollment in a yearlong thesis film course and completion of a senior thesis project. Therefore, *all* B.F.A. students must submit a thesis project preproduction proposal packet the spring term of their junior year; specifically, proposals are due *by the end of the first school week after spring break*. Details about what to include in the proposal packet are available in the department office.

Proposals will be reviewed by the faculty, and students will be notified about any potential problems that need to be addressed prior to registration in FILM 5311. Students not submitting proposals will not be allowed to register for this course or to shoot a thesis project.

The ensuing academic year, B.F.A. students will register for FILM 5311 in the fall, and for FILM 5212 and 5199 in the spring. Each senior B.F.A. student will be required to present his/her project as a work-in-progress in FILM 5199 for feedback, then presenting the finished project later in the semester after it has been approved by the committee.

Students registered for FILM 5212 will have, at most, until the second day of final exams that term to complete the proposed project to the satisfaction of their committees. This means thesis defenses should be scheduled no later than mid-April to allow time to address any issues or concerns raised by the committee at the defense.

Colloquium

The Division of Film and Media Arts sets aside a weekly time for all-department activities. FILM 5199 meets biweekly in this block. Attendance is required for all students enrolled in FILM 5199 and is optional for all other film and media arts students. This alternates with a biweekly film screening series in the same time block, where faculty will choose films, give a brief introduction and screen the films. Attendance at these screenings is not required for anyone but is open to all students (whether or not enrolled in FILM 5199).

Directed Studies

A directed study is a close collaboration between a professor and an advanced student with junior or senior standing who conducts a rigorous research or creative project that goes beyond the experience available in course offerings. The student must secure formal approval from the professor to undertake a directed studies project.

Departmental Distinction

Both B.A. and B.F.A. film and media arts majors with sufficiently high standing may graduate from the division with honors (i.e., with departmental distinction). All students who are qualified – 3.750 departmental GPA, 3.500 SMU GPA and 21 credits of film and media arts courses completed – will be informed by the division chair of their eligibility at the end of the fall term of their junior year. To attain the departmental distinction recognition, an eligible candidate must complete a thesis project through the FILM 5311, 5212/5199 or FILM 5214/5199 sequence, and

successfully defend the thesis to his or her committee with a final grade of *A*; candidates must also maintain a 3.750 departmental GPA and 3.500 SMU GPA through graduation. Students should note that admission to FILM 5214 is competitive, and eligibility for departmental distinction does not guarantee acceptance into this course.

Class Attendance

Due to limited class space and enrollment pressures, a student who fails to appear on the first day or who fails to attend three consecutive class meetings during an academic term without establishing contact with the instructor may be administratively dropped from a course.

Bachelor of Arts in Film and Media Arts

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Studies Requirements	12
FILM 1301, 1302, 2351, 4353	
Production Requirements	6
FILM 1304	
FILM 2354, 3301, 3302, 3303, *or* 3308	
Industry Requirements (one from the following)	3
FILM 3328, 3330, 3335, 3361, 3396, 4304, 4316, 4399	
Capstone Requirement	3
FILM 5214 (requires application, permission, and enrollment in FILM 5199) *or* 5315	
Film and Media Arts Electives	9
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Bachelor of Fine Arts in Film and Media Arts

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Studies Requirements	9
FILM 1301	
At least two from the following:	
FILM 1302, 2306, 2332, 2344, 2351, 2362, 2364, 3300, 3310, 3314, 3352, 3353, 3355, 3359, 3375, 3395, 3397, 4351, 4353	
Industry Requirements	9
FILM 4316	
At least two from the following:	
FILM 3328, 3330, 3335, 3361, 3396, 4304, 4399	
AMAE 3305, 3322, 3370, 3387	

Requirements for the Degree (continued)	*Credit Hours*
Production Requirements	21
FILM 1304, 2354, 3304	
Four from the following:	
FILM 3301, 3302, 3303, 3305, 3306, 3308, 3309, 3316, 3364, 3365, 3384, 3390, 3391, 4301, 4305, 4306, 4307, 4308, 4317, 4385	
Capstone Requirement	9
FILM 5311, 5212 (requires concurrent enrollment in FILM 5199), 5312, 5199	
Community Experience	0–1
MSA 1001 *or* 1101 (B.F.A. pre-admits enroll their first term at SMU; current SMU students admitted to the B.F.A. enroll the first fall after their acceptance.)	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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The Courses (FILM)

FILM 1301 (3). ART OF FILM AND MEDIA. Introduction to the fundamental visual and audio techniques used in cinema, television, and emerging media to convey meaning and mood. Careful analysis of selected films, TV shows, and other media. Required of all majors.

FILM 1302 (3). MEDIA AND CULTURE. Surveys of the relationship between media and society. The technological, economic and legal aspects of the media industries will also be explored. Required of all majors and minors.

FILM 1304 (3). PRODUCTION 1. Practical, comprehensive course in the fundamentals of video and audio production, covering cameras, microphones, lighting, shooting, editing, sound design, and outputting. Incorporates hands-on exercises, screenings, lecture, and group and individual video projects. Required of all majors.

FILM 2306 (3). HISTORY OF RECORDED MUSIC. Connects major periods of recorded music to innovations in music hardware with special focus on the importance of music to the radio, television, cinema, and new media industries.

FILM 2332 (3). AMERICAN POPULAR FILM AND TELEVISION. An in-depth examination of specific aspects of the American popular cinema, focusing upon questions of popular culture and ideology, of the historical development of styles and genres, and of the impact of the Hollywood film industry. Specific topics and films will vary from term to term.

FILM 2344 (3). HISTORY OF ANIMATED FILM. Provides a critical and historical overview of the development of the animated film from its origins in the 19th century to the present.

FILM 2351 (3). INTERNATIONAL FILM HISTORY. Overview of the development of the cinema as a technology, an art form, an industry, and a social institution beginning with the origins of the medium and tracing its major movements and configurations up to the present.

FILM 2354 (3). SCREENWRITING 1. Introduces the language of screenwriting. Topics include the creative process of idea generation and what makes a story filmable; creating memorable and redeemable characters; the arc and transformation of story, including the setup, the question or conflict, the turning point, and the climax or ending; and the details of proper format and presentation. In application, students produce two short film scripts as their midterms and finals, and they gain an understanding of the characteristics of a good short film and the differences between shorts and feature scripts.

FILM 2362/CFA 3362 (3). DIVERSITY AND AMERICAN FILM: RACE, CLASS, GENDER AND SEXUALITY. Historical survey of representations of race/ethnicity, class structure, gender and sexual orientation in American cinema, as well as the opportunities for minorities within the industry.

FILM 2364 (3). HISTORY OF CINEMA-TV COMEDY. Survey of the development of comedy in the film and television, with an emphasis on a historical examination of comic films and TV shows and a theoretical analysis of the phenomena of humor and laughter.

FILM 3300 (3). FILM AND TELEVISION GENRES. This course examines questions of genre pertinent to film and/or television by focusing on various generic forms and their history. The specific genres under consideration will vary from term to term.

FILM 3301/ASPH 3390 (3). EXPERIMENTAL CAMERA. Pushing the technical boundaries of cameras as capture devices, students experiment with the creative aesthetic possibilities therein (still and/or motion) and then draw from a variety of genres to create short, experimental films. Exploring diverse concepts such as storytelling, portraiture, documentary, poetry, and abstraction, students combine elements including still photography, animation, graphics, narration, sound effects, and original music to create motion picture media. *Prerequisite(s):* FILM 1304; or ASPH 1300, 1310; or instructor permission is available for students with a working knowledge of the camera (aperture, shutter speed, focal length) and a basic understanding of video editing. Students are required to have access to at least a digital still camera.

FILM 3302 (3). CONVERGENT MEDIA. Explores the technical, legal, and practical requirements for creating cross-platform media, from preproduction through distribution. Also, covers crowdsourcing, projects distributed on the Web, and projects utilizing the interactive nature of the Web. The goal is to understand, at a fundamental level, how the Web works and all the components/tools that allow interactivity to happen. This course demystifies Internet and Web technology for nontechnical people.

FILM 3303 (3). FILM ACTING. This class is designed for the director to understand the actor's process. How performances are crafted from objectives, obstacles, substitutions, inner objects, beats, actions, and doings. A basic overview of these techniques is explored through monologue and scenes. Concentrates on the unique circumstances given to the single-camera film actor: set etiquette (film crew breakdown, terminology), technical basics (the shots), blocking (hitting the mark), and general camera awareness (overlapping, cheating, matching). Also, the marketing needed to secure an acting job (headshots, agents and managers, auditioning, callbacks).

FILM 3304 (3). PRODUCTION 2. Intermediate-level production course building on the lighting, camerawork, editing, and sound design skills and techniques learned in FILM 1304. The course focuses on developing an artistic vision and includes the basics of directing, preproduction, grip, double-system sound, set etiquette, and crewing. Students produce individual short narratives in addition to working together on an all-class project. *Prerequisite:* FILM 1304.

FILM 3305 (3). MOS CAMERA. A focus on visual language and advanced camera and lens techniques. Each student makes a short film, shooting only nonsynchronous original material and concentrating on visual design through effective lens choice, mise-en-scène, location usage, and production design. The course covers prime lenses, exposure, latitude, color grading, and other camera-specific technologies, and provides hands-on experience with high-end camera equipment. Students gain a deeper understanding of how to use visual language to express their ideas. *Prerequisite:* FILM 3304.

FILM 3306 (3). NONFICTION PRODUCTION. Combines the history and practice of nonfiction field production. Hands-on demonstrations, screenings, readings, lectures, and discussions prepare students to produce and create a short documentary piece. Focuses on research, preplanning, and writing skills as integral components of video production. Students create a 5- to 10-minute documentary project on a topic of their choice. *Prerequisite:* FILM 3304.

FILM 3308 (3). EDITING. This course on the creative art and craft of editing develops storytelling and rhythmic sensibilities through close study of films, critique and discussion of works in progress, and hands-on practice. Projects include short editing exercises, reworks of students' own existing projects, and re-edits of others' films. *Prerequisite:* FILM 1304.

FILM 3309 (3). MULTICAMERA PRODUCTION. Multiple-camera shooting has long been a staple of such things as three-camera television shooting and live sporting events, but as cameras have gotten cheaper and more accessible, multicam has found a place in a vast range of applications. This class covers the variety of ways multiple-camera techniques are used and the advantages and disadvantages of each compared with each other and with single-camera shooting. The class produces several multicam projects covering a variety of content types and shooting styles. *Prerequisite:* FILM 1304.

FILM 3310/CF 3390/WL 3310 (3). SCREEN ARTISTS. This course examines the questions of authorship pertinent to the cinema by focusing on the works of one or more film artists. The specific directors, producers, screenwriters, and other artists treated by the course will vary from term to term.

FILM 3314 (3). COMICS: FROM PANELS TO SCREENS. An overview of comics, one of the most influential aesthetic forms of the past century. Three interrelated areas are emphasized: aesthetics (including genre), cultural history, and function as a media industry. The course also analyzes the relationship between comics and other media forms, particularly film and TV.

FILM 3316 (3). 16 MM PRODUCTION. A focus on visual language and 16 mm film production techniques. Each student makes a short film, shooting only nonsynchronous original material. Covers use and operation of the Bolex 16 mm film camera: incident light meter, fixed focal length lenses, film speeds, and color temperature ratings. Also, visual design through effective lens choice, mise-en-scène, location usage, and production design. Students gain a deeper understanding of how to use visual language to express their ideas. *Prerequisite:* FILM 1304.

FILM 3328 (3). MEDIA MANAGEMENT. Explores the relationship between the theory and practice of broadcast and cable management with emphasis on legal and economic constraints on these media outlets.

FILM 3330 (3). MEDIA SALES. This course is designed to examine the contemporary world electronic media sales. The goals of this class are to combine strategic thinking with creative thought while keeping the target audience/client in mind.

FILM 3335 (3). FILM EXHIBITION AND DISTRIBUTION. This course offers a detailed examination of contemporary practices in the distribution and exhibition of theatrical feature films, including the roles of audience survey techniques, booking, publicity, and advertising.

FILM 3352 (3). AMERICAN FILM HISTORY. An overview of U.S. film history from the silent period to the present day. Emphasis on the genres, directors, cinematic techniques, and industrial factors that advanced the art of Hollywood and independent filmmakers.

FILM 3353 (3). AMERICAN BROADCAST HISTORY. Focus on the history of American television, with an emphasis on the industrial and sociocultural aspects of the medium's development. Issues of race, gender, class, genre, sexuality, and national identity are studied in the context of significant television shows of the past and present.

FILM 3355 (3). HISTORY OF DOCUMENTARY FILM AND TELEVISION. An overview of the development of the documentary mode in cinema and television, offering a survey of the non-fiction film and video provided by newsreels, training films, propaganda movies, wartime documentaries, and reality TV.

FILM 3359 (3). NATIONAL CINEMAS. Examines the social, economic, technological and aesthetic histories of cinema from various nations, as well as examining the concept of national cinema. The specific nations under consideration will vary from term to term.

FILM 3361 (3). MEDIA PROGRAMMING. Analysis of the development of program ideas and the research and strategies involved in programming media outlets.

FILM 3364 (3). SCREENWRITING 2. The purpose of the course is to produce a first draft feature screenplay. Review of proper format and act structure leads to a more in-depth exploration of story, character, dialogue, scenes and scene sequencing, narrative devices, and the emotional payoff. Each student pitches his or her idea twice: the logline (short summary) pitch at the beginning of the term and the 10-minute room pitch at the end of the term. Work includes step outlines of each act, scene readings, and collective feedback, culminating in a fully realized first draft screenplay. *Prerequisite:* FILM 2354.

FILM 3365 (3). ADVANCED SCREENWRITING WORKSHOP. Writing is rewriting. Every student is required to enter this class with a first draft feature length screenplay. In order to strengthen and deepen the story, students work on solidifying characters and giving them clear agendas and goals, fixing story problems, identifying the central conflict and serving it, getting dirty and killing the darlings – anything superfluous that does not move the story forward – making the scene sequences work and satisfy, punching up dialogue, eliminating clichés, and working toward the final edit. *Prerequisite:* FILM 3364.

FILM 3375/CFA 3375 (3). POSTWAR EUROPEAN CINEMA: 1945–PRESENT. Presents an overview of postwar European cinema focusing on major films, directors, and national

movements. Considers cultural and stylistic features that differ from Hollywood-genre models. (Summer Abroad)

FILM 3384 (3). SOUND DESIGN AND RECORDING. Audio postproduction course focused on sound effect creation and artistic approaches to using sound over the course of an entire work. Covers microphone selection and placement, advanced recording techniques, routing in a studio, complex Foley and automatic dialog replacement, and tools for designing sound effects. Work includes individual and group sound design projects as well as written sound design plans. *Prerequisite:* FILM 3304 or MSA 3310.

FILM 3385 (3). SOUND MIXING. Audio-driven course covering production and postproduction mixing and audio-related output and distribution considerations. Also, in-depth coverage of processors, cleanup, automation, routing within Pro Tools, surround mixing for film, multichannel miking, and live routing techniques. May include topics such as stems, live mixing, and music mixing, depending on student and instructor interests. *Prerequisite:* FILM 3304 or MSA 3310.

FILM 3390 (3). TOPICS IN PRODUCTION. Focus on a specific area of production. Subjects and prerequisites vary from term to term.

FILM 3391 (3). TOPICS IN POSTPRODUCTION. Focus on a specific topic of film/video postproduction. Subjects and prerequisites vary from term to term.

FILM 3395 (3). TOPICS IN FILM AND MEDIA STUDIES. Focus on a specific topic pertinent to film and media studies. May focus on film and/or television history, criticism, critical theory, etc. Topics vary from term to term.

FILM 3396 (3). TOPICS IN MEDIA INDUSTRIES. Focus on a specific topic related to the business/industrial side of film and media. Subjects vary from term to term.

FILM 3397 (3). GENDER AND SEXUALITY IN MEDIA. Focus on a specific topic related to gender and sexuality in film and media. Subjects vary from term to term.

FILM 4125 (1), 4225 (2). INTERNSHIP. This course allows students to earn academic credit through practical experience gained by working in the professional media, either part-time during the fall or spring terms, or full-time during the summer. Students may take a maximum of three credit hours of internship. One hundred fifty hours of work per term is calculated as three credit hours. Internship credit is given on a pass/fail basis only. *Prerequisites:* Permission of instructor, upper-division standing.

FILM 4301 (3). TV AD CONCEPTING AND PRODUCTION. Working collaboratively, students create and develop ideas for 30-second commercials for predetermined clients, complete all necessary preparation for producing these concepts, and shoot and edit them into finished ads. Focus is on real-world commercial-style production, emphasizing how to address clients' specific needs while maintaining the creative elements of design and production. Completed ads are submitted to national and/or international advertising competitions and festivals. Note: Interdisciplinary course cross-listed with ADV 4397; usually offered during the January or summer term. *Prerequisite:* Instructor consent. Generally, students must have taken ADV 3395 and/or FILM 3304 beforehand, though in special cases exceptions may be made.

FILM 4304 (3). NEW MEDIA DISTRIBUTION. Discusses the distribution and monetization of online video. Industry concepts such as measuring return on investment, identifying the major industry players in new media distribution, and sustaining an online filmmaking brand are framed within the contemporary, multiplatform video marketplace.

FILM 4305 (3). CINEMATOGRAPHY. Cinematography is the articulation of motion picture language through the technical and aesthetic concerns of the lens, composition, lighting, visual design, camera movement, and point of view. Students explore each of these elements in theory and in practice to better develop their visual storytelling skills. Examination and analysis of art, print media, films, videos, and TV shows is complemented by demonstration of and intensive hands-on practice with camera, lighting, grip, electric, and filtration. *Prerequisite:* FILM 1304.

FILM 4306 (3). INTRODUCTION TO ANIMATION. Studies in traditional animation principles, including squash and stretch, timing and spacing, morphing, paths of action, overlapping actions, walk/run cycles, balance, and jumping. This introduction to character animation, with class exercises in character acting in both voice and movement, helps students translate performance into their animated characters. Students have opportunities to work with multiple methods of animation, including 2-D traditional hand drawn, Claymation, stop motion, and 2-D/3-D CGI software.

FILM 4307 (3). INTRODUCTION TO 3-D ANIMATION. Introduces computer graphics with an emphasis on the popular software package Maya. Includes focus on the user interface, creating of 3-D geometry using polygonal techniques, materials and textures, kinematics, animation, and camera lighting techniques. This course explores the various aspects and fundamentals of computer graphics. Students gain an understanding of the workflow necessary to create 3-D imagery. Assignments employ students to combine a variety of techniques to become familiar with the computer animation production process. *Prerequisite:* Junior standing or higher.

FILM 4308 (3). POSTPRODUCTION VISUAL FX. Studies in design concepts and application to broadcast graphics and visual special FX. Advanced green screen keying and compositing techniques, motion tracking, working within 3-D space, and setting up virtual cameras and lights using After Effects and Apple Motion. An introduction to 3-D design. Project based focusing on visual FX design and advanced key framing techniques for animating FX with final compositing into live-action footage. *Prerequisites:* FILM 3304 and instructor consent.

FILM 4316 (3). PRODUCERS SEMINAR. Lectures and discussions by both faculty and guest speakers provide an overview of the basic business and legal aspects of film and television production.

FILM 4317 (3). FILM DIRECTING. Covers all elements of the directing process, with specific emphasis on how the film director works with screen actors and captures actors' performances to fit the director's unique vision. Working from a script throughout the term, students learn about script analysis, character outline, casting, rehearsals, and on-set direction. Students create a casting notice, hold auditions, and work with professional and/or student actors. *Prerequisite:* FILM 1304.

FILM 4325 (3). INTERNSHIP. This course allows students to earn academic credit through practical experience gained by working in the professional media, either part-time during the fall or spring terms, or full-time during the summer. Students may take a maximum of three credit hours of internship. One hundred fifty hours of work per term is calculated as three credit hours. Internship credit is given on a pass/fail basis only. *Prerequisites:* Permission of instructor, upper-division standing.

FILM 4351 (3). MAPPING MODERNISM: ARTISTIC COLLABORATIONS IN PARIS AND MOSCOW 1890–1940. Investigates artistic modernism, emphasizing fertile collaborations and exchange in art, dance, theatre, music, and film. Focuses on Paris, Moscow, and St. Petersburg, 1895–1940.

FILM 4353 (3). FILM AND MEDIA THEORY. Provides an overview of major theoretical writings on cinema, television, and new media (including the work of theorists such as Andre Bazin, Sergei Eisenstein, Laura Mulvey, and Christian Metz) and demonstrates the application of various analytical approaches to specific texts. *Prerequisites:* FILM 1301, 2351.

FILM 4399 (3). GLOBAL MEDIA SYSTEMS. Overview of contemporary globalized media industries, policies, and texts, with an emphasis on how cultural differences and similarities are represented, marketed, and contested in television, film, and other media forms. *Prerequisite:* FILM 2351 or instructor consent.

FILM 5110 (1). DIRECTED STUDY. Independent study under the direction and supervision of a faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed directed studies form to the Film and Media Arts Office before the start of the term during which the study is to be undertaken. *Prerequisites:* Junior standing and permission of instructor.

FILM 5199 (1). PRESENTATION AND CRITIQUE. Students, faculty, and guests share creative and/or scholarly works in progress for discussion and constructive criticism. Meets bi-weekly. Graded pass/fail; absence or significant tardiness at more than two sessions results in a failing grade. All students are required to present work at least once over the course of the term. For those taking this as the completion of a thesis project begun in FILM 5211, 5214, or 5216, a passing grade requires completion of the thesis project to the satisfaction of the student's faculty committee and subsequent presentation of the thesis project in this course. Requires instructor permission. May be taken up to twice for credit.

FILM 5210 (2). DIRECTED STUDY. Independent study under the direction and supervision of a faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed directed studies form to the Cinema-TV office before the start of the term during which the study is to be undertaken. *Prerequisites:* Junior standing, permission of instructor.

FILM 5212 (2). THESIS FILM 2. A course centered on completing a high-quality senior thesis film using classes as a workshop to improve projects in the preproduction, production, and postproduction phases. This course is designed as the culmination of the production curriculum, providing a forum for putting the ideas, skills, and techniques learned throughout the curriculum into use on one ambitious piece. The student enrolled must be the director and primary creative force behind the project proposed (e.g., cannot propose to be the producer, writer, or director of photography for the film but not direct it). The thesis film must ultimately be defended to and approved by a faculty committee. *Prerequisite:* FILM 5311.

FILM 5214 (2). RESEARCH THESIS. An advanced critical studies course in which students research, write, and defend a 10,000- to 15,000-word research paper, developed in consultation with a faculty adviser. The thesis is designed to synthesize interests and works that the student may have developed in previous critical studies courses, and to potentially serve as an essay for scholarly publication or for application to a graduate program in media studies. While the course is individually structured and highly self-directed, it also requires regular meetings with the thesis adviser. The thesis must ultimately be defended to and approved by a faculty committee. *Prerequisites:* Two 2000-level or above FILM critical studies courses, senior standing, and acceptance through a competitive application process.

FILM 5310 (3). DIRECTED STUDY. Independent study under the direction and supervision of a faculty member. A directed study is a close collaboration between the professor and an advanced student who conducts a rigorous project that goes beyond the experience available in course offerings. The student must secure written permission from the instructor and return a completed directed studies form to the Cinema-TV office before the start of the term during which the study is to be undertaken. *Prerequisites:* Junior standing, permission of instructor.

FILM 5311 (3). THESIS FILM 1. A course centered on completing a high-quality senior thesis film using classes as a workshop to improve projects in the preproduction, production, and postproduction phases. This course is designed as the culmination of the production curriculum, providing a forum for putting the ideas, skills, and techniques learned throughout the curriculum into use on one ambitious piece. The student enrolled must come in the first day with director's book in hand and be the director and primary creative force behind the project proposed (e.g., cannot propose to be the producer, writer, or director of photography for the film but not direct it). The thesis film must ultimately be defended to and approved by a faculty committee. *Prerequisites:* Completion of all other production requirements, senior standing, and acceptance through a competitive application process.

FILM 5312 (3). MEDIA CAREER PREPARATION. Students prepare themselves to enter the professional media industry. Students refine and finish their existing film or video projects, enter their work into festivals, and create demo trailers of same. They also create business cards, develop their résumés, and create a professional website that incorporates the demo trailers of their work. Guest speakers and field trips to local film/video/audio facilities provide introductions and insight into the various areas of employment within the film industry. Fulfills the department's capstone requirement. *Prerequisites:* FILM 3304 and one other 3000- or 4000-level production course.

FILM 5314 (3). THESIS. Capstone history/criticism course. *Prerequisites:* Instructor consent and prior completion of all other history/criticism requirements.

FILM 5315 (3). CRITICAL STUDIES SEMINAR. A high-level research seminar, with variable topics; check course listing each time it is offered. Fulfills department's capstone requirement. *Prerequisites:* FILM 2351 plus at least one other 3000- or 4000-level critical studies course; non-majors need consent of instructor.

Program Directors: Kevin Paul Hofeditz (Interdisciplinary Studies), Camille Kraeplin (Fashion Media), Cheryl Mendenhall (Graphic Design), Melissa Murray (History of the Visual and Performing Arts.

Bachelor of Arts in Interdisciplinary Studies in the Arts

The major in interdisciplinary studies provides an opportunity for outstanding students to design programs that bring together multiple disciplines within the Meadows School of the Arts. Another option is to combine a discipline or disciplines housed in the Meadows School of the Arts with areas of study found elsewhere in the University for the purpose of exploring new forms of artistic expression or communication. Academically qualified students may explore the possibility of a specialized major with the program director. If the proposed plan appears to have merit, the program director will suggest faculty advisers who can provide further assistance in designing the program.

Program Description. Students with at least a 3.000 GPA in the first 24 term hours taken through enrollment at SMU are eligible to pursue the program. The program consists of individually designed majors in the arts of at least 36 term hours, with a minimum of at least 24 term hours of advanced courses (3000 level or above). At least two-thirds of the courses that count toward the major must be taken in the Meadows School of the Arts. The program must satisfy all University-wide requirements and all other University and Meadows School graduation requirements. Students are responsible for fulfilling all prerequisites for courses taken. This program is designed to allow exceptional students an opportunity to design an interdisciplinary program; it is not intended to be a way of avoiding divisional requirements. Certain Meadows courses are open only to majors or by audition. Admission to such courses is at the discretion of the faculty of the division in which such courses are offered. The degree will be identified as a Bachelor of Arts. The transcript will refer to the major as "Interdisciplinary Studies in the Arts." A note on the transcript will denote the specialization. Students intending to seek admission to graduate schools are encouraged to include at least 30 hours of a coherent set of courses in an identifiable disciplinary field.

Administrative Procedures. The Meadows Academic Policies Committee shall have the final authority to approve all specialized programs. In order to initiate discussion of a specialized major, a student must submit to the program director a preliminary plan of study in the form of a brief statement of goals and a course list made in consultation with appropriate faculty advisers. A number of steps must be completed prior to declaring the major:

1. If the program director approves the program, the student and the faculty advisers must form a supervisory committee with a minimum of three members. The supervisory committee will provide advice and guidance to the student. At least two members, including the chair of the committee, shall be resident members of the Meadows School faculty. The chair of the committee will normally be the faculty adviser.
2. The student will submit a formal plan of study to the supervisory committee. The plan of study must include a proposal for a special project such as a thesis, exhibition or performance. Satisfactory completion (in the judgment of the supervisory committee) of this special project is a requirement. If the commit-

tee approves the plan, it must then be submitted to the program director, who will submit it to the Meadows Academic Policies Committee for approval.

3. Once approved by the Meadows Academic Policies Committee, the plan will be transmitted to the Office of the Meadows Associate Dean for Student Affairs. The plan of study normally should be submitted to the Meadows Academic Policies Committee for approval before the completion of 60 total term hours of coursework.
4. The chair of the supervisory committee and the program director will recommend candidates for graduation. The chair of the supervisory committee will certify that the required project has been completed to the satisfaction of the committee. The supervisory committee may recommend that the degree be awarded "with distinction" if the GPA in the courses required for the major exceeds or equals 3.500 and if the project is deemed excellent. The associate dean for student affairs will be responsible for verifying and certifying graduation requirements.

Minor in Fashion Media

The fashion media minor is an interdisciplinary program of study that exposes students to fashion media coursework and prepares them for further academic study or workplace internships.

Requirements for the Minor	*Credit Hours*
History and Critical Studies	3
MSA 3325/THEA 2319 Fashion, Media, and Culture	
Theory (one from the following)	3
ANTH 2301 Introductory Cultural Anthropology	
ANTH 3310 Gender and Sex Roles	
ARHS 1333 Introduction to Visual Culture	
ARHS 3350 Modern Art and Media Culture	
CCJN 4360 Women and Minorities in Media	
PSYC 3371 Psychology of Women	
SOCI 3345 Media Ethics and Gender	
SOCI 3371 Sociology of Gender	
WGST 2322/CFA 3302 Gender: Images and Perspectives	
Visual Media Skills (one from the following)	3
ADV 3391 Creative Production (advertising majors may substitute ADV 3390)	
ASPH 1300 Basics of Photography	
CCJN 2304 Basic Video and Audio Production	
FILM 1304 Production 1	
Written Media Skills	4
CCJN 2103	
CCJN 2312 Reporting I	
or **COMM 2308** Strategic Communication	
Elective	3
One additional course from theory, visual media skills, or written media skills or chosen from the following:	
ADV 2374 Survey of Advertising	
ADV 4318 Interactive Advertising	
ARHS 3355 History of Photography II	

Requirements for the Minor (continued)	*Credit Hours*
Elective (continued)	
ARHS 3367 History of Photography I	
CCJN 2302 Ethics of Convergent Media	
CCJN 2380 Digital Journalism	
Capstone	4
MSA 4110 Fashion Media Project	
or **MSA 4125** Fashion Media Internship	
One from the following:	
ASPH 3330 Fashion Photography	
CCJN 3370 Fashion Journalism	
COMM 5304 Fashion Public Relations	
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Minor in Graphic Design

The graphic design minor provides a basic understanding and development of skills necessary for message design across various media. Topics and skill sets may include identity (logos, branding collateral material, packaging), digital (social, mobile, online media), publication (magazines, newspapers, books), and other areas of design. The minor is designed for students who wish to incorporate an interest in graphic design into their major coursework or to pursue further study in a variety of design disciplines.

Through this minor, students will demonstrate an understanding of the history of graphic design communication, demonstrate the visual and aesthetic skills needed to communicate design messages across media, apply production techniques and technologies to solve graphic design problems, create a design portfolio that includes both print and online collateral material, understand the interrelationship of graphic design to society, and develop a better understanding of graphic design in the various communication industries (advertising, journalism, public relations, publishing, etc.) The minor requires 21 term credit hours, distributed as follows:

Requirements for the Minor	*Credit Hours*
Core Courses	12
ADV 2310 *or* **ASAG 1310** Word and Image/Art and Design: 1900–Present	
ADV 3360 Introduction to Graphic Design Studio	
ADV 3391 Creative Production (advertising creative track majors may use ADV 3390)	
ADV 4320 Typography	
Electives	9
Three from the following, with at least one course at the 3000-level or above:	
ADV 4330 Logo and Trademark Design	
ADV 4335 Publication Design	
ADV 4360 Visualization of Information	
ASIM 1310 Art and Code I	
ASIM 3310 Computation and Media Workshop	
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Note: Advertising majors may count **ADV 3385** Introduction to Creativity and **ADV 4355** Advertising Art Direction as electives.

Minor in the History of the Visual and Performing Arts

The minor in the history of the visual and performing arts provides students with a broad multidisciplinary engagement with the arts in their historical contexts. Students must take six courses (18 hours) from the following list, with at least one course from each group and no more than two courses from any single group.

Art, art history, dance, film and media arts, music, and theatre majors may apply credits from the history sequence requirements of their respective majors toward this minor but must take at least 12 hours outside their discipline.

Requirements for the Minor	*Credit Hours*
History of Art (one or two from the following)	3–6
ARHS 1303 Introduction to Western Art I: Prehistoric Through Medieval	
ARHS 1304 Introduction to Western Art II: Renaissance Through Modern	
ARHS 1307 Introduction to Art History	
ARHS 1336 Rhetorics of Art, Space, and Culture: Ways of Knowing	
Any art history course at the 3000 level or above	
Music (one or two from the following)	3–6
MUHI 1321 The Art of Listening	
MUHI 3301, 3302 Survey of Music History I and II	
MUHI 4350 Music in World Cultures	
Dance and Theatre (one or two from the following)	3–6
DANC 2370 Movement as Social Text	
THEA 3381, 3382 Theatre and Drama History I, II	
Film History (one or two from the following)	3–6
FILM 2351 International Film History	
FILM 2352 American Film History	
FILM 2353 American Broadcast History	
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Interdisciplinary Course Offerings (MSA)

MSA 1001/MSA 1101 (0). FACE: FIRST-YEAR ARTS COMMUNITY EXPERIENCE. A collaborative, cross-disciplinary exploration for students who are also enrolled in the foundational courses in art, dance, music, and theatre. Students meet collectively to build community, to explore a common currency among the arts, to take risks, to discover alternative models of practice, to understand the concept of artists as entrepreneurs, and to define personal goals for success. Note: Must be taken concurrently with ASAG 1300, or DANC 1244, or MUAS 1020, or THEA 1303. Grading on a pass/fail basis.

MSA 1010 (0). UNDERGRADUATE TEACHING PRACTICUM. Development of teaching and leadership skills through preparing lesson plans, leading discussion groups, assessing course presentations and coordinating/developing supplemental learning experiences. The corresponding course by the same professor is required as either a prerequisite or a corequisite. Students will spend a minimum of one hour per week preparing a lesson plan, one hour in discussion planning with the professor and one hour leading a discussion/listening group.

MSA 1101/MSA 1001 (1). FACE: FIRST-YEAR ARTS COMMUNITY EXPERIENCE. A collaborative, cross-disciplinary exploration for students who are also enrolled in the foundational courses in art, dance, music, and theatre. Students meet collectively to build community, to explore a common currency among the arts, to take risks, to discover alternative models of practice, to understand the concept of artists as entrepreneurs, and to define personal goals for

success. Note: Must be taken concurrently with ASAG 1300, or DANC 1244, or MUAS 1020, or THEA 1303. Grading on a pass/fail basis.

MSA 1110 (1). UNDERGRADUATE TEACHING PRACTICUM. Development of teaching and leadership skills through preparing lesson plans, leading discussion groups, assessing course presentations and coordinating/developing supplemental learning experiences. The corresponding course by the same professor is required as either a prerequisite or a corequisite. Students will spend a minimum of one hour per week preparing a lesson plan, one hour in discussion planning with the professor and one hour leading a discussion/listening group.

