## Southern Methodist University

General Information

Undergraduate Catalog

## NOTICE OF NONDISCRIMINATION

Southern Methodist University will not discriminate in any employment practice, education program, or educational activity on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. SMU's commitment to equal opportunity includes nondiscrimination on the basis of sexual orientation. The Director of Institutional Access and Equity has been designated to handle inquiries regarding the nondiscrimination policies.

The following catalogs constitute the General Bulletin of the University:
Undergraduate Catalog
Dedman School of Law Catalog
Perkins School of Theology Catalog
Dedman College Graduate Catalog
Cox School of Business Graduate Catalog
Meadows School of the Arts Graduate Catalog
Annette Caldwell Simmons School of Education and Human Development
Lyle School of Engineering Graduate Catalog
In addition, certain academic programs provide their own schedules and catalogs:
Continuing Education
International Programs
Summer Studies
SMU-in-Taos (Fort Burgwin)

Every effort has been made to include in this bulletin information which, 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. Additional information may be obtained by writing to the offices listed below:

## Admissions:

Undergraduate: Executive Director of Enrollment Services and Undergraduate Admission
Graduate: Dean's office of school - arts, business, engineering, law, theology; for humanities and sciences - Research and Graduate Studies office

## Employment:

Off Campus: Hegi Family Career Development Center
On Campus: Division of Enrollment Services - Financial Aid
Financial Information on Tuition and Fees:
Division of Enrollment Services - Student Financial Services
Housing:
Department of Residence Life and Student Housing
Loans:
Division of Enrollment Services - Financial Aid
Registration and Academic Records:
Division of Enrollment Services - University Registrar

## Scholarships:

Division of Enrollment Services - Financial Aid
All addresses are as below:
Southern Methodist University
Dallas TX 75275
Information also is available at the Web site www.smu.edu.
Produced by SMU Provost's Office
Southern Methodist University, Dallas TX 75275
2009

## Contents

Notice of Nondiscrimination ..... 2
Bulletin of Southern Methodist University ..... 3
Official University Calendar ..... 10-14
Academic Year 2009-2010 ..... 10
Fall Term 2009 ..... 10
January Inter-term 2010 ..... 11
Spring Term 2010 ..... 11
May Term 2010 ..... 12
Summer Term 2010 ..... 12
Major Religious Holidays ..... 14
Description of the University ..... 15-16
Statement of Vision ..... 15
Statement of Mission ..... 15
Southern Methodist University ..... 15
Academic Accreditation ..... 16
Admission to the University ..... 17-27
Southern Methodist General Admissions Policy ..... 17
First-Year Admission Criteria ..... 17
Transfer Admission Criteria ..... 22
Readmission of Students ..... 25
Academic Forgiveness ..... 26
International Students ..... 26
Nondegree Students ..... 27
Financial Information ..... 28-29
Withdrawal From the University ..... 28
Payment Options ..... 29
Student Financial Aid ..... 30-31
SMU Satisfactory Progress Policy ..... 31
Residence Accommodations ..... 32-34
Housing Policy for All Students ..... 32
Applications for Residence ..... 32
Undergraduate Residence Halls ..... 33
Upperclass, Graduate Student and Family Halls ..... 33
SMU Apartments ..... 33
Special Housing Needs ..... 33
General Housing Information ..... 33
Policies and Procedures ..... 35-52
Confidentiality of Education Records ..... 35
Enrollment ..... 35
Academic Advising Policy ..... 36
Academic Progress: Probation, Suspension, Reinstatement, Dismissal ..... 41
Class Attendance ..... 45
Classification of Students ..... 46
Term-Hour Loads ..... 47
Final Examinations ..... 47
Grades ..... 48
Graduation ..... 52
Honors ..... 52
The General Education Curriculum ..... 53-81
Summary of General Education Requirements ..... 53
Fundamentals ..... 53
Wellness - CHOICES for Living ..... 54
Science and Technology ..... 56
Perspectives ..... 57
Cultural Formations ..... 62
Human Diversity Cocurricular Requirement ..... 79
Exemptions and Exceptions ..... 79
Rules ..... 80
Educational Facilities ..... 82-87
Altshuler Learning Enhancement Center (A-LEC) ..... 82
SMU Libraries ..... 82
Laboratories and Research Facilities ..... 85
Museum ..... 87
Office of Information Technology ..... 88
Academic Programs ..... 89-107
Preface to the Curriculum ..... 89
Baccalaureate Degree Programs ..... 90
Honors Programs ..... 90
Academic Advisement ..... 91
International Students ..... 92
International Center ..... 92
Required Testing ..... 93
International Certificate Programs ..... 93
Foreign Transcript Credit ..... 94
English as a Second Language Program ..... 95
International Center/Education Abroad ..... 96
Summer and Inter-term Programs ..... 97
SMU-in-Legacy ..... 106
SMU-in-Taos ..... 106
Reserve Officers' Training Corps ..... 107
Student Affairs ..... 108-118
Student Life ..... 108
Academic Integrity and Code of Conduct ..... 108
Services for Students With Disabilities ..... 111
New Student Orientation and Student Support ..... 111
Student Activities and Multicultural Student Affairs ..... 111
Student Center ..... 112
Student Media ..... 113
Volunteer Programs ..... 113
Women's Center ..... 113
Chaplain and University Ministries ..... 113
Hegi Family Career Development Center ..... 114
Health Services ..... 114
Recreational Sports ..... 116
Housing ..... 118
Right to Know ..... 119-120
DEDMAN COLLEGE ..... 121
General Information ..... 121-125
Academic Programs of Study ..... 121
Honors Programs ..... 122
Departmental Distinction ..... 122
Programs for Preprofessional Students ..... 122
Undergraduate Internship Program ..... 124
Teacher Education ..... 124
Multiple Majors and Minors ..... 124
Transfer Courses From Other Institutions ..... 125
Admission ..... 125
Degree Requirements ..... 126-127
The Major ..... 126
The Minor ..... 126
General Requirements ..... 126
Courses of Study in Dedman College ..... 128-268
Aerospace Studies ..... 128
Anthropology ..... 129
Biochemistry ..... 139
Biological Sciences ..... 141
Chemistry ..... 146
Classical Studies ..... 149
Earth Sciences ..... 150
Economics ..... 157
English ..... 164
Environmental Science ..... 173
Environmental Studies ..... 176
Ethnic Studies ..... 179
Evening Degree Program ..... 181
Foreign Languages and Literatures ..... 181
Chinese ..... 182
Danish ..... 183
French ..... 183
German ..... 185
Hindi ..... 187
Italian ..... 187
Japanese ..... 189
Latin ..... 189
Russian ..... 190
Spanish ..... 191
Courses in English on Linguistics and World Literatures and Cultures ..... 195
History ..... 197
Human Rights ..... 208
Individualized Studies in the Liberal Arts ..... 209
International and Area Studies ..... 210
International Studies ..... 211
Area Studies Curriculum ..... 213
Asian Studies ..... 214
European Studies ..... 215
Latin American and Iberian Studies ..... 217
African and Middle Eastern Studies ..... 220
Markets and Culture ..... 221
Mathematics ..... 226
Medieval Studies ..... 230
Natural Sciences ..... 234
Philosophy ..... 234
Physics ..... 238
Political Science ..... 242
Psychology ..... 250
Public Policy ..... 253
Religious Studies ..... 255
Sociology ..... 260
Statistical Science ..... 263
Women's and Gender Studies ..... 265
SIMMONS SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT ..... 269-279
Department of Teaching and Learning ..... 270
Undergraduate Teacher Certification ..... 270
Education Courses ..... 272
Institute for Reading Research ..... 274
Gifted Students Institute ..... 275
Department of Applied Physiology and Wellness ..... 275
Diagnostic Center for Dyslexia and Related Disorders ..... 277
Center for Academic Progress and Success (CAPS) ..... 77
Mediation Clinic ..... 277
Center for Family Counseling ..... 278
Center for Child and Community Development ..... 278
Lifelong Learning Programs ..... 278
COX SCHOOL OF BUSINESS ..... 280
General Information ..... 280-283
Vision Statement ..... 280
General Information ..... 280
Cox School Complex ..... 280
Centers and Institutes ..... 281
Admission ..... 284-287
Admission of SMU Students to a Business Major/B.B.A. Degree Program ..... 284