MSA 1315 (3). MASS MEDIA AND TECHNOLOGY. An overview of technology as it applies to mass media in America, emphasizing the access of information via the Internet and World Wide Web. Topics include the expanding nature of technology, legal aspects, and the effects of technology on society.

MSA 1320 (3). MEDIA THEORY: IMAGE, TEXT, AND SOUND. This course introduces key tests of media theory, ranging from Plato's "The Allegory of the Cave" to McLuhan's "Understanding Media." Explores issues that shed light on a wide range of images, objects, theatrical and musical works, dance, and films. Students learn the fundamentals of media theory and the foundation of intermedia arts. Lectures and discussion focus on formal and conceptual issues in the primary texts and the application of issues to different works.

MSA 1350 (3). THE ARTS IN THEIR CULTURAL CONTEXT: THE CITY OF THE IMAGINATION. This course will introduce students to the way that the performing and visual arts are situated in their temporal, historiographic, geographic, and social contexts. The aim of the course is to examine issues of both theory and practice in the individual disciplines (art, art history, cinema, dance, music, and theater) through readings that engage varied methodologies and through hands-on experiences with practitioners and scholars in Dallas.

MSA 2051 (0), 2052 (0), 2151 (1), 2152 (1). ARTISTS IN THE WORLD: THE TEACHING ARTIST AS CATALYST. Introduces artists-in-training to the basic principles, practices and priorities of the artist as teacher in the community. It provides a foundation in any artistic discipline and for the most common kinds of education work that artists undertake, such as working with young people (in schools and other settings), teaching one's art form, curriculum integration and in-depth residencies, creating artistically authentic programs with an education thrust, working in challenging situations, and working with adults in performance, educational and professional settings. The course will include a project for students to design a program they can use in real-world settings. It will include field observations, readings, written response and active participation and presentation. This is a two semester sequence. Students must take MSA 2051, 2151 or 3351 in order to enroll in either MSA 2052, 2152 or 3352. Completion of MSA 2052, 2152 or 3352 will make students eligible to apply for a competitive paid fellowship in the following year. Consent of instructor is required, as is a minimum GPA of 3.000.

MSA 2301 (3). MEDIA LITERACY. An exploration of the critical thinking skills necessary to understand and interpret modern media, both news and entertainment. Social networking and the Internet, the complexities of the 24-hour news cycle, celebrity news and infotainment, violence, media framing and bias are among the topics examined.

MSA 2305 (3). MEADOWS VIDEO PRODUCTION. This course will teach students basic video production skills useful for any artistic or media field. Students will learn field production skills and nonlinear editing skills that will enable them to create video projects for multiple platforms, including the internet and television. This course is open to all students except Journalism majors and minors and film and media arts majors and minors.

MSA 3101 (1). DIRECTED STUDY IN THE ARTS. Independent study in an interdisciplinary arts topic under the direction and close supervision of a faculty member of the Meadows School. *Prerequisite:* Instructor approval.

MSA 3131 (1). ACTING IN SONG I: SOLO. Focuses on the acquisition and/or redirection of the skills, technical vocabulary, and techniques necessary to create fully realized performances of solo songs from the musical theatre repertoire. Culminates in a program of performed solo songs. For musical theatre minors only. *Prerequisite:* Permission of instructor.

MSA 3201 (2). DIRECTED STUDY IN THE ARTS. Independent study in an interdisciplinary arts topic under the direction and close supervision of a faculty member of the Meadows School. *Prerequisite:* Instructor approval.

MSA 3232 (2). ACTING IN SONG II: ENSEMBLE. Builds on the skills developed in MSA 3131 and focuses on the preparation, rehearsal, and performance of selected duets, trios, and ensemble pieces from the musical theatre repertoire in order to achieve a synthesis of vocal and acting performance techniques. Culminates in the creation of a workshop performance. For musical theatre minors only. *Prerequisite:* Permission of instructor.

MSA 3301 (3). DIRECTED STUDY IN THE ARTS. Independent study in an interdisciplinary arts topic under the direction and close supervision of a faculty member of the Meadows School. *Prerequisite:* Instructor approval.

MSA 3310 (3). FUNDAMENTALS OF AUDIO AND SOUND. Course provides a solid grounding in the concepts, techniques, and terms associated with audio across disciplines. Individual and/or group projects acquaint students with the basics of recording, editing, mixing/processing, and distributing audio projects; lectures and discussions on these and other areas, including listening practices, rights and fair use, etc., supplement this hands-on work with a broader perspective on sound.

MSA 3321 (3). VIDEO DANCE WORKSHOP. Provides an opportunity for Meadows Dance and film and media arts students to collaborate on the creation of a "dance for camera" video piece. Students will collectively conceive a concept, designate production roles, create a production plan and schedule, then choreograph/direct, shoot, and edit a short video dance. Workshop will conclude with a campus screening and students will be encouraged to submit the piece into student dance film festivals. *Prerequisite:* FILM 2304 (FILM 3393 preferred) or DANC 2242. Instructor approval required.

MSA 3325/THEA 2319 (3). FASHION, MEDIA, AND CULTURE. Explores how and why people tell others who they are by what they wear, and what roles fashion magazines, blogs and other media play in that process. Examines fashion, media, and their relationship to culture, with an emphasis on the contemporary designers and fashion editors who have shaped the modern fashion landscape. This course supports the fashion media minor. No prerequisites. (Note: THEA 2319 may take the place of this course.)

MSA 3330 (3). SPECIAL TOPICS. Various topics determined by the instructor regarding studies in the arts.

MSA 3351 (3), 3352 (3). ARTISTS IN THE WORLD: THE TEACHING ARTIST AS CATALYST. Introduces artists-in-training to the basic principles, practices, and priorities of the artist as teacher in the community. Provides a foundation in any artistic discipline and for the most common kinds of education work that artists undertake (e.g., working with young people (in schools and other settings); teaching one's art form, curriculum integration, and in-depth residencies; creating artistically authentic programs with an education thrust; working in challenging situations; and working with adults in performance, educational, and professional settings. Students design a program to use in real-world settings. Includes field observations, readings, written response, and active participation and presentation. Two term sequence. Students must take MSA 2051, 2151 or 3351 to enroll in MSA 2052, 2152 or 3352. Completion of MSA 2052, 2152 or 3352 will make students eligible to apply for a competitive paid fellowship in the following year. Consent of instructor is required, as is a minimum GPA of 3.000.

MSA 3369/CFA 3369 (3). LONDON: EXPLORING REPRESENTATION OF THE PERFORMATIVE. This course is based in the academic discipline of performance studies, which examines performance from a broad range of critical perspectives and includes the disciplines of history, anthropology, literary studies, gender studies, critical theory, and analysis of the act of performance itself. The intention is to use the city of London (and its environs: theatres, concert halls, sports arenas, exhibitions, museums, tourist attractions, fairs, markets, law courts, pubs, restaurants, etc.) as a template to engage the student with the vibrant dialogues between art, culture, and history that make it a thriving, multicultural city and an international melting pot.

MSA 3390 (3). INTERDISCIPLINARY STUDIES IN THE ARTS – STUDY ABROAD. Interdisciplinary topics in the performing, visual, and communication arts. (Study Abroad)

MSA 3391 (3). INTERNATIONAL STUDIES IN THE ARTS – STUDY ABROAD. International topics in the performing, visual, and communication arts. (Study Abroad)

MSA 4110 (1). FASHION MEDIA PROJECT. 1-hour credit. Fashion media students collaborate to produce an interdisciplinary, professional-level fashion media product. May be completed in lieu of a fashion media internship. Permission of adviser required. Restricted to fashion media minors.

MSA 4125 (1), 4225 (2). FASHION MEDIA INTERNSHIP. Off-campus interdisciplinary internship in any area of the fashion media field during the regular term or summer. Offered on a pass/fail basis only. *Prerequisite:* Restricted to fashion media minors.

MSA 4210 (2), 4310 (3). FASHION MEDIA DIRECTED STUDY. Students collaborate to produce an interdisciplinary, professional-level fashion media product. Permission of adviser required. Restricted to fashion media minors.

MSA 4320 (3). INTERMEDIA PORTFOLIO PROJECT. A theory-based, production-focused course that allows students to produce and exhibit intermedia artworks that make use of techniques of at least two divisions. A minimum of two advisers from two different disciplines must supervise the project. The program director may recommend specific advisers to the student. A minimum grade of at least C- in this class is required to earn the minor in intermedia theory and practice.

MSA 4325 (3). FASHION MEDIA INTERNSHIP. Off-campus interdisciplinary internship in any area of the fashion media field during the regular term or summer. Graded pass/fail. *Prerequisite:* Restricted to fashion media minors.

MSA 5105 (1), 5205 (2), 5305 (3). DIRECTED STUDY IN THE ARTS. Independent study in an interdisciplinary arts topic under the direction and close supervision of a faculty member of the Meadows School. *Prerequisite:* Instructor approval.

MSA 5301 (3). DIRECTED STUDIES. Independent study under direction of an instructor.

MSA 5302 (3). DEVELOPING CBI FOR ARTS. A course designed to provide students with skills in hierarchical, structure program design in BASIC computer language, including sound and graphic routines. Explores pedagogical approaches, using the computer, appropriate to the student's art discipline.

MSA 5310 (3). DIRECTED STUDY. Independent study under direction of an instructor.

MSA 5326/AMAE 4326 (3). CULTURAL POLICY. This course provides an overview of policy analysis and practice of the cultural sector in its different areas (heritage, visual and performing arts, etc.) and perspectives. Specifically, the following issues will be analyzed: Historical and theoretical backgrounds of cultural policy; cultural policies in practice - stylized facts and geographical and political divergence at local, national and international level; evaluation of cultural policies and their socio-economic impact; culture, diversity and development; cultural access and arts education.

Journalism

Professor Tony Pederson, **Belo Foundation**
Endowed Distinguished Chair in Journalism

Professor: Tony Pederson. **Associate Professors:** Craig Flournoy, Camille Kraeplin. **Assistant Professor:** Jake Batsell. **Broadcast Executive-in-Residence:** Lucy L. Scott. **Journalist-in-Residence and William J. O'Neil Chair in Business Journalism:** Mark Vamos. **Professors of Practice:** Carolyn Barta, Michele Houston, Jayne Suhler, Karen Thomas. **Adjunct Lecturers:** Pam Harris, Robert Hart, Linda Leavell, Jean-Jacques Taylor, Bruce Tomaso.

The world of journalism is changing fast. Once-divergent media forms are rapidly coming together in ways that make it essential for 21st-century journalism education to reflect the complexity of actual practice. Graduates must be prepared to function and lead in a new and changing environment. The Division of Journalism prepares students to succeed in this dynamic setting.

Majors will study multimedia journalism, including broadcast, print and online formats. They will learn professional skills that will enable them to adapt swiftly to a changing journalism environment. Content that is useful and interesting will have value regardless of the delivery system or systems of a particular era. For this reason, students also are taught the intellectual and theoretical skills they will need to help them interpret the world around them and understand the role of the media in society. They will graduate as clear, concise thinkers and writers.

Students may choose from two optional specializations: the minor in fashion media, detailed in the Interdisciplinary Programs section, and the William J. O'Neil program in business journalism, detailed below.

Instructional Facilities

The Division of Journalism is located in the Journalism Complex in the Umphrey Lee Center, which houses faculty and administrative offices, audio and video production, and media support areas. The main media content areas are a complete broadcast studio with control room and a convergence newsroom with computer equipment designed for production of multiplatform news content. Classrooms and conference rooms in the Journalism Complex are state of the art, with complete audio and video capabilities. All classrooms are equipped with the latest computers for each student.

The Journalism Complex is a secured area where journalism majors are permitted 24-hour access. The concept and design of the Journalism Complex promote the individualized instruction for which the Division of Journalism is known. Each student is encouraged to spend as much time as desired on highly specialized equipment to pursue projects and assignments in a professional media work environment.

Admission and Degree Requirements

Strong writing skills are essential to the student's success in the division's journalism curriculum and later in the profession of journalism. Students may enroll in journalism classes as first-year students. Those seeking permission to major or minor in the Division of Journalism must have completed 24 hours of study, which may include transfer hours. Students must also have taken DISC 1312, 1313 (or equivalent) and earned a minimum GPA of 3.000 (*B*) between these courses. Students are required to take CCJN 2103 before further journalism study, and they must declare the major or minor before taking CCJN 2312. Students transferring from other universities must have completed equivalent courses and obtained the equivalent GPA in those

courses before they can be considered a major candidate in the Division of Journalism. The Journalism Division has a focus on and commitment to diversity, recognizing the need for diversity in media and communications in the 21st century.

Scholarships

Honors scholarships are awarded each year to outstanding students who intend to major in journalism. Other scholarships are available to journalism students through a variety of foundations and gifts to the division.

Honors Program

The honors program in journalism is highly selective. At midterm of the sophomore year, and again at midterm of the junior year, declared journalism majors with a GPA of 3.500 or better can apply to the honors program. All interested students, including those who have been previously awarded honors scholarships, need to apply for admission to the program. Those wishing to graduate with distinction in journalism must complete six hours of honors coursework within the Division of Journalism. Where specific honors sections are not offered in the Division of Journalism, students may work with individual professors to develop appropriate honors coursework within regular classes, subject to approval of the honors program director. Three hours must be in honors skills, three hours in honors topical studies and three hours in honors critical studies. In addition, seniors must complete CCJN 5308 as a directed study and produce an honors thesis. For further information, students should contact the honors program director, Division of Journalism, Meadows School of the Arts, 280 Umphrey Lee, Southern Methodist University, Dallas TX 75275. The honor society is separate from the honors program. At midterm of the senior year, the top 10 percent of the graduating class is invited for membership in Kappa Tau Alpha, the Journalism Mass Communication Honor Society.

The William J. O'Neil Program in Business Journalism

As global markets and fast-paced technological change buffet American workers, consumers, investors and companies, business has become one of the most important components of news. The O'Neil Program equips aspiring journalists with both the technical knowledge to understand often-complex business and economic issues and the journalistic skills to make those topics understandable and accessible to news audiences. And because an ability to follow the money is critical to many beats, the tools and techniques developed in this program will prepare students for more sophisticated and insightful coverage of subjects ranging from national and local politics to technology, the entertainment industry and the environment.

This innovative interdisciplinary program includes courses in the Cox School of Business. In addition to the 37 credit hours required for the journalism major, students wishing to concentrate in business and finance journalism will complete either a second major in business, the minor in business administration, or the summer minor in business, plus ECO 1311 and 1312. Students will put into practice what they are learning about business, financial markets and economics in advanced journalism classes and in coverage of North Texas-based companies and the regional economy.

Admission to the program is subject to the approval of the faculty member who holds the O'Neil Chair in Business Journalism. Students studying in the program will be advised by this faculty member.

Internships and Practica

Upon achieving junior and senior status, students are encouraged to take on experiences that enable them to work under the guidance of professionals in the news industry (internships). Many on-campus activities also offer practical experience (practica), and students are strongly urged to take advantage of the opportunities available to them through both the Student Media Company, which publishes a daily newspaper and a yearbook, and the Journalism Division. Practica are taken for one credit hour at a time. Internships may be taken for one, two or three credit hours at a time, depending on the number of hours worked. A total of three credit hours of internships and practica may be counted toward a student's degree requirements but may not be counted toward the required nine credit hours of electives within the division. Internships and practica are taken on a pass/fail basis only and are restricted to journalism majors and minors.

Class Attendance

Due to limited class space and enrollment pressures, a student who fails to appear on the first day of class may be administratively dropped from the class at the instructor's discretion. Furthermore, students must comply with any more specific attendance policies spelled out in course syllabi; creation and enforcement of such policies are entirely at the instructor's discretion. The division strives to keep class size small enough for individual attention, and large enough to ensure discussion and interaction among students. Very large enrollments will be limited and very small classes may be merged or canceled.

Off-campus Programs

American University. Through a cooperative program with American University in Washington, D.C., students have an opportunity to study in the nation's capital as a part of the Washington Term Program. Students may complete up to six hours of journalism elective credit and internships, as well as courses in other disciplines. The program is restricted to journalism majors and minors.

SMU-in-London. SMU students can earn six credit hours by enrolling in the SMU-in-London communications program. Conducted each year during the second session of summer school, the program allows students to study in London, a hub for international communications. Courses offered carry three credit hours. They do not require prerequisites, and they are designed to take full advantage of London's importance as an international center. Students live in dormitories in London. As part of their international experience, students are encouraged to explore the culture and fine arts offerings of London and European countries on their own, as class schedules permit.

Programs of Study

The role of the journalist in today's society has become increasingly complex and important because of a paradox: as the world shrinks amid the communication revolution, the journalist's horizons and responsibilities have vastly expanded. The rapid development of converging media technologies means journalists of the 21st century must know more about the world and also be capable of working in a variety of new media. At the same time, the next generation of journalists must retain the core ethics and values of the craft. Journalism students will study multimedia journalism, learning the basic skills and conventions of broadcast journalism,

print journalism and the emerging skill set needed to practice journalism on the Internet. The major requires 37 credit hours within the division. Journalism majors may count no more than 40 hours of CCJN courses toward graduation. A second language capability of eight credit hours or its equivalent is required. Courses may be used to fulfill only one of the student's divisional requirements (i.e., a student may not fulfill two divisional requirements with one course). **Note:** All journalism majors must declare and complete a second major or a minor of their choosing. The fashion media minor does not meet this requirement. Only CCJN courses passed with a grade of *C-* or better will count for credit toward the major in journalism.

Bachelor of Arts in Journalism

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
Journalism Core Curriculum	19
CCJN 2103, 2302, 2304, 2312, 2313, 3330, 4316	
Skills Requirement (one from the following)	3
CCJN 3357, 3358, 3360, 3362, 3365, 3382, 3385, 4310, 4384, 4385, 4388, 4390, 5306	
Topical Studies Requirement (one from the following)	3
CCJN 3325, 3370, 4300, 4306, 4307, 4344, 4345, 4387, 4392, 4395, 4396, 5301, 5302, 5303, 5304	
Critical Studies Requirement (one from the following)	3
CCJN 3345, 3390, 3396, 4331, 4350, 4360, 4370, 4380, 4393, 4394, 4397, 5305	
Journalism Electives	9
Selected from CCJN courses.	
Second Language	8
Two terms of the same language.	
Minor or Second Major and Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Minor in Journalism

The minor in journalism provides a basic understanding of the role of the news media in American society and an introduction to the basic skills necessary for the practice of the field.

Requirements for the Minor	*Credit Hours*
CCJN 2103, 2302, 2304, 2312, 2313, 3330, 4316	19
Additional CCJN course	3
	22

CCJN 2103 (1). WRITING AND EDITING TUTORIAL AND LAB. An introduction to basic journalistic writing for all media. Students review English grammar and punctuation, and become versed in Associated Press writing style. Combines an online tutorial with a required weekly lab. This course is required before students may enroll in Reporting 1.

CCJN 2302 (3). ETHICS OF CONVERGENT MEDIA. Explores the ethical issues (e.g., free speech, privacy, government regulation and censorship) that provide the foundation for all communication fields and have become more complex as media and industries have converged.

CCJN 2304 (3). BASIC VIDEO AND AUDIO PRODUCTION. Offers students practical training in the fundamentals of broadcast communication. Students learn the basic techniques, including field production and editing, and control room and studio editing. 3 hours of lecture and one 1.5-hour lab per week. *Prerequisite:* CCJN 2103 or 2303.

CCJN 2312 (3). REPORTING I. Rigorous foundation writing and reporting course needed to complete the major. Students gain fundamental skills (e.g., gathering, documenting, organizing, and writing news) that are essential to accurate, fair, clear, and concise journalism. 3 hours of lecture and one 1.5-hour lab per week. Restricted to journalism majors and minors or fashion media minors only. *Prerequisites:* CCJN 2103 (or 2303) and 2302.

CCJN 2313 (3). REPORTING II. Builds on the foundation of Reporting I. Students learn to analyze information quickly and accurately while applying critical thinking skills. Introduces students to the basics of broadcast writing. Three lecture hours and one 1.5-hour lab per week. *Prerequisite:* CCJN 2312. Restricted to majors and minors only.

CCJN 3325 (3). TECHNOLOGY REPORTING. Helps journalists of tomorrow understand complex technologies like the World Wide Web in a way that will allow them to foresee the impact of those technologies on U.S. society, culture, and way of life. Offered periodically. *Prerequisite:* CCJN 2312.

CCJN 3330 (3). DIGITAL JOURNALISM. Students explore the use of new communication technologies for multimedia storytelling; work with social media as a tool for newsgathering, community building, and the fostering of audience engagement; learn about Web metrics and search engine optimization techniques; and update and perfect their personal portfolio websites and social media presence. *Prerequisites:* CCJN 2304, 2312; junior or senior standing.

CCJN 3345 (3). MASS MEDIA IN GREAT BRITAIN, POLITICS, PIN-UPS, AND PROPAGANDA. Explores the interaction between power, politics, and mass media in Great Britain; the history of the media in Great Britain; the health (or lack thereof) of mass media today and its impact on politics and popular culture; and how journalists report the news abroad and in the United States. Daily assignments include examination of newspapers and broadcast and Internet news available in the U.K. Students write papers based on visits to renowned sites such as the British Library and the Imperial War Museum. British journalists, scholars, and foreign correspondents present guest lectures. Final class projects that include papers and class presentations involve group studies in specialized areas of British media. (SMU-in-London only.)

CCJN 3357 (3). PHOTOJOURNALISM. Training in the techniques and execution of digital photojournalism including computer processing of images. Students will learn to produce digital photojournalism and have the opportunity to generate photographic images for the division's convergence website. Three lecture hours and one 1.5-hour lab per week.

CCJN 3358 (3). NEW MEDIA NEWS. Focuses on using new media presentation methods and design skills to produce new forms of communication for news outlets. *Prerequisite:* CCJN 2380 or 3330.

CCJN 3360 (3). COMPUTER ASSISTED REPORTING. Emphasizes a hands-on approach through the gathering and organizing of computerized data. Students learn techniques for locating, retrieving and verifying information from electronic sources including libraries, research institutions, government documents, databases, court cases and experts. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 3362 (3). MAGAZINE WRITING. Introduces the diverse world of magazines. Students study exceptional magazine feature writing (profiles, narratives, analytical pieces, etc.) and practice feature magazine reporting and writing to prepare for professional work in the industry. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 3365 (3). INVESTIGATIVE REPORTING. Intensive introduction to the art of generating original news ideas about issues of public significance; developing critical news judgment; unearthing often difficult-to-access information; and organizing the information into focused, well-documented, and compelling stories. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 3370 (3). FASHION JOURNALISM. Intensive training on reporting and writing for journalism outlets with a focus on fashion. Coursework includes producing spot news and short fashion features for student media. Field trips to meet with Dallas fashion writers and other fashion media professionals. *Prerequisite:* CCJN 2103 or 2303.

CCJN 3382 (3). FEATURE WRITING. Emphasizes the conceptual and technical skills needed to develop one's own voice, to bring a literary quality to one's journalism, and to produce professional-level descriptive pieces and features for various media. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 3385 (3). BROADCAST I. Builds on skills learned in CCJN 2304, with more emphasis on deadline-driven, original, campus-based reporting and broadcast producing. Students learn how to assign coverage; to enterprise original story ideas; and to write cogent broadcast stories and turn them in on deadline using video, and/or set debriefs, as well as Web components. Convergence laboratory required. *Prerequisites:* CCJN 2304, 2312.

CCJN 3390 (3). LITERARY JOURNALISM. Students explore and analyze nonfiction through roundtable discussion, book reviews and creative writing. Course requires heavy reading with an emphasis on books and essays of the last 100 years. *Prerequisite:* Sophomore standing.

CCJN 3396 (3). HISTORY OF JOURNALISM. The story of how American journalism became what it is today. The course emphasizes the people and events that transformed the media from the colonial printer into 21st century media conglomerates. *Prerequisite:* Sophomore standing.

CCJN 4101 (1), 4102 (1). JOURNALISM PRACTICA. Students work in on-campus media positions. A maximum of 2 credit hours may be earned and counted toward degree requirements. Offered on a pass/fail basis only. *Prerequisites:* Junior standing and permission of adviser. Restricted to majors and minors only.

CCJN 4125 (1), 4225 (2). INTERNSHIPS IN JOURNALISM. Internship credit for off-campus work in the field during the regular term or in the summer. Students are limited to a total of 3 credit hours for internships. These hours will not count toward the 9 hours of required elective credit in the division. Offered on a pass/fail basis only. *Prerequisites:* Junior standing and permission of adviser. Restricted to majors and minors only.

CCJN 4300 (3). BROADCAST NEWS SEMINAR. A small group of selected students conduct an in-depth study of current events, examining and analyzing issues and producing sophisticated television programming. *Prerequisite:* CCJN 3385.

CCJN 4302 (3), 4303 (3), 4304 (3), 4305 (3). WASHINGTON TERM DIRECTED STUDIES. Students study and practice journalism in the nation's capital. Restricted to majors and minors only.

CCJN 4306 (3). BUSINESS AND JOURNALISM. An intensive introduction to business, financial markets, and economics, combined with practice in reporting and writing about these complex topics. Gives aspiring business journalists the tools to make business information understandable and accessible to news audiences. *Prerequisite:* CCJN 2312.

CCJN 4307 (3). BUSINESS NEWS SEMINAR. Builds upon the skills and insights gained in CCJN 4306. Combines close reading and analysis of business coverage with detailed exploration of how to gather and understand financial and economic information. Also, intensive practice in reporting and writing business stories. *Prerequisite:* CCJN 4306.

CCJN 4310 (3). EDITORIAL/OPINION WRITING. Examines the role of opinion writing in American journalism and teaches techniques that will help students develop clear and effective editorials and columns on a range of topics. The course emphasizes critical thinking and writing skills. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4316 (3). COMMUNICATION LAW. An exploration of the historical and philosophical bases for freedom of expression. Practical applications of the law – in such areas as libel, censorship, access, privacy, obscenity, copyright, and government regulations – that affect broadcasting, advertising, and the press. *Prerequisite:* Sophomore standing.

CCJN 4325 (3). INTERNSHIPS IN JOURNALISM. Internship credit for off-campus work in the field during the regular term or in the summer. Students are limited to a total of 3 credit hours for internships and practica. These hours will not count toward the 9 hours of required elective credit in the division. Offered on a pass/fail basis only. *Prerequisites:* Junior standing and permission of adviser. Restricted to majors and minors only.

CCJN 4326 (3). WASHINGTON TERM INTERNSHIP. Internship opportunities in the nation's capital. Restricted to majors and minors only.

CCJN 4331 (3). CURRENT ISSUES IN THE NEWS. Encourages students to think critically about important issues in journalism today, acquaints them with the classic writings and ideas that have shaped modern journalism, and identifies the key concepts that have formed recent journalism criticism. The goal is to teach communications majors to become more creative problem-solvers as professionals, and more critical as media consumers. *Prerequisite:* Sophomore standing.

CCJN 4344 (3). SPORTS JOURNALISM. Emphasizes the particular narrative style and newsgathering techniques of sports stories and coverage. Students will learn how to interview sports personalities and compose stories relating to the competitive events and social issues surrounding the world of sports. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4345 (3). MEDIA AND POLITICS. Increases students' understanding of political and elections processes so they can evaluate and practice political journalism. Covers campaigns, governance, analysis of media coverage, and practical application. *Prerequisite:* CCJN 2312.

CCJN 4350 (3). HUMAN RIGHTS AND THE JOURNALIST. Students analyze human rights issues affecting the world today and how both U.S. and international media cover these issues. The course examines topics such as the role images play in conveying the harsh truth of any human rights story, and how everything from new media formats to shrinking budgets is changing the way journalists who cover these stories do their job. This course is offered periodically. *Prerequisite:* Sophomore standing.

CCJN 4360 (3). WOMEN AND MINORITIES IN THE MEDIA. Examines the impact and representation of women and minorities in the mass media from historical and critical perspectives. *Prerequisite:* Sophomore standing.

CCJN 4370 (3). LAW AND ETHICS IN A HIGH-TECH WORLD. Encourages students to investigate the real and possible boundaries in cyberspace among open and closed systems of code, commerce, governance, and education, while examining the relationship of law and ethics to each. Students engage with a wide spectrum of Internet issues, including privacy, intellectual property, antitrust concerns, content control, and electronic commerce. *Prerequisite:* Sophomore standing.

CCJN 4380 (3). OBJECTIVITY AND BIAS. Identifies the various forces that critics say bias the news media and looks for evidence of these biases in media products. *Prerequisite:* Sophomore standing.

CCJN 4384 (3). BROADCAST II. Furthers the foundation established in CCJN 3385. The curriculum emphasizes deadline-driven, off-campus beat reporting and broadcast producing. Students learn how to plan original story ideas, including investigative and long-form pieces. Convergence laboratory required. CCJN 4300 highly recommended before taking this course. *Prerequisites:* CCJN 2313, 3385. Restricted to majors and minors only.

CCJN 4385 (3). GRAPHICS AND DESIGN. Introduction to the principles and processes associated with visual design. Students examine the roles of visual design as both a tool and a medium of communication and cultural production. Assignments include creating, altering, editing and processing images; conceptualizing, formatting, analyzing and refining typography; and preparing materials for production and publication, utilizing one or more media. Three lecture hours and one 1.5-hour lab per week. *Prerequisite:* CCJN 2312.

CCJN 4387 (3). ARTS BEAT. Students gain experience in a convergence class in reporting on arts and entertainment and writing reviews, etc. The course includes sessions with local critics and experts in various areas of arts and literature. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4388 (3). PRINT DESIGN AND EDITORIAL DECISION-MAKING. The fundamentals of newspaper layout and design, including an emphasis on news selection, decision-making, and publication trends. 3 lecture hours and one 1.5-hour lab per week. *Prerequisite:* CCJN 2312.

CCJN 4390 (3). ADVANCED WEB MASTERY. Builds on the online journalism skill sets of students and trains them to create dynamic, online news packages that leverage the flexibility of the Internet in order to increase the public's understanding of news stories. Students learn how to create their own websites, how to use technology to assist in newsgathering, and how to unleash their creativity in online presentations. *Prerequisite:* CCJN 2380 or 3330.

CCJN 4392 (3). JOURNALISM AND RELIGION. Introduces students to the basics of the world's major religions and describes how journalists should cover faith-based organizations and interview religious leaders. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4393 (3). CIVIL RIGHTS IN THE MEDIA. Prior to the 1950s, the mainstream press was one of the major obstacles to African-American progress. But during the civil rights movement, the media became a primary force in helping African Americans achieve equal rights. Explores how and why this revolutionary change took place. *Prerequisite:* Sophomore standing.

CCJN 4394 (3). MEDIA EFFECTS. A critical study of how mediated messages influence behavior, attitudes, and feelings within a society. Surveys historical research efforts to examine effects on individuals, groups, and institutions. Also, explores contemporary social critiques in the American mass media. *Prerequisite:* Sophomore standing.

CCJN 4395 (3). PUBLIC AFFAIRS REPORTING. Emphasis on skills required for the reporting of news emanating from governmental bodies or politics. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4396 (3). INTERNATIONAL REPORTING. Prepares students to work as foreign correspondents by helping them understand international production processes. Students profile current American correspondents who work in foreign countries, comparing their work to those of their contemporaries. Students also engage in newsgathering assignments to encourage them to publish on matters of international interest. *Prerequisite:* CCJN 2313. Restricted to majors and minors only.

CCJN 4397 (3). JOURNALISM IN LATIN AMERICA. Provides students with an understanding of the practice of journalism in Latin America. Students profile specific regions, examining the historical, political, economic, cultural, ethnic, and even geographical differences, to better understand the issues that affect the struggle for freedom of the press. *Prerequisite:* Sophomore standing.

CCJN 5110 (1), 5210 (2). DIRECTED STUDY. Independent study under the direction and supervision of a faculty member. In close collaboration with the instructor, the student conducts a rigorous project that goes beyond the experience in course offerings. Written permission from the instructor is required, and a completed directed studies form must be filed with the Division of Journalism before the start of the term during which the study is to be undertaken. *Prerequisites:* Junior standing and permission of instructor. Restricted to majors and minors only.

CCJN 5301 (3), 5302 (3), 5303 (3), 5304 (3). TOPICS IN JOURNALISM. Provides a study and discussion setting for an issue or topic of current interest in the journalism profession. Offered on an irregular basis, depending on the significance and timeliness of the topics to be studied.

CCJN 5305 (3). TOPICS IN CRITICAL STUDIES. Provides a study and discussion setting for a critical media studies issue. Offered on an irregular basis, depending on the significance and timeliness of the topics to be studied.

CCJN 5306 (3). TOPICS IN JOURNALISM PRACTICE. Provides an introduction to new, cutting-edge areas of journalism practice. Offered on an irregular basis, depending on the significance and timeliness of the topics to be studied.

CCJN 5308 (3). HONORS THESIS. Students research and write a thesis examining an aspect of or an issue in the field of journalism. Required for all students wanting to graduate with an honors degree in journalism. *Prerequisite:* Permission of instructor. Restricted to majors and minors only.

CCJN 5310 (3). DIRECTED STUDY. Independent study under the direction and supervision of a faculty member. In close collaboration with the instructor, the student conducts a rigorous project that goes beyond the experience in course offerings. Written permission from the instructor is required, and a completed directed studies form must be filed with the Division of Journalism before the start of the term during which the study is to be undertaken. *Prerequisites:* Junior standing and permission of instructor. Restricted to majors and minors only.

Music

Professor Samuel S. Holland, **Director**

Artist-in-Residence: Chee-Yun Kim. **Joel Estes Tate Professor of Music:** Joaquín Achúcarro. **Professors:** José Antonio Bowen, Jack Delaney, Virginia Dupuy, Michael Hawn, Samuel Holland, David Karp, Robert Krout, Barbara Hill Moore, Alfred Mouledous, Larry Palmer, Paul Phillips, Simon Sargon, Thomas Tunks. **Associate Professors:** Sarah Allen, Christopher Anderson, Andrés Díaz, Clifton Forbis, Robert Frank, Kevin Hanlon, Pamela Elrod Huffman, Carol Leone, David Mancini, Martin Sweidel, Xi Wang. **Assistant Professors:** Peter Kupfer, Jesus Ramos-Kittrell, Julie Scott. **Visiting Artist-in-Residence**: Matthew Albert. **Visiting Assistant Professor:** Andrew Greenwood. **Senior Lecturers:** Dale Dietert, Mark Feezell, Gary Foster, Hank Hammett, Matthew Kline, Catharine Lysinger. **Lecturers:** Kevin Gunter, Jamal Mohamed, Melissa Murray, Jason Smith. **Adjunct Professors:** Christopher Adkins, Emanuel Borok, Robert Guthrie, Douglas Howard, Gregory Hustis, John Kitzman, Wilfred Roberts. **Adjunct Associate Professors:** Kalman Cherry, Don Fabian, Paul Garner, Matthew Good, Erin Hannigan, Jean Larson Garver, Diane Kitzman, Thomas Lederer, Brian Merrill, Ellen Rose, Barbara Sudweeks. **Adjunct Assistant Professors:** Deborah Baron, Barbara Bastable, Alessio Bax, Kim Corbet, Susan Dederich-Pejovich, Martha Gerhart, Lane Harder, Lynne Jackson, Camille King, David Matthews, Deborah Perkins, Akira Sato, Kara Kirkendoll Welch. **Adjunct Lecturers:** Thomas Booth, John Bryant, Lucille Chung, Haley Hoops, Drew Lang, Jon Lee, Morgan May, Kelly Pfaffenberger, Edward Smith. **Piano Technician:** David Brown. **Accompanists:** Tara Emerson, Luidmila Georgievskaya. **Music Therapy Supervisor:** Janice Lindstrom. **Recording Engineer:** Roy Cherryhomes. **Mustang Band Staff:** Don Hopkins, Tommy Tucker.