Admission of External Transfer Students to a Business Major/B.B.A. Degree Program ..... 285
Admission to Minors ..... 286
Statute of Limitations ..... 287
Acceptance of Transfer Credit Prior to Enrollment ..... 287
Transfer Credit for Current SMU Students ..... 287
Academic Regulations ..... 288-289
B.B.A. Degree Requirements ..... 288
Admission ..... 288
Grade Requirements ..... 288
Minimum Hours and Residency ..... 288
Application for Graduation ..... 288
Minor Requirements ..... 288
Programs of Study ..... 290-297
Curriculum ..... 290
Advising ..... 290
Career Counseling ..... 291
Business Associates Program ..... 291
Honors Program ..... 291
Business Scholars Program ..... 292
Business Administration Requirements ..... 292
Major in General Business ..... 293
Major in Accounting ..... 293
Major in Finance ..... 293
Major in Financial Consulting ..... 294
Major in Marketing ..... 294
Major in Management ..... 295
Major is Risk Management and Insurance ..... 295
Major in Real Estate Finance ..... 296
Minor in Business Administration Requirements ..... 296
Minor in Business Requirements ..... 297
Courses of Study in Cox ..... 298-307
Accounting ..... 298
Business Administration ..... 299
B.B.A. Leadership Institute ..... 299
Finance ..... 300
Information Systems ..... 302
Management and Organizations ..... 303
Marketing ..... 304
Real Estate, Risk Management and Business Law ..... 306
Business Law ..... 306
Risk Management and Insurance Area ..... 306
Strategy and Entrepreneurship ..... 307
The Caruth Institute ..... 307
MEADOWS SCHOOL OF THE ARTS ..... 308
General Information ..... 308-309
Academic, Performance and Exhibition Spaces ..... 308
Meadows School of the Arts and the Liberal Arts Education ..... 309
Admission ..... 310-311
Admission Procedures ..... 310
Undergraduate Student Financial Aid ..... 311
Degree Requirements ..... 312-314
Requirements for Graduation ..... 312
Interdisciplinary Course Offerings ..... 313
Programs of Study ..... 315-404
Advertising ..... 315
Tamerlin Advising Institute of Education and Research ..... 315
Admission Requirements ..... 315
Program of Study ..... 315
Courses ..... 319
Art ..... 322
Instructional Facilities ..... 322
Admission and Financial Aid ..... 323
Programs of Study ..... 324
Courses ..... 327
Art History ..... 335
Program of Study ..... 336
Honors Program ..... 337
Minor in Art History ..... 337
Courses ..... 337
Cinema-Television ..... 346
Instructional Facilities ..... 346
Admission and Degree Requirements ..... 346
Internships ..... 346
Directed Studies ..... 347
Class Attendance ..... 347
Program of Study ..... 347
Courses ..... 348
Corporate Communications and Public Affairs ..... 352
Admission ..... 353
Special Requirements ..... 353
Scholarships ..... 354
CCPA Honors Program ..... 354
Programs of Study ..... 354
Courses ..... 355
Dance ..... 358
Admission, Audition and Financial Aid ..... 359
Performance ..... 359
Program of Study ..... 360
Courses ..... 363
Interdisciplinary Studies in the Arts ..... 367
Program Description ..... 367
Administrative Procedures ..... 367
Journalism ..... 368
Instructional Facilities ..... 368
Admission and Degree Requirements ..... 369
Scholarships ..... 369
Honors Program ..... 369
The William J. O’Neil Program in Business Journalism ..... 369
Internships and Practica ..... 370
Class Attendance ..... 370
Off-campus Programs ..... 370
Program of Study ..... 371
Courses ..... 373
Music ..... 376
Admission ..... 376
Facilities ..... 377
Act of Enrollment ..... 377
Specific Music Requirements ..... 378
Meadows Elective/Corequirement ..... 379
Programs of Study ..... 379
Courses Open to All University Students ..... 384
Courses ..... 384
Theatre ..... 396
Instructional Facilities ..... 396
Admission ..... 397
Evaluation of Progress and Artistic Growth ..... 397
Degrees and Programs of Study ..... 397
Courses Open to All University Students ..... 399
Courses ..... 400
SCHOOL OF ENGINEERING ..... 405
General Information ..... 405-407
Professional Engineering Licensure ..... 405
Program Information ..... 405
Undergraduate Engineering Internship Program ..... 406
Cooperative Education ..... 408-409
How the Cooperative Program Operates ..... 408
Policies of the Cooperative Engineering Education Program ..... 409
Co-op Certificate ..... 409
Admission ..... 410-411
High School Preparation ..... 410
Admission to Advanced Standing ..... 410
Admission by Transfer From Another Institution ..... 411
Academic Regulations ..... 412
Graduation Requirements for Baccalaureate Degrees ..... 412
General Education Program ..... 412
Programs of Study ..... 413-483
Description of Courses ..... 413
Computer Science and Engineering ..... 414
Degrees ..... 415
Dual Degree Program ..... 415
4+1 Master's Degree Program ..... 415
Teaching Certification ..... 415
Computer Facilities ..... 416
Curriculum in Computer Science ..... 416
Curriculum in Computer Engineering ..... 419
Courses ..... 420
Electrical Engineering ..... 427
Department Facilities ..... 429
Curriculum in Electrical Engineering ..... 432
Courses ..... 436
Engineering Management, Information and Systems ..... 442
Curriculum in Management Science ..... 443
Dual Degree Programs and the 4+1 Program ..... 445
Computing Facilities ..... 446
Courses ..... 446
Environmental and Civil Engineering ..... 450
Environmental Engineering and Environmental Science Programs ..... 451
Civil Engineering Program ..... 451
Degrees Offered ..... 452
Departmental Facilities ..... 453
Curriculum Requirements ..... 454
Courses ..... 457
Mechanical Engineering ..... 466
Departmental Facilities ..... 468
Instructional Laboratories ..... 469
Shared Laboratory Space ..... 470
Curriculum in Mechanical Engineering ..... 470
Courses ..... 475
Center for Special Studies ..... 482
Reserve Officers' Training Corps ..... 482
ADMINISTRATION AND FACULTY ..... 484
Dedman College ..... 487-495
Annette Caldwell Simmons School of Education and Human Development ..... 496-497
Cox School of Business ..... 498-500
Meadows School of the Arts ..... 501-507
Lyle School of Engineering ..... 508-514
INDEX ..... 515

## Official University Calendar

## ACADEMIC YEAR 2009-2010

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, the instructor or supervisor may contact the Office of the Chaplain.

Graduate programs in the Cox School of Business, Perkins School of Theology and Dedman School of Law have different calendars.

Offices of the University will be closed on September 7, November 26-27, December 21-25, 2009; January 1, January 18, April 2, May 31 and July 5, 2010.

## FALL TERM 2009

March 30-April 17, Monday-Friday: Enrollment Fall 2009 Continuing Students for all undergraduates and graduate Dedman and Meadows.
May/July/August : Academic Advising, Enrollment and Orientation (AARO) conferences for new first-year and transfer undergraduate students. Contact New Student Programs, Student Life Office, 214-768-4560, www.smu.edu/newstudent, for a list of dates.

August 23, Sunday: Residence halls officially open.
August 25, Tuesday: Opening Convocation, McFarlin Auditorium.
August 26, Wednesday: First day of classes.
September 1, Tuesday: Last day to enroll, add courses or drop courses without grade record or tuition billing. Last day to file for graduation in December.
September 7, Monday: University Holiday - Labor Day.
September 9, Wednesday: Follows Monday Class Schedule.
September 11, Friday: Last day to declare pass/fail, no credit or first-year repeated course grading options. Last day to request excused absence for observance of a religious holiday.
October 7, Wednesday: Last day for continuing undergraduate students to change their majors before November enrollment.
October 12-13, Monday-Tuesday: Fall Break.
November 2 -November 20, Monday-Friday: Enrollment Spring 2010 Continuing Students for all undergraduates and graduate Dedman and Meadows.
November 3, Thursday: $60 \%$ 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 6-7, Friday-Saturday: Homecoming.
November 10, Tuesday: Last day to drop a course.
November 13-14, Friday-Saturday: Family Weekend.
November 16, Monday: Last day for December graduation candidates to change grades of Incomplete.

November 24, Tuesday: Students should file for May graduation. Last day to file is January 21.
November 25, Wednesday: "No Class" Day.
November 26-27, Thursday-Friday: University Holiday - Thanksgiving.
December 1, Tuesday: Last day to withdraw from the University.
December 4-9, Friday-Wednesday: No final examinations or unscheduled tests and papers.
December 7, Monday:Last day for oral/written examinations for December graduate degree candidates.

December 9, Wednesday: Last day of instruction.

December 10, Thursday: Reading Day.
December 11-17, Friday-Thursday: Examinations (No examinations scheduled for Sunday).
December 18, Friday: Residence halls officially close (December graduates contact RLSH).
December 19, Saturday: Official close of term and date for conferral of degrees. Graduation ceremony for December graduates.

December 21-25, Friday: University Holidays - Christmas/Winter Break.

## JANUARY INTER-TERM 2010

January 1, Friday: University Holiday - New Year's Day.
(Note: Some areas of instruction offer selected courses during the January Inter-term, December 22-January 19.)

## SPRING TERM 2010

November 2-January 25, Monday-Thursday: Enrollment Spring 2010 Continuing Students for all undergraduates and graduate Dedman and Meadows.

January - TBA: Academic Advising, Enrollment and Orientation (AARO) conferences for new first-year and transfer undergraduate students. Conference dates to be announced. Contact New Student Programs, Student Life Office, 214-768-4560, www.smu.edu/ newstudent.

January 1, Friday: University Holiday - New Year's Day.
January 12, Tuesday: Residence halls officially open.
January 18, Monday: University Holiday - Martin Luther King, Jr.'s Birthday.
January 19, Tuesday: First day of classes.
January 25, Monday: Last day to enroll, add courses or drop courses without grade record or tuition billing. Last day to file for May graduation.

February 3, Wednesday: Last day to declare pass/fail, no credit or first-year repeated course grading options. Last day to request excused absence for observance of a religious holiday.

March 6-14, Saturday-Sunday: Spring Break.
March 31, Wednesday: $60 \%$ 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, Friday: University Holiday - Good Friday.
April 4, Sunday: Easter Sunday.
April 5-23, Monday-Friday: Enrollment Summer 2010 and Fall 2010 Continuing Students for all undergraduates and graduate Dedman and Meadows.

April 5, Monday: Last day for continuing undergraduate students to change their majors before April enrollment.

April 8, Thursday: Last day to drop a course.
April 12, Monday: Last Day for May graduation candidates to change grades of Incomplete.
April 20, Tuesday: Students should file for August or December graduation. Last day to file for August is June 4. Last day to file for December is the last day to enroll for Fall 2010.
April 26, Monday: Last day to withdraw from the University.
April 29-May 4, Thursday-Tuesday: No final examinations or unscheduled tests and papers.
April 30, Friday: Last day for oral/written examinations for graduate students who are May degree candidates.

May 4, Tuesday: Last day of instruction. Follows a Friday schedule.
May 5-11, Wednesday-Tuesday: Examinations (No examinations scheduled for Sunday).
May 12, Wednesday: Residence halls officially close for non-graduating students.
May 14, Friday: Baccalaureate.
May 15, Saturday: Commencement.
May 16, Sunday: Residence halls close for graduating students.