Admission

In addition to meeting University admission criteria, entering undergraduate students intending to major in music must audition prior to matriculation. Auditions assess a prospective student's previous experience and potential for success in the intended major. Entering students intending to major in composition must submit a portfolio of original compositions and pass a performance audition. Both the Division of Music and the University must accept the candidate in order for him or her to be classified as a music major. Information regarding auditions may be obtained by writing to the Office of the Associate Director for Academic Affairs of the Division of Music. In decisions regarding advanced placement, the Division of Music considers transfer credits and AP test results. Departments reserve the right to give additional tests to determine the most appropriate placement in any course sequence.

Nondegree students are those applicants for admission who wish to be enrolled in University courses for credit but are not intending to pursue an SMU degree program. Nondegree students are admitted through the Office of the Registrar's nondegree credit studies area and are eligible to register in day and evening classes for which they have satisfied prerequisites and received departmental approval. Admission as a nondegree-seeking student does not qualify a student as a degree applicant. The presence of nondegree students in courses or ensembles may not displace an opportunity for a degree-seeking music major.

Facilities

Concert performances are presented in Caruth Auditorium, a 490-seat concert hall, the 168-seat Robert J. O'Donnell Lecture-Recital Hall, and the Dr. Bob and Jean Smith Auditorium in the Meadows Museum. Opera productions are presented in the 400-seat Bob Hope Theatre. The Jake and Nancy Hamon Arts Library houses an inspiring collection of more than 110,000 books and scores, more than 31,000 audio and video recordings, and more than 100,000 items in special collections of research materials such as the Van Katwijk Music Collection.

Facilities available to music students include 45 newly renovated practice rooms in the Jeanne R. Johnson Practice Complex.

The electronic keyboard laboratory, used for class instruction in piano, theory and improvisation, is equipped with 16 Yamaha 88-key digital pianos, an MLC 100 Communications Center and state-of-the-art audio-visual technology.

Student recitals and faculty and ensemble performances are digitally recorded and mastered to a CD that is acceptable for auditions, competitions and archival purposes.

The Group and Individual Music Therapy Clinics, connected by an observation room, offer student therapists opportunities for clinical practicum experiences under faculty supervision.

The Division of Music maintains an inventory of 30 Steinway grand pianos, three harpsichords and eight pipe organs, including a celebrated three-manual 51-stop tracker organ built by C.B. Fisk located in Caruth Auditorium.

The Electronic Music Studio is a comfortable, multitrack, MIDI and digital audio facility featuring hardware and software on a Macintosh platform. The studio is well equipped to support algorithmic composition, interactive performance, synthesis, sampling, sequencing, signal processing, video post scoring and digital recording with stereo, quad and 5.1 surround monitoring.

Act of Enrollment

By the act of enrolling in the Meadows School of the Arts Division of Music for participation in a music course – whether as a music major, music minor or through elective study – and in consideration of the right to participate in such course, the student 1) acknowledges his or her willingness to accept and comply with the standards and policies set forth in the *Division of Music Handbook,* the *Graduate Supplement to the Division of Music Handbook,* and all other University rules and regulations; 2) assigns to the University the exclusive right to use the proceeds from any curricular or extracurricular promotional, publicity or entertainment activities associated with the course, including but not limited to photographs, television, recordings, motion pictures, concerts and theatrical productions, and any right the student may have to receive any royalties and/or other sums that may be due to the student from such activities; 3) releases the University, its trustees, officers, agents, employees and assigns from any obligation to pay any proceeds, royalties and/or other sums that may be due to the student in connection with the course; and 4) agrees, on request of the University, to periodically execute all documents necessary to acknowledge the assignment and release set forth herein.

Specific Music Requirements

During the second year of study, each premusic major or transfer student must apply for upper-division degree/major status. The Office of the Associate Director for Academic Affairs of the Division of Music reviews applications.

All full-time music majors are required to enroll for MUAS 1010 each term of residence, for which they will receive a grade of Pass or Fail. Minors are required to enroll for four terms. To complete the requirements of the course and receive a passing grade, majors must attend a minimum of 10 recitals each term (minors, six each term), in addition to those in which the student is participating for credit. A grade of Incomplete may be awarded by the associate director in case of illness or other reason based on student petition.

All music majors, with the exception of guitar, piano, organ, composition and music therapy, are required to enroll in one large ensemble (wind ensemble, orchestra or choral ensemble) are required to enroll for both Meadows Symphony Orchestra and Meadows Wind Ensemble at the discretion of the directors. Exemptions may be granted by written approval of the ensemble director and the applied faculty in an area. Transfer students will not be exempted from the large ensemble requirement based on transfer credits.

All second-year students are expected to present one solo performance in general recital, departmental recital or master class each term. Required recitals must include a cross-section of the repertory in the student's major performance area. The performance of contemporary works is encouraged.

The Division of Music requires attendance at all scheduled class meetings, lessons and ensemble rehearsals. The instructor determines the extent to which absences affect a student's grade. Students should become thoroughly acquainted with the class attendance policy established by their teachers and ensemble directors. Instructors are not obligated to make special arrangements for any student to accommodate an absence. All reasons for absence should be submitted to the instructor in advance. Failure to do so may result in a student being dropped from a course with a grade of *WP* (before the calendar deadline to drop) or receiving a grade of *F* for the course.

All undergraduate music majors must receive a minimum grade of *C-* in all courses specified in the major. The major consists of all courses listed in the student's degree plan with the exception of UC/GEC courses, free electives and coursework in a minor or second major. Students must retake major courses in which a grade below *C-* is received. A course may be repeated only once.

Bachelor of Music in Performance

Requirements for the Degree	*Credit Hours*			
	Orch	*Organ*	*Piano*	*Voice*
UC/GEC Requirements	varies	varies	varies	varies
MUAS 1020 (one enrollment fall term of 1st year)	0	0	0	0
MUAS 1010 (each term of residence except fall 1st year)	0	0	0	0
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230	12	12	12	12
MUTH Electives (at the 3000 level or above)	6	6	6	6
MUHI 1302, 3301, 3302	9	9	9	9
MUHI Elective (at the 4000 level or above)	3	3	3	3
PERB 1131, 1132, 2131, 2132 (*or* 1233, 1234)	4	4	4	4
Private Studies 3200 (eight terms)	16	16	16	16
MURE 3101, 4201 (instrumental recitals)	3	3	3	0
MURE 3001, 4101 (voice recitals)	0	0	0	1
MUCO 3208 (choral) *or* 3209 (instrumental)	2	2	2	2
PERE Large Ensemble (orch. and voice) each term of residence)	6	6	3	6
PERE Chamber Ensemble	3	1	2	0
For Orchestral				
MPED 4305 *or* 4308 (MPED 4303 is required for guitar majors)	3			
One from MREP 5130, 5140, 5150, 5160, 5170 (two terms)	2			
For Organ				
MPED 5114		1		
MUAC 2101, 2102		2		
MUHI 4320, 5207		5		
PERB 1001 (each term of residence)		0		
For Piano				
MREP 4114 (two terms)			2	
MUAC 2101, 2102			2	
MUAC 3100 (three terms)			3	
MUPD 4125, 4126, 4396, 4397			8	
PERB 1001 (each term of residence)			0	
PERB 1011, 1012			1	
For Voice				
Second Language (two terms)				8
MPED 5216				2
MPED 5217 (*or* two terms of PERE 4150)				2
PERB 2117 *or* PERE 4150 (two terms)				2
PERB 2106 and 2108, 2107 and 2109				4
VOIC 3015, 3116, 4017, 4118				2
Music Electives	11	10	5	5
Community Experience: MSA 1001 *or* 1101	0–1	0–1	0–1	0–1
Free Electives (hours vary as needed to meet University residency and degree requirements)				
	122	**122**	**122**	**122**

Notes

- GEC students are required to complete a minimum of 124 term credit hours (orchestral, organ) or 125 term credit hours (piano, voice), and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.
- Guitar majors follow the orchestral instruments curriculum and are required to take only four credits of large ensemble. Percussionists take 16–20 credits of applied study. Elective hours are reduced accordingly.
- Piano majors may earn an emphasis in piano pedagogy by substituting MUPD 5325, 5326 for MUPD 4125, 4126.

Bachelor of Music in Composition

Each year, students are expected to organize at least one performance of an original work (completed in their studies) in a general/studio recital or another appropriate venue or medium, such as a film score, incidental music, a dance collaboration or an electronic music installation. Attendance at regularly scheduled composition seminars is expected of all students enrolled in private composition study; failure to attend will be reflected in the grade given for composition. Students receiving an artistic scholarship must enroll in a PERE large ensemble each term as assigned by the director.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	Varies
MUAS 1020 (one enrollment fall term of 1st year)	0
MUAS 1010 (each term of residence except fall of 1st year)	0
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230	12
MUTH 1325	3
MUTH 3350, 4300, 4310, 5360, 5370	15
MUTH 3200 *or* 3300	16
MSA 3310	3
MUHI 1302, 3301, 3302	9
PERB 1131, 1132, 2131, 2132 (*or* 1233, 1234)	4
Private Studies 3200 *or* 3100 (two to four terms, as needed)	4
MURE 4201	2
MUCO 3208 (choral) *or* 3209 (instrumental)	2
PERE/PERB Ensemble: (must include two terms of large ensemble)	8
Music Electives	4
Community Experience: MSA 1001 *or* 1101	0–1
Free Electives (hours vary as needed to meet University residency and degree requirements)	
	122

Notes

GEC students are required to complete a minimum of 125 term credit hours and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.

Bachelor of Music in Music Therapy

Students majoring in music therapy have two junior-level performance options: 1) to present a minimum of one solo performance in general recital each term of the junior year or 2) to present a half recital of 30 minutes. Before enrolling for internship MUTY 4144, the student must meet the following conditions:

1. Completed all course, practicum and preclinical work.
2. Demonstrated good physical health and emotional stability.
3. Achieved functional competency on piano, guitar, percussion and voice.
4. Achieved a cumulative GPA of 2.500 and a 2.750 in all music therapy courses.

Students completing this program of study may add a minor in psychology with nine additional psychology credits.

Students receiving an artistic scholarship must enroll in a PERE large ensemble each term as assigned by the director.

The Bachelor of Music degree in music therapy is approved by the American Music Therapy Association. Successful completion of this program entitles the graduate to take the national board examination in music therapy administered by the Certification Board for Music Therapists. The official designation by the board is MT-BC, the nationally accepted credential of qualified music therapists.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
MUAS 1020 (one enrollment fall term of 1st year)	0
MUAS 1010 (each term of residence except fall of 1st year)	0
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230	12
MUHI 1302, 3301, 3302	9
PERB 1131, 1132, 2131, 2132 (*or* 1233, 1234)	4
PERB 1103, 1104	2
MUAS 5152 *or* PERB 2113; MUAS 5153	2
Private Studies 3200 *or* 3100	10
MURE 3001 *or* 3101 (optional)	0
MUCO 3208 (choral) *or* 3209 (instrumental)	2
PERE Ensemble	5
MUTY 1120, 1320, 3211, 3212, 3213, 3214, 3141, 3142, 3143, 3144, 4340, 4341, 4144, 4145, 4141, 4142	26
Music Electives (may include MURE 3101 optional recital)	10
Community Experience: MSA 1001 *or* 1101	0–1
PSYC 1300, 2351, and PSYC elective	9
Free Electives (hours vary as needed to meet University residency and degree requirements)	
	122

Notes

- GEC students are required to complete a minimum of 125 term credit hours and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.
- Students with a concentration in voice, percussion or guitar must substitute music electives for the corresponding technique class.

Bachelor of Music in Music Education (Teacher Certification)*

After the completion of 60 hours of coursework, including the music theory sequence, music education students must successfully undergo an upper-division review before enrolling in upper-division coursework. The senior major should present one solo performance in general recital. Prior to student-teaching certification, students must complete 45 clock hours of field experience in early childhood through grade 12 schools.

Students should arrange to take both portions of the state-mandated Texas Higher Education Assessment before their student-teaching term. Registration for the TExES Pedagogy and Professional Responsibilities Test requires approval of the Department of Teaching and Learning of the Annette Caldwell Simmons School of Education and Human Development. Students are not eligible to apply for state certification until successful completion of the TExES examination, all degree requirements and student-teaching hours.

Student teaching, in addition to being subject to the eligibility requirements published by the Department of Teaching and Learning, must be approved by the Music Education Department, and must follow successful completion of all methods (MUED) and techniques (MUAS) courses. Student teaching is considered a full-time endeavor, with no daytime coursework or concurrent ensemble assignments.

Requirements for the Degree	*Credit Hours*	
	Instrumental	*Vocal or Keyboard*
UC/GEC Requirements	varies	varies
MUAS 1020 (one enrollment fall term of 1st year)	0	0
MUAS 1010 (each term of residence except fall of 1st year)	0	0
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230	12	12
MUTH 5330	3	3
MUHI 1302, 3301, 3302	9	9
PERB 1131, 1132, 2131, 2132 (*or* 1233, 1234)	4	4
Private Studies 3200	14	14
MUCO 3208, 3210 (vocal) *or* 3209, 3211 (instrumental)	4	4
PERE Large Ensemble (each term of residence)	5	5
PERE Chamber Ensemble (keyboard principals may substitute MUAC 2101 or 2102; vocalists may substitute large ensemble)	1	1
MUAS 2149, 5152	2	2
For Instrumental	9	
MUAS 5146, 5147, 5148, 5149, 5150, 5151, 5153, 5154 (optional for strings), 5155		
For Vocal or Keyboard		7
MUAS 5146 *or* 5147, 5148 *or* 5149, 5150 *or* 5151, 4230; MPED 5216 (keyboard may substitute MUAS 5153)		
MUED 2250, 3330	5	5
MUED 3331 (instrumental) *or* 3332 (vocal/keyboard)	3	3

Requirements for the Degree (continued)	*Credit Hours*	
	Instrumental	*Vocal or Keyboard*
PERB Diction (two of the following)		2
PERB 2106 and 2108, 2107 and 2109		
EDU 2350, 5327, 5349	9	9
Community Experience: MSA 1001 *or* 1101	0–1	0–1
Free Electives		
(hours vary as needed to meet University residency and degree requirements)		
	122	**122**
***Additional requirements for teacher certification:**		
Student teaching: Select any two with adviser approval: EDU 5363, 5364, 5373, 5374	6	6
Successful completion of the state TExES examination		

Notes

GEC students are required to complete a minimum of 124 term credit hours, and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.

Dual Degree in Performance and Music Education

Students who meet degree candidacy criteria in both performance and music education can pursue dual degrees in these fields. If begun by the second or third term, the second degree can usually be achieved with a range of nine to 17 additional credits (approximately one term) through careful selection of electives and curricular planning. Students considering these plans should consult their adviser and the department heads as early as possible in their academic program.

Bachelor of Arts in Music

The B.A. degree is intended to serve students combining a music degree with interests in one or more of the following: a broad liberal arts education, the possibility of exploring the interdisciplinary relationship of music coursework to coursework in other areas of the Meadows School and the University as a whole, a dual degree, a minor, preparation for medical school or law school, preparation for graduate study in music, participation in the SMU Honors Program, or a term or summer of study abroad.

Requirements for the Degree	*Credit Hours*
UC/GEC Requirements	varies
MUAS 1020 (one enrollment fall term of first year)	0
MUAS 1010 (each term of residence except fall of first year)	0
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230	12
MUHI 1302, 3301, 3302	9
MUTH Elective (3000 level or above) *or* MUHI Elective (4000 level)	3
PERB Class Piano	2

Requirements for the Degree (continued)	*Credit Hours*
Private Studies 3200 *or* 3100 (eight credits required/14 credits maximum) (*or* composition in combination with private studies)	8
PERE Ensemble (required each term of residence)	4
Music Electives (may include senior project)	11
Community Experience: MSA 1001 *or* 1101	0–1
Free Electives (hours vary as needed to meet University residency and degree requirements)	
	122

Notes

Of the 11 music elective credits, a minimum of three credits must be music classes from the 3000 level or higher, selected from the following areas: MPED, MPSY, MUAS, MUED, MUHI, MUPD, MUTH, and MUTY. Multiple one- or two-credit electives may be taken in place of a three-credit elective.

Minor in Music

The minor is designed to meet one of the following objectives:

1. A course of study in music with sufficient breadth and depth to satisfy the artistic aspiration of students from any major who have some background and experience in music, or
2. An alternative to the rigorous course of study required for the major in music for those students who do not aspire to a musical career.

Acceptance criteria for the minor include a successful audition or composition portfolio review and a theory/aural skill assessment prior to enrollment in private lessons or the theory sequence. The ability to read music is required. Musicianship (MUTH 1129, 1130, 2129, 2130) must be taken concurrently with the corresponding offering of written music theory (MUTH 1229, 1230, 2229, 2230). In any given term, private study will be approved only if the student is enrolled for at least one other course (not including MUAS 1010) required for the minor. Approval is required for study beyond four credits. Ensemble participation is encouraged.

Requirements for the Minor	*Credit Hours*
MUTH 1129, 1130, 1229, 1230	6
MUHI 1302, 3301, 3302	9
Private Study (in instrument, voice or composition; typically 1 credit hour per term)	4
MUAS 1010 (four terms) (The *Division of Music Handbook* has course requirements.)	0
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Music Courses Open to All University Students

The following courses are open to all students from any field of study.

Performance Classes	PERB 1103/1104, 1203/2203, 1205/2205/3205, 1206/2206, 2113/2114/2115/2313
Ensembles	PERE 1010/1110, 1011/1111, 1012/1112, 1013/1113, 1014/1114, 1015/1115, 1017/1117, 1018/1118, 1019/1119, 3020/3120, 3073/3173
Other Music Courses	MUAS 1323, 5320, 5322 MUHI 1321, 2310, 3339, 3340, 3343, 4355/CFB 3355 MUTH 1301, 3117/3217, 4310 MUTY 1320, 4341

Private Studies

The following subject prefixes will be used to designate private study in the specific instrument or in voice. Section numbers, which indicate the specific teacher with whom the student should enroll, are listed in the schedule of classes for each term.

BSSN	Bassoon	**GUIT**	Guitar	**SAX**	Saxophone
CELL	Cello	**HARP**	Harp	**TROM**	Trombone
CLAR	Clarinet	**HARS**	Harpsichord	**TRPT**	Trumpet
DBBS	Double Bass	**OBOE**	Oboe	**TUBA**	Tuba
EUPH	Euphonium	**ORG**	Organ	**VLA**	Viola
FLUT	Flute	**PERC**	Percussion	**VIOL**	Violin
FRHN	French Horn	**PIAN**	Piano	**VOIC**	Voice

XXXX 3100 (1). PRIVATE STUDY. One half-hour lesson each week (14 per term) with a jury examination at the conclusion of each term. These repeatable course numbers are offered each fall, spring and summer. Students are required to accept internships in performance or private teaching, subject to availability and/or scheduling conflicts with other SMU courses. Internships may begin prior to the beginning of the term.

XXXX 3200 (2). PRIVATE STUDY. One-hour lesson each week (14 per term) with a jury examination at the conclusion of each term. These repeatable course numbers are offered each fall and spring. Majors are required to enroll in private studies each term until degree requirements are completed. Students are required to accept internships in performance or private teaching, subject to availability and/or scheduling conflicts with other SMU courses. Internships may begin prior to the beginning of the term.

Music Pedagogy (MPED)

MPED 4184 (1), 4284 (2), 4384 (3). DIRECTED STUDY – PEDAGOGY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MPED 4303. GUITAR PEDAGOGY. Prepares guitarists for studio teaching. Offered fall term of odd-numbered years.

MPED 4305 (3). INTRODUCTION TO INSTRUMENTAL PEDAGOGY. Prepares instrumental private teachers for studio teaching. Fall term.

MPED 4308 (3). STRING PEDAGOGY I. A survey of methods, materials, and curriculum for teaching strings at the beginning level. Focus on the philosophical, psychological, and developmental bases of string study. Review and evaluation of current educational materials.

Additional topics include current trends, history of string education, and pedagogical situations. *Prerequisites:* Proficiency on a string instrument as a major, or techniques courses equivalent to MUAS 3146 Upper String and 3147 Lower Strings, or permission of the instructor. Fall term.

MPED 4309 (3). STRING PEDAGOGY II. A survey of methods, materials, and curriculum for teaching strings at the beginning level. Focus on the philosophical, psychological, and developmental bases of string study. Review and evaluation of current educational materials. Additional topics include current trends, history of string education, and pedagogical situations. *Prerequisites:* Proficiency on a string instrument as a major, or techniques courses equivalent to MPED 4308, or permission of the instructor. Spring term.

MPED 5114 (1). ORGAN/HARPSICHORD PEDAGOGY. A survey of teaching materials and pedagogical methods, both historical and modern, for organ and harpsichord students. Class projects include compilation of graded repertoire lists and preparation/presentation of a supervised private lesson. Fall term of even-numbered years.

MPED 5216 (2). VOCAL PEDAGOGY I. A study of vocal techniques. Information useful to the singer, studio voice teacher, and choral director. Vocal acoustics, breathing, and laryngeal function are studied. Fall term. *Prerequisite:* Permission of instructor.

MPED 5217 (2). VOCAL PEDAGOGY II. Teaching strategies and philosophies, diagnosis of vocal problems, stage deportment, vocal repertoire, and ethics for teachers are studied. Students gain practical, supervised experience in teaching. Spring term.

Music Psychology (MPSY)

MPSY 5340 (3). ACOUSTICS OF MUSIC. Study of acoustical foundations of music. Topics covered include basic acoustics, acoustics of musical instruments and voice, room and auditorium acoustics, acoustical principles of sound systems, and psychoacoustics. Three hours of lecture and one laboratory period (MPSY 5340 – N10) per week. Fall term.

Music Repertoire (MREP)

MREP 4114 (1). PIANO REPERTOIRE. A broad survey of piano literature, including lectures and performances by the students enrolled. Performance styles and practices of every historical period are emphasized.

MREP 5030 (0), 5130 (1). GUITAR REPERTOIRE. Student performances of their solo repertoire and individual instruction in a master-class setting.

MREP 5040 (0), 5140 (1). ORCHESTRAL REPERTOIRE: WOODWINDS. Interpretive study and performance preparation of significant excerpts from selected orchestral repertoire.

MREP 5050 (0), 5150 (1). ORCHESTRAL REPERTOIRE: BRASS. Interpretive study and performance preparation of significant excerpts from selected orchestral repertoire.

MREP 5060 (0), 5160 (1). ORCHESTRAL REPERTOIRE: STRINGS. Interpretive study and performance preparation of significant excerpts from selected orchestral repertoire.

MREP 5070 (0), 5170 (1). ORCHESTRAL REPERTOIRE: PERCUSSION. Interpretive study and performance preparation of significant excerpts from selected orchestral repertoire.

MREP 5209 (2). CLASSICAL AND ROMANTIC SONG LITERATURE. (spring term of odd-numbered years) An overview of song literature from the Classical and Romantic periods. Students prepare repertoire for performance in class and make presentations on topics of specialized interest. Lectures focus on specific developmental trends such as the genesis of the song cycle, the evolution of the piano accompaniment in the 19th century, and links between poets and composers.

MREP 5210 (2). 20TH-CENTURY SONG LITERATURE. (spring term of even-numbered years) A survey of repertoire and performance practices of song literature from the 20th century. Provides students with a general knowledge of the literature to acquaint them with performance notational practices and to develop the musical skills necessary to perform this literature.

Accompanying (MUAC)

MUAC 2101 (1), 2102 (1). TECHNIQUES OF VOCAL ACCOMPANYING. A course designed for pianists to acquaint them with the various skills associated with accompanying and to familiarize them with some of the vocal repertoire.

MUAC 2102 (1). TECHNIQUES OF INSTRUMENTAL ACCOMPANYING. A course designed for pianists to acquaint them with the various skills associated with accompanying and to familiarize them with some of the instrumental repertoire.

MUAC 3100 (1). PRACTICUM IN COLLABORATIVE PERFORMANCE. Practical application of collaborative performance skills through studio assignments and performance. *Prerequisites:* MUAC 2101, 2102.

Music Arts and Skills (MUAS)

MUAS 1010 (0). RECITAL ATTENDANCE. Required of all music majors. First-year students attend MUAS 1020 fall term.

MUAS 1020 (0). MUSIC PATHWAYS: EXPLORING MEADOWS AND YOUR FUTURE. Required orientation for all first-year music majors. Provides valuable information about college life and professional opportunities in music. Fall term.

MUAS 1323 (3). EXPLORING THE POWER OF MUSIC IN OUR LIVES – FROM CHAOS 2 CREATION. This experiential course explores how we can use music creatively in our lives to effect positive change. Topics include the building blocks of sound and music (pitch, timbre, rhythm, melody, harmony), effects of the environment on the sound source, our hearing systems, how sound and music affect the brain and body, music and emotions, and the uses of musical improvisation, composition, and songwriting to help express thoughts and feelings in healthy and creative ways. No previous music training is required.

MUAS 2149 (1). INTRODUCTION TO MUSIC EDUCATION. A broad-based survey of the issues, aims, and opportunities in music education programs of all levels with an introduction to music education philosophies and methodologies. Fall term.

MUAS 3011 (0), 3111 (1). PRACTICUM IN MUSIC. Practical on-campus work in areas such as piano technology or recording engineering. Specific learning outcomes, measures, and activities are stated in an individualized syllabus. Students are limited to a total of 3 credit hours for internships and practica. Departmental permission required.

MUAS 3084 (0), 3184 (1), 3284 (2), 3384 (3). INTERNSHIP IN MUSIC. Internship credit for practical off-campus work in the music industry or with a professional music organization. Specific learning outcomes, measures, and activities are stated in an individualized syllabus. Students are limited to a total of 3 credit hours for internships and practica. Departmental permission required.

MUAS 4230 (2). ELEMENTARY MUSIC PRACTICUM. Focuses on crafting and teaching short lessons for peers in the college classroom and for area public school classrooms. Video camera is used extensively for accurate feedback. *Prerequisite:* MUED 3330.

MUAS 5145 (1). OVERVIEW OF PIANO TECHNOLOGY. Provides an overview of the history and development of the piano, grand and upright construction and regulation, tuning, temperament and relationships with technicians and retailers. Hands-on instruction in tuning techniques includes unison and octave tuning. Fall semesters.

MUAS 5146 (1). UPPER STRING TECHNIQUES. Basic principles involved in playing and teaching violin and viola. Fall term. Reserved for music majors and minors.

MUAS 5147 (1). LOWER STRING TECHNIQUES. Basic principles involved in playing and teaching cello and bass. Spring term. Reserved for music majors and minors.

MUAS 5148 (1). SINGLE REED AND FLUTE TECHNIQUES. Basic principles involved in playing and teaching single-reed and flute instruments. Fall term. reserved for music majors and minors.

MUAS 5149 (1). DOUBLE REED TECHNIQUES. Basic principles involved in playing and teaching double-reed instruments. Spring term. Reserved for music majors and minors.

MUAS 5150 (1). LOW BRASS TECHNIQUES. Basic principles involved in playing and teaching low brass. Fall term. Reserved for music majors and minors.

MUAS 5151 (1). HIGH-BRASS TECHNIQUES. Basic principles involved in playing and teaching upper brass. Spring term. Reserved for music majors and minors.

MUAS 5152 (1). PERCUSSION TECHNIQUES. Basic principles involved in playing and teaching percussion. Fall term. Reserved for music majors and minors.

MUAS 5153 (1). VOCAL TECHNIQUES. Basic principles involved in singing and teaching voice. Spring term. Reserved for music majors and minors.

MUAS 5154 (1). MARCHING BAND TECHNIQUES. Provides music education students opportunities to learn skills/techniques involved in marching band. Fall term of even-numbered years.

MUAS 5155 (1). JAZZ TECHNIQUES. Provides a basic introduction to jazz pedagogy with an emphasis on improv. Fall term of even-numbered years.

MUAS 5310 (3). DIRECTED STUDY IN MUSIC SKILLS. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUAS 5320 (3). RECORDING TECHNOLOGY. A philosophical comparison of approaches to music recording in all forms of mass media. Studio equipment, including digital recording and editing will be demonstrated.

MUAS 5322 (3). ANALYSIS OF MUSIC PRODUCTION. Provides a basic, yet broad understanding of the function of a music producer in both artistic and music business environments. The goal is to provide a forum to discuss and demonstrate how the role of music producer is concentric to all decisions in recording and defining artistic endeavors. Whether working with a director in producing music for a film score, collaborating with a songwriter to define an expression, working with a composer to achieve an artistic vision, or understanding how an advertising agency needs musical help in order to sell a product, the producer must be able to coordinate the procedure with the vision. Even when the producer is also the artist, composer, recording engineer, and financier, he/she must step outside of all other roles to plan how the end result can best be achieved. By the end of the term, students will have an understanding of the process through which any musical work is produced as a live performance or recording.

Conducting (MUCO)

MUCO 3208 (2). FUNDAMENTALS OF CHORAL CONDUCTING. All basic beat patterns, subdivision, fermata problems, beat character. Introduction to left-hand usage, basic score reading. Emphasis on the psychophysical relationship between conductor and ensemble. Fall term.

MUCO 3209 (2). FUNDAMENTALS OF INSTRUMENTAL CONDUCTING. The focus of the course includes basic conducting technique, score reading, score analysis, and general rehearsal procedures. Attention is given to rehearsal techniques in a laboratory setting. Fall term.

MUCO 3210 (2), 5210 (2). CHORAL CONDUCTING PRACTICUM. Stresses development of rehearsal techniques in a laboratory setting. Choose, prepare, and rehearse music with other students in class to develop skills in error detection, rehearsal pacing, sequencing, and ordering of music for optimum rehearsals. Spring term. *Prerequisite:* MUCO 3208 or equivalent.

MUCO 3211 (2). INSTRUMENTAL CONDUCTING PRACTICUM. Stresses development of rehearsal techniques in a laboratory setting. Choose, prepare, and rehearse music with other students in the class to develop skills in error detection, rehearsal pacing, sequencing, and ordering of music for optimal rehearsals. Spring term. *Prerequisite:* MUCO 3209.

MUCO 4184 (1), 4284 (2), 4384 (3). DIRECTED STUDY IN CONDUCTING. Individual technical development and score preparation for the advanced conductor. *Prerequisite:* Approval of instructor.

MUCO 5309 (3). ADVANCED INSTRUMENTAL CONDUCTING. Stylistic analysis of a range of large ensemble repertoire, with emphasis on historical context, performance practice, interpretive issues, performance techniques, and conducting problems. Study of baton and rehearsal technique. Spring term.

Music Education (MUED)

MUED 2250 (2). NEW HORIZONS IN MUSIC EDUCATION. Observation and discussion of teaching methodologies conducted primarily in the public schools. Includes hands-on teaching experiences with supervision by SMU faculty and public school cooperating teachers.

MUED 3330 (3). ELEMENTARY MUSIC METHODS AND MATERIALS. An investigation of major approaches for teaching elementary general music. Includes public school classroom observations.

MUED 3331 (3). INSTRUMENTAL MUSIC METHODS AND MATERIALS. Covers materials for instruction, motivation, administration, class control, and performance preparation.

MUED 3332 (3). CHORAL MUSIC METHODS AND MATERIALS. Focus on the art and practice of developing successful choral programs for grades 5–12. Topics include recruitment, auditions, behavior management, vocal techniques, the changing voice, choosing music, planning rehearsals, and management of nonmusical details. Includes public school observations. Spring term.

MUED 4194 (1), 4294 (2), 4394 (3). DIRECTED STUDIES IN MUSIC EDUCATION. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUED 5115 (1). METHODS AND MATERIALS – CHURCH. The principles and practices of music education useful to church music professionals and others who may be interested in church work. Spring term of odd-numbered years.

MUED 5147 (1), 5149 (1), 5150 (1), 5151 (1), 5152 (1), 5153 (1), 5154 (1), 5250 (2), 5251 (2), 5254 (2), 5255 (2), 5350 (3), 5351 (3), 5352 (3), 5354 (3). WORKSHOP IN MUSIC EDUCATION. A brief, intensive study of a focused topic in music education, including Orff, Kodály, Dalcroze, and other methodologies.

MUED 5252 (2). WIND LITERATURE FOR THE SECONDARY SCHOOL. (fall term of odd-numbered years) Survey of new and standard literature suitable for secondary school students. Examines music for instrumental solo, ensemble, band, and orchestra.

MUED 5253 (2). VOCAL AND CHORAL LITERATURE FOR THE SECONDARY SCHOOL. (fall term of odd-numbered years) Survey of new and standard vocal solo, ensemble, and choral literature suitable for the secondary school.

MUED 5257 (2). COMPUTER APPLICATIONS FOR MUSIC EDUCATION. The investigation of the potential for computer use in music education, including computer-assisted instruction, information storage and retrieval, book and record keeping, and specialized uses such as computer-assisted management of schools of music; and the development of basic techniques for designing and implementing such uses. Offered irregularly.

MUED 5353 (3). MUSIC IN EARLY CHILDHOOD EDUCATION. A study of the role of music in teaching young children, including planning music experiences for preschool and early elementary levels. Offered irregularly.

Music History and Literature (MUHI)

MUHI 1302 (3). INTRODUCTION TO MUSIC IN WORLD SOCIETIES. Introduction to basic elements of music within the context of cultural traditions of world musics. Students study musical traditions of Western art music; jazz; African-American gospel music; and musics of India, China, Africa, and Latin America. Musical forms, techniques, terminology, and chronology are presented, but primary emphasis is placed upon listening to and experiencing a diverse sample of music and exploring music's roles in societies.

MUHI 1321 (3). MUSIC: ART OF LISTENING. An investigation of the elements of music (melody, rhythm, harmony, form, timbre) as they develop and change throughout the various historical periods of music. Emphasis is on active listening. For nonmajors. Does not satisfy music history requirements for music majors.

MUHI 3301 (3). SURVEY OF MUSIC HISTORY I. Surveys the origins and evolution of musical forms, compositional procedures, performing practices, and musical instruments in the West from the rise of the Christian liturgy through the death of J.S. Bach. Presented within the contexts of related arts and historical events, as time permits. Includes listening, score analysis, and practice in writing about music. *Prerequisite:* MUHI 1302.

MUHI 3302 (3). SURVEY OF MUSIC HISTORY II. Surveys musical forms, styles, compositional procedures, and performing practices from the late 18th century to the present day. Presented within the contexts of related arts and historical events, as time permits. Includes listening, score analysis, and practice in writing about music. *Prerequisite:* MUHI 3301.

MUHI 3339 (3). MUSIC FOR CONTEMPORARY AUDIENCES. An examination of the interaction of the various forms of popular musical expression (folk, blues, soul, rock, Muzak, and film music) and their impact upon American culture.

MUHI 3340 (3). JAZZ: TRADITION AND TRANSFORMATION. Bunk, Bird, Bix, Bags, and Trane. From blues to bop, street beat to free jazz. A study of the people and music from its African, Euro-American origins through the various art and popular forms of the 20th century.

MUHI 3343 (3). MUSIC AND IDENTITY IN COLONIAL AND POSTCOLONIAL FRANCE. Designed for undergraduate students with or without musical backgrounds. Explores music in France and in the colonies of the Maghreb and sub-Saharan Africa from the late 19th century to the present. Focuses on the incorporation of foreign musical elements by composers living in France, including the social context for several musical compositions and the musical traditions of Java, Spain, and Russia, which provided sources of inspiration for these works. Also, the musical traditions of the Maghreb and sub-Saharan Africa, including certain events that led to the invention of new musical styles in these geographical areas and the music of the Diaspora in France. Examines how music has been used in colonial and postcolonial contexts to construct regional, ethnic, and national identities in France, and in formerly colonized countries. (SMU-in-Paris). Does not satisfy music history requirements for music majors or minors but may be taken by music majors or minors as an elective.

MUHI 4192 (1), 4292 (2). DIRECTED STUDY IN MUSIC HISTORY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Instructor approval.

MUHI 4302 (3). SEMINAR IN MUSIC HISTORY. This course will provide advance investigation into a variety of topics in music history. The undergraduate seminar will be writing intensive and will consider such topics as music aesthetics, the works of a specific composer or compositional school, music within the context of a specific time and/or place, or in-depth studies of works relative to a particular genre. Topics to be announced each term. Students may take this seminar more than once. Offered every semester. *Prerequisites:* MUHI 3301 and 3302.

MUHI 4320 (3). ORGAN HISTORY/LITERATURE. A survey of the literature for the organ, Renaissance to contemporary. Required of organ majors and concentrations (undergraduate).

MUHI 4345 (3). SURVEY OF OPERA HISTORY. A chronological survey of opera, beginning with a brief introduction to medieval and Renaissance precedents, followed by an in-depth presentation of selected Baroque and Classical masterworks. Explores the ways 19th-century Romantic opera synthesized music, literature, art, and elements of politics and culture. Also, investigates the musical language and dramatic substance of selected works from 20th-century operatic repertoire. Students spend significant time viewing operas on video and laser disc, and in certain cases making comparative studies of productions. *Prerequisite:* MUHI 3302.

MUHI 4347 (3). SYMPHONIC LITERATURE. Examines representative orchestral works from the late Baroque era to the present day. Attention is directed to the forms, compositional procedures, and orchestration devices employed by selected composers who reflect the various stylistic orientations within this time frame. *Prerequisite:* MUHI 3302.

MUHI 4348 (3). GUITAR HISTORY/LITERATURE. This course examines the history of guitar and its music from the early 16th century to the present. Included are the vihuela and Baroque guitar, four-string Spanish guitar, and related literature. Emphasis will be given to the evolution of the modern instrument and its repertoire. Offered spring term of odd-numbered years. *Prerequisite:* Completion of music history sequence or written permission of department head.

MUHI 4355/CFB 3355 (3). MUSIC AND CULTURE: STUDIES IN POPULAR MUSIC. Focus on music as an element of culture formation. Discussion of current scholarship introduces the multidisciplinary study of the role of human agency in creating meaningful spaces in which music unfolds its socio-political and cultural dimensions. *Prerequisite:* MUHI 3302.

MUHI 4384 (3). SURVEY OF CHORAL LITERATURE. A survey of choral music from the medieval era to the present. Examination of representative compositions will be made with regard to genre, form, compositional procedures, and stylistic aspects. Discussion of the works will also include the social-political conditions, intellectual-artistic states of mind of patrons and composers, and other external influences. Offered spring term of even-numbered years. *Prerequisite:* Completion of music history sequence or permission of department chair.

MUHI 4392 (3). DIRECTED STUDY IN MUSIC HISTORY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUHI 5206 (2). PERFORMANCE PRACTICUM IN EARLY MUSIC. Studies in the interpretation of Baroque music from a stylistic point of view. Offered spring term of even-numbered years.

MUHI 5207 (2). ORGAN SURVEY. Organ building fundamentals of construction and design; organ history as it relates to the development of a style-conscious concept of enrollment. Required of organ majors and concentrations (undergraduate). Recommended elective for M.M. and M.S.M. degree. Fall term.

Piano Pedagogy (MUPD)

MUPD 4125 (1), 4126 (1). PIANO PEDAGOGY PRACTICUM. Supervised teaching experience; specific goals and projects are agreed upon for the term. Required for all piano majors.

MUPD 4396 (3). FUNDAMENTALS OF PIANO PEDAGOGY I. In-depth study of methods and curriculum for teaching piano at the elementary level. Focus on philosophical and physiological bases of piano study. Survey and evaluation of current educational materials. Offered fall term of even-numbered years.

MUPD 4397 (3). FUNDAMENTALS OF PIANO PEDAGOGY II. In-depth study of methods, materials, and curriculum for teaching piano at the intermediate and advanced levels. Additional topics: current trends (including technology), professionalism, history of piano pedagogy, employment opportunities. Offered fall term of odd-numbered years.

MUPD 5103 (1), 5203 (2). CREATIVE PIANO TEACHING. Pedagogical projects designed to meet the needs of the piano teacher. Offered in conjunction with the SMU Institute for Piano Teachers in the summer of even-numbered years or the National Conference on Keyboard Pedagogy in the summer of odd-numbered years. Pedagogy majors are limited to one credit.

MUPD 5196 (1). DIRECTED STUDY IN PIANO PEDAGOGY. Directed study in piano pedagogy.

MUPD 5210 (2). CURRENT TRENDS IN PIANO PEDAGOGY. The psychological principles operative in group and class environments are explored through student participation and observation, with emphasis on teacher effectiveness. Survey of college-level keyboard texts. Offered spring term of even-numbered years.

MUPD 5312 (3). SURVEY OF PRECOLLEGE PIANO LITERATURE. Survey and performance of standard piano literature in all style periods for precollege students. Emphasis on technical preparation and curriculum-building. Offered spring term of odd-numbered years.

MUPD 5325 (3), 5326 (3). PIANO PEDAGOGY INTERNSHIP I, II. Supervised teaching experience; specific goals and projects are agreed upon for the term. Required of all undergraduate piano majors with an emphasis in piano pedagogy performance.

Recitals (MURE)

MURE 3001 (0), 3101 (1). JUNIOR RECITAL. Solo performance of approximately 30 minutes of music. Graded pass/fail by committee.

MURE 4001 (0), 4101 (1), 4201 (2). SENIOR RECITAL. Solo performance of approximately 1 hour of music. Graded pass/fail by committee.

Composition and Theory (MUTH)

MUTH 1129 (1). MUSICIANSHIP I. Beginning studies in solfege, melodic, and harmonic dictation. *Corequisite:* MUTH 1229.

MUTH 1130 (1). MUSICIANSHIP II. Continuation of MUTH 1129 covering solfege, melodic, and harmonic dictation. *Prerequisites:* MUTH 1129, 1229. *Corequisite:* MUTH 1230.

MUTH 1229 (2). MUSIC THEORY I. Covers rudiments (notation, clefs, key signatures, intervals, scales, and modes), diatonic and chromatic harmony, figured bass, part-writing, and analysis. *Corequisite:* MUTH 1129.

MUTH 1230 (2). MUSIC THEORY II. Continuation of MUTH 1229 covering diatonic and chromatic harmony, figured bass, part-writing, and analysis. *Prerequisites:* MUTH 1129, 1229. *Corequisite:* MUTH 1130.

MUTH 1301 (3). MUSIC FUNDAMENTALS. Covers the recognition, basic aural realization, and use and writing of the fundamental elements of tonal music, including pitch, rhythm, meter, chords, scales, key signatures, melody, and harmony. Lecture and discussion, with in-class application through rhythmic reading and singing. Appropriate for all students except music majors.

MUTH 1325 (3). INTRODUCTION TO COMPOSITION STUDIES. Provides a survey of historical and contemporary compositional skills and practices via projects and study of the literature. Also serves as an introduction to the faculty, each of whom directs sessions during the term. Required course during the first term of composition studies prior to private study. *Prerequisite:* Composition major or instructor consent.

MUTH 2129 (1). MUSICIANSHIP III. Continuation of MUTH 1130 covering solfege, melodic, and harmonic dictation employing chromaticism and 20th-century materials. *Prerequisites:* MUTH 1130, 1230. *Corequisite:* MUTH 2229.

MUTH 2130 (1). MUSICIANSHIP IV. Continuation of MUTH 2129 covering solfeggio, melodic, and harmonic dictation employing chromaticism and 20th-century materials. *Prerequisites:* MUTH 2129, 2229. *Corequisite:* MUTH 2230.

MUTH 2229 (2). MUSIC THEORY III. Continuation of MUTH 1230 covering repertoire from the 19th century to the present. Emphasis on traditional harmonization exercises, beginning studies in musical form, and introduction to current analytical methods. *Prerequisites:* MUTH 1130, 1230. *Corequisite:* MUTH 2129.

MUTH 2230 (2). MUSIC THEORY IV. Continuation of MUTH 2229 covering repertoire from the 19th century to the present. Emphasis on traditional harmonization exercises, musical form, and current analytical methods. *Prerequisites:* MUTH 2129, 2229. *Corequisite:* MUTH 2130.

MUTH 3117 (1). SONGWRITING LABORATORY. Guided work-shopping of songs through group sharing and comprehensive application of information provided in MUTH 3217. *Corequisite:* MUTH 3217 or permission of instructor.

MUTH 3200 (2), 3300 (3). PRIVATE COMPOSITION. Individual study with the composition faculty and regularly scheduled seminars with faculty and visiting guests. Fall and spring terms. *Prerequisite:* Admission to the composition degree program.

MUTH 3217 (2). SONGWRITING. Development of songwriting knowledge and skills, including essential components of a song, basic song forms, multiple approaches to starting and completing songs, recording basics, and related aspects of music law. *Corequisite:* MUTH 3117.

MUTH 3350 (3). FORM AND ANALYSIS. Study of musical form within a wide range of styles. *Prerequisites:* MUTH 2130, 2230.

MUTH 4184 (1). DIRECTED STUDIES IN MUSIC THEORY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUTH 4190 (1), 4290 (2). DIRECTED STUDIES IN MUSIC COMPOSITION. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUTH 4202 (2). SEMINAR IN MUSIC THEORY. Advanced analytical study of music in a selected style or genre, or by a particular composer or group of composers. Fulfills upper-division MUTH requirements. Repeatable. *Prerequisites:* MUTH 2130, 2230.

MUTH 4284 (2), 4384 (3). DIRECTED STUDIES IN MUSIC THEORY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Instructor approval.

MUTH 4300 (3). ANALYSIS OF CONTEMPORARY MUSIC. Detailed analysis of recent music written in a variety of styles and using diverse techniques. Explores early 20th-century antecedents of more recent music. Analysis and discussion are supported by readings from theoretical articles and composers' writings. *Prerequisites:* MUTH 2130, 2230.

MUTH 4310 (3). INTRODUCTION TO ELECTRO-ACOUSTIC MUSIC. This course covers historical and emerging concepts and techniques of composing, performing, and listening to both fixed and interactive electro-acoustic music via lectures and laboratory projects. Topics include basic acoustics, hardware and software tools for the generation, processing, and reproduction of musical sound, and the history and literature of electronically generated music.

Students will complete individual and collaborative projects applying their studies to the recording, creation and performance of both fixed and real-time interactive creative projects. *Prerequisite:* MUTH 2130, 2230 or consent of instructor.

MUTH 4311 (3). ADVANCED TOPICS IN MUSIC TECHNOLOGY. Advanced investigation into a variety of topics in electro-acoustic music and technology-related musical art forms. Topics are announced each term the course is offered and may include film music, MIDIstration, real-time interactive performance using Max/MSP/Jitter, algorithmic composition, and technology-related interdisciplinary collaboration. Repeatable. *Prerequisite:* MUTH 4310/6310, MSA 3310, or permission of instructor.

MUTH 4390 (3). DIRECTED STUDIES IN MUSIC COMPOSITION. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Instructor approval.

MUTH 5130 (1). COLLABORATIVE COMPOSITION. Students collaborate with artists in other disciplines on composition projects. Meadows disciplines rotate periodically.

MUTH 5150 (1), 5250 (2). ADVANCED MUSICIANSHIP. Develops musicianship skills beyond the level attained in the undergraduate core musicianship courses. Includes sight-reading and improvisation studies in a range of musical styles for both voice and instruments, advanced melodic and harmonic dictation exercises, aural analysis of musical examples from a wide range of style periods, and the use of the keyboard to support the continued development of skills. Repeatable for credit. Instructor consent required. *Undergraduate prerequisites:* MUTH 2130, 2230. *Graduate prerequisite(s):* Passing score for the Graduate Music Theory Diagnostic Exam or for MUTH 6023, 6124, and 6125.

MUTH 5325 (3). CLASS COMPOSITION. A composition course for non-composition majors. Topics include notational practices, contemporary and traditional approaches to composition through study of model works from the literature, in-class presentation, reading, and critique of projects, and professional standards for the creation and distribution of scores, parts, and recordings of compositions and arrangements. *Prerequisite:* MUTH 2130, 2230 or permission of instructor. Restricted to music majors.

MUTH 5330 (3). INSTRUMENTATION AND ARRANGING. An overview of the ranges and performing characteristics of orchestral/band instruments and vocalists, with practical application via scoring and arranging for a variety of small instrumental and vocal ensembles. *Prerequisites:* MUTH 2130, 2230.

MUTH 5360 (3). ADVANCED ORCHESTRATION. Explores advanced techniques of orchestration through a series of scoring projects for a variety of ensembles. *Prerequisite:* MUTH 5330 or permission of instructor.

MUTH 5370 (3). SURVEY OF COUNTERPOINT. Through exercises in analysis and composition, this course provides a study of contrapuntal techniques from the Middle Ages to the 20th century, with emphasis on traditional modal and tonal styles. *Prerequisites:* MUTH 2130, 2230.

Music Therapy (MUTY)

MUTY 1120 (1). CLINICAL ORIENTATION. The study of music therapy assessment, treatment procedures, and evaluation, through observation as well as literature and repertoire review. Each student will participate on a working music therapy team. *Prerequisite:* Permission of instructor.

MUTY 1320 (3). INTRODUCTION TO MUSIC THERAPY. An overview of the function of the music therapist, the history of the music therapy profession, and music in treatment procedures. The course is required of all music therapy majors and is open to others who may want information about the professional field of music therapy. Fall term.

MUTY 3130 (1). DIRECTED STUDIES IN MUSIC THERAPY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

MUTY 3141 (1). DEVELOPMENTAL MUSIC THERAPY PRACTICUM I. Supervised observation of and therapeutic experience with persons who exhibit developmentally delayed disorders. Fall term. *Corequisite:* MUTY 3211.

MUTY 3142 (1). PSYCHIATRIC MUSIC THERAPY PRACTICUM II. Supervised observation of and therapeutic experience with persons who exhibit psychopathological disorders. Fall term. *Corequisite:* MUTY 3212.

MUTY 3143 (1). MEDICAL MUSIC THERAPY PRACTICUM III. Supervised observation and development of clinical skills with patients in medical settings. *Corequisite:* MUTY 3213.

MUTY 3144 (1). GERONTOLOGICAL PRACTICUM IV. Supervised observation and development of clinical skills with elderly clients. Spring term. *Corequisite:* MUTY 3214.

MUTY 3211 (2). DEVELOPMENTAL MUSIC THERAPY. A study of music therapy with developmentally disabled children and adults such as mentally retarded, visually disabled, and speech-impaired individuals. Fall term. *Corequisite:* MUTY 3141.

MUTY 3212 (2). PSYCHIATRIC MUSIC THERAPY. A study of music therapy with persons with psychopathological disorders such as schizophrenia, depression, and dementia. Fall term. *Corequisite:* MUTY 3142.

MUTY 3213 (2). MEDICAL MUSIC THERAPY. A study of music therapy with the health impaired, such as burn patients, AIDS patients, and obstetric patients. *Corequisite:* MUTY 3143.

MUTY 3214 (2). GERONTOLOGICAL MUSIC THERAPY. A study of music therapy with elderly, gerontological clients. Spring term. *Corequisite:* MUTY 3144.

MUTY 3230 (2), 3330 (3). DIRECTED STUDIES IN MUSIC THERAPY. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Instructor approval.

MUTY 4141 (1). MUSIC THERAPY PRACTICUM V. Supervised clinical experience in the treatment and health maintenance of clients with clinical disorders.

MUTY 4142 (1). MUSIC THERAPY PRACTICUM VI. Continued supervised clinical experience in the treatment and health maintenance of clients with clinical disorders.

MUTY 4144 (1). INTERNSHIP I. Three months, or 520 clock hours, of continuous full-time music therapy experience in an AMTA-approved clinical facility. Reports from the intern and music therapy supervisor required before, during, and after the internship. Because the internship extends beyond the regular term, enrollment for MUTY 4144 will occur for the term during which the internship begins; and for MUTY 4145, concurrently or the term immediately following. *Prerequisite:* Before the internship, all course, clinical, and preclinical work must be completed in the undergraduate music therapy degree or graduate equivalency program.

MUTY 4145 (1). INTERNSHIP II. Second term continuation of MUTY 4144. An additional three months, or 520 clock hours, of continuous full-time music therapy experience in an AMTA-approved clinical facility. Reports from the intern and music therapy supervisor required before, during, and after the internship. *Pre/Corequisite:* MUTY 4144.

MUTY 4340 (3). RESEARCH METHODS AND MATERIALS IN MUSIC THERAPY. A study of research methods in music psychology, therapy, and education, with emphasis on research designs, analysis, and interpretation of research literature.

MUTY 4341 (3). SURVEY OF MUSIC PSYCHOLOGY. Basic study of music systems, with emphasis on perception of and responses to musical stimuli. Interpretation of the interdependence of psycho-socio-physiological processes in musical behavior, such as musical ability and preference. Fall term.

MUTY 5340 (3). TOPICS IN MUSIC THERAPY. A survey of contemporary trends in music therapy, psychology, and medicine. The universality of music is shown, with applications in modern therapy, medicine, and health. Fall term. *Prerequisite:* Permission of instructor.

MUTY 5341 (3). SEMINAR – CLINICAL MUSIC THERAPY. A survey of contemporary trends in music therapy, psychology, and medicine. Through use of group process and self-exploration, students will develop a comprehensive, personalized, and demonstrable theory of clinical music therapy. Spring term. *Prerequisite:* Permission of instructor.

Harpsichord	PERB 5118, 5213
Piano	PERB 1001, 1011, 1012, 1131, 1132, 1205, 1233, 1234, 2131, 2132, 2205, 3205, 5107, 5108
Voice	PERB 1206, 2017, 2106–09, 2206, 2117, 5101, 5017, 5117, 5208
Other Instrumental	PERB 1103/1104, 1203/2203, 2113, 2114, 22152313, 5011, 5111, 5211

PERB 1001 (0). DEPARTMENTAL PERFORMANCE CLASS. Departmental recitals, performance classes, master classes, guest artist performances, and lectures related to performance specialization. Students enroll concurrently with studies in applied music.

PERB 1011 (0.5). SIGHT READING FOR PIANISTS I. A requirement for pre-music majors in Piano Performance, this course explores techniques to improve each student's ability to read music at any level through supervised practicing and reading of various piano literature.

PERB 1012 (0.5). SIGHT READING FOR PIANISTS II. A requirement for pre-music majors in Piano Performance. Emphasis will be given to reading skills that are particularly useful in collaborative playing, including exposure to various types of scores and score preparation. *Prerequisite:* Sight Reading for Pianists I.

PERB 1103 (1). THERAPEUTIC ACOUSTIC GUITAR I. Beginning steel-string acoustic guitar skills, with emphasis on flat-picking and finger-picking chords, strums, and additional left- and right-hand techniques for accompanying folk, popular, and original songs in music therapy, music education, and recreational music settings.

PERB 1104 (1). THERAPEUTIC ACOUSTIC GUITAR II. Intermediate steel-string acoustic guitar skills, with emphasis on enhanced flat-picking and finger-picking chords, strums, and additional left- and right-hand techniques for accompanying folk, popular, and original songs in music therapy, music education, and recreational music settings.

PERB 1131 (1). CLASS PIANO I. Emphasis on sight-reading, technique, harmonization, transposition, improvisation, and appropriate literature. *Corequisites:* MUTH 1129, 1229. Reserved for music majors (except keyboard majors) or minors.

PERB 1132 (1). CLASS PIANO II. Emphasis on sight-reading, technique, harmonization, transposition, improvisation, and appropriate literature. *Corequisites:* MUTH 1130, 1230. *Prerequisite:* PERB 1131. Reserved for music majors (except keyboard majors) or minors.

PERB 1203 (2). CLASSICAL GUITAR I. Basics of reading music; technique; simple chord progressions as applied to popular music; performance of simple classic guitar pieces.

PERB 1205 (2). BEGINNING CLASS PIANO. Designed for students with no previous piano study. Emphasis placed on the development of basic music reading and functional keyboard skills. Not open to music majors.

PERB 1206 (2). CLASS VOICE. A course in basic singing techniques and interpretive skills, suitable for both beginning singers and for students with singing experience but little formal training.

PERB 1233 (2). ADVANCED CLASS PIANO I. (fall term of odd-numbered years) Emphasis on sight-reading, harmonization, transposition, improvisation, and technique. Reserved for keyboard majors or music majors with advanced keyboard skills.

PERB 1234 (2). ADVANCED CLASS PIANO II. (spring term of even-numbered years) Emphasis on sight-reading, harmonization, transposition, improvisation, and technique. *Prerequisite:* PERB 1233. Reserved for keyboard majors or music majors with advanced keyboard skills.

PERB 2017 (0). MEADOWS OPERA WORKSHOP. Exploration of operatic and musical theatre styles, basic acting technique, dramatic analysis, storytelling skills, character development, monologue study, stagecraft skills, repertoire preparation and research, and scene study. Open to all undergraduates whose primary instrument is voice. Must be taken in sequence for two terms beginning with the fall term.

PERB 2106 (1). DICTION – ITALIAN. Principles of pronunciation and enunciation for singing in Italian. Phonetic practice and practical application to the performance of art songs and arias Fall term.

PERB 2107 (1). DICTION – GERMAN. Principles of pronunciation and enunciation for singing in German. Phonetic practice and practical application to the performance of art songs and arias. Spring term.

PERB 2108 (1). DICTION – ENGLISH. Principles of pronunciation and enunciation for singing in English. Phonetic practice and practical application to the performance of art songs and arias. Fall term.

PERB 2109 (1). DICTION – FRENCH. Principles of pronunciation and enunciation for singing in French. Phonetic practice and practical application to the performance of art songs and arias. Spring term.

PERB 2113 (1). HAND DRUMMING AND ETHNIC PERCUSSION I. Development of fundamental hand drumming and other percussion skills through listening, analysis and performance of African, Latin American, and Asian rhythms.

PERB 2114 (1). HAND DRUMMING AND ETHNIC PERCUSSION II. Further development of hand drumming and other percussion skills through listening, analysis and performance of non-Western rhythms. Spring term. *Prerequisite:* PERB 2113 or consent of instructor.

PERB 2115 (1). ELEMENTARY KEYBOARD IMPROVISATION. An introductory keyboard course in the fundamentals of improvisation for the novice pianist. This course will expand the student's knowledge of basic music theory, employing it in a wide variety of styles. Open to music and non-music majors. *Prerequisite:* Late beginner or intermediate piano skills including a basic knowledge of scales. Instructor consent required.

PERB 2117 (1). MEADOWS OPERA WORKSHOP. Exploration of operatic and musical theatre styles, basic acting technique, dramatic analysis, storytelling skills, character development, monologue study, stagecraft skills, repertoire preparation and research, and scene study. Open to all undergraduates whose primary instrument is voice. Must be taken in sequence for two terms beginning with the fall term.

PERB 2131 (1). CLASS PIANO III. Emphasis on sight-reading, technique, harmonization, transposition, improvisation, and appropriate literature. *Corequisites:* MUTH 2129, 2229. *Prerequisite:* PERB 1132. Reserved for music majors (except keyboard majors) or minors.

PERB 2132 (1). CLASS PIANO IV. Emphasis on sight-reading, technique, harmonization, transposition, improvisation, and appropriate literature. *Corequisites:* MUTH 2130, 2230. *Prerequisite:* PERB 2131. Reserved for music majors (except keyboard majors) or minors.

PERB 2203 (2). CLASSICAL GUITAR II. Continued development of technical skills and performance repertoire. *Prerequisite:* PERB 1203 or equivalent proficiencies.

PERB 2205 (2). CLASS PIANO. Continued development of fundamental keyboard skills. Emphasis on sight reading, harmonization, transposition, improvisation, technique, and repertoire study. *Prerequisite:* PERB 1205 or equivalent, audition for placement required. Not open to music majors.

PERB 2206 (2). CLASS VOICE. A course in singing techniques and interpretive skills, suitable for students with some singing experience but little formal training. *Prerequisite:* PERB 1206.

PERB 2313 (3). WORLD RHYTHMS: ETHNIC PERCUSSION AND CULTURAL IMMERSION. (SMU Abroad) Introduces students to rhythms and instruments of world music through total immersion in a specific world culture. Students learn hand drumming and ethnic percussion techniques and the cultural context of the music.

PERB 3205 (2). INTERMEDIATE CLASS PIANO. An intermediate level keyboard course for non-music majors. Continued development of individual repertoire study in a variety of musical styles, with supporting work in sight reading, harmonization, pop chord symbols, technique and improvisation. *Prerequisite:* PERB 2205 or equivalent, audition for placement required. Not open to music majors.

PERB 3306 (3). CLASS VOICE MUSICAL THEATRE I. Introduces the dancer and actor to proper singing technique for musical theatre, with an emphasis on the repertoire of musical theatre. *Prerequisite:* Audition into the minor in musical theatre program.

PERB 3307 (3). CLASS VOICE MUSICAL THEATRE II. Advanced development of proper musical theatre singing technique for dancers and actors. Students also gain a broader knowledge of repertoire for the musical theatre. *Prerequisite:* PERB 3306 or instructor consent.

PERB 5006 (0). SINGERS' DICTION REVIEW. A review course required of all students not passing an entrance assessment for proficiency in the pronunciation of Italian, French, and German.

PERB 5011. DIRECTED STUDIES IN PERFORMANCE. Directed studies or approved internships in performance or pedagogy. Students are required to accept internships in performance or private teaching, subject to availability and/or scheduling conflicts with other SMU courses. Internships may begin prior to the beginning of the term.

PERB 5022 (0). MUSIC THEATRE ACTING AND PERFORMANCE. Fundamentals of acting in musical theatre: script analysis, blocking, character development, and scene study. Includes introduction to musical theatre movement and audition techniques. Students will culminate this course with a series of performed musical scenes. *Prerequisite:* By audition.

PERB 5101 (1). DIRECTED STUDIES IN VOICE. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

PERB 5107 (1). KEYBOARD SKILLS FOR CHORAL CONDUCTORS I. Keyboard competencies for choral conductors including basic technical patterns, harmonization, and relevant score reading. Review course for the MSM and MM Choral Conducting keyboard proficiency requirement.

PERB 5108 (1). KEYBOARD SKILLS FOR CHORAL CONDUCTORS II. Advanced keyboard competencies for choral conductors including basic technical patterns, harmonization, and relevant score reading. Review course for the MSM and MM Choral Conducting keyboard proficiency requirement.

PERB 5111, 5211 (2). DIRECTED STUDIES IN PERFORMANCE. Directed studies or approved internships in performance or pedagogy. Students are required to accept internships in performance or private teaching, subject to availability and/or scheduling conflicts with other SMU courses. Internships may begin prior to the beginning of the term.

PERB 5118 (1). INTRODUCTION TO THE HARPSICHORD. (spring term of odd-numbered years) Presents a variety of topics related to the harpsichord and its music. Provides keyboard musicians, especially pianists, with knowledge and practical experience at the harpsichord to enable them to face future contacts with the instrument in a more informed, confident, and artistic manner.

PERB 5122 (1). MUSIC THEATRE ACTING AND PERFORMANCE. Fundamentals of acting in musical theatre: script analysis, blocking, character development, and scene study. Includes introduction to musical theatre movement and audition techniques. Students will culminate this course with a series of performed musical scenes. *Prerequisite:* By audition.

PERB 5201 (2). DIRECTED STUDIES IN VOICE. A close collaboration between a faculty member and an advanced student who conducts a rigorous project that goes beyond the experience available in current course offerings. *Prerequisite:* Approval of instructor.

PERB 5208 (2). ADVANCED ACTING FOR VOICE MAJORS. Acting and performance tools, character development, monologue study, and repertoire preparation and research. *Prerequisites:* Concurrent enrollment in VOIC and consent of instructor.

PERB 5213 (2). STUDIES CONTINUO PLAYING. Designed for the harpsichord major, to fill the need for a well-developed skill in playing Baroque through bass accompaniments from an unrealized figured bass and/or from an unfigured bass with style performance suitable to the period. Fall term of even-numbered years.

PERB 5215 (2). INTRODUCTION TO JAZZ THEORY AND IMPROVISATION. Introduces jazz improvisation through applied theory. Students gain theoretical and practical experience in jazz improvisation using common jazz chord progressions and chord/scale relationships. Includes the study of jazz recordings to explore and understand the links among chords, scales, and melodies. May be repeated for credit. *Prerequisite:* Music major/minor or instructor consent.

PERB 5310 (3). MUSIC THEATRE WORKSHOP. Preparation and performance of musical theatre as an American art form. *Prerequisite:* By audition.

Performance Ensembles (PERE)

Fulfill "Large Ensemble" Requirements	PERE 1013/1113, 1014/1114, 1018/1118, 1019/1119
Chamber Ensembles	PERE 2071/2171, 2072/2172, 3070/3170, 3071/3171, 3072/3172, 3074/3174
Other Ensembles	PERE 1010/1110, 1011/1111, 1012/1112, 1015/1115, 1017/1117, 3020/3120, 3030/3130, 3073/3173, 3077/3177, 3150, 4050/4150

PERE 1010 (0), 1110 (1). POINT: INTERDISCIPLINARY PROJECT AND PERFORMANCE ENSEMBLE. An interdisciplinary ensemble for inventive artists of all interests, exploring the future of personal expression through collaborative projects and performances. Innovative technologies will be utilized and created. Open to all SMU students with instructor consent. May be repeated for credit. Offered Fall and Spring semester.

PERE 1011 (0), 1111 (1). MUSTANG STRINGS: AN SMU CAMPUS ORCHESTRA. Open to all students and community members. Does not meet the large ensemble requirement for music majors. *Prerequisite:* Audition or permission of instructor.

PERE 1012 (0), 1112 (1). MUSTANG MARCHING BAND. Preparation and performance of music for field performances.

PERE 1013 (0), 1113 (1). MEADOWS CHORALE. This mixed choir features the most advanced vocal talent in the university. Meadows Chorale is open to all undergraduate and graduate students, regardless of major. Auditions are held at the beginning of the fall term.

PERE 1014 (0), 1114 (1). CONCERT CHOIR. This large mixed ensemble performs a variety of choral repertoire and is open to all students through audition. Auditions are held at the beginning of every term.

PERE 1015 (0), 1115 (1). MEADOWS JAZZ ORCHESTRA. Rehearsal and performance of standard and original works for jazz ensembles. By audition.

PERE 1017 (0), 1117 (1). SMU SYMPHONY BAND. Open to all students, including music majors, non-music majors, and community members. Provides a concert band experience exploring band music ranging from transcriptions to original works. Does not meet the large ensemble requirement for music majors. *Prerequisite:* Audition or permission of instructor.

PERE 1018 (0), 1118 (1). MEADOWS SYMPHONY ORCHESTRA. The symphony is open to all students on an audition selection basis. Although the majority of membership is composed of students who are majoring in music, any university student may audition. Each season, the symphony performs publicly in concert a wide variety of orchestral repertoire.

PERE 1019 (0), 1119 (1). MEADOWS WIND ENSEMBLE. The Wind Ensemble is open to all students on an audition selection basis. Although the majority of the membership is composed of students who are majoring or minoring in music, any University student may apply for an audition. The Wind Ensemble performs a wide variety of literature that encompasses both the symphonic band and wind orchestra idioms.

PERE 2071 (0), 2171 (1). CHAMBER ENSEMBLE: PIANO DUOS. Preparation and performance of piano duets for one piano, four hands and two pianos, four hands. Does not fulfill chamber music requirements for music majors.

PERE 2072 (0), 2172 (1). CHAMBER ENSEMBLE: SONATAS. Preparation and performance of repertoire for one instrument and piano. With adviser approval, one term may be counted toward chamber music requirements for undergraduate piano majors.

PERE 3020 (0), 3120 (1). WORLD MUSIC ENSEMBLE. Exploration of rhythms, melodies, forms, and basic ethnic percussion techniques from a variety of cultures including Africa, Asia and Latin America. Composition, improvisation and performances within forms of ethnic traditions adapted to Western instruments. *Prerequisite:* Music major or consent of instructor.

PERE 3030 (0), 3130 (1). CHAMBER ENSEMBLE: GUITAR. Preparation and performance of guitar ensemble literature.

PERE 3070 (0), 3170 (1). CHAMBER ENSEMBLE: WOODWINDS, BRASS, PERCUSSION. Preparation and performance of repertoire for various ensembles of 3–9 mixed instruments, one to a part, without conductor.

PERE 3071 (0), 3171 (1). CHAMBER ENSEMBLE: KEYBOARD. Preparation and performance of repertoire for ensembles that include keyboard as a member of a trio, quartet, quintet, or sextet with mixed instruments, without conductor.

PERE 3072 (0), 3172 (1). CHAMBER ENSEMBLE: STRINGS. Preparation and performance of repertoire for various ensembles of 3-9 mixed instruments, one to a part, without conductor.

PERE 3073 (0), 3173 (1). MEADOWS PERCUSSION ENSEMBLE. Rehearsal and performance of standard percussion ensemble literature. By audition.