## MAY TERM 2010

Some areas of instruction may offer a limited number of selected courses during the May Term period, May 12-30. Each May Term course may have unique start and end dates within the May 12-30 term to accommodate the particular needs of the course.

The following dates are applicable only for courses offered at the Taos campus:
May 12, Wednesday: SMU-in-Taos: May Term Travel Day and Arrival, 2-6 p.m.
May 13, Thursday: SMU-in-Taos: First Day of Classes.
May 14, Friday: SMU-in-Taos: Last day to enroll, add courses and drop courses without grade record or tuition billing. Permission of Taos Program required for all enrollments.
May 29, Saturday: SMU-in-Taos: May Term Examinations.
May 30, Sunday: SMU-in-Taos: May Term Departure.

## SUMMER TERM 2010

The Summer Term consists of three primary sessions: first session, second session, and a full, 10 -week session. There are also shorter and longer sessions to accommodate the particular needs of the various instructional units such as SMU-In-Taos, International Programs and Perkins School of Theology.

> Full Summer Session
> Classes will meet 2 hours and 15 minutes twice a week or 1 hour and 30 minutes three times a week.

May 31, Monday: University Holiday - Memorial Day.
June 1, Tuesday: First day of Full Summer Session classes.
June 4, Friday: Last day to enroll, add courses or drop courses without grade record or tuition billing for Full Session course. Last day to file for August graduation.
June 10, Thursday: Last day to declare pass/fail, no credit or first-year repeated course grading options for a Full Session course.
July 4-5, Sunday-Monday: University Holiday - Independence Day.
July 6, Tuesday: Follows a Monday class schedule.
July 10, Saturday: $60 \%$ 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.

July 16, Friday: Last day for August graduation candidates to change grades of Incomplete.
July 23, Friday: Last day to drop a Full Summer Session course.
July 29, Thursday: Last day to withdraw from the University.
August 4, Wednesday: Last day of Full Summer Session instructions and examinations. Close of the term and conferral date.

## First Session

Classes meet two hours a day, Monday-Friday.
May 31, Monday: University Holiday - Memorial Day.
June 1, Tuesday: First day of First Session Classes.
June 2, Wednesday: Last day to enroll, add courses or drop courses without grade record or tuition billing for a First Session course.

June 4, Friday: Last day to declare pass/fail, no credit or first-year repeated course grading options for a First Session course. Last day to file for August Graduation.

June 19, Saturday: $60 \%$ 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.

June 23, Wednesday: Last day to drop a First Session course.
June 24, Thursday: Last day to withdraw from the University.
June 30, Wednesday: Last day of First Session instruction and examinations.

## Taos Summer I Session

June 3, Thursday: SMU-in-Taos: Summer I Arrival and First Day of Classes.
June 4, Friday: SMU-in-Taos: Last day to enroll, add courses and drop courses without grade record or tuition billing. Permission of Taos Program required for all enrollments.

June 30, Wednesday: SMU-in-Taos: Summer I Examinations.
June 30, Wednesday: SMU-in-Taos: Summer I Departure.

## Second Session

Classes meet two hours a day, Monday-Friday.
June 4, Friday: Last day to file for August Graduation.
July 1, Thursday: First day of Second Session classes.
July 2, Friday: Last day to enroll, add courses or drop without grade record or tuition billing for Second Session courses.

July 4-5, Sunday-Monday: University Holiday - Independence Day.
July 6, Tuesday: Last day to declare pass/fail, no credit or first-year repeated course grading options for a Second Session course.

July 13, Tuesday: Last day for August graduation candidates to change grades of Incomplete.
July 23, Friday: Last day to drop a Second Session course.
July 24, Saturday: $60 \%$ 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.
July 27, Tuesday: Last day to withdraw from the University.
August 2, Monday: Last day of Second Session instruction and examinations.
August 4, Wednesday: Official close of the term and conferral date.

## Taos August Term 2010

August 5, Thursday: SMU-in-Taos: August Term Arrival and First Day of Classes, 2-6 p.m.
August 6, Friday: SMU-in-Taos: Last day to enroll, add courses and drop courses without grade record or tuition billing. Permission of Taos Program required for all enrollments.
August 22, Sunday: SMU-in-Taos: August Term Examinations.
August 23, Monday: SMU-in-Taos: August Term Departure.