PERE 3074 (0), 3174 (1). CHAMBER ENSEMBLE: VOICE. Preparation and performance of chamber music repertoire that includes a solo singer in a small instrumental ensemble without conductor.

PERE 3077 (0), 3177 (1). SYZYGY CONTEMPORARY CHAMBER ENSEMBLE. Preparation and performance of the music of living and local composers as well as seminal works of the 20th century for various mixed ensembles, typically without conductor. Fulfills one term of chamber music requirement and the contemporary music workshop requirement. *Prerequisite:* Audition or consent of instructor.

PERE 3150 (1). CHAPEL CHOIR. Choir sings for 11 a.m. University Service of Worship (Protestant) on Sundays at Perkins Chapel; 14 services per term. Rehearsal at 9:30 a.m. Sunday.

PERE 4050 (0), 4150 (1). MEADOWS OPERA ENSEMBLE. Musical preparation, dramatic coaching, role study, rehearsal, and performance of opera (one-act operas and opera excerpts) and scenes from musical theatre. Eligibility, by audition, for the annual main stage production. *Prerequisites:* By audition. Requires two consecutive terms of PERB 2017 or 2117, or consent of instructor.

Vocal Coaching (VOIC)

VOIC 3015 (0), 3116 (1), 4017 (0), 4118 (1). VOCAL COACHING. Vocal coaching (for voice majors only) course numbers are VOIC 3015, 3116, 4017, 4118. The instructor coaches the singer on diction and interpretation of art song and aria.

Theatre

Professor Stanley Wojewodski, Jr., **Division Chair**

Professors: Rhonda Blair, Kevin Paul Hofeditz, Bill Lengfelder, Stanley Wojewodski, Jr., Steve Woods. **Associate Professors:** Michael Connolly, James Crawford, Jack Greenman, Russell Parkman, Sara Romersberger, Gretchen Smith, Claudia Stephens. **Assistant Professors:** Benard Cummings, Blake Hackler, Anne Schilling. **Lecturers:** Brad Cassil, Marsha Grasselli, Giva Taylor. **Adjunct Lecturers:** Dawn Askew, Jason Biggs, Linda Blase, Stephen Leary, J.D. Margetts, Kathy Windrow. **Artist-in-Residence:** Will Power. **Costumer:** Eugenie Stallings. **Prop Master:** JT Ringer. **Scene Shop Foreman:** Eliseo Gutierrez. **Associate Master Electrician:** Daniel Bleikamp.

Undergraduate education in the Division of Theatre reflects a commitment to the rigorous study of theatre within a liberal arts context. To this end, undergraduate theatre majors pursue coursework not only in theatre, but also in the social and natural sciences, literature, the arts and humanities, and other areas of human culture and experience. A faculty adviser works closely with each student to develop a program of study best suited to the individual's needs and career goals. In addition, the Division of Theatre presents an annual season of public productions chosen for their timeliness, public appeal and suitability for training. Practical experience in all areas of theatre operation is considered a vital part of the educational program.

Instructional Facilities

The Division of Theatre is housed in the well-equipped facilities of the Meadows School of the Arts. These facilities include the Greer Garson Theatre (a 380-seat theatre with a classical thrust stage), the Bob Hope Theatre (a 400-seat proscenium theatre), the Margo Jones Theatre (a 125-seat "black box" theatre), the Hamon Arts Library and numerous rehearsal studios.

Admission

Prospective theatre majors at SMU are admitted by audition and interview. All prospective students prepare an audition, consisting of two contrasting monologues and a song. Candidates may also be asked to demonstrate improvisational skills. Students seeking admission into the B.F.A. in Theatre Studies program may also be asked to demonstrate ability in their particular area of interest by supplying writing samples, portfolio materials, etc. Admission to the major requires both admission to SMU and admission through the theatre audition process.

Transfer Students. Admission procedures for applicants seeking to transfer from other schools are the same as those for first-year applicants. Transfer students may begin work only in the fall term.

Evaluation of Progress and Artistic Growth

Students must continually demonstrate a high order of talent and commitment in both class work and production work to progress in the curriculum. At the end of each term, the faculty of the Division of Theatre evaluates each student's progress, examining all aspects of a student's academic and production participation.

Every student meets with the faculty to receive this evaluation. An unsatisfactory evaluation is accompanied by the reasons for this evaluation and the terms for continuation in the program. An unsatisfactory evaluation may also result in a student's immediate dismissal from the program.

Degrees and Programs of Study

The Division of Theatre offers the B.F.A. degree in theatre with a specialization in theatre studies, and the B.F.A. degree in theatre with a specialization in acting.

Bachelor of Fine Arts in Theatre With a Specialization in Theatre Studies

The B.F.A. degree in theatre with a specialization in theatre studies reflects a commitment to theatre training within the context of liberal education. Based on the division's philosophy that an understanding of and experience with the actor's process are essential to education and training in all areas of theatre, all undergraduate theatre majors focus on foundational actor training during the first two years of their program of study. Focused study in one area of theatre, chosen from directing, playwriting, stage management, critical studies and design, is required to complete the major. With the approval of the student's theatre adviser and the chair of the division, this emphasis may be individualized to suit the specific goals of the student. All theatre studies students must complete at least 12 hours of upper-level courses among those offered in directing, playwriting, stage management, critical studies or design.

Requirements for the Specialization	*Credit Hours*
UC/GEC Requirements	varies
Dramatic Arts	6
THEA 1303, 1304	
Practica/Crews	9
THEA 2140/2240, 2141/2241, 2142/2242	
Acting	6
THEA 2303, 2304	
Voice	6
THEA 2305, 2306	
Movement	6
THEA 2307, 2308	
Theatre and Drama History	6
THEA 3381, 3382	
Text Analysis, Stage Management	6
THEA 2322, 2361	
Emphasis Courses	12
Emphasis on directing, playwriting, stage management, design, or critical studies.	
Theatre Electives	17
Community Experience	0–1
MSA 1001 *or* 1101	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

GEC students are required to complete a minimum of 123 term credit hours, and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.

Bachelor of Fine Arts in Theatre With a Specialization in Acting

The B.F.A. degree in theatre with a specialization in acting is a unique program of specialized acting study within a liberal arts context. Enriched by the intellectual growth engendered by both their liberal arts and theatre courses, acting students engage in an intense investigation of acting at the highest level. The purpose of the program is two-fold: to prepare students for 1) entrance into the profession, and/or 2) admission to a top-flight, graduate training program. Upon completion of two years of foundational actor training, students in the acting major receive advanced training in the areas of acting, stage movement and stage voice.

Requirements for the Specialization	*Credit Hours*
UC/GEC Requirements	varies
Dramatic Arts	6
THEA 1303, 1304	
Practica/Crews	9
THEA 2140/2240, 2141/2241, 2142/2242	
Acting	18
THEA 2303, 2304, 3303, 3304, 4303, 4304	
Voice	14
THEA 2305, 2306, 3305, 3306, 4105, 4106	
Movement	14
THEA 2307, 2308, 3207, 3208, 4207, 4208	
Theatre and Drama History	6
THEA 3381, 3382	
Text Analysis, Stage Management and Business Aspects of Theatre	9
THEA 2322, 2361, 4309	
Community Experience	0–1
MSA 1001 *or* 1101	
Free Electives	
Hours vary as needed to meet University residency and degree requirements.	
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Notes

GEC students are required to complete a minimum of 123 term credit hours, and are exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.

The following classes are open to all students: THEA 1380, 2311, 2319, 2321, 3312–3314, 3316, 3318 3381–3382, 4373, 4381–4385, 5319. **Note:** There are no performance opportunities for nontheatre majors.

THEA 1303 (3), 1304 (3). DRAMATIC ARTS TODAY. An introduction to theatre and performance for entering theatre majors. Considers basic artistic concepts, disciplines, and vocabulary common to this program, providing an elementary foundation in theatre with an emphasis on acting.

THEA 1380 (3). MIRROR OF THE AGE. Introduction to theatre emphasizing the role of the audience in the experience of performance. Semiotic and communications models are used to explore the dynamic interaction and changing relationship between performance, audience and society. Theatre-going experiences are discussed and analyzed.

THEA 2101 (1). DIRECTED STUDY. Directed study courses are not required and are taken only as needed; form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 2140 (1). LIGHT RUNNING/CONSTRUCTION CREW. Practical application of skills and knowledge studied in THEA 2240 to the mounting and running of a theatrical production; involves either serving on the running crew of a Division production or completing 65 hours of work mounting a production. Theatre majors should complete this course by the end of the junior year. Departmental approval required for nonmajors. Must be taken concurrently with or subsequent to completion of THEA 2240.

THEA 2141 (1). SCENE RUNNING/CONSTRUCTION CREW. Practical application of skills and knowledge studied in THEA 2241 to the mounting and running of a theatrical production; involves either serving on the running crew of a Division production or completing 65 hours of work mounting a production. Theatre majors should complete this course by the end of the junior year. Departmental approval required for nonmajors. Must be taken concurrently with or subsequent to completion of THEA 2241.

THEA 2142 (1). COSTUME RUNNING/CONSTRUCTION CREW. Practical application of skills and knowledge studied in THEA 2242 to the mounting and running of a theatrical production; involves either serving on the running crew of a Division production or completing 65 hours of work mounting a production. Theatre majors should complete this course by the end of the junior year. Departmental approval required for nonmajors. Must be taken concurrently with or subsequent to completion of THEA 2242.

THEA 2201 (2). DIRECTED STUDY. Directed study courses are not required and are taken only as needed; form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 2240 (2). LIGHTING PRACTICUM. An introduction to the backstage crafts of theatrical lighting intended to give the student a broad understanding of the basic principles and technical procedures used in the design of lighting. Fifty-hour lab required. Departmental approval required for nonmajors.

THEA 2241 (2). SCENERY PRACTICUM. An introduction to the backstage crafts of theatrical scenery intended to give the student a broad understanding of the basic principles and technical procedures used in the design of scenery. Fifty-hour lab required. Departmental approval required for nonmajors.

THEA 2242 (2). COSTUME PRACTICUM. An introduction to the backstage crafts of theatrical costume intended to give the student a broad understanding of the basic principles and technical procedures used in the design of costumes. Fifty-hour lab required. Departmental approval required for nonmajors.

THEA 2271 (2), 2272 (2), 2273 (2), 2274 (2), 2275 (2), 2276 (2), 2277 (2), 2278 (2). TECHNICAL THEATRE LABORATORY. Various workshops are structured to introduce students to a broad range of technical experience. Subject matter may include properties design

and construction, audio design for performing arts, advanced electrics, costume construction, scenic construction for film and television.

THEA 2301 (3). DIRECTED STUDY. Directed study courses are not required and are taken only as needed; form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 2303 (3). ACTING 1. Exploration of the actor's imagination and the nature of acting, embracing training concepts of ease, honesty, sense memory, and concentration.

THEA 2304 (3). ACTING 2. Beginning script work, in which the actor learns to analyze a scene for its events and to particularize these events in a series of expressive action tasks. Sophomore course. *Prerequisite:* THEA 2303.

THEA 2305 (3). VOICE FOR THE STAGE 1. Employing body awareness, modified yoga positions, and a variety of isolated physical actions, students deepen their experience of breath, impulse, and vibration. This process of freeing the vocal mechanism allows students to practice ease and efficiency of vocal release and to begin to make acting choices that are self-revealing. General patterns of self-editing and an initial expansion of the actor's range and flexibility in performance are addressed.

THEA 2306 (3). VOICE FOR THE STAGE 2. Students continue to practice ease and efficiency of vocal release and deepen their ability to make acting choices that are self-revealing. Vocal power, flexibility, and efficiency are enhanced and refined. Students are introduced to phonetic information and begin to execute detailed speech actions.

THEA 2307 (3). MOVEMENT 1. Teaches students to individuate internal energies of the body; to use these energies to move the body to create precise statuary mime for the stage; and to begin to synthesize physical listening skills for ensemble acting. Skills taught include juggling, Hatha yoga, corporal mime, illusionistic pantomime, Tai Chi Ch'uan, and the improvising of mime pieces.

THEA 2308 (3). MOVEMENT 2. Increases students' physical listening skills and practices these in unarmed stage combat. Skills taught include T'ui Sh'uo, Chi Sao, foil fencing (left and right), French sabre, Kung-fu animals, and conventions of unarmed stage combat. *Prerequisite:* THEA 2307.

THEA 2311 (3). THE ART OF ACTING. Basic work in acting, voice, and movement for the nonmajor. Relaxation, concentration, imagination, and the actor's exploration and use of the social world.

THEA 2319/MSA 3325 (3). FASHION HISTORY AND CULTURE. How and why does what we wear tell us who we are? A study of clothing: its role in and reflection of various historical cultures, including the relationship between fashion, art, architecture, and the decorative arts of selected time periods. For majors and nonmajors. No prerequisites.

THEA 2321 (3). SPECTACLE OF PERFORMANCE. Ever wonder how they do that? Spectacle is part of our life and culture. Students learn to deconstruct spectacle and analyze its influence upon themselves and society at large. Go backstage to experience firsthand how effects are achieved. Students are required to attend performances in a wide range of live venues and discuss what they observe, enabling them to view performance on a critical level. For majors and nonmajors. No prerequisites.

THEA 2322 (3). TEXT ANALYSIS. Text Analysis aids first-year student in the skills necessary to read a play as an actor, a director, a playwright, a designer, and a student of drama; as such, it is an essential foundation step in the major. The course explores key styles and genres of dramatic literature and allows students to become familiar with important texts in the development of theatre. The class will focus on a balance of lecture and discussion, and assignments will include reading, written papers, and text-based exercises. Guest lecturers from the faculty will provide perspective on different areas of theatre production.

THEA 2333 (3). TECHNICAL DRAWING FOR THE THEATRE. Principles and practice in the techniques of drafting traditional and nontraditional types of stage scenery. Students will learn how to prepare and present construction and detail drawings for use in a scene, prop or electric shop.

THEA 2361 (3). INTRODUCTION TO STAGE MANAGEMENT. An exploration of the methods and techniques of theatrical stage management, including preproduction planning, scheduling, and conducting rehearsals and performances. Assignments are both theoretical and practical. Permission of instructor required for nonmajors and first-year students.

THEA 2371 (3). THEATRE TECHNOLOGY 1: LIGHTING MECHANICS. Basic principles of stage lighting design are introduced, including the mechanics and optics of lighting instruments, electrical theory and practices, control systems, basic design concepts, and color theory. Controllable qualities of light are investigated and demonstrated through the student's participation on a lighting crew for a department production. Students are expected to provide appropriate materials as needed.

THEA 2372 (3). THEATRE TECHNOLOGY 2: COSTUME CONSTRUCTION TECHNIQUES. The course introduces the student to basic costume patterning and construction methods. The student will not only study draping, drafting, and flat-patterning, but will also learn terminology, equipment usage, and the skills necessary to the entire costuming process. Students are expected to provide appropriate materials as needed.

THEA 2373 (3). THEATRE TECHNOLOGY 3: STAGECRAFT. Introduction to the organization of the scene shop, tool maintenance and usage, construction techniques, technical drawing development, computer applications, rigging, time and material budgeting. Students will complete class projects and work on Meadows School of the Arts stage productions. Students are expected to provide appropriate materials as needed.

THEA 2374 (3). THEATRE TECHNOLOGY 4: INTRODUCTION TO THEATRICAL SOUND. Introduction to the organization of the sound studio, maintenance and usage of equipment, recording techniques, and computer applications. Students will complete class projects and work on Meadows School of the Arts stage productions. Students are expected to provide appropriate materials as needed.

THEA 3201 (2). THEATRE PRACTICUM. Independent work with theatre faculty on a specific topic chosen by the student.

THEA 3207 (2). MOVEMENT 3. Teaches extension of energy and physical listening skills. Skills taught include quarterstaff, rapier and dagger, court sword, and broad sword. *Prerequisite:* THEA 2308.

THEA 3208 (2). MOVEMENT 4. Allows the student to process personal experience into the movement and sound of a character. Skills taught include clowning, LeCoq figures, and neutral mask. *Prerequisite:* THEA 3207.

THEA 3301 (3), 3302 (3). DIRECTED STUDY. Directed study courses are not required and are taken only as needed; form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 3303 (3). ACTING 3. A synthesis of first- and second-year work to the end of an individual system by which actors approach the presentation of characters through their ability to present themselves effectively. *Prerequisite:* THEA 2302.

THEA 3304 (3). ACTING 4. Continuation and extension of THEA 3303, consisting of special projects in characterization studies. *Prerequisite:* THEA 3303.

THEA 3305 (3). VOICE FOR THE STAGE 3. Students refine their ability to execute detailed speech actions and identify specific phonetic changes using the International Phonetic Alphabet. Vocal power, flexibility, and malleability are enhanced. The application of voice and speech actions to heightened language and stakes in a scene is practiced and refined.

THEA 3306 (3). VOICE FOR THE STAGE 4. Vocal power, flexibility, and expressive capability are practiced in a variety of space configurations. Students refine their ability to execute detailed speech actions and identify specific phonetic changes using the phonetic alphabet. The application of voice and speech actions to accents and dialects is practiced and refined.

THEA 3307 (3). TOPICS IN THEATRE: PLAYWRITING. This course will be conducted in a workshop structure. Led by a distinguished guest artist, each student playwright will spend the duration of the course developing and refining a short play. Student actors will conduct daily reading of each play, led by a director, and take part in discussion with the playwrights and

director intended to assist the playwright in the development of his/her play. The course will culminate with a public reading of the student written plays.

THEA 3310 (3). SPECIAL TOPICS IN THEATRE. Topics pertinent to theatre performance. Subjects vary from semester to semester, and may include acting, voice and movement.

THEA 3311 (3). ACTING FOR SINGERS AND DANCERS. Advanced work in acting, voice, and movement built upon the foundational performance and presentation skills required for singing and dancing. Focus is on scene study intended to reinforce the actor's development of a method of text analysis as an entry to a tactical approach (objective, obstacle, action) to acting and to facilitate the integration of text analysis and self-use as a process to create an emotionally honest, powerful, and effective moment of dramatic action on the stage. For dance majors and music vocal performance majors only. *Prerequisite:* Permission of instructor.

THEA 3312 (3). SCENE STUDY FOR NON-MAJORS. The course will have two fundamental objectives: 1. To facilitate each actor's exploration of his/her full range and complexity of imaginative, intellectual, emotional and experiential life and to facilitate each actor's access to these elements of self as useful tools of creative expression. 2. To reinforce the actor's development of a method of text analysis as an entry to a tactical approach (objective, obstacle, action) to acting and to facilitate the integration of text analysis and self-use as a process to create an emotionally honest, powerful and effective moment of dramatic action on the stage. *Prerequisite:* Art of Acting or instructor permission.

THEA 3313 (3). INTRODUCTION TO DESIGN FOR THE THEATRE. An analytical study of stage design, including an introduction to the basic history, principles, and languages of stage design. The course will include text analysis, elements and principles of design, and critical discussion of current theatre productions. For majors and nonmajors. No prerequisites.

THEA 3314 (3). LIGHTING DESIGN: THEATRE, FILM, AND TELEVISION. An introduction to the practice of lighting design. Students will be required to study techniques, complete projects, and make presentations in the discipline.

THEA 3316 (3). SCENE DESIGN: THEATRE, FILM, AND TELEVISION. An introduction to the practice of scenic design. Students will be required to study techniques, complete projects, and makes presentations in the discipline.

THEA 3318 (3). COSTUME DESIGN: THEATRE, FILM, AND TELEVISION. An introduction to the practice of costume design. Students will be required to study techniques, complete projects, and make presentations in the discipline.

THEA 3319 (3). HISTORY OF DESIGN: FASHION, ARCHITECTURE, AND INTERIORS. A historical survey of fashion, interior design and architecture and how they relate to designing costumes and scenery for theatre, film, and television.

THEA 3321/THEA 5321 (3). TOPICS IN DESIGN 1: LIGHTING. This course presents approaches to lighting design and poses specific design problems for the student to solve. Attention is also given to color, composition, cueing and production through presentations and discussions in class. Students will participate in department productions as assistant designers and electricians. Students are expected to provide appropriate materials as needed.

THEA 3322 (3). TOPICS IN DESIGN 2: DIRECTOR–DESIGNER RELATIONSHIP. The course covers design metaphors, ground plans, and terminology. It also explores the director–designer relationship and the elements of design as they relate to theatrical space. Students are expected to provide appropriate materials as needed.

THEA 3323 (3). TOPICS IN DESIGN 3: COSTUME. Students develop an understanding of the basic principles of costume design used to create statements about a play and its characters. Lectures and class discussions prepare students to confront specific problems in design projects. Students are expected to provide appropriate materials as needed.

THEA 3324 (3). TOPICS IN DESIGN 4: SOUND. This course will introduce the basic principles of theatrical sound design and the practices and skills required to develop a production's sound design and supportive technical documentation. Students will be introduced to, system layout, effects development, source researching, and organization. The combined hands-on presentations and class assignments will allow students to develop a working knowledge of the sound designer's responsibilities and skills. Students are expected to provide appropriate materials as needed.

THEA 3331 (3). PLAYWRITING 1. Creative exploration in the development of performance scripts with emphasis on structural vocabularies of story, plot, character development, and dramatic action.

THEA 3332 (3). PLAYWRITING 2. Intermediate techniques of playwriting with emphasis on developing individual style and voice; writing one-act plays. *Prerequisite:* THEA 3331.

THEA 3341 (3). DIRECTING 1. Researching the history of designer/director relationships and creating and conceptualizing various approaches to texts, with a goal of achieving a working vocabulary in the collaborative language among theatre artists. The course culminates in a director/designer presentation and/or performance.

THEA 3342 (3). DIRECTING 2. Production styles and methodologies evidenced in the art of major modern directorial innovators. Directing projects required. *Prerequisites:* THEA 3341 and permission of instructor.

THEA 3357 (3). DESIGNING WITH COMPUTERS, STAGE PROJECTION. An exploration of the tools for computer image creation and their application. Software used includes, but is not limited to AutoCad, MiniCad and Adobe Photoshop.

THEA 3361 (3), 3362 (3). STAGE MANAGEMENT 1. Fuller explanation of the methods and techniques of theatrical stage management. *Prerequisite:* THEA 2361.

THEA 3371 (3). AUTOMATED LIGHTING 2. Students have the opportunity to work with Vari-Lite, Robe and Martin automated lighting fixtures while learning advanced programming skills.

THEA 3373 (3). DRAPING I. A study of pattern making that utilizes both the three dimensional approach of draping fabric on a dress form and drafting patterns by formula. Students will learn to drape a basic bodice, skirt, and collars. They will create a basic sleeve pattern by formula. They will manipulate these patterns to achieve a variety of shapes.

THEA 3374/THEA 5374 (3). DRAPING II. Period dress from a draping point of view.

THEA 3375 (3). THEATRE TECHNOLOGY 5: LIGHTING AUTOMATION. Advanced study in the field of automated lighting and control systems.

THEA 3376 (3). THEATRE TECHNOLOGY 6: ADVANCED COSTUME CONSTRUCTION TECHNIQUES. A continuation in the study of costume construction.

THEA 3377 (3). THEATRE TECHNOLOGY 7: ADVANCED STAGECRAFT. A continuation of stagecraft, students will explore advanced construction techniques, rigging, metal work, and the use of automation in scenery.

THEA 3378 (3). THEATRE TECHNOLOGY 8: ADVANCED TECHNIQUES IN SOUND. The use of sound to create an environment for a theatrical event will be explored. Students will complete a studio project and/or Meadows event.

THEA 3379/THEA 5379 (3). COMPUTER ASSISTED DESIGN I. Students learn the fundamentals of computer-assisted design, using VectorWorks and Spotlight, in application for the theatre. 2D work is emphasized. Some time will be spent on 3D work as well. Drafting, as such, will not be taught. It is assumed that the student has an understanding of mechanical drawing and its conventions. Focuses on how to apply that knowledge using a computer.

THEA 3380/THEA 5380 (3). COMPUTER ASSISTED DESIGN II. Using VectorWorks as the primary drafting software, focus of the class will be on modeling scenic and lighting designs, organization of the drawing layouts, rendering techniques and lighting specific CAD tools.

THEA 3381 (3). THEATRE AND DRAMA HISTORY 1. Examines key moments in the history of Western theatre and drama. Focuses on selected dramatic texts and their social and cultural contexts, and to the dynamic interaction and changing relationship between performance, audience and society as this is influenced by the advent of actors, playwrights, designers, and directors, and by changes in theatre architecture and the social definition of space.

THEA 3382 (3). THEATRE AND DRAMA HISTORY 2. Lecture, 3 hours. An examination of key moments in the history of Western theatre and drama. Particular attention is given to selected dramatic texts and their social and cultural contexts, and to the dynamic interaction and changing relationship between performance, audience and society as this is influenced by the advent of actors, playwrights, designers, and directors, and by changes in theatre architecture and the social definition of space.

THEA 4101 (1). DIRECTED STUDY. Directed study courses are not required and are taken only as needed. Their form and content are not predetermined. The student and the adviser

decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 4105 (1). VOICE FOR THE STAGE 5. A continuation of the voice curriculum to further enrich the actor's technique and address any outstanding issues in the work. The vocal workout keeps the actor in tune with his/her instrument while preparing to enter the profession. *Prerequisite:* Permission of instructor.

THEA 4106 (1). VOICE FOR THE STAGE 6. A continuation of the voice curriculum including the study of the International Phonetic Alphabet and dialect/accent work and the addition of specific skills for a variety of media. Cold reading skills, studio time and use of microphones, and commercial work for radio and television spots are addressed. *Prerequisite:* Permission of instructor.

THEA 4201 (1). DIRECTED STUDY. Directed study courses are not required and are taken only as needed. Their form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 4207 (2). MOVEMENT 5. Explores historical movement and dance, including selected dances, movements, and manners during the 16th–20th centuries, focusing on the embodiment of the style of those periods. Emphasis is placed on the dress, movement, and manners of the Renaissance and Classic Baroque periods. *Prerequisite:* Permission of instructor.

THEA 4208 (2). MOVEMENT 6. Physical self-study explored through mask work including Neutral Mask, the masks of the commedia dell'arte, Character Mask, and European Clown. The exploration begins with finding a physical neutral, moves through the playing of the stock masked commedia characters and their counterparts in plays by Shakespeare and Moliere, and culminates with finding one's own personal clown. *Prerequisite:* Permission of instructor.

THEA 4301 (3). DIRECTED STUDY. Directed study courses are not required and are taken only as needed. Their form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 4303 (3), 4304 (3). ACTING 5, 6. An actor's approach to classic texts through scene study, monologues, and lecture/demonstration. Focus on Shakespeare and his contemporaries.

THEA 4305 (3). VOICE FOR THE STAGE 5. Vocal power, flexibility, and transformation are practiced with a variety of textual demands. Actors work in character voice in scene work and presentations. Students refine their ability to execute detailed speech actions and identify specific phonetic changes using close phonetic transcription.

THEA 4306 (3). VOICE FOR THE STAGE 6. Vocal power, flexibility, and transformation are practiced with a variety of textual, character, and space demands. Students refine their ability to execute detailed speech actions and identify specific phonetic changes using close phonetic transcription. Students prepare a solo performance employing the skills they have learned in the entire sequence of training.

THEA 4309 (3). BUSINESS AND PROFESSIONAL ASPECTS OF THEATRE. A preparation for graduating actors that includes compiling resumes, photographs, use of cold readings, monologues, and scene work with a variety of scripts for repertory or summer theatre casting.

THEA 4321 (3). ADVANCED SCENE STUDY. Designed for junior, senior and graduate theatre majors. Team taught by senior faculty. Text includes modern and contemporary dramatic literature. Objectives: 1. Through intensive exploration of the text, to reinforce the actor's development of a method of text analysis as an entry to a tactical approach to acting. 2. Through the employment of improvisational techniques and other exercises, to facilitate each actor's exploration of his/her full range and complexity of imaginative, intellectual, emotional and experiential life and to facilitate each actor's access to these elements of self as useful tools of creative expression. 3. To facilitate the integration of text analysis and self-use as a process to create an emotionally honest, powerful and effective moment of dramatic action on the stage.

THEA 4331 (3). PLAYWRITING 3. Advanced work in the development of performance scripts for the stage, with emphasis on full-length works. *Prerequisite:* THEA 3332.

THEA 4332 (3). PLAYWRITING IV. Advanced techniques of writing for the stage, including rehearsal and performance or produced theatrical event. Focuses on professional aspects of playwriting. *Prerequisite:* THEA 4331.

THEA 4341 (3). DIRECTING 3. Advanced project studies in stage direction, with emphasis on the interplay between director and other artistic collaborators (playwrights and/or designers). *Prerequisites:* THEA 3342 and permission of instructor.

THEA 4342 (3). DIRECTING 4. Advanced techniques in the interpretation of established dramatic literature and/or creation of original work for the stage. Emphasis on collaboration between director and playwright. This course is for the student seriously considering directing as a career. Time will be spent on exploring professional career choices for the young director. *Prerequisites:* THEA 4341 and permission of instructor.

THEA 4357 (3). DESIGNING WITH COMPUTERS: STAGE PROJECTION. Working with the tools necessary to create projected scenery, students learn the fundamentals of creating projected images for the stage.

THEA 4361 (3), 4362 (3). STAGE MANAGEMENT 2. Fuller explanation of the methods and techniques of theatrical stage management. *Prerequisite:* THEA 3361, 3362.

THEA 4363 (3). PRODUCTION MANAGEMENT. This course will introduce students to the role of the production manager for live entertainment. Budgeting, scheduling, and the business aspects of the manager will be discussed.

THEA 4373 (3). CREATIVE DRAMATICS. Creative problem-solving using the medium of improvisational theatre. Develops spontaneity and a sense of humor. *Prerequisite:* Permission of instructor.

THEA 4376 (3). LIGHTING AUTOMATION I. This course presents approaches to lighting design and poses specific design problems for the students to solve. Attention is also given to color composition, queuing and production values. The course will focus on Vari-Lite, Robe and Martin experimentation.

THEA 4381/CF 3377 (3), 4382/CF 3382 (3), 4383 (3), 4384 (3). STUDIES IN THEATRE, DRAMA, AND PERFORMANCE. An examination of selected topics in theatre, drama, and performance. Texts, topics, and critical approaches vary.

THEA 4385 (3). STUDIES: THEATRE, DRAMA, PERFORMANCE. A senior-level, interdisciplinary seminar that examines cultural production through the media of art, architecture, dramaturgy, festival and theatre.

THEA 4386/CFA 3386 (3). EUROPEAN THEATRE 1879–1953. A survey of major figures and movements in European theatre beginning with the premiere of Ibsen's *A Doll's House* and culminating with the premiere of Beckett's *Waiting for Godot*.

THEA 4387 (3). ART AND DRAMA IN CLASSICAL ATHENS. This undergraduate seminar is an intensive reading and discussion course focused on the relationships between the visual arts and dramatic performances as seen against the historical background of golden-age Athens during the fifth century B.C.

THEA 4491 (4), 4492 (4). SPECIAL PROJECT 1, 2. This course serves to bring together three years of class work, shop/studio experience and growth to give each student a meaningful and challenging hands of leadership experience in either the design or technical area.

THEA 4493 (4), 4494 (4). SUMMER THEATRE WORKSHOP 1, 2. Students may engage in summer theatre work and gain credit toward degree completion. Enrollment and class credit approval must be obtained from the chair of the Division of Theatre and the program head.

THEA 5001 (0), 5002 (0), 5003 (0), 5004 (0). DESIGN LABORATORY I, II, III, IV. Exploration of techniques in advanced design.

THEA 5101 (1), 5201 (2). DIRECTED STUDY. Directed study courses are not required and are taken only as needed. Their form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 5205 (2), 5206 (2). MOVEMENT I, II. Exploration of the actor's self through immersion in physical skills for the theatre, including T'ai Chi Ch'uan, corporal mime, improvisation, juggling, hatha yoga, unarmed stage combat, animal-style wu-shu, and foil fencing.

THEA 5207 (2), 5208 (2). VOICE FOR THE STAGE I, II. A series of progressive exercises/experiences designed to introduce basic principles of physical, vocal, and imaginative freedom, encouraging the removal of psychophysical barriers to sound production, and developing the voice's sensitivity to impulse, power, flexibility, and range. Organic exploration of sounds of speech, using IPA pillows and sound and movement improvisations. Text work includes development of self-scripted solo pieces, exploration of poetry and song, and the application of voice work to modern dramatic texts.

THEA 5209 (2), 5210 (2). APPLIED MOVEMENT I, II. Body work as it pertains to economy of movement, alignment, proper use, kinesthetic awareness, strength, flexibility, and freeing the physical instrument. This course includes acrobatics, the Lecoq 20 movements, and Neutral Mask, as well as physicalization of text, improvisation, and ensemble projects employing the physical work investigated throughout the term.

THEA 5221 (2), 5222 (2). SCENE DESIGN I, II. An introductory course for designers focusing on the communication skills (visual and verbal) necessary for collaborating with the director and the other artists in the theatre. Included is a design seminar that explores the text relative to its literary, musical, social, and historical influences.

THEA 5223 (2), 5224 (2). COSTUME DESIGN I, II. An introductory course for designers with emphasis on the application of design principles and the use of research materials.

THEA 5226 (2). LIGHTING DESIGN II. Fundamentals of learning how to see, exploring the mind's eye, and painting with light. How to translate theatrical moments and music into lighting sketches, story boards, and atmospheres. Developing points of view and approaches. Also, fundamentals of the tools of the lighting designer and assistant skills and techniques.

THEA 5241 (2). COLLABORATION: DIRECTORS AND DESIGNERS. Team taught by directing and design faculty, this course emphasizes the building of a collaborative process among theatre artists. Students research historical collaborative relationships, create and conceptualize approaches to various texts, and familiarize themselves with the approaches of artists currently working in the theatre.

THEA 5258 (2). ADVANCED DESIGNING WITH COMPUTERS. A continuation of the exploration of tools for computer image creation and their applications. Software used includes, but is not limited to, AutoCad, MiniCad, and Adobe Photoshop.

THEA 5259 (2). ADVANCED DESIGN SKILLS. Students learn advanced skills in theatrical design practice. Topics include hand drafting, theatrical model-making, set sketching, fashion illustration, introduction to textiles, and digital tablet drawing.

THEA 5301 (3). DIRECTED STUDY. Directed study courses are not required and are taken only as needed. Their form and content are not predetermined. The student and the adviser decide what kind of activity or learning experience should occur. Before the end of the add-drop period, the student must arrange the course content and grading basis with the supervising faculty. Numbers are assigned to the student's year status rather than by the subject matter.

THEA 5303 (3), 5304 (3). ACTING I, II. Focuses on defining a fundamental acting process. Stress is placed on the identification of behavioral blocks, channeling impulses into uncluttered and organic psychophysical connections, and using the text as a blueprint for action. Courses combine a mix of exercise, improvisation and scene study with materials drawn from modern American Realism as well as the early Modernist plays of Ibsen, Strindberg, and Chekhov.

THEA 5319 (3). HISTORY OF DESIGN. How and why do elements of design describe a culture? A study of design elements and their role in various historical cultures, including the relationship between fashion, art, architecture, and the decorative arts of selected time periods. For majors and nonmajors. No prerequisites.

THEA 5321/THEA 3321 (3). TOPICS IN DESIGN I: LIGHTING. This course presents approaches to lighting design and poses specific design problems for the student to solve. Attention is also given to color composition, queuing and production values. The course will focus on Vari-Lite, Robe and Martin experimentation.

THEA 5351 (3), 5352 (3). SCENE DESIGN III, IV. A continuation of the study of scene design incorporating individual class projects with the intensive study of style and genre.

THEA 5353 (3), 5354 (3). COSTUME DESIGN III, IV. An intermediate course with emphasis on play analysis, character relationships, and techniques of presentation.

THEA 5355 (3), 5356 (3). LIGHTING DESIGN III, IV. Continued study in the art of lighting design. Advanced atmosphere creation, professional techniques, and specialized approaches are explored. Professional assistantships are assigned to selected students.

THEA 5357 (3). DESIGNING WITH COMPUTERS: STAGE PHOTOGRAPHY. An exploration of the tools for computer image creation and their applications. Software used includes, but is not limited to, AutoCad, MiniCad, and Adobe Photoshop.

THEA 5371 (3). AUTOMATED LIGHTING 2. Students have the opportunity to work with Vari-Lite, Robe and Martin automated lighting fixtures while learning advanced programming skills.

THEA 5373 (3). DRAPING I. A study of pattern making that utilizes both the three dimensional approach of draping fabric on a dress form and drafting patterns by formula. Students will learn to drape a basic bodice, skirt and collars. They will create a basic sleeve pattern by formula. They will manipulate these patterns to achieve a variety of shapes.

THEA 5374/THEA 3374 (3). DRAPING II. Period dress from a draping point of view.

THEA 5375 (3). THEATRE TECHNOLOGY 5: LIGHTING AUTOMATION. Advanced studies in the field of automated lighting and control systems. Students will explore top brands of intelligent lighting equipment, learning to program and provide simple repair and upkeep of equipment.

THEA 5379/THEA 3379 (3). COMPUTER ASSISTED DESIGN I. Students will learn the fundamentals of computer-assisted design, using VectorWorks and Spotlight, in application for the theatre. 2D works will be emphasized. Some time will be spent on 3D works as well. It is assumed that the student has an understanding of mechanical drawing and its conventions. The course will focus on how to apply that knowledge using a computer.

THEA 5380/THEA 3380 (3). COMPUTER ASSISTED DESIGN II. Using VectorWorks as the primary drafting software, focus of the class will be on modeling scenic and lighting designs, organization of the drawing layouts, rendering techniques and lighting specific CAD tools.

THEA 5398 (3), 5399 (3). PRODUCTION RESEARCH AND DEVELOPMENT I, II. Script analysis, background research, and performance design for actors, designers, and directors.

SIMMONS SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT

GENERAL INFORMATION

The Annette Caldwell Simmons School of Education and Human Development comprises research institutes, undergraduate and graduate programs, and community enrichment centers that concern the areas of professional education, dispute resolution, counseling, applied physiology, sport management, personal responsibility and wellness, and liberal studies. The mission of the school is to integrate the theory, research and practice of education and human development; to promote academic rigor and interdisciplinary study; to educate students for initial certification and professional practice; and to nurture collaboration across the academic community.

Undergraduate programs include a major and three minors in applied physiology and sport management and a minor in education. The school offers one doctoral program, nine Master's degrees and a number of graduate certification programs. Its academic departments include Teaching and Learning; Applied Physiology, Sport Management and Wellness; Education Policy and Leadership; and Dispute Resolution and Counseling.

The school is housed in Simmons Hall, which is one of several LEED-certified buildings on campus. Key features include an exercise physiology and biomechanics laboratory equipped with teaching pods, a data acquisition system, and an environmental research chamber.

The **Department of Teaching and Learning** represents SMU's commitment to the professional development of educators through innovative and research-based undergraduate and graduate programs. The department's teaching and research practices are grounded in multiple perspectives that encompass behaviorist, cognitive, social-constructivist and sociocultural approaches to scholarship. All Teaching and Learning programs serve to prepare educators who are scholars and leaders in professionalism and experts in differentiated instruction and who are committed to high-quality teaching and able to translate research into practice. The department's undergraduate curriculum prepares students for initial teacher certification. Graduate programs – which include a Ph.D., Master's degrees and graduate-level certifications – focus on research, literacy and language acquisition, teaching and learning, special education, giftedness, bilingual education, mathematics, science, and technology. A variety of enrichment opportunities serve the continuing education needs of practicing educators. The school promotes high-quality research that combines quantitative and qualitative methodologies, generates new hypotheses, and influences pedagogical practices in early childhood (or "EC") through grade 12 schools. The department's research efforts are supported by the Institute for Evidence-Based Education, one of the most productive literacy research centers in the nation; the institute performs research concerning reading and reading disabilities, language acquisition, and teaching and learning. The Gifted Students Institute, which also resides within the department, was founded on the premise that "giftedness" is a resource that should be nurtured for the benefit of all; it focuses on professional development for teachers and is an integral part of the department's work on differentiated instruction.

The **Department of Applied Physiology, Sport Management and Wellness** offers undergraduate and graduate programs. Its undergraduate programs include a major and three minors in applied physiology and sport management. Its graduate programs include an M.S. in sport management and a Ph.D. in education, with an emphasis in applied physiology. The department also offers the personal responsibility and wellness courses that are required of all undergraduate students as part of the University Curriculum, and a selection of sports and fitness activity courses are available as electives. The undergraduate and graduate programs have access to the department's two laboratories: the exercise physiology and biomechanics laboratory, which is housed within Simmons Hall, and the Locomotor Performance Laboratory, which specializes in terrestrial locomotion and in relating muscle function to metabolic energy expenditure and performance.

The **Department of Education Policy and Leadership** focuses on preparing educators for leadership roles in complex educational settings, including colleges and universities. Coursework and systematic applications of knowledge are designed to ensure that the education leaders of tomorrow are able to develop and support effective teachers and other education service providers; to select and implement effective curricula and instructional programs; and to identify, implement and sustain effective organizational practices to ensure high levels of student learning and achievement. In service to this mission, the department offers the following Master of Education degrees: an M.Ed. in accelerated school leadership, an M.Ed. in educational leadership with a specialization in higher education and an M.Ed. in educational leadership with a specialization in urban school leadership. The department is also dedicated to the preparation and continued education of education policy leaders; to the promotion of research, development and analysis; and to the translation of research into policy and practice at the local, state, national and international levels.

The **Department of Dispute Resolution and Counseling** offers an M.S. in counseling, an M.A. in dispute resolution and a graduate certificate in dispute resolution, all of which draw on social and behavioral science theories to teach the communication skills necessary for the resolution of personal and interpersonal conflicts. Additionally, the department operates two community resource centers: the SMU Mediation Center and the Center for Family Counseling.

DEPARTMENT OF TEACHING AND LEARNING

www.smu.edu/teacher

Professor Jill Allor, **Department Chair**

Professors: Stephanie Al Otaiba, David J. Chard, Patricia Mathes, Paul Yovanoff. **Associate Professors:** Deborah Diffily, William Pulte, Ken Springer, Paige Ware. **Assistant Professors:** Doris Baker, Anne Garrison, Candace Walkington. **Clinical Associate Professors:** Abigail Bartoshesky, Barbara Morganfield. **Clinical Assistant Professors:** Ann Batenburg, Julia Bore, Sherril English, Caroline Kethley, Nancy Montgomery, Nancy Roberts, Dara Williams-Rossi. **Lecturer:** Karen Vickery. **Research Professors:** Charles Knibb, Hector Rivera, Beverly Weiser, Moses Williams.

Home to undergraduate, postbaccalaureate and graduate programs for both aspiring and practicing educators, the Department of Teaching and Learning offers students a comprehensive curriculum of theory, research, cross-disciplinary studies and practica. Undergraduate programs of study assist students in obtaining credentials for teaching in elementary, secondary or all-level (grades EC–12) settings. At the graduate level, a student may pursue a Ph.D., an M.Ed., an M.Ed. with certification, a Master of Bilingual Education, an M.Ed. in reading and writing, an M.Ed. in special education, or a Master of Music in music education, as well as other credentials in areas such as gifted education, special education, reading, mathematics, science, technology, bilingual education, English as a second language and learning therapy.

Undergraduate Teacher Certification

Clinical Assistant Professor Dara Williams-Rossi, **Director**

The Department of Teaching and Learning offers courses that prepare students for teacher certification at the elementary and secondary levels: EC through grade six, grades four through eight (middle school) and grades eight through 12 (high school). All of the courses in the program of study are based on the Texas standards for beginning teachers. Undergraduate students pursuing an approved academic major in the Dedman College of Humanities and Sciences, Cox School of Business, Lyle School of Engineering, or Meadows School of the Arts may seek Texas teacher certification and pursue a minor in education from the Simmons School. Music education students work toward an all-level (grades EC–12) certificate. Those who have already earned a Bachelor's degree may obtain teacher certification credentials through the postbaccalaureate program, which essentially mirrors the undergraduate program. Postbaccalaureate students seeking certification for grades four through eight or grades eight through 12 must have 24 hours of coursework in the subject area in which they plan to seek certification, with at least 12 of the 24 hours being upper-division courses. Postbaccalaureate students seeking certification for EC through grade six or grades four through eight must have 24 content hours of coursework, with six hours in each of the following: English, math, science and social studies.

Each student in a certification program has an education adviser who directs his/her program of study. The education adviser is committed to mentoring and supporting student learning. Students are expected to maintain high levels of performance and to develop habits of reflection as they acquire knowledge and skills of practice.

The program of study includes 24 credit hours of education coursework and six hours of student-teaching or internship experience in the three elementary and

secondary certification programs: EC through grade six, grades four through eight (middle school) and grades eight through 12 (high school). Students must complete the 24 credit hours of coursework required for teacher certification preparation in order to complete a minor in elementary teaching or secondary teaching.

Requirements for Admission to the Teacher Education Program. Undergraduate students apply for formal admission to the program. When they apply, they must submit a transcript, an essay, a recommendation, and appropriate Texas Higher Education Assessment or other test scores; in addition, they must complete a background check and a State of Texas Character and Dispositions Statement. Students must complete at least 45 hours of academic work with a GPA of at least 2.500 to be considered for admission. For those applying for grades EC through six or grades four through eight, the academic work must include at least three credit hours each in English, math, social studies and science, with no grade lower than a *C* (2.000); for those applying for high school, the academic work must include at least 12 credit hours in a declared teaching field major, with no grade lower than a *C* (2.000). Applicants also interview with an adviser. Students may register for up to seven hours of EDU coursework (usually, EDU 2350, 5327 and 5121/5124) before formally applying for admission to the program. EDU 2350 is a prerequisite for undergraduates enrolling in the certification program. Applications for admission to the teacher education program may be obtained from the advising office in suite 135, Annette Caldwell Simmons Hall.

Courses. All of the courses in the program of study are based on the Texas standards for beginning teachers. Students in the EC through grade six certification program must have completed MATH 1305 and PLSC 3387 with a *C* (2.000) or better. The classroom-based coursework can be completed in two regular terms, such as fall and spring. Professors model learning experiences that are considered best practices for all learners in these courses. Students are expected to work collaboratively in small groups, complete simulated teacher tasks, pose questions for class inquiry and use multiple resources to answer questions.

Field Experience and Student Teaching. The teacher education program includes extensive field experience to help students prepare for careers in teaching. A personal/criminal background check is required prior to field experience and student teaching. The student progresses from observational activities in classrooms to teaching and learning practice sessions in early field experiences with individual students and small groups. Finally, during student teaching, the student assumes responsibility for an entire classroom in a carefully managed student-teaching experience. SMU students receive mentoring from faculty members noted for their exemplary records as both master teachers and scholars. Exemplary teachers from inner city to suburban settings also act as coaches during the field experience. Part of the field experience comes in the form of either a one-term student-teaching experience or a two-term internship. During the one-term experience, students work with an experienced teacher full-time for 15 weeks in an assigned classroom in a preapproved Dallas-area public, private or charter school. During this student-teaching term, the student-teaching experience, which is six credit hours, is regarded as full-time enrollment status at SMU for insurance purposes. Students receiving financial aid should meet with financial aid counselors in advance of the student-teaching term to determine aid status. Student teaching ensures that graduates of the SMU teacher education program are better able to enter the teaching profession ready to meet the dynamic learning needs of today's youth.

Eligibility for Student Teaching. Before being assigned to student teaching, candidates are reviewed by the faculty to determine whether adequate progress has been made in order to assume responsibility for school-age students. Such factors as academic performance, maturity and a demonstrated sense of responsibility are considered. Students must have a 3.000 GPA in all education courses before beginning student teaching, and all qualifiers must be passed prior to the student-teaching/internship experience.

Recommendation for Certification. Before the Department of Teaching and Learning will recommend a student for certification, the following requirements must be fulfilled: 24 hours of coursework, six hours of a satisfactory student-teaching or internship experience, and passing scores on two Texas Examinations of Educator Standards tests. The two TExES tests for grades EC through six include the EC–12 Pedagogy and Professional Responsibilities Test and the EC through grade six Generalist Test. Students preparing for teaching in fourth through eighth grade middle schools must pass the EC-12 Pedagogy and Professional Responsibilities Test and the fourth through eighth grade Generalist Test. Students preparing for teaching in high schools must pass the TExES Pedagogy and Professional Responsibilities Test for grades EC–12 and a TExES test in their content area. Music students must pass the music content test and the EC–12 Pedagogy and Professional Responsibility Test.

TExES Exam. All students seeking teacher certification are required to take and pass the state-mandated TExES exams in the desired area(s) of certification. In preparation for the TExES, students are required to take and successfully pass an SMU qualifying test. Students must attend preparation debriefs and participate in an online preparation module. When a student does not pass the TExES qualifier, a faculty mentor will develop an individual plan of supplemental study to complement a retake of the TExES qualifier.

Further information regarding SMU's teacher preparation opportunities is available from the Department of Teaching and Learning, Southern Methodist University, 345 Simmons Hall, PO Box 750455, Dallas TX 75275-0455; phone 214-768-2346; www.smu.edu/teacher.

The Courses (EDU)

Early Childhood–Grade 6 Courses	EDU 2350, 5121–23, 5318, 5327, 5331, 5349, 5355, 5357–58, 5363–64, 5385–86
Middle (Grades 4–8) and High School (Grades 8–12) Courses and Certification Areas	EDU 2350, 5124–26, 5318, 5327, 5335, 5348–49, 5367, 5371, 5373–76
Elective Education Courses (These courses are not required by the state for teacher certification.)	EDU 2355, 3301, 4300

EDU 1099 (0). INTERNSHIP. This course requires a full-year assignment as the teacher of record in a public or accredited private school. Supervision by SMU faculty is required.

EDU 2349 (3). PSYCHOLOGY OF ADJUSTMENT. This course introduces the field of psychology, with emphasis on how people deal with the problems and challenges of everyday life. Students learn about classical and contemporary theories, recent research, and applications of the science of psychology to everyday situations.

EDU 2350 (3). EDUCATIONAL PSYCHOLOGY. This course focuses on aspects related to the learning process, such as education theories, characteristics of learners, nature and measurements of abilities, motivation, and successful classroom practice.

EDU 2355 (3). LITERACY AND SOCIETY. The primary function of this course is to serve as a structured service learning opportunity that fosters academic growth, citizenship, leadership, and civic responsibility. Readings and course activities relate to the relationship between literacy and society. Throughout the semester, students will tutor local elementary school students, as well as complete related assignments.

EDU 4099 (0). FULL-TIME STATUS. This course provides full-time status for students placed in an internship. Students must obtain permission to enroll in this course.

EDU 4300 (3). FOUNDATIONS OF TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES. Students will develop/analyze lesson plans in all content areas using TESOL competencies, emphasizing language concepts, acquisition, teaching and assessment strategies, and the role of culture in language acquisition.

EDU 5100 (1). SPECIAL TOPICS. Students work on a personalized system of instruction. Most of the work in this course is to be done as an independent study.

EDU 5121 (1). FIELD EXPERIENCE I: ELEMENTARY. This course gives students opportunities to work in appropriate school settings and allows them to observe a functioning classroom. Includes classroom setup, environment, organization, structure, and discipline.

EDU 5122 (1). FIELD EXPERIENCE II: ELEMENTARY. This course concerns special populations. It gives students opportunities to work in appropriate school settings and allows them to observe the teaching techniques used to help children with disabilities.

EDU 5123 (1). FIELD EXPERIENCE III: ELEMENTARY. This course gives students opportunities to work in appropriate school settings and to plan and teach lessons. Students shadow a teacher in preparation for student teaching.

EDU 5124 (1). FIELD EXPERIENCE I: SECONDARY. This course gives students opportunities to work in appropriate school settings and allows them to observe a functioning classroom. Includes classroom setup, environment, organization, structure, and discipline.

EDU 5125 (1). FIELD EXPERIENCE II: SECONDARY. This course concerns special populations. It gives students opportunities to work in appropriate school settings and allows them to observe the teaching techniques used to help children with disabilities.

EDU 5126 (1). FIELD EXPERIENCE III: SECONDARY. This course gives students opportunities to work in appropriate school settings and to plan and teach lessons. Students shadow a teacher in preparation for student teaching.

EDU 5200 (2). SPECIAL TOPICS. Students will work on a personalized system of instruction. Most of the work in this course is to be done as an independent study.

EDU 5300 (3). SPECIAL TOPICS. Students work on a personalized system of instruction. Most of the work in this course is to be done as an independent study.

EDU 5318 (3). FORMATIVE/SUMMATIVE ASSESSMENT. This course is an explanation and practice of formal and informal assessment strategies and how assessment outcomes should inform instruction and be shared with families. All assignments relate to putting assessment skills into practice in the classroom.

EDU 5327 (3). INTEGRATING TEACHING AND LEARNING. This course reviews the nature and design of educational activities: theory, research, and practice of unit planning and lesson planning for active learning that meets the needs of individual students.

EDU 5331 (3). CONTENT AREA STUDIES FOR ELEMENTARY SCHOOL. This course is an exploration of science, social studies, art, music, drama, and physical education content for EC through 6th-grade students and effective teaching strategies for each content area.

EDU 5335 (3). ADOLESCENT DEVELOPMENT AND COGNITION. This course focuses on theory of adolescent growth and development and its application in the classroom. The study of how adolescents learn and the conditions under which they learn best will guide this course.

EDU 5348 (3). INTRODUCTION TO DIVERSE LEARNERS. This course is a study of diversity, multicultural concepts, and inclusion and exploration of issues, policies, and professional practice relevant to teaching.

EDU 5349 (3). LEARNING ENVIRONMENT AND PROFESSIONALISM: EC-12. This course focuses on major issues facing teachers in establishing and maintaining a positive and productive learning environment, as well as the professional roles and responsibilities of teachers.

EDU 5355 (3). TEACHING MATHEMATICS IN ELEMENTARY SCHOOL. This course evaluates learning materials and teaching methods focusing on knowledge and skills required for EC through 6th-grade students.

EDU 5357 (3). EMERGENT LITERACY. This course examines principles of literacy learning in young children and predictable stages of oral language, writing, and reading development. All literacy classes require field experiences in local schools.

EDU 5358 (3). CONVENTIONAL LITERACY. This course introduces theories, practices, and materials for teaching reading/writing in primary grades. All literacy classes require field experiences in local schools.

EDU 5363 (3). ELEMENTARY STUDENT TEACHING. This course requirement is a 15-week assignment in an elementary school that has a diverse student population. The course includes a seminar on campus every two weeks.

EDU 5364 (3). ELEMENTARY STUDENT TEACHING. This course requirement is a 15-week assignment in an elementary school that has a diverse student population. The course includes a seminar on campus every 2 weeks. Students are assigned an SMU supervisor who observes in the classroom at least four times a term. A portfolio is required.

EDU 5367 (3). CREATING SUCCESSFUL CLASSROOMS. Students will examine current research that promotes student-centered teaching and constructivist practices. Various teaching and learning strategies of teaching in effective classrooms will be the focus of the course.

EDU 5371 (3). CONTENT AREA METHODS. Students refine content knowledge, methods, and strategies specific to their content area and level of certification.

EDU 5373 (3). SECONDARY STUDENT TEACHING. This course requirement is a 15-week assignment in a middle/high school that has a diverse student population. The course includes a seminar on campus every 2 weeks. Students are assigned an SMU supervisor who observes in the classroom at least four times a term. A portfolio is required.

EDU 5374 (3). SECONDARY STUDENT TEACHING. Requires a 15-week assignment in a middle/high school that has a diverse student population. Includes a seminar on campus every 2 weeks. Students are assigned an SMU supervisor who observes in the classroom at least four times a term. A portfolio is required.

EDU 5375 (3). INTERNSHIP I: HIGH SCHOOL AND MIDDLE SCHOOL. This course requirement is a full-year assignment as the teacher of record in a public or accredited private school. Supervision by SMU faculty is required.

EDU 5376 (3). INTERNSHIP II: HIGH SCHOOL AND MIDDLE SCHOOL. This course requirement is a full-year assignment as the teacher of record in a public or accredited private school. Supervision by SMU faculty is required.

EDU 5385 (3), 5386 (3). INTERNSHIP I: EC–6. This course requirement is a full-year assignment as the teacher of record in a public or accredited private school. Supervision by SMU faculty is required.

EDU 5386 (3). INTERNSHIP II: EC–6. This course requirement is a full-year assignment as the teacher of record in a public or accredited private school. Supervision by SMU faculty is required.

CENTERS AND INSTITUTES

The Institute for Evidence-Based Education

www.smu.edu/EvidenceBasedEducation

Professor Patricia G. Mathes, **Director**

The mission of the Institute for Evidence-Based Education at SMU is to ensure that every student in every classroom has a highly effective teacher. A clear research base indicates that teacher effectiveness is the single most important school-related factor impacting student outcomes. This research illustrates that the most effective teachers produce as much as five times the learning gains among their students as the least effective teachers.

The Institute for Evidence-Based Education seeks to carry out its mission following a two-pronged approach that marries cutting-edge research with translation of that research into improved instructional practices of teachers. Since its founding in 2003, the institute and its collaborating faculty have received approximately $14 million in external funding for various research studies, all of which focus on one of three areas:

- Creating and scientifically evaluating well-designed curricular materials, strategies and tools to assist teachers in delivering highly effective instruction.
- Designing valid, reliable ongoing assessment tools to help teachers determine which students are succeeding and which need additional support.
- Examining the role technology can play in supporting teachers through ongoing, job-embedded staff development, coaching and professional communities of learning.

While research is important, its true value is only realized if findings of this research impact practice in the schools. Thus, current activities at the institute increasingly focus on translating research into daily practice in 'schools across the nation. Translational activities include

- Making available to the marketplace the curricular materials, assessments, strategies and tools developed and empirically validated by the institute.
- Supporting the implementation of curricular materials, assessments, strategies and tools through the institute's staff development.
- Helping schools to build human capital in the classroom through the institute's technology-based coaching services.

Institute faculty members teach in the Simmons School's teacher education programs, which include preschool teacher education, learning therapy, the Master Reading Teacher program and the Bilingual Education program.

Gifted Students Institute

www.smu.edu/GSI

Dedicated to the support of the cognitive and affective development of gifted youth, the Gifted Students Institute offers a range of programs and services for educators and gifted youth and their families.

The Distinguished Lecture Series offers a large selection of one-day sessions and workshops that integrate theory and practice. Lectures are delivered by guest

speakers from the SMU faculty and public and private learning institutions throughout the country. The institute developed the school's Gifted Education graduate program that is offered through the Department of Teaching and Learning. In addition, the institute serves precollege gifted students through the Talented and Gifted and College Experience programs.

Research in Mathematics Education

www.smu.edu/ResearchMathematicsEducation

The Research and Mathematics Education center conducts research with the goal of providing evidence-based support to improve students' mathematics achievement in North Texas and across the country. The center is funded through the generous support of the Meadows Foundation.

DEPARTMENT OF APPLIED PHYSIOLOGY, SPORT MANAGEMENT AND WELLNESS

www.smu.edu/apsm

Associate Professor Peter Gifford, **Department Chair**

Associate Professors: Lynn Romejko Jacobs, Peter Weyand. **Assistant Professor:** Scott L. Davis. **Clinical Assistant Professor:** Megan Murphy. **Professors of Practice:** Susan Holland, Michael Lysko, Michael Stone. **Senior Lecturers:** Marilyn "Birdie" Barr, Brian Fennig. **Lecturers:** Caitlin Anderson, Piotr Chelstowski, Jessica Gillaspy, Donna Gober, Megan Knapp, Mark Rudich, Kaitlin Starrett, Bradley Warren. **Research Professor:** Eric Bing. **Research Assistant Professor:** Jeffrey Hastings.

The Department of Applied Physiology, Sport Management and Wellness offers undergraduate and graduate programs. Its undergraduate programs include a major and three minors in applied physiology and sport management. Its graduate programs include an M.S. in sport management and a Ph.D. in education, with an emphasis in applied physiology. The department also offers the personal responsibility and wellness courses that are required of all undergraduate students as part of the University Curriculum and a selection of sports and fitness activity courses. All UC students must take PRW1 and PRW2 in order to graduate from SMU.

Applied Physiology and Sport Management Major

The Applied Physiology and Sport Management program provides a rigorous curriculum for understanding the biological basis of health and fitness and the business background required of professionals in the sport, health, and fitness industries. The program leads to a B.S. degree with an emphasis in either applied physiology and enterprise or sport management. Both concentrations require coursework in the physiological sciences and business. Three minors in APSM are also offered: applied physiology, applied physiology and enterprise, and sport management.

The core curriculum introduces the discipline; establishes the scientific basis of health, fitness and human performance; introduces the business principles and skills necessary to establish and maintain a sports- or fitness-related business; and familiarizes students with the legal and ethical aspects of the fitness, health and sport industries. Woven throughout the program are experiential learning opportunities as well as science courses structured in accordance with evidence-based practices and augmented by reviews of current research. The program culminates in a mentored senior project. Students are ultimately prepared for a variety of career paths, including commercial health and fitness facility management; corporate fitness programming; sports strength and conditioning; health management; sports marketing; management of professional, collegiate or amateur sport organizations; representation of professional athletes; sport public relations; and sport facility and event management.

Applied Physiology and Enterprise Concentration

The Applied Physiology and Enterprise program ensures that students are prepared to develop research-based training methods in order to advise effective lifestyle prescriptions, as well as design and manage fitness and health facilities.

The course offerings within this concentration focus on holistic fitness and health outcomes and are formulated and presented around the central theme of evidence-based practice. This strategy endows students with the analytic skills necessary to evaluate and properly incorporate research results into professional practice. The

Applied Physiology and Enterprise program provides students with the solid research foundation that is necessary for leaders, educators and practitioners in the prevention of chronic diseases that plague our society and affect our health-care system.

Sport Management Concentration

Due to the explosion of interest in sport as a business, curricula to prepare management professionals are growing in number and prevalence. Further, as the business of sport becomes more complex, the preparation of professionals has become increasingly sophisticated, relying heavily on successful business theories and principles.

The academic discipline of sport management draws significantly on valid research and practices from organization and information management systems, including: budgeting, accounting, managing events, managing personnel and facilities, controlling, directing, evaluating, leading, writing, selling, working with media, developing publications, keeping game notes and statistics, interviewing, promoting, advertising, and fundraising.

Application for Admission Requirements

To apply for admission, students first must meet minimum GPA criteria and complete prerequisite requirements before submitting the application for admission. Admission is competitive. Students who are not accepted may reapply for admission during another term. For consideration, students must

- Have a minimum 2.000 GPA overall.
- Complete a minimum of 30 credit hours (currently enrolled hours may be included).
- Complete the introductory course for the area of concentration: APSM 2310 (sport management concentration) or APSM 2441 (applied physiology and enterprise concentration).
- Attend a required orientation meeting for prospective majors.
- Submit a completed general application form for the APSM major program.
- Declare an area of concentration.
- Complete a proctored essay.
- Interview with the APSM Interview Committee (by invitation only).

Students approved for admission by the faculty are assigned an adviser; they may continue to take core courses and/or courses in their concentration of interest.

Degree Requirements

A student may earn either a B.S. degree with an emphasis in applied physiology and enterprise or a B.S. degree with an emphasis in sport management.

Bachelor of Science With a Major in Applied Physiology and Sport Management

The applicable requirements of the major are those in effect during the academic year in which the major is declared *or* those of a subsequent academic year. If an APSM major makes a grade below *C-* in any APSM course, the student must retake the course. The Simmons School also requires a cumulative GPA of 2.000 on all

courses attempted for completion of a major or minor. All courses attempted that could count toward the major/minor are included in determining the major/minor GPA. Majors must be officially declared (or changed) through the Office of the Dean.

Core Courses and Concentrations

Note: APSM courses completed with a grade below a *C-* will not be accepted toward fulfilling major requirements. All students must complete 15–17 hours of core courses and 24–27 hours of concentration courses to obtain a B.S. in APSM. The core courses and concentrations are described below.

	Credit Hours
Core Courses	15–17
Sport Management Concentration (15 hours)	
APSM 3311, 3322, 3332, 3340, 5300	
Applied Physiology and Enterprise Concentration (17 hours)	
APSM 3411, 3422, 3332, 3340, 5300	
Concentration Courses	24–27
Sport Management Concentration (24 hours)	
APSM 2310, 3372, 4345, 4371, 4372, 5371, 5672	
Applied Physiology and Enterprise Concentration (27 hours)	
APSM 2441, 2442, 3351, 4349, 4412, 5351, 5610	
	39–41

Minors in Applied Physiology and Sport Management

A candidate for a degree may also complete the requirements of a minor, either in the Simmons School or in one of the other undergraduate schools of the University. Coursework intended to apply toward a minor may not be taken pass/fail. If an APSM minor earns a grade below *C-* in any APSM course, the student must retake the course. In addition, the Simmons School requires a cumulative GPA of 2.000 on all courses attempted for completion of a major or minor. All courses attempted that could count toward the major/minor are included in determining the major/minor GPA. Minors must be officially declared (or changed) through the Office of the Dean.

	Credit Hours
Minors in Applied Physiology and Sport Management	18–23
Applied Physiology and Enterprise Minor (23 hours)	
APSM 2441, 2442, 3311, 3322, 3351, 4349, 5351 (PSYC 3360 and APSM 3332 *recommended*)	
Sport Management Minor (18 hours)	
APSM 2310, 3332, 3340, 5371 Choice of two electives from the following: APSM 3372, 4345, 4371, 4372	
Applied Physiology Minor (23 hours)	
APSM 2441, 2442, 3411, 3422, 3351, 4412 (APSM 4349 *recommended*)	

General Requirements

Student Responsibility for Completion of Degree Plan

Students are required to schedule a degree-plan conference with an APSM adviser at the time of their acceptance into the major. **Note:** Each term, students are required to attend a group advising session if they want to schedule individual appointments with their assigned adviser. Detailed information concerning academic regulations and degree requirements are provided at that time. Students are individually responsible for knowing and complying with all regulations and requirements that may apply to the APSM program.

Application for a Degree

Students must submit to the Office of the Dean a formal application for graduation at the beginning of the term in which they will complete all degree requirements. Applications should be filed by the deadline date in the Official University Calendar.

Credits

A candidate for a Simmons School APSM degree must have

- A minimum total of 122 credit hours, including University-wide requirements (UC/GEC) and requirements for the APSM major.
- A minimum total of 42 advanced credit hours (3000 level or above).
- A maximum total of two credit hours of PRW/WELL courses.
- A maximum total of six credit hours of internship credit.

Grades

A candidate for a Simmons School APSM degree must have

- A minimum cumulative GPA of 2.000 on all work attempted through enrollment at SMU.
- A minimum cumulative GPA of 2.000 on all equivalent work attempted elsewhere, if any.
- A minimum grade of *C-* on any APSM course taken in fulfillment of major or minor requirements.
- A minimum cumulative GPA of 2.000 on all work attempted for completion of major or minor requirements.
- No more than 12 hours with a grade of *P* (Pass).

Minimum Credit Requirement

A candidate for a B.S. degree in APSM from the Simmons School must take the following hours as SMU credit; that is, the credit hours must be earned in SMU courses or SMU-approved international programs.

- A minimum of 60 credit hours.
- A minimum of 18 credit hours of advanced work in the major.

Requirements for Obtaining Two Degrees Simultaneously

A student may select both concentrations within the APSM major in the Simmons School by completing all requirements in each concentration, along with the general requirements for a B.S. degree in APSM. However, a student may not be awarded more than one baccalaureate degree from the Department of Applied Physiology, Sport Management and Wellness.

A student may concurrently pursue a program of study leading to a degree from the Simmons School along with a degree from the Dedman College of Humanities and Sciences, Cox School of Business, Meadows School of the Arts, or Lyle School of Engineering. The student must obtain approval for the proposed program of study from the deans of the schools involved.

Graduation Honors

There are three classes of graduation honors: summa cum laude, magna cum laude and cum laude. Eligibility for graduation honors will be based upon a student's total academic program. All academic work attempted at other colleges or universities that is equivalent to SMU work will be included in the calculation of the GPA. For students who have transferred to SMU, two GPAs will be calculated: one for all work attempted (at both SMU and equivalent universities) and one for work completed through enrollment at SMU alone. Honors will be based on the lower of the two averages.

Departmental Distinction

A student may be awarded departmental distinction regardless of eligibility for graduation honors. This award is conferred by the Department of Applied Physiology, Sport Management and Wellness based on specific criteria established by the department. Further information may be obtained from www.smu.edu/apsm or the department.

The Courses (APSM)

Elective Courses These courses are elective courses available to APSM students.	APSM 4159, 4259, 4359, 5160, 5260, 5261, 5360, 5361

APSM 2310 (3). CONTEMPORARY ISSUES IN SPORT MANAGEMENT. Explores the functional areas of business, management principles, contemporary issues, and future considerations for organizations within the fitness and sports industries. Gateway course for sport management concentration majors. Successful completion of this course is mandatory to be invited into the applied physiology and sport management major with a sport management concentration. First-year, sophomore, or junior standing only (less than 90 hours).

APSM 2441 (4). HUMAN ANATOMY AND PHYSIOLOGY I WITH LABORATORY. A systemic approach to the study of the human body, with a focus on the anatomical structure and function of the human neuro-musculo-skeletal systems. Gateway course for applied physiology and enterprise concentration majors. Successful completion of this course is mandatory to be invited into the applied physiology and sport management major with an AP&E concentration.