## MAJOR RELIGIOUS HOLIDAYS

## (August 2009-August 2010)

Listing of religious holidays 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, 2009
Ash Wednesday: February 17, 2010
Palm Sunday: March 28, 2010

Janmashtami: August 28, 2009
Good Friday: April 2, 2010
Easter Sunday: April 4, 2010
Easter Sunday (Orthodox): April 4, 2010

## Hindu

Diwali: October 28, 2009
Dasera: October 9, 2009

## Jewish

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

Rosh Hashanah: September 28-30, 2009 Purim: March 8-9, 2010
Yom Kippur: October 7, 2009
Sukkot: October 12-14, 2009
Hanukkah: December 21-28, 2009
Pesach (Passover): April 7-15, 2010
Shavuot: May 28-30, 2010

## Muslim

Ramadan:September 1- 2, 2009
Eid al Fitr:September 30-October 1, 2009
Eid al Adha: December 7-8, 2009
Islamic New Year: December 29, 2009
Ashura: January 7, 2010
Mawlid al Nabi: March 8-9, 2010

## 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's mission is to be a leading private institution of higher learning that expands knowledge through research and teaching. Among its faculty, students and staff, the University develops skills and cultivates principled thought and wisdom. The University is dedicated to the values of academic freedom and open inquiry 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:

- To enhance the academic quality and competitiveness of the University.
- To improve teaching and learning.
- To strengthen scholarly research and creative achievement.
- To support and sustain student development and quality of life.
- To broaden global perspectives.
- To advance the University through select, strategic alliances.


## 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, professional, 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, Meadows School of the Arts, Edwin L. Cox School of Business, Annette Caldwell Simmons School of Education and Human Development, Bobby B. Lyle School of Engineering, Dedman School of Law and Perkins School of Theology.

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.

The University has 104 buildings, a total enrollment that has averaged more than 10,000 the past ten years, a full-time faculty of 656 , and assets of $\$ 2.26$ billion - including an endowment of $\$ 1.36$ billion (Market Value, June 30, 2008).

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 and professional degrees through those and professional schools.

Of the 10,965 students enrolled for the 2008 fall term, 6,240 were undergraduates and 4,725 were graduate and professional students. The full-time equivalent enrollment was 6,073 for undergraduates and 3,121 for graduate and professional students.

Nearly all the students in SMU's first class came from Dallas County, but now 47 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 92 foreign countries, and from all races, religions and economic levels.

Undergraduate enrollment is 54 percent female. Graduate and professional enrollment is 44 percent female.

A majority of SMU undergraduates receive some form of financial aid. In 20082009,77 percent of first-year students received some form of financial aid, and 25 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 Commission on Colleges of the Southern Association of Colleges and Schools to award Baccalaureate, Master's, 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.

Individual academic programs are accredited by the appropriate national professional associations. The Edwin L. Cox School of Business is accredited by AACSB International, the Association to Advance Collegiate Schools of Business. The Dedman School of Law is accredited by the American Bar Association. Perkins School of Theology is accredited by The Association of Theological Schools in the United States and Canada. The Department of Chemistry is accredited by the American Chemical Society. In the Meadows School of the Arts, the Dance Division is accredited by the National Association of Schools of Dance; the Music Division by the National Association of Schools of Music; and the Theatre Division by the National Association of Schools of Theater.

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, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700. 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 disciplines of environmental science and management science.

## SOUTHERN METHODIST UNIVERSITY GENERAL ADMISSIONS POLICY

Southern Methodist University's vision is to "shape citizens who contribute to their communities and lead their professions in a global society." To achieve this vision, SMU has expressed in its Statement of Mission the intent to "develop skills and cultivate principled thought and wisdom." In addition, SMU seeks "to support and sustain student development and quality of life." These statements reflect SMU's recognition that its students cannot become the leaders the world will need in the years ahead unless they have been exposed to an educational environment in which there is a rich variety of thoughts and opinions. This type of exposure will better prepare them for the diverse workforce and society to which they will contribute.

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 may result from differences in racial, ethnic, socio-economic, geographic, educational and religious backgrounds, different life experiences or talents in the arts or athletics, or multi-lingual skills. It is the policy of SMU to examine individually each prospective student's application for admission in order 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 via Dedman College of Humanities and Sciences. Dedman College will assign an appropriate academic adviser based on the student's intended field of study. The adviser assists the student in selecting courses pertinent to the General Education Curriculum requirements as well as the student's chosen major.

Students normally qualify for entry into a 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, classroom performance, grade pattern, rank in class (if applicable), SAT I and/or ACT scores, counselor and teacher recommendations, essay and extracurricular activities. Although no specific cutoff is applied to any single measure, generally a student who has accomplished both a strong academic record and exhibited a variety of academic and personal achievements gains and benefits the most from the SMU experience. Matriculation to the University is contingent upon continuing academic achievement as evidenced in the application for admission, and final completion of the high school diploma. As an independent institution, SMU has no limits on enrollment based solely on geography, and no 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, age, disability or veteran status.

## High School Curriculum

Students who present academic records in excess of the following minimum requirements generally have an advantage in the admissions process. Curriculum rigor, classroom performance, elective choices and senior-year course load are
given particular consideration. Applicants should submit high school records in a minimum of 15 or more academic units. The recommended distribution for a minimит program is as follows: four units of English, three units of mathematics (Algebra I, Plane Geometry, Algebra II), three units of science (including two units of laboratory science), three units of social science and two units of a foreign language (a two-year sequence). Engineering applicants should have completed four years of math (including higher level math beyond Algebra II) and a year each of chemistry and physics. Students who have not completed a two-year sequence of a single foreign language in high school will be required to complete successfully two terms of a single foreign language at an accredited institution prior to their fifth regular term at SMU, regardless of intended major. American sign language will be used to satisfy the University's admission foreign language requirement for those students with a documented language-based learning disability that prevents learning a foreign language.

## 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 I and/ or ACT scores, as well as the SMU Home School Supplement that indicates mastery of English, math and science in the home school curriculum and documentation that the student has fulfilled their home state's requirements for graduation. A checklist of the home school requirements can be found at www.smu.edu/admission/apply_home_school.asp. In addition to the above requirements, three SAT II subject exams (to include English, math and science) offered by the Educational Testing Service may also be required. According to "Title 34 of the Code of Federal Regulations," Part 600, Section 668.32, an accepted home-schooled applicant must be at least 17 years of age.

## 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 Action Applicants*

Application Deadline: November 2
Notification Date: By December 30
Deposit Reply Date: May 1 (postmark date)
Regular Decision Applicants
Application Deadline: January 15
Notification Date: By March 15
Deposit Reply Date: May 1 (postmark date)
Rolling Decision Applicants (on space-available basis)
Application Deadline: March 15
Notification Date: Rolling after April 1
Deposit Reply Date: May 1 (postmark date)
*NOTE: Acceptance under Early Action does not require a student to withdraw applications from other institutions. The deadline for priority merit scholarship consideration is January 15.

## Required Testing

SMU requires all applicants, except foreign citizens from foreign secondary schools, to submit Scholastic Aptitude Test (SAT I) scores and/or American College Test (ACT) scores. Foreign citizens interested in merit-based scholarships
must submit official ACT/SAT scores for scholarship consideration. These examinations are conducted in a number of test centers throughout the United States and in foreign countries several times each year. It is recommended that students take the SAT I or ACT more than once. Although scores from tests taken after January may be submitted, score results may delay the final admission decision. Foreign students whose native language is not English are required to submit a score of 550 or better on the paper-based TOEFL (Test of English as a Foreign Language) or a score of at least 213 on the computer-based TOEFL.

Students may obtain additional information about the College Entrance Examination Board (CEEB) and its tests (SAT I, SAT II, TOEFL) from their high school counselors or by writing to the CEEB at P.O. Box 592, Princeton, NJ 08540 or visiting CEEB online at www.collegeboard.com. Students requesting further information about the ACT also may contact their high school counselors or write to the ACT National Office, 2201 North Dodge Street, PO Box 168, Iowa City, IA 52243.

## 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 Studio Art must submit a portfolio of their work for faculty review to the Meadows School of the Arts through SMU's online slideroom. Information regarding audition and portfolio requirements and dates may be obtained by contacting the Associate Dean, Meadows School of the Arts, Southern Methodist University, Dallas, TX 75275-0356; 214-SMU-3217, www.meadows.smu.edu.

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 Studio Art portfolios correspond with deadlines for SMU application submissions. Current deadlines can be found at meadows.smu.edu/art. Transfer students entering degree programs within the Division of Dance or Theatre may do so only in the fall term.

## Reserving a Place

Admitted students are required to submit a nonrefundable $\$ 550$ deposit by the deadline May 1 to reserve a place in class. This deposit includes a Matriculation Fee, Advance Tuition Deposit, and Housing Deposit. All first-year students who have completed fewer than 30 hours in residence at SMU must live on campus unless permission is granted to live at home. Students granted permission to live at home by the Director of Housing and Residence Life need to submit a nonrefundable $\$ 450$ deposit.

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

## Health Examination

All new students must have a completed medical history form on file with the University Health Service before they are eligible to register. All students must provide proof of immunization against diphtheria, tetanus, poliomyelitis, rubeola (red, or regular, measles), rubella (German, or three-day, measles) and tuberculosis (a negative skin test or chest X-ray within the past year).

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

An official copy of test results must be sent from the College Board to the Office of Admission so that you may know what credit you have earned prior to advising and enrollment.

| AP Examination | Scores | Credits Awarded | Course (s) Credited |
| :---: | :---: | :---: | :---: |
| American History | 4, 5 | 6 Hours | HIST 2311, 2312 |
| 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 1340 |
| Computer Science AB | 4, 5 | 3 Hours | CSE 1340 |
| Economics: |  |  |  |
| Macro | 4, 5 | 3 Hours | ECO 1312 |
| Micro | 4, 5 | 3 Hours | ECO 1311 |
| English Lng/C or Lit/C | 4 | 3 Hours | ENGL 1301 |
| English Lng/C or Lit/C | C | 6 Hours | ENGL 1301, 1302 |
| 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 |
| Languages (Lang or Lit): |  |  |  |
| French | 4,5 | 12 Hours | FREN 1401, 1402, 2401 |
| German | 4,5 | 14 Hours | GERM 1401, 1402, 2311, 2312 |
| 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 | 3 if $A B$ subscore of 4 | 3 Hours | MATH 1337 |
| Calculus BC | 4 | 3 Hours | MATH 1337 |
| Calculus BC | 5 | 6 Hours | MATH 1337, 1338 |
| Physics: |  |  |  |
| Physics C (Mech) | 4, 5 | 3 Hours | PHYS 1303 |
| Physics C (E\&M) | 4, 5 | 3 Hours | PHYS 1304 |
| Physics does not award placement credit for labs. |  |  |  |
| Psychology | 4, 5 | 3 Hours | PSYC 1300 |
| Statistics | 4, 5 | 3 Hours | STAT 2331 |