APSM 2442 (4). HUMAN ANATOMY AND PHYSIOLOGY II WITH LAB. This course examines the gross anatomy and physiology of the endocrine, cardiovascular, respiratory, digestive, and urinary systems and their relationship with human health and performance. *Prerequisite:* APSM 2441.

APSM 3311 (3). EXERCISE PHYSIOLOGY. Uses an organ system approach to examine the body's responses and adaptations to exercise and movement. *Prerequisite:* APSM 2310.

APSM 3322 (3). BIOMECHANICS. This course introduces the scientific basis of support and motion in humans and other vertebrate animals, drawing equally on musculoskeletal biology and Newtonian mechanics. *Prerequisite:* APSM 2310 Contemporary Issues.

APSM 3332 (3). LEGAL AND ETHICAL ASPECTS OF APPLIED PHYSIOLOGY AND SPORTS MANAGEMENT. Legal and ethical implications related to careers within the fitness and sport industries are explored. Ethical practices and legalities related to safety, risk management, personnel, and contracts are also discussed. *Prerequisite:* APSM 2310 or 2441.

APSM 3340 (3). APPLIED MANAGEMENT SKILLS IN SPORTS AND FITNESS. An extensive study of organizational functions, methods of operation, types of ownership, and the role of organizations in contemporary society as they relate to fitness and sport enterprises today. *Prerequisite:* APSM 2310 or APSM 2441.

APSM 3351 (3). NUTRITION. An examination of the role that nutrition plays in health and optimal function including the impact of nutrition on obesity, heart disease, stroke, cancer, eating disorders and specific populations.

APSM 3372 (3). ADVANCED PUBLIC RELATIONS IN SPORT. This course provides an overview of sport industry-specific communications, including public relations, media relations, and community relations. *Prerequisite:* APSM 2310.

APSM 3411 (4). EXERCISE PHYSIOLOGY WITH LABORATORY. Examines the physiological mechanisms underlying human movement. Topics include muscle physiology, respiration, cardiac function, circulation, energy metabolism, and their application to training. Students are expected to have a basic understanding of algebra, general chemistry, and anatomy and/or physiology prior to enrollment. *Prerequisites:* APSM 2441, 2442.

APSM 3422 (4). BIOMECHANICS WITH LABORATORY. This course introduces the scientific basis of support and motion in humans and other vertebrate animals, drawing equally on musculoskeletal biology and Newtonian mechanics. *Recommended:* PHYS 1303. *Prerequisite:* APSM 2441.

APSM 4159 (1), 4259 (2). INDEPENDENT STUDY IN APSM. For APSM majors or minors seeking to increase their experiential presence and/or research capabilities. Enrollment is by faculty invitation only. *Prerequisite:* APSM 2310 or 2441.

APSM 4345 (3). SPORTS MARKETING. This course provides a strategic framework to understand market dynamics, trends, consumer behavior, products, delivery systems, and marketing and promotional strategies that shape and drive the sports marketing industry. *Prerequisite:* APSM 2310.

APSM 4349 (3). HEALTH CARE: FROM POLICY TO PRACTICE. Explores the development and transformation of health care policy and the environmental factors that influence the delivery of health care services. Also, financial, economical, and operational issues related to health care.

APSM 4359 (3). INDEPENDENT STUDY IN APSM. For APSM majors or minors seeking to increase their experiential presence and/or research capabilities. Enrollment is by faculty invitation only. *Prerequisite:* APSM 2310 or 2441.

APSM 4371 (3). REVENUE IN SPORTS. This course covers sports industry revenue topics, including professional league and team revenue generation, franchise ownership and valuation, corporate sponsorship, sports media revenue, and industry selling practices. *Prerequisite:* APSM 2310.

APSM 4372 (3). SPORT FACILITY AND EVENT MANAGEMENT. This course examines the principles of sport facility planning, design, and management. Topics include venue design, operations, revenue streams, budgeting, personnel, security, media relations, crisis control, and legal considerations. *Prerequisite:* APSM 2310.

APSM 4412 (4). ADVANCED EXERCISE PHYSIOLOGY. This course introduces students to measurement techniques used to assess physiological responses to exercise. Students take measurements on themselves (or one another if they prefer) in structured laboratory experiences. *Prerequisites:* APSM 2441, 2442, 3411, and 3422.

APSM 5160 (1), 5260 (2). TEACHING PRACTICUM. Students assist the instructor in conducting a course in which they have previously excelled. Three credit hours maximum allowed. *Prerequisites:* Junior or senior standing; demonstrated academic excellence when previously enrolled in the same course (no less than an A-); instructor approval.

APSM 5261 (2). RESEARCH PRACTICUM IN APPLIED PHYSIOLOGY. Intended for students considering a career in laboratory-based biological research. Students conduct supervised research with an APSM research faculty member in his/her laboratory. Enrollment is by invitation from an APSM research faculty member in whose lab the research is conducted. *Prerequisites:* APSM 2441, 2442, 3311.

APSM 5300 (3). SENIOR PROJECT. Teaches the process of formal inquiry by utilizing a team format to plan, execute, and report results regarding a scientific question of interest to the group. *Prerequisite:* STAT 2301 or 2331. Reserved for APSM majors. Senior standing only (at least 90 credit hours required).

APSM 5351 (3). FITNESS AND HEALTH ENTERPRISE. This course prepares students who aspire to careers in the health and fitness industries. Topics include the fundamentals of entrepreneurship, leadership, salesmanship, certification, and liability. *Prerequisites:* APSM 2441 or 4441, and junior-year standing.

APSM 5360 (3). TEACHING PRACTICUM. Students assist the instructor in conducting a course in which they have previously excelled. Three credit hours maximum allowed. *Prerequisites:* Junior or senior standing; demonstrated academic excellence when previously enrolled in the same course (no less than an A-); instructor approval.

APSM 5361 (3). RESEARCH PRACTICUM IN APPLIED PHYSIOLOGY. Intended for students considering a career in laboratory-based biological research. Students conduct supervised research with an APSM research faculty member in his/her laboratory. Enrollment is by invitation from an APSM research faculty member in whose lab the research is conducted. *Prerequisites:* APSM 2441, 2442, 3311.

APSM 5362 (3). DIRECTED STUDIES IN APPLIED PHYSIOLOGY. This directed research course is necessary to be considered for departmental distinction. Students must have an APSM faculty sponsor and a written structured course plan to enroll. *Prerequisites:* Instructor invitation, APSM 5361, senior standing, 3.000 overall GPA, and 3.500 GPA within the major.

APSM 5363 (3). DIRECTED STUDIES IN SPORT MANAGEMENT. This directed research course is necessary to be considered for departmental distinction. Students must have an APSM faculty sponsor and a written structured course plan to enroll. *Prerequisites:* Instructor approval, APSM 4359, senior standing, 3.000 overall GPA, and 3.500 GPA within the major.

APSM 5364 (3). DIRECTED STUDIES IN APPLIED PHYSIOLOGY AND ENTERPRISE. This directed research course is necessary to be considered for departmental distinction. Students must have an APSM faculty sponsor and a written structured course plan to enroll. *Prerequisites:* Instructor approval; APSM 4159, 4259, or 4359; senior standing; 3.000 overall GPA; and 3.500 GPA within the major.

APSM 5371 (3). SPORT MANAGEMENT PRACTICUM. Experiential learning through planning, promoting, executing, and evaluating a sports-related event on campus for a total of 150 hours. *Prerequisite:* Junior standing. Recommended to precede APSM 4345, APSM 3372, APSM 4371, APSM 4372.

APSM 5461 (4), 5561 (5), 5661 (6). RESEARCH PRACTICUM IN APPLIED PHYSIOLOGY. Intended for students considering a career in laboratory-based biological research. Students conduct supervised research with an APSM research faculty member in his/her laboratory. Enrollment is by invitation from an APSM research faculty member in whose lab the research is conducted. *Prerequisites:* APSM 2441, 2442, 3311.

APSM 5610 (6). APPLIED PHYSIOLOGY AND ENTERPRISE INTERNSHIP. Experiential learning at a local fitness or health organization as an intern for a total of 250 hours. *Prerequisites:* APSM 5351 and senior standing. Reserved for applied physiology and sports management majors.

APSM 5672 (6). SPORTS MANAGEMENT INTERNSHIP. Experiential learning at a local sports industry organization as an intern for a total of 250 hours. *Prerequisites:* APSM 5371 and senior standing. Reserved for applied physiology and sports management majors.

Personal Responsibility and Wellness

www.smu.edu/wellness

The personal responsibility and wellness courses reflect the University's philosophy that a well-rounded education enhances the physical and mental well-being of the student. PRW courses help students to become more aware of the comprehensive nature of wellness; to understand the importance of personal life management; to respond positively to imbalances in their lifestyles; to become familiar with campus wellness facilities, equipment and services; to commit to a lifetime of physical activity and physical fitness; and to utilize opportunities the University provides and promotes in a variety of wellness areas. Each student must complete PRW1 and PRW2 as part of the University Curriculum; transfer students complete a 1000-level and 2000-level Wellness course as required in the General Education Curriculum. Additional information is found in the University-wide Requirements section of this catalog.

Concepts of Wellness. PRW1 introduces students to the University and includes topics useful for life transitions, such as stress management, personal financial planning and healthy decision-making. PRW1 is designed to be completed during the first year of SMU enrollment.

Physical Fitness. Extensive research supports that regular physical activity is essential for health and vitality. Students take PRW2 to establish personal fitness goals and fitness plans for the term. A variety of individual and group fitness courses are available; in both cases, students work with instructors. Each course contains central core objectives and student-learning outcomes based on health-related fitness components. Topics and activities include the following: comprehensive physical fitness assessments, cardiorespiratory workshops, resistance exercise workshops, individual goals and individual or group training, post-training assessments, counseling, and a final exam under the auspices and leadership of a qualified instructor. Grades are based on attendance, understanding of training and health principles, and satisfactory improvements toward the goals that students set for themselves. The aim is to help each student achieve immediate fitness benefits and inculcate positive, lifelong fitness habits. Grading is on a letter (A, B, C) basis. PRW2 courses are offered in the fall and spring terms. All courses share a congruent syllabus with core student-learning outcomes and assessments, as well as outcomes specific to the modality through which the core objectives are met. All health-related fitness courses meet the criteria for the required PRW2 credit.

The Courses (PRW)

PRW 1101 (1). PRW1: CONCEPTS OF WELLNESS. PRW1 is required for graduation. The course introduces students to the University and explores three sets of issues: 1) the role of personal responsibility in coping with college and life's other transitional periods; 2) challenges and opportunities such as managing time and stress, benefiting from diversity and autonomy, dealing with pitfalls related to alcohol and drugs, and exploring resources and activities on campus; and 3) personal finance decisions while at SMU and later in life, including managing money, using credit cards and making major purchases. During this course, students work on their e portfolio. The aim of the e portfolio is to encourage students to record and reflect upon their activities. Grading is on a pass/fail basis. (Fall term restricted to first-year standing only.)

PRW 2101 (1). PRW2: PHYSICAL FITNESS: BENCH AEROBICS. This class offers an intense aerobic workout using benches, along with body contouring using dumb bells, body bars, and mats. Selected activities designed to target health-related fitness components are also introduced.

PRW 2102 (1). PRW2: PHYSICAL FITNESS: JOGGING. This class provides an excellent means for improving cardiovascular endurance by running. Introduces selected activities designed to target health-related fitness. Students are expected to increase their jogging ability and set personal running goals.

PRW 2105 (1). PRW2: PHYSICAL FITNESS: WEIGHT TRAINING. This class accommodates all levels of weight training experience. Proper mechanics, safety, and principles of strength building with machines and free weights are presented and practiced. Additionally, students engage in selected activities designed to target health-related fitness.

PRW 2106 (1). PRW2: PHYSICAL FITNESS: WEIGHT TRAINING FOR WOMEN. Classes accommodate all levels of weight training experience. Proper mechanics, safety, principles of strength building, and endurance training with machines and free weights are presented and practiced in a friendly setting. Additionally, students engage in selected activities to target health-related fitness.

PRW 2110 (1). PRW2: PHYSICAL FITNESS: INDIVIDUAL FITNESS. Students develop a personal exercise program, and they test and evaluate their own strengths and weaknesses in terms of health and fitness. The class accommodates all levels of fitness. Activities aim to improve cardiovascular endurance, muscular strength and endurance, and flexibility.

PRW 2112 (1). PRW2: PHYSICAL FITNESS: WALKING. Walks of 2 to 2.5 miles during class time, and diet and nutrition information. Students also engage in selected activities designed to target health-related fitness.

PRW 2114 (1). PRW2: PHYSICAL FITNESS: BEGINNING TRIATHLON. Students train for an actual sprint distance triathlon (swim, bike, run) during the term. Additionally, students engage in selected activities designed to target health-related fitness.

PRW 2115 (1). PRW2: PHYSICAL FITNESS: INTERMEDIATE TRIATHLON. This course prepares the student to complete an Olympic triathlon (1.5 km swim, 40 km bike, 10 km run). Covers bicycle care, training progressions, and race strategies. Additionally, students engage in selected activities designed to target health-related fitness. *Prerequisite:* Completion of a sprint distance triathlon.

PRW 2117 (1). PRW2: PHYSICAL FITNESS: BEGINNING MARATHON TRAINING. This class helps students gain the skills and endurance needed to complete the local White Rock Marathon at the end of the term. Additionally, students engage in selected activities designed to target health-related fitness. Students are charged a $75 activity fee to cover marathon entry fees.

PRW 2120 (1). PRW2: PHYSICAL FITNESS: SPINNING. Spinning utilizes specialized, stationary cycles in a controlled, group setting. This indoor class is uniquely tailored to suit a wide range of abilities. Training principles are inspired by road cycling, and the pace is self-directed. Additionally, students engage in selected activities designed to target health-related fitness. Special activity fee: $10.

PRW 2125 (1). PRW2: PHYSICAL FITNESS: GROUP FITNESS. This class introduces students to a variety of group fitness activities such as kickboxing, jogging, Pilates, calisthenics, indoor rowing, and nonmachine strength training. This is a boot camp style class.

PRW 2127 (1). PRW2: PHYSICAL FITNESS: PILATES. Pilates is a total-body conditioning exercise method that combines flexibility and strength activities designed to develop the mind and body uniformly by providing balance, flexibility and strength, improved posture, and strengthened core muscles. Aerobic components are included for a full, health-related fitness workout.

PRW 2130 (1). PRW2: PHYSICAL FITNESS: POWER YOGA. This class focuses on three main areas of Yoga practice: deep breathing, exercise (postures), and meditation. Additionally, students engage in selected activities designed to target health-related fitness.

PRW 2132 (1). PRW2: PHYSICAL FITNESS: JUDO. Judo (meaning gentle way) is a safe combat sport that teaches students to apply maximum efficiency with minimum effort. These techniques allow students to better defend themselves, particularly against stronger opponents, by developing skills that yield to the attacker in order to throw the attacker off balance and gain an upper hand. This course teaches the basic skills of judo while emphasizing that judo a way of life and more than just a sport. It teaches students to relate to others in more harmonious and effective ways.

PRW 2135 (1). PRW2: PHYSICAL FITNESS: MOUNTAIN SPORTS. This class takes place outdoors at the SMU-in-Taos campus. Includes several hikes, a river raft trip, a mountain bike trip, and a volleyball tournament. Students also choose from other outdoor activities such as fly-fishing, rock climbing, horseback riding, and a field trip. Additionally, students engage in selected activities designed to target health-related fitness.

PRW 2140 (1). PRW2: PHYSICAL FITNESS: INTERMEDIATE SWIMMING. This class is for the intermediate to advanced swimmer. It provides an opportunity to refine swimming stroke techniques and to gain more advanced swimming skills and aerobic fitness. Additionally, students engage in selected activities designed to target health-related fitness.

PRW 2190 (1). PRW2: PHYSICAL FITNESS: OPTIONAL. This class acknowledges the fitness commitment being made by special groups, including athletes, cheerleaders, and pom pom and military service personnel. Students must demonstrate knowledge of health-related fitness concepts and produce an off-season personal fitness plan. Instructor approval required.

The Courses (WELL)

WELL 1101 (1). CHOICES I: CONCEPTS OF WELLNESS. Concepts of Wellness is primarily an information-oriented course. It focuses on issues of attitude, change, adaptation to change, personal responsibility and happiness. In general, the course content increases awareness of the relationship between our thoughts and lifestyle choices and how they relate to health, fitness and effectiveness as well as an improved sense of meaning, purpose and well-being. The context in which this information is delivered will vary by instructor.

WELL 2091 (0). CHOICES II: OPTIONAL.

WELL 2109 (1). CHOICES II: BENCH AEROBICS. This class offers an intense aerobic workout using benches along with body contouring using dumb bells, body bars and mats. The students enjoy the benefits of their hard work by the end of the semester with loss of body fat, toned muscles and more endurance. The class meets in the dance studio, second floor, Dedman Center. Updated popular CDs inspire the class to groove to the moves! Students leave each class feeling accomplished, invigorated and stress-free! This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2110 (1). CHOICES II: JOGGING. Jogging is an opportunity for those who are interested in improving their cardiovascular endurance by running. Classes vary as to the times and distances to suit personal goals. Students are expected to increase their jogging ability and to set a personal goal for their own running. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2111 (1). CHOICES II: WEIGHT TRAINING. Classes are designed to accommodate all levels of weight training experience. Proper mechanics, safety, principles of strength building and with machines and free weights are presented and practiced. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2112 (1). CHOICES II: WEIGHT TRAINING: WOMEN. Classes accommodate all levels of weight training experience. Proper mechanics, safety, principles of strength building and endurance training with machines and free weights are presented and practiced in a friendly setting. Women are encouraged to develop their own training program as the term progresses. Satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2113 (1). CHOICES II: INDIVIDUAL FITNESS. Students develop a personal exercise program utilizing the resources at the Dedman Center. Using some basic principles from contemporary exercise science, the student will test and evaluate their own strengths and weaknesses in terms of health and fitness. The class is designed to accommodate all levels of fitness, and students are encouraged to attempt activities that are outside their realm of experience. Fitness Activities are an opportunity for the student to improve in the areas of cardiovascular endurance, muscular strength and endurance, and flexibility. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2114 (1). CHOICES II: WALKING. Walking is a great way to achieve physical fitness and control weight. It has become one of the most popular form of aerobic activity because it is easy on the joints. Walks of 2 to 2.5 miles will take place during class times. Students only need to provide a good pair of walking shoes. The course also provides beneficial information on diet and nutrition. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2115 (1). CHOICES II: BEGINNING TRIATHLON. Students cover the basics of the triathlon while training for a sprint distance triathlon. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2116 (1). BEGINNING MARATHON TRAINING. This course is for the runner who is looking to take their sport to the next level. The class will help participants of all levels, from beginning runners to the more experienced, to gain skill and endurance and complete the White Rock Marathon at the end of the semester. Students will be charged a $75.00 activity fee to cover marathon entry fees. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2117 (1). CHOICES II: SPINNING. Cycling has long been recognized as an outstanding means for developing fitness. Spinning takes place indoors in a controlled, group setting and utilizes specialized indoor cycles. The class is uniquely tailored to suite a wide range of abilities and emphasizes road cycling-inspired training principles at self-directed paces. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2118 (1). CHOICES II: GROUP FITNESS. This class exposes students to variety of group fitness activities included but not limited to kick boxing, jogging, Pilates, calisthenics, indoor rowing and non-machine strength training, as well as other group fitness formats. During the Boot Camp style class participants will have a chance to enhance their endurance and overall physical fitness. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2119 (1). CHOICES II: PILATES. This class will introduce students to the discipline of Pilates, a total body conditioning exercise method that combines flexibility and strength activities. Pilates is designed to develop the mind and body uniformly by providing balance, flexibility and strength, improved posture, and strengthened core muscles. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2122 (1). CHOICES II: ROCK CLIMBING. Introduces the recreational sport of rock climbing. Students learn safety skills and techniques necessary for successful rock climbing and have opportunities to climb outdoors and indoors. Special activity fee: $50. This class satisfies the GEC Wellness requirement but does not satisfy the UC PRW requirement.

WELL 2125 (1). INTERMEDIATE TRIATHLON. Prepares the student to complete an Olympic triathlon – 1.5 km swim, 40 km bike, and a 10 km run. Bicycle care, training progressions and race strategies are covered. *Prerequisite:* Completion of a sprint distance triathlon. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2129 (1). CHOICES II: GOLF. Promotes golf and introduces new golfers to the game. This class, taught by PGA professionals utilizing state-of-the-art equipment, provides quality instruction to help students learn the skills, rules, and etiquette of golf. Equipment is provided, if necessary. (This course does not satisfy the UC PRW requirement but only fulfills the GEC Wellness requirement.)

WELL 2131 (1). CHOICES II: MOUNTAIN SPORTS. This class focuses on enjoying the amazing activities one can perform in the great outdoors. All the Wellness students participate in several hikes, a river raft trip, a mountain bike trip and a volleyball tournament. They will also be able to choose from other outdoor activities such as fly-fishing, rock climbing, horseback riding, and a field trip to Ojo Caliente Mineral Springs. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2132 (1). CHOICES II: RACQUETBALL I. Racquetball classes are held in the racquetball courts of the Dedman Center and are designed to accommodate all levels of physical skill. Rules, safety, skill techniques, strategy, and competitive play are progressively introduced throughout the term. Activities include workouts and stress reduction activities. This class satisfies the GEC Wellness requirement but does not satisfy the UC PRW requirement.

WELL 2135 (1). CHOICES II: TABLE TENNIS. Accommodates all levels of expertise. Students learn new table tennis techniques, refine known techniques, and gain a greater appreciation for this Olympic, lifetime sport. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2136 (1). CHOICES II: TENNIS I. Provides instruction in the basic tennis skills of the forehand, backhand, volley, serve, lob, and overhead smash. Rules, code of conduct, and etiquette are emphasized. Game experience is complemented by skill practice and drills. This class satisfies the GEC Wellness requirement but does not satisfy the UC PRW requirement.

WELL 2139 (1). CHOICES II: FLY FISHING. (SMU-in-Taos) Students learn the techniques and ideology behind the sport of fly-fishing, including equipment use, casting, reading a river, safety, fly selection, and the basics of fly tying. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2140 (1). CHOICES II: BADMINTON. Provides instruction in the basic badminton skills of the forehand, backhand, serve, lob, and overhead smash. Rules, code of conduct, and etiquette are also emphasized. Game experience is complemented by skill practice and drills. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2141 (1). CHOICES II: INTERMEDIATE SWIMMING. This class is for the intermediate to advanced swimmer. It provides an opportunity to refine swimming stroke techniques and to gain more advanced swimming skills and aerobic fitness. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2142 (1). CHOICES II: BALLROOM AND FOLK DANCING. Teaches the beginning ballroom steps of the fox-trot, waltz, rumba, cha-cha, tango, and swing/jitterbug, emphasizing leading and following techniques. Also, country-western line dancing and international folk dances representing different countries and cultures. One class is devoted to square dancing with a professional caller. Students view popular dance videos to learn special styles and techniques. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2144 (1). CHOICES II: SCUBA. Students need only basic swimming skills to participate. The class presents basic physics and physiology (in class) and practical scuba methods and techniques (in the Perkins Natatorium pool). Includes an introduction to animal behavior so divers can better understand their own behavior underwater. On balance, class time is divided equally among academics, pool work, and open water diving at area lakes. Students earn certification as open water scuba divers upon completion of the course. (This course does not satisfy the UC PRW requirement but only fulfills the GEC Wellness requirement.)

WELL 2145 (1). CHOICES II: BEGINNING SWIMMING. Designed primarily for the beginner but accommodates skilled swimmers as well. The term begins with adjusting to and overcoming a fear of water and basic skills such as floating, bobbing, rhythmic breathing, and gliding. The class covers the front crawl, backstroke, elementary backstroke, and breaststroke and introduces basic diving, water polo, aqua aerobics, and relays. Students who are not beginners participate in workouts designed to improve known strokes and build cardiovascular conditioning. Satisfies the GEC Wellness requirement but does not satisfy the UC PRW requirement.

WELL 2146 (1). CHOICES II: LIFEGUARD TRAINING. Provides the training needed to become a certified lifeguard. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2147 (1). CHOICES II: POWER YOGA. The word yoga means to join or yoke together the mind and the body. This class focuses on three main areas of yoga practice: deep breathing, exercise (postures), and meditation. Each class begins with approximately five minutes of deep breathing. The aim of deep breathing is to physically and mentally slow down and ready students for the physical postures and meditation. The exercises are designed to strengthen, stretch and relax the major muscle groups of the body. Deep breathing and exercises prepare the body and mind for meditation. Meditation slows the breathing and allows the mind to focus on a sound or saying that brings peace and healing from everyday stress. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2148 (1). CHOICES II: AIKIDO. Students learn the basics of falling and tumbling, Aikido's 10 basic techniques of self-defense, and how to apply principles of physics to an opponent's skeletal system in order to lock various joints of the body and thus control the attacker. Based on circular movements to avoid clashing with the opponent's strength and energy, Aikido techniques, when done correctly, are applied with minimal muscular force, allowing a smaller and weaker person to control a larger opponent. This class satisfies the GEC Wellness requirement but does not satisfy the UC PRW requirement.

WELL 2149 (1). CHOICES II: KARATE. Karate ("empty hands") is a system of self-defense that consists of blocking or thwarting an attack and counterattacking the opponent by punching, striking, or kicking. As a physical art, karate is an excellent form of total body exercise. Karate is based on proper body mechanics in order to develop power and speed of techniques. Flexibility

and strength are enhanced through stretching and calisthenics. Self-defense techniques are practiced with partners in numerous real-life situations. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2150 (1). CHOICES II: JUDO. Judo means the gentle way. It is a safe combat sport that teaches students to apply maximum efficiency with minimum effort. These techniques allow students to better defend themselves, particularly against stronger opponents. This is accomplished by developing skills that yield to the attacker in order to throw the attacker off balance and gain an upper hand. This course teaches the basic skills of judo while emphasizing that judo is more than just a sport, it is a way of life. It teaches students to relate to others in more harmonious and effective ways. It is a great opportunity to make new friends, have fun and challenge yourself with new experiences in both physical and spiritual aspects. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 2151 (1). CHOICES II: SELF-DEFENSE. Teaches students how to prepare physically and mentally for an attack using the ancient Japanese martial art jujitsu and a mix of other martial arts techniques (aikido, judo, kickboxing, and various schools of karate). Includes lessons in blocking, striking, joint locks, release and escape, the proper method of falling, and defense while lying on the ground. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2153 (1). CHOICES II: FENCING. Covers the basic movements of this ancient art form of combat: correct stance, movements, techniques for the foil, and combative strategies, as well as training in the rules and judging. Appropriate for beginners or those wanting to brush up their rusty skills. (This course does not satisfy the UC PRW requirement but only fulfills the GEC Wellness requirement.)

WELL 2161 (1). CHOICES II: BASKETBALL. Teaches the fundamentals of playing basketball using team drills and offensive and defensive formations and strategy. Augments skill development with gamelike conditions. This class satisfies the GEC Wellness requirement but does not satisfy the UC Personal Responsibility and Wellness requirement.

WELL 2170 (1). CHOICES II: VOLUNTEER ACTIVITY. Students explore the well-being that comes from serving others, and they develop the skills and knowledge necessary to increase their individual effectiveness as a volunteer. Students perform a minimum of 30 hours of volunteer work in a community agency. Covers placement, communication with project personnel, problem-solving, and reflection on issues raised by the volunteer experience. Students report on and discuss the activities that are a part of the Wellness II out-of-class experience. They also submit weekly journals and complete a project evaluation at the end of the term. (This course does not satisfy the UC PRW requirement but only fulfills the GEC Wellness requirement.)

WELL 2191 (1). CHOICES II: OPTIONAL. This section of Choices II is restricted to scholarship athletes, dance majors and veterans who are exempt from participation in Choices 2. It may also be available for last semester graduating seniors who can demonstrate, for one reason or another, an inability to register for a traditional section. In this case, departmental approval is required and students are responsible for fulfilling an independent regular physical activity contract. This class satisfies the GEC Wellness requirement, but does not satisfy the new UC PRW requirement.

WELL 3144 (1). CHOICES II: ADVANCED SCUBA. Introduces several diving specialties: night diving, wreck diving, search and recovery, and overhead environments. The course is 1/3 academics, 1/3 pool work (Perkins Natatorium), and 1/3 open water diving at one of the in-state, area lakes. Also, introduces the use of advanced equipment such as lift bags, diver propulsion vehicles, and full-face masks. Students meet experienced and accomplished divers, and earn advanced scuba certification upon completion of the class. (This course does not satisfy the UC PRW requirement but only fulfills the GEC Wellness requirement.)

HUMAN DEVELOPMENT COURSES (HDEV)

The Simmons School offers a selection of courses under the HDEV rubric that address learning and career-development skills.

HDEV 1110 (1). OPTIMUM READING, ATTENTION, COMPREHENSION, LEARNING EFFICIENCY. (formerly EDU 1110; course number modified spring 2011) A one-term, one-credit-hour course that counts as a University free elective. Designed to improve reading and learning efficiency, O.R.A.C.L.E. is directed to undergraduate students who want to acquire advanced reading and learning techniques.

HDEV 1111 (1). SUCCESS STRATEGIES. Students will learn strategies for creating success in their academic, professional, and personal lives. Students will engage in self-assessment and journal writing to identify academic strengths and challenges. Students will also learn study skills and have the opportunity to explore campus resources to succeed at SMU.

HDEV 1306 (3). DEVELOPMENTAL MATHEMATICS. This course refreshes and strengthens algebraic skills, especially those needed for success in precalculus. Only SMU students who are approved to take this course on the SMU campus may receive credit. This course is not eligible for transfer credit from other institutions.

HDEV 1307 (3). ESSENTIALS OF COLLEGE WRITING. This course emphasis is placed on reading comprehension, grammar, and punctuation mastery appropriate to university-level thinking. Only SMU students who are approved to take this course on the SMU campus may receive credit. This course is not eligible for transfer credit from other institutions.

HDEV 1308 (3). PSYCHOLOGY OF LEARNING. This course is a theoretical overview of how human learning occurs. Only SMU students who are approved to take this course on the SMU campus may receive credit. This course is not eligible for transfer credit from other institutions.

HDEV 2101 (1). PRACTICUM: GROUP LEADERSHIP. This course is a unique leadership experience that gives students a laboratory for assessing learned concepts and skills about leadership. Course content includes discussions on empowerment, public speaking, ethics, and citizenship.

HDEV 2102 (1). PRACTICUM: GROUP LEADERSHIP. This course is a one-hour credit for a minimum of 15 clock hours practicum either on campus or in the community. *Prerequisite:* Must have completed HDEV (EDU) 2101.

HDEV 2201 (2). DIVERSITY: FITTING INTO A WORLD OF DIFFERENCE. This course is a study of human diversity and identity development. Students learn about their own identities and about fitting into the communities of which they are a part. Topics include elements of oppression, cycle of socialization, identity development models, privilege, race, sex, gender, sexuality, ability, ethnicity, class, and faith.

HDEV 2308 (3). CAREER DEVELOPMENT THEORY AND PRACTICE. This course is a study of the history of theories and practice in career development. Topics include leaders in vocational education, legislative initiatives, social issues and organizations involved in and impacting career development. The course also includes study and application of career development and choice; and traditional and emerging career development theories, models and strategies. Using these models and strategies, this course develops students' abilities to work constructively to build individualized career plans. The format includes lecture, discussion, demonstration, and experiential components.

HDEV 2310 (3). LEADERSHIP DYNAMICS: THEORY, PRACTICE, AND INNOVATION. This course is an examination of the theories and skills necessary for the development of effective leadership with an emphasis on leadership, its theory and practice.

CLIENT SERVICES

The Simmons School operates a number of centers and clinics open to the community. Services provided by these centers are available on a limited basis, and some services may be fee based. Additional information on the availability and costs of programs offered is found on the client service centers' Web pages.

Diagnostic Center for Dyslexia and Related Disorders

www.smu.edu/reading

The Learning Therapy program administers the Diagnostic Center for Dyslexia and Related Disorders, established in response to a community need for services that evaluate individuals for learning disorders related to reading acquisition and comprehension. The center is dedicated to providing comprehensive initial and follow-up evaluation services and appropriate medical, psychological and educational referrals and recommendations for children, adolescents and adults who are at risk for dyslexia and related disorders.

Comprehensive initial evaluation services are available to individuals who exhibit symptoms of dyslexia. Based on the evaluation results, the center helps these clients secure appropriate remediation and/or accommodations (e.g., a time-modified SAT or ACT exam) and provides medical and psychological referrals if warranted.

Re-evaluation services are available to individuals who have previously been diagnosed with dyslexia but who require a follow-up evaluation and diagnosis in order to continue receiving remediation and/or accommodations.

Mustang Learning Center for Youth

www.smu.edu/MustangLearning

The Mustang Learning Center for Youth offers tutoring services for precollege-age children who are experiencing difficulty with reading, vocabulary development, writing, math and spelling. The center's tutoring methods and tools have been designed by researchers from the University's nationally renowned Institute for Evidence-Based Education. Tutoring sessions are individualized, providing one-on-one instruction that is explicit, intensive and specifically designed to address learning differences and disabilities in children.

SMU Mediation and Arbitration Center

www.smu.edu/MediationClinic

Mediation and arbitration services are available to parties involved in a dispute. Alumni, current students of the Dispute Resolution Program who have completed at least 200 training hours and other conflict resolution professionals serve as volunteer mediators and arbitrators.

Parties may use SMU's mediation services either before or after a lawsuit is filed. Parties may contact SMU directly to arrange for services or, if a lawsuit has been filed, a judge may order mediation and appoint the center as the mediator. Parties have an equal say in the mediation process and the settlement terms. The mediator has no authority to impose a settlement; if no agreement is reached, the lawsuit continues or is filed. There is no determination of guilt or innocence in this process. Both sides are able to exchange information, express expectations and propose solutions for reaching a resolution. The mediator facilitates this process by helping the parties to communicate clearly and appropriately.

Arbitration is an alternative to litigation that allows parties to have more control over their case but still leaves the ultimate decision about how to resolve the dispute to a neutral third party. The process is similar to a trial but with fewer procedural restrictions. If parties have an arbitration clause in a contract, or just wish to utilize arbitration to settle their dispute, they may contact SMU directly.

Most mediated settlements are completed in one meeting, saving time and money. Legal or other representation is permitted but is not required. A mediated settlement or arbitrated award can be binding upon both parties. Mediation is a confidential process, and communications and settlement discussions cannot be used as evidence in any future court proceedings, except in very limited circumstances. In arbitration, the parties and the arbitrator may choose to restrict or prohibit disclosure of information and evidence presented during the arbitration outside the arbitration process. The parties pay only a minimal administrative fee to SMU for mediation or arbitration.