College-Level Examination Program (CLEP)
SMU gives credit for CLEP subject examinations based on the specified minimum scores below:

| CLEP Exam | Score $($ of 80$)$ | Award | Course credited |
| :--- | :---: | :---: | :--- |
| American Literature | 60 | 3 cr | ENGL 3346 |
| English Literature | 60 | 3 cr | ENGL 3341 |
| Macro Economics | 60 | 3 cr | ECO 1312 |
| Micro Economics | 60 | 3 cr | 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.

Foreign Languages. All students with at least two years of the same foreign language in high school are required to take the foreign language placement examinations given during orientation if they intend to continue the study of that language. Scores on these examinations are used to evaluate the foreign 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 earn retroactively from 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) in order for the course to serve as a basis for granting retroactive credit. Such credit counts toward graduation and serves to reduce the student's foreign language requirement in degree programs that require competence in foreign language. Students must take the language placement examination in order to be eligible for retroactive credit at the successful completion of the course into which they have been placed. 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 must be taken in the first term that the student enrolls at SMU and 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 cr | Introduction to Mathematical Sciences |
| :--- | :---: | :--- |
| MATH 1309 | 3 cr | Introduction to Calculus for Business/Social Sciences |
| (suggested preparation $=$ one | full year high school calculus) |  |
| MATH 1337 | 3 cr | Calculus I |
| (suggested preparation $=$ one | full year high school calculus) |  |
| MATH 1338 | 3 cr | Calculus II |

Computer Science. The Computer Science and Engineering department offers a credit exam for CSE 1340 Introduction to Computing Concepts that must be taken prior to initial enrollment.

## International Certificate Programs

SMU awards 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. Credits will not be awarded for Subsidiary-Level exams.
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 score of "C", or for 0-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.

## Concurrent Dual Credit/College Programs

Credit is awarded for college courses a student takes prior to graduation from high school if the course meets 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

Although the average G.P.A. of successful transfer applicants who have completed 30 or more transferable hours is considerably higher than a 2.7 G.P.A. (on a 4.0 scale), applicants with a G.P.A. below this threshold are not typically successful in gaining admission. Candidates with a transferable G.P.A. below 2.0 are not competitive for admission to the University. For all candidates who have completed 30 or more college hours, the Admission Committee considers the rigorous nature of the courses attempted. In particular, 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, the 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 including SAT I and/or ACT scores and high school performance.

Applicants for admission who have not taken one of the math courses described under the Fundamentals/Mathematical Sciences list in the General Education Curriculum found in this catalog, must have completed within the last three years college algebra or a high school sequence of Algebra I, Algebra II and Plane Geometry to be considered for transfer admission.

Those 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 the performing arts of Dance, Music or Theatre must audition. Refer to the sections on Performing Arts Auditions for requirements. Students wishing to pursue a Bachelor of Fine Arts (B.F.A.) in Studio Art must submit a portfolio to the Meadows School of the Arts for review.

Students who have not completed a two-year sequence of a single foreign language in high school nor a one-year sequence of a single foreign language at the college level, will be required to take two terms of a single foreign 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 foreign language admission requirement for those students with a documented language-based learning disability that prevents learning a foreign language.

Prospective transfer students must complete an Undergraduate Application for Transfer Admission and submit a $\$ 60$ nonrefundable application fee. In addition, an official academic transcript from each college or university attended, including the last completed term, must be sent to:

SMU Undergraduate Admission
P.O. Box 750181

Dallas, TX 75275-0181
A final high school transcript or GED results should be sent to confirm foreign language and math background. A high school transcript, including SAT I or ACT scores, is required when less than 30 transferable hours have been earned. SAT I or ACT results will not be required of students for whom five or more years have lapsed since high school or high school equivalent.

## Transfer Credit

University policy requires that of the 122 minimum required term hours for a degree, at least 60 hours must be earned in residence at SMU. Therefore, regardless of the number of transferable credits completed elsewhere, to receive an SMU degree students need to earn 60 credit hours in residence at SMU.

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, 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 G.P.A. 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 G.P.A. A grade of I (Incomplete) will be calculated as F. A grade of IP (In Progress) for a current term is not calculated.

Official college transcripts are required for all college-level work attempted, regardless of transferability. Transcripts must be received at SMU directly from the transferable institution. A transcript issued to a student is acceptable provided it is received in a sealed, letterhead envelope with the Registrar's Office 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.

A copy of the transfer credit evaluation