Center for Family Counseling

www.smu.edu/FamilyCounseling

The Center for Family Counseling delivers developmentally appropriate and culturally sensitive counseling services for families, couples, adults, adolescents and children undergoing varying life circumstances, while providing SMU graduate counseling students with meaningful training experience via supervised therapeutic interactions. Counseling services are designed to assist individuals and groups seeking to enhance their overall life functioning, interpersonal relationships, self-understanding and career satisfaction for optimal well-being.

Center for Child and Community Development

www.smu.edu/cccd

The Center for Child and Community Development is dedicated to the cognitive, affective/social, and cultural development of children in ethnically diverse communities. With both a national and international reach, the center serves this mission through the provision of research-related educational programs and services to schools, families and community organizations.

Center on Communities and Education

www.smu.edu/cce

The mission of the Center on Communities and Education is to close the education gap in low-income communities by providing coordinated resources to support schools and teaching and by using data to drive students' academic success. CCE has four core strategies:

- Hands-on work in low-income communities.
- Research and evaluation by faculty and students.
- Collaboration with local and regional education reform efforts.
- Contributions nationwide to the practice of education transformation.

The Writer's Path

www.smu.edu/CreativeWriting

The Writer's Path is a creative writing program that guides individuals in the process of writing for publication. Progressive noncredit courses take students from the development of writing ideas, through the preparation of a draft, to the revisions and polish. Qualified students are eligible to participate in a trip to New York where they visit publishing houses and meet professional publishers and editors.

Center on Research and Evaluation

www.smu.edu/CORE

The development of new knowledge through research and evaluation is essential to the effectiveness of 21st-century schools of education. The goal of SMU's Center on Research and Evaluation is the pursuit and dissemination of knowledge to improve outcomes for children and families. CORE is both a research center designed to support Simmons faculty members in their efforts to procure funding, implement research projects and disseminate findings and an evaluation center that designs and conducts systematic evaluations of regional and national projects and activities.

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Jeff Tian, P.E., *Professor of Computer Science and Engineering,* Ph.D., Maryland

Wei Tong, *Professor of Mechanical Engineering,* Ph.D., Brown

David A. Willis, *Associate Professor of Civil and Environmental Engineering and Associate Professor of Mechanical Engineering,* Ph.D., Purdue

Jeong Ho You, *Assistant Professor of Mechanical Engineering,* Ph.D., Illinois (Urbana-Champaign)

Andrew Junfang Yu, *Assistant Professor of Engineering Management, Information and Systems,* Ph.D., Louisiana State

Lyle Emeritus Faculty

Kenneth L. Ashley, P.E., *Professor Emeritus of Electrical Engineering,* Ph.D., Carnegie Mellon

H. Charles Baker, *Professor Emeritus of Electrical Engineering,* Ph.D., Texas

Margaret H. Dunham, P.E., *Professor Emerita of Computer Science and Engineering,* Ph.D., SMU

Robert R. Fossum, *Professor Emeritus of Electrical Engineering,* Ph.D., Oregon State

Someshwar C. Gupta, P.E., *Professor Emeritus of Electrical Engineering,* Ph.D., California (Berkeley)

David B. Johnson, P.E., *Professor Emeritus of Mechanical Engineering,* Ph.D., Stanford

Paul F. Packman, P.E., *Professor Emeritus of Mechanical Engineering,* Ph.D., Syracuse

Cecil H. Smith, P.E., *Professor Emeritus of Civil and Environmental Engineering and Professor Emeritus of Mechanical Engineering,* Ph.D., Texas

Mandyam D. Srinath, P.E., *Professor Emeritus of Electrical Engineering,* Ph.D., Illinois (Urbana-Champaign)

Hal Watson, Jr., P.E., *Professor Emeritus of Mechanical Engineering,* Ph.D., Texas

Lyle Adjunct Faculty

Note: The list of faculty adjuncts provided here is advisory only. In any given term, a particular adjunct may not be able to teach because of other commitments. This is especially true because many of SMU's adjuncts are professionals and scholars who are in high demand.

Jane C. Ahrens, *Adjunct Lecturer of Civil and Environmental Engineering,* M.Arch., Texas (Arlington) (Gresham, Smith and Partners)

Jeffrey D. Alcantara, *Adjunct Lecturer of Computer Science and Engineering,* B.E.D., Texas A&M (Reel FX Creative Studios)

Fatma Cakir Alptekinoglu, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., California (Los Angeles)

Bogdan V. Antohe, *Adjunct Professor of Mechanical Engineering,* Ph.D., SMU (MicroFab)

Karl J. Arunski, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S.E.E., Washington (Raytheon)

Christopher L. Askew, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., SMU (Lockheed Martin)

John D. Baschab, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.B.A., Chicago (Technisource)

Charles W. Beall, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Southern California

Arthur F. Beck, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., SMU (B.S.M. Engineers)

Robert L. Bell, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.E.E.E., Brigham Young (Lockheed Martin)

William D. Bell, *Adjunct Professor of Engineering Management, Information and Systems,* D.E., SMU (U.S. Department of Defense)

Samir Bougacha, P.E. *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Texas (Parsons Brinckerhoff)

Lyle Adjunct Faculty (continued)

Mark K. Boyd, P.E., *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., SMU (LCA Environmental)

William A. Bralick, Jr., *Adjunct Professor of Computer Science and Engineering,* Ph.D., Pennsylvania State (Paladin Logic Inc.)

Ann E. Broihier, *Adjunct Lecturer of Computer Science and Engineering and Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., Northern Illinois (Raytheon)

Hakki C. Cankaya, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

Robert Casagrande, *Adjunct Lecturer of Civil and Environmental Engineering,* M.B.A., SMU

George W. Chollar, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Texas Tech (The Statistical Design Institute)

Christian P. Christensen, *Adjunct Lecturer of Computer Science and Engineering,* M.S., SMU

Randall J. Clendening, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., George Washington University (Boeing)

Eric B. Cluff, *Adjunct Lecturer of Engineering Management, Information and Systems and Adjunct Lecturer of Mechanical Engineering,* M.S., SMU (Abbott Labs)

David S. Cochran, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Auburn (System Design LLC)

Howard S. Cowin, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S.E., California State (Northridge) (Lockheed Martin)

William S. Dahlstrom, *Adjunct Professor of Civil and Environmental Engineering,* J.D., Texas (Jackson Walker, LLP)

Weiping Dai, P.E., *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Carnegie Mellon (Trinity Consultants)

Christopher M. Davis, *Adjunct Lecturer of Engineering Management, Information and Systems*, M.B.A., Texas (ForeScout Technologies)

H. Elizabeth del Monte, *Adjunct Lecturer of Civil and Environmental Engineering,* M.Arch., Rice (The Return on Innovation Project)

Leven T. Deputy, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., Texas (Jacobs Engineering)

Theodore A. Dumas, Ph.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S.C.E., SMU

Matthew L. Durchholz, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (Lockheed Martin)

John H. Easton, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Alabama (Birmingham) (Technico Environmental Inc.)

Carl E. Edlund, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* B.S.M.E., Maryland (U.S. Environmental Protection Agency)

Fawzi E. Elghadamsi, *Adjunct Lecturer of Civil and Environmental Engineering*

Aaron L. Estes, *Adjunct Lecturer of Computer Science and Engineering,* M.S., SMU

Jahanzeb Faizan, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

Andrew A. Felder, *Adjunct Professor of Civil and Environmental Engineering,* J.D., New York Law School (The Arsenal Companies)

Edward Forest, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Princeton

Dennis J. Frailey, *Adjunct Professor of Computer Science and Engineering and Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Purdue (Raytheon, retired)

Santos Garza, *Adjunct Professor of Mechanical Engineering,* Ph.D., Texas Tech (Texas Instruments)

John R. Graham, III, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.B.A., Wright Statue (Technisource)

Ganesh L. Harpavat, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Rochester (Lucent Technologies)

James H. Hinderer, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Texas

Ahmed H. H'mimy, *Adjunct Professor of Electrical Engineering,* Ph.D., SMU (Andrew Corporation)

Hossam H. H'mimy, *Adjunct Professor of Electrical Engineering,* Ph.D., SMU (Ericsson)

Michael E. Hopper, P.E., *Adjunct Professor of Engineering Management, Information and Systems,* D.E., SMU

Kenneth R. Howard, *Adjunct Lecturer of Computer Science and Engineering,* M.B.A., Saint Mary's (Improving Enterprises)

Gerard V.S. Ibarra, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU

Sina Iman, *Adjunct Lecturer of Civil and Environmental Engineering*, M.S.C.E., SMU (DAL-TECH Engineering)

Ronald W. Jackson, *Adjunct Lecturer of Civil and Environmental Engineering,* B.S., Northern Illinois (KDFW-TV)

Shantanu Kangude, *Adjunct Professor of Electrical Engineering,* Ph.D., Georgia Institute of Technology (Texas Instruments)

Bhanu Kapoor, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

Mohamed M.I. Khalil, *Adjunct Professor of Computer Science and Engineering,* Ph.D., New Mexico State

Kamran Z. Khan, *Adjunct Lecturer of Computer Science and Engineering,* M.S., Texas (Dallas) (MCI WorldCom)

Clark D. Kinnaird, P.E., *Adjunct Professor of Electrical Engineering,* Ph.D., SMU (Texas Instruments)

R. Mallik Kotamarti, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

James E. Langford, *Adjunct Lecturer of Civil and Environmental Engineering,* M.Arch., Harvard (James E. Langford, Architects and Planners LLC)

Khiem V. Le, *Adjunct Professor of Electrical Engineering,* Ph.D., Southern California

Donald L. Legg, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S.S.M., Akron (Bell Helicopter)

Lun Li, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

John I. Lipp, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Michigan Tech (Lockheed Martin)

Lyle Adjunct Faculty (continued)

D. Kall Loper, *Adjunct Professor of Computer Science and Engineering,* Ph.D., Michigan State

Paul M. Martin, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., Nebraska

Mehedy Mashnad, P.E., *Adjunct Professor of Civil and Environmental Engineering*, Ph.D., Illinois (Urbana-Champaign) (Walter P. Moore and Associates)

Matthew R. McBride, *Adjunct Lecturer of Computer Science and Engineering,* M.S., SMU (Bank of America)

Shannon K. McCall, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S.E.E., Georgia Institute of Technology (Telios)

Lee D. McFearin, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

M. Wade Meaders, *Adjunct Lecturer of Mechanical Engineering,* M.S., SMU (Halliburton)

Freeman L. Moore, *Adjunct Professor of Computer Science and Engineering,* Ph.D., North Texas (Raytheon, retired)

William H. Muto, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Virginia Tech (Abbott Labs)

Padmaraj M.V. Nair, *Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU

Mofid Nakhaei, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., SMU (Parson Brinckerhoff Inc.)

William P. Nanry, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., Texas (Lockheed Martin)

Dario Nappa, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (Texas Instruments)

Nhut Nguyen, *Adjunct Professor of Electrical Engineering,* Ph.D., Tokyo (Samsung)

David J. Nowacki, *Adjunct Lecturer of Mechanical Engineering,* M.B.A., M.S., Louisiana State

Jennifer A. O'Brien, *Adjunct Professor of Civil and Environmental Engineering*, Ph.D., North Texas

Robert S. Oshana, *Adjunct Lecturer of Computer Science and Engineering and Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., SMU (Object Space Inc.)

David A. Peters, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., Texas (Dallas)

John J. Pfister, *Adjunct Lecturer of Computer Science and Engineering,* M.C.S., Texas A&M (Texas Instruments, retired)

Oscar K. Pickels, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.B.A., SMU

Sally R. Pinon, *Adjunct Lecturer of Civil and Environmental Engineering,* M.A., Texas (Arlington)

Jon C. Piot, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.B.A., Harvard (Technisource)

Leonid Popokh, *Adjunct Lecturer of Computer Science and Engineering,* M.S., Texas (Dallas)

Sohail Rafiqi, *Adjunct Lecturer of Computer Science and Engineering,* M.S., SMU

Jon D. Rauscher, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Colorado State (U.S. Environmental Protection Agency)

Mohamed O. Rayes, *Adjunct Professor of Computer Science and Engineering,* Ph.D., Kent State

James B. Rodenkirch, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., SMU

Christopher A. Rynas, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S.E., Texas Tech (Raytheon)

Mauricio A. Salinas, *Adjunct Lecturer of Mechanical Engineering*, Ph.D., Texas (Arlington)

Mark E. Sampson, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., Southern California (UGS)

Nandlal M. Singh, *Adjunct Professor of Engineering Management, Information and Systems,* D.E., SMU (MinMax Technologies)

Stephen C. Skinner, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (Bell Helicopter)

Gheorghe M. Spiride, *Adjunct Professor of Engineering Management, Information and Systems and Adjunct Professor of Computer Science and Engineering,* Ph.D., SMU (Nortel Networks)

D. Blair Spitzberg, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Texas (U.S. Nuclear Regulatory Commission)

John L. Stanley, *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., SMU (FACServices Inc.)

Bennett Stokes, *Adjunct Professor of Civil and Environmental Engineering,* J.D., Texas

Hung-Ming (Sue) Sung, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Vanderbilt

Patricia A. Taylor, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., SMU (U.S. Environmental Protection Agency)

Kenneth T. Thomas, *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., Amberton

Allen D. Tilley, *Adjunct Lecturer of Mechanical Engineering,* M.B.A., SMU

Philip K. Turner, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., North Texas (U.S. Environmental Protection Agency)

Raymond E. Van Dyke, *Adjunct Professor of Computer Science and Engineering,* J.D., North Carolina (Chapel Hill)

John W. Via, III, *Adjunct Professor of Engineering Management, Information and Systems,* D.E., SMU (Alcon Laboratories)

Andrew K. Weaver, *Adjunct Lecturer of Mechanical Engineering,* M.A., Navy; M.P.A., Troy State

James R. Webb, *Adjunct Lecturer of Mechanical Engineering,* M.B.A., Dallas

Jeffery L. Williams, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (New York Air Brake)

Dan Wittliff, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.B.A., Oklahoma (GDS Associates Inc.)

Lyle Adjunct Faculty (continued)

Scott P. Woodrow, P.E., *Adjunct Lecturer of Civil and Environmental Engineering,* M.S., SMU (Dallas Cowboys)

Timothy D. Woods, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (Lockheed Martin)

John R. Yarrow, *Adjunct Lecturer of Engineering Management, Information and Systems,* M.S., North Texas (XO Communications)

Rumanda K. Young, *Adjunct Professor of Civil and Environmental Engineering,* Ph.D., Texas (Arlington) (U.S. Army Corps of Engineers)

Hossam A. Zaki, *Adjunct Professor of Engineering Management, Information and Systems,* Ph.D., SMU (Zilliant)

Jessie Marshall Zarazaga, *Adjunct Lecturer of Civil and Environmental Engineering,* M.Arch., Cambridge

MEADOWS SCHOOL OF THE ARTS

Office of the Academic Dean

José Antonio Bowen, *Dean of Algur H. Meadows School of the Arts and Algur H. Meadows Chair*

Kevin Paul Hofeditz, *Associate Dean for Academic Affairs*

Martin Sweidel, *Associate Dean for Planning and Assessment*

Karen Drennan, *Assistant Dean for Marketing and Communications*

Kris Muñoz Vetter, *Assistant Dean for Development and External Affairs*

Meadows Administration

Mark Roglán, *Linda P. and William A. Custard Director of the Meadows Museum*

Deanna Johnson, *Assistant to the Dean*

Lisobel Bernal, *Graduate Records Coordinator*

Chuck Donaldson, *Undergraduate Degree Counselor*

Pam Henderson, *Director of Scholarships and Financial Aid*

Jay Hengst, *Director of Facilities and Events*

Joe Hoselton, *Graduate Admissions and Strategic Enrollment Management*

Corinna Nash-Wnuk, *Director of Student Recruitment*

Ellen Schlachter, *Director of Alumni Relations and Annual Giving*

Janet Stephens, *Undergraduate Degree Counselor*

Cynthia Watson, *Director of Business and Finance*

Margaret Weinkauf, *Director of Major Gifts*

Meadows Faculty

Note: The list of faculty adjuncts provided here is advisory only. In any given term, a particular adjunct may not be able to teach because of other commitments. This is especially true because many of SMU's adjuncts are professionals and scholars who are in high demand.

Joaquín Achúcarro, *Professor of Music and Joel Estes Tate Chair in Piano*

Christopher Adkins, *Adjunct Professor of Cello*, Principal Cello DSO, M.M.A., Yale

Matthew Albert, *Director of Chamber Music*, M.M., Northwestern

Kael Alford, *Adjunct Lecturer of Art,* M.A., Missouri (Columbia)

Sarah Allen, *Associate Professor of Music Education*, Ph.D., Texas

Patricia Alvey, *Professor of Advertising*, Ph.D., Texas

Christopher Anderson, *Associate Professor of Sacred Music*, Ph.D., Duke

Dawn Askew, *Adjunct Lecturer of Theatre, Master Electrician*, B.A., Southwestern Oklahoma State

Yong Bakos, *Visiting Professor of Creative Computation,* M.S., Regis

Beatriz Rodriguez Balanta, *Assistant Professor of Art History,* Ph.D., Duke

Belinda Baldwin, *Adjunct Lecturer of Advertising,* Ph.D., Southern California

Deborah Baron, *Adjunct Assistant Professor of Flute*, Assistant Principal Flute DSO, M.M., Juilliard School of Music

Willie Baronet, *Visiting Executive-in-Residence, Advertising,* M.F.A., Texas (Dallas)

Carolyn Barta, *Professor of Practice in Journalism*, M.A., Texas

Meadows Faculty (continued)

Barbara Bastable, *Adjunct Assistant Professor of Music Therapy*, M.A., Texas Woman's, MT-BC

Jacob Batsell, *Assistant Professor of Journalism*, M.A., Texas

Alessio Bax, *Adjunct Assistant Professor of Piano*, Artist Certificate, M.M., SMU

Shelley C. Berg, *Professor of Dance*, Ph.D., New York

Janis Bergman-Carton, *Associate Professor of Art History,* Ph.D., Texas

Jason Biggs, *Adjunct Lecturer of Theatre,* B.M., SMU

Rhonda Blair, *Professor of Theatre*, Ph.D., Kansas

Mary Walling Blackburn, *Assistant Professor of Art,* M.F.A., New York

Linda Blase, *Adjunct Lecturer of Theatre*, M.F.A., Trinity

Tom Booth, *Adjunct Lecturer of Trumpet*, Assistant Principal Trumpet DSO, M.M., Illinois

Emanuel Borok, *Adjunct Professor of Violin*, Concertmaster DSO 1985–2010, B.M., Gnessin Academy of Music

Alejandro Borsani, *Adjunct Lecturer of Art,* M.F.A., Rensselaer Polytechnic Institute

José Antonio Bowen, *Professor of Music History and Literature, Dean of Meadows School of the Arts*, Ph.D., Stanford

Trey Bowles, *Adjunct Lecturer of Arts Management and Arts Entrepreneurship,* B.B.A., Baylor

Susan Benton Bruning, *Assistant Professor of Arts Management and Arts Entrepreneurship*, J.D., SMU

John Bryant, *Adjunct Lecturer of Percussion*

Amy Buono, *Assistant Professor of Art History*, Ph.D., California (Santa Barbara)

Danny Buraczeski, *Professor of Dance*, B.A., Bucknell

Brice Campbell, *Executive-in-Residence, Advertising*, E.M.B.A., Colorado Tech

Brad Cassil, *Lecturer of Theatre*, B.F.A., California Institute of the Arts

Kalman Cherry, *Adjunct Associate Professor of Percussion*, Principal Timpani DSO (retired), Artist Diploma, Curtis Institute of Music

Lucille Chung, *Adjunct Lecturer of Piano*, International Concert Artist, M.M., Artist Certificate, SMU

Michael Connolly, *Associate Professor of Theatre*, Ph.D., Indiana

Kim Corbet, *Adjunct Assistant Professor of Music History and Literature*, M.M., Texas Christian

Michael Corris, *Professor of Art,* M.F.A., Maryland Institute College of Art (Baltimore), Ph.D., University College London

James Crawford, *Associate Professor of Theatre*, M.F.A., California (San Diego)

Benard Cummings, *Assistant Professor of Theatre*, M.F.A., Yale

Charles DeBus, *Senior Lecturer of Art*, B.F.A., Dallas

Susan Dederich-Pejovich, *Adjunct Assistant Professor of Harp*, Principal Harp DSO, B.A., Cleveland Institute of Music

Jack Delaney, *Professor of Music, Director of Bands,* D.M.A., Cincinnati College Conservatory of Music

Patricia Harrington Delaney, *Associate Professor of Dance, Division of Dance Chair*, M.F.A., SMU

Andrés Díaz, *Professor of Cello*, B.M. and Artist Diploma, New England Conservatory

Dale Dietert, *Senior Lecturer of Voice*, M.M., Texas

Maria Dixon, *Associate Professor of Communication Studies,* Ph.D., Missouri

Christopher Dolder, *Assistant Professor of Dance*, M.F.A., Mills

David Dreyer, *Adjunct Lecturer of Art,* M.F.A., SMU

Sandra C. Duhé, *Associate Professor of Communication Studies, Division of Communication Studies Chair*, Ph.D., Texas (Dallas)

Virginia Dupuy, *Professor of Voice*, M.M., Texas

Steven Edwards, *Professor of Advertising, Temerlin Advertising Institute Director*, Ph.D., Texas

Shelley Estes, *Adjunct Lecturer of Dance*, B.S.E., Arkansas, Pilates Unlimited Full Certification

Donald Fabian, *Adjunct Associate Professor of Saxophone*, M.M., Michigan State

Mark Feezell, *Senior Lecturer in Music Theory*, Ph.D., North Texas

Barnaby Fitzgerald, *Professor of Art*, M.F.A., Yale

Craig Flournoy, *Associate Professor of Journalism*, Ph.D., Louisiana State

Nina Flournoy, *Visiting Lecturer of Communication Studies*, B.A., Louisiana State

Gary Foster, *Senior Lecturer of Music Theory*, Ph.D., Louisiana State

Hugh Clifton Forbis, *Associate Professor of Voice*, M.M., SMU

Robert Frank, *Associate Professor of Music Theory and Composition, Chair of Composition and Music Theory*, Ph.D., North Texas

Kathleen Gallagher, *Assistant Professor of Arts Management and Arts Entrepreneurship,* Ph.D., Colorado (Denver)

Paul Garner, *Adjunct Associate Professor of Clarinet*, Associate Principal Clarinet DSO, M.M., Kansas

Jean Larson Garver, *Adjunct Associate Professor of Flute*, Principal Flute DSO, M.M., Texas

Martha Gerhart, *Adjunct Assistant Professor of Voice, Vocal Coach*, M.M., Colorado

Paula Goldberg, *Lecturer of Film and Media Arts,* M.F.A., Rutgers

Matthew Good, *Adjunct Associate Professor of Tuba*, Principal Tuba DSO, B.M., Curtis Institute of Music

Marsha Grasselli, *Lecturer of Theatre, Production Manager*, M.F.A., Goodman

Ira Greenberg, *Professor of Creative Computation*, M.F.A., Pennsylvania

Jack Greenman, *Associate Professor of Theatre,* M.F.A., California (Irvine)

Andrew Greenwood, *Visiting Assistant Professor of Music,* Ph.D., Chicago

Randall C. Griffin, *Professor of Art History,* Ph.D., Delaware

Sean Griffin, *Associate Professor of Film and Media Arts, Division of Film and Media Arts Chair*, Ph.D., Southern California

Kevin Gunter, *Lecturer of Piano, Class Piano*, M.M., SMU

Dev Gupta, *Lecturer of Advertising*, M.A., Texas

Robert Guthrie, *Adjunct Professor of Guitar, Director of Guitar Ensemble*, B.M., North Carolina School of the Arts

Lisa Haayen, *Adjunct Lecturer of Advertising,* M.A., SMU

Meadows Faculty (continued)

Blake Hackler, *Assistant Professor of Theatre*, M.F.A., Yale

David Hadeler, *Executive-in-Residence, Advertising*, M.A., North Texas

Hank Hammett, *Senior Lecturer of Music, Director of Opera*, M.M., Texas

Kevin Hanlon, *Associate Professor of Composition*, D.M.A., Texas

Erin Hannigan, *Adjunct Associate Professor of Oboe*, Principal Oboe DSO, M.M., Eastman School of Music

Lane Harder, *Adjunct Assistant Professor of Music,* Ph.D. Texas

Pamela Harris, *Adjunct Lecturer of Journalism*, B.S., Texas

Jim Hart, *Assistant Professor of Practice of Arts Management and Arts Entrepreneurship, Director of Arts Entrepreneurship,* M.F.A., Yale

Robert Hart, *Adjunct Lecturer of Journalism*, B.A., Texas (Arlington)

C. Michael Hawn, *Professor of Sacred Music*, D.M.A., Southern Baptist Theological Seminary

Kevin Heffernan, *Associate Professor of Film and Media Arts*, Ph.D., Wisconsin (Madison)

Sally Helppie, *Adjunct Lecturer of Film and Media Arts,* J.D., California (Los Angeles)

Adam Herring, *Associate Professor of Art History*, Ph.D., Yale

Kevin Paul Hofeditz, *Professor of Theatre, Associate Dean for Academic Affairs*, M.F.A., Missouri (Kansas City)

Samuel S. Holland, *Professor of Music, Division of Music Director, Chair of Piano Pedagogy*, Ph.D., Oklahoma

Haley Hoops, *Adjunct Lecturer of Horn*, DSO, M.M., Northwestern

Michele Houston, *Professor of Practice in Journalism*, B.S., Texas

Douglas Howard, *Adjunct Professor of Percussion*, Principal Percussion DSO, M.M., Catholic

Pamela Elrod Huffman, *Associate Professor of Music, Director of Choral Activities*, D.M.A., Illinois

Debora Hunter, *Associate Professor of Art*, M.F.A., Rhode Island School of Design

Gregory Hustis, *Adjunct Professor of Horn,* Principal Horn DSO, B.M., Curtis Institute of Music

Tearlach Hutcheson, *Adjunct Lecturer of Film and Media Arts,* M.A., Colorado

Lynne Jackson, *Adjunct Assistant Professor of Music Education*, M.M., Michigan

Cara Jacocks, *Visiting Lecturer of Communication Studies,* M.A., Abilene Christian

JoLynne Jensen, *Adjunct Lecturer of Arts Management and Arts Entrepreneurship,* Ph.B., Wayne State

Millicent Johnnie, *Assistant Professor of Dance*, M.F.A., Florida State

David Karp, *Professor of Piano*, D.M.A., Colorado

Lisa Kaselak, *Assistant Professor of Film and Media Arts*, M.F.A., Texas

Misty Keasler, *Adjunct Lecturer of Art,* M.F.A., Bard College

Alice Kendrick, *Professor of Advertising,* Ph.D., Tennessee (Knoxville)

Mark Kerins, *Associate Professor of Film and Media Arts*, Ph.D., Northwestern

Chee-Yun Kim, *Artist-in-Residence, Violinist*

Camille King, *Adjunct Assistant Professor of Voice*, B.A., California

Rita Kirk, *Professor of Communication Studies,* Ph.D., Missouri

Diane Kitzman, *Adjunct Associate Professor of Violin*, Principal Violin DSO, B.A., Michigan

John Kitzman, *Adjunct Professor of Trombone*, Principal Trombone DSO, B.M., Michigan

Matthew Kline, *Senior Lecturer of Piano Pedagogy and Preparation, Associate Director of Piano Preparatory Department*, M.M., SMU

Derek Kompare, *Associate Professor of Film and Media Arts*, Ph.D., Wisconsin (Madison)

Camille Kraeplin, *Associate Professor of Journalism*, Ph.D., Texas

Robert Krout, *Professor of Music Therapy, Director of Music Therapy*, Ed.D., Columbia, MT-BC

Peter Kupfer, *Assistant Professor of Music History and Literature*, Ph.D., Chicago

Carrie La Ferle, *Professor of Advertising*, Ph.D., Texas

Drew Lang, *Adjunct Lecturer of Percussion*, M.M., Arizona

Suzanne Larkin, *Adjunct Lecturer of Advertising,* M.F.A., Texas A&M (Commerce)

Gordon Law, *Adjunct Lecturer of Advertising,* B.S., Oklahoma State

Steve Leary, *Adjunct Lecturer of Theatre, Technical Director*, B.A., Cameron

Linda Leavell, *Adjunct Lecturer of Journalism,* B.A., Texas

Thomas Lederer, *Adjunct Associate Professor of Double Bass*, Co-principal Double Bass DSO, B.F.A., Carnegie Mellon

Jon Lee, *Adjunct Lecturer of Music, Director of Percussion Ensemble*, M.M., SMU

Steve Lee, *Adjunct Lecturer of Communication Studies*, M.A., Texas (Arlington)

Bill Lengfelder, *Professor of Theatre*, M.F.A., Lindenwood College

Carol Leone, *Associate Professor of Piano, Chair of Piano*, Ph.D., North Texas

Rick Lester, *Adjunct Lecturer of Arts Management and Arts Entrepreneurship,* M.B.A., Queens (Charlotte)

Owen Lynch, *Associate Professor of Communication Studies*, Ph.D., Texas A&M

Catharine Lysinger, *Senior Lecturer of Piano Pedagogy and Preparation, Director of Piano Preparatory Department*, D.M.A., Houston

Carolyn Macartney, *Associate Professor of Film and Media Arts*, M.F.A., School of the Art Institute of Chicago

David L. Mancini, *Associate Professor of Music Theory, Chair of Music Theory*, Ph.D., Yale

J.D. Margetts, *Adjunct Lecturer of Theatre, Assistant Technical Director*, M.F.A., Northern Illinois

David Matthews, *Adjunct Assistant Professor of Music,* B.M., North Texas

Margaret Meehan, *Adjunct Lecturer of Art,* M.F.A., Washington

Linjuan Rita Men, *Assistant Professor of Communication Studies*, Ph.D., Miami

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APPENDIX

2013–2014 UNDERGRADUATE CATALOG

Summary of Corrections and Changes

The tables below list corrections and changes to the official *Southern Methodist University 2013–2014 General Information Undergraduate Catalog* as found online at smu.edu/catalogs.

Last update: November 21, 2013

Section: Cox School of Business

Program/ Degree	Summary of Change	Page	Date
Bachelor of Business Administration with a major in real estate finance	Addendum updated with additional electives offered for the major.	319: Added a note referring readers to the addendum, which was updated and published online 11/2013.	11/21/13

Section: Lyle School of Engineering

Program/ Degree	Summary of Change	Pages	Date
Bachelor of Science with a major in management science	Addendum updated with change in required courses: 15 hours of science/social science courses instead of 21, and a total of 93 hours for the major instead of 99.	377–378: Added a note referring readers to the addendum, which was updated and published online 11/2013.	11/21/13

SOUTHERN METHODIST UNIVERSITY

ADDENDUM

GENERAL INFORMATION UNDERGRADUATE CATALOG

2013–2014

PROGRAMS OF STUDY AND BUSINESS COURSES

Real Estate, Risk Management and Business Law

Professor William B. Brueggeman, **Department Chair**

Associate Professor: Robert Puelz. **Senior Lecturers:** Barbara W. Kincaid, Catherine Weber.

Bachelor of Business Administration With a Major in Real Estate Finance

To earn the B.B.A. degree with a major in real estate finance, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

	Credit Hours
Real Estate Core	12
RE 3381, 4338, 4382, 4389	
Electives (selected from the following)	6
ACCT/ITOM 4307	
BUSE 3357, 4332	
CISB 5397 (if senior core is completed with STRA 5370)	
FINA 3330, 4325, 4326, 4327, 4328, 4329, 5132 *and* 5232, 5340, 5341	
MNO 3373, 4361	
RMI 3360	

Note: The core real estate courses above must be taken through enrollment at SMU.

The Courses

Real Estate (RE)

RE 3381 (3). REAL ESTATE FUNDAMENTALS. Introduces all phases of real estate and serves as the foundation for other courses in real estate. *Prerequisite:* ACCT 2302. *Prerequisite or corequisite:* FINA 3320. Reserved for Cox majors.

RE 4338 (3). REAL ESTATE LAW. Surveys real estate law with emphasis on real estate transactions, financing, syndication, and land use regulation. *Prerequisites:* BL 3335 and RE 3381. Reserved for Cox majors.

RE 4382 (3). REAL ESTATE VALUATION. Presents principles and techniques of estimating the value of residential and income producing properties. Considers the economic base, structure, and distribution of land use in urban areas. *Prerequisites:* RE 3381 and FINA 3320. RE 3381 may be taken concurrently with the permission of the instructor. Reserved for Cox majors.

RE 4389 (3). REAL ESTATE FINANCE. Students develop the technical competence necessary to structure real estate transactions. Covers computation of periodic payments, amortization schedules, and true borrowing costs; the secondary mortgage market; and application of techniques for structuring real estate transactions (e.g., sales-leaseback, joint ventures, syndications). *Prerequisites:* RE 3381 and FINA 3320; RE 4382 recommended. Students cannot receive credit for RE 4381 and RE 4389. Reserved for Cox majors.

Business Law (BL)

BL 3300 (3). SPECIAL TOPICS: INTERNATIONAL BUSINESS LAW. Special topics in international business law taught abroad.

Engineering Management, Information and Systems

Bachelor of Science With a Major in Management Science

Curriculum Notes. In addition to the University-wide requirements, which include the completion of a minimum of 120 academic credit hours for any degree, the term credit hours within this curriculum are distributed as follows:

Requirements for the Major	*Credit Hours*
Mathematics	12
MATH 1337, 1338, 3315, 3353	
Science/Social Science	15~~21~~
ECO 1311, 1312	
3 hours in natural science from group 1	
3 hours in natural science or technology from groups 1 and 2	
3~~9~~ hours from groups 1, 2, and 3	
Group 1:	
BIOL 1305, 1308, 1310, 1401, 1402	
CEE 1331	
CHEM 1303/1113, 1304/1114	
GEOL 1301, 1305, 1307, 1308, 1313, 1315, 2320	
PHYS 1303/1105, 1304/1106, 1307/1105, 1308/1106, 1320	
Group 2:	
ANTH 2315, 2363	
CEE 1301, 1378	
CSE 1331	
EE 1301, 1382	
ME 1301, 1202/1102, 1303	
PHYS 1403, 1404	
Group 3: Other courses in ANTH, ECO, PSYC, or SOCI	
Major Concentration	45
EMIS 1360, 2360, 3308 (or MNO 3370), 3309, 3340, 3360, 3361, 4395, 5362	
CEE 3302	
CSE 1341, 1342, 4360	
6 hours from EMIS courses at the 5000 level or above	
Business	6
ACCT 2301	
MKTG 3340	
Electives	15
Adviser must approve electives.	
	93~~9~~

Note: All management science majors must earn a grade of at least *C-* in all courses taken in fulfillment of the requirements for the major; however, a grade of *C* or better is required in all subset classes. All courses must be taken for a grade (not pass/fail), with the exception of those courses for which the student has received test credit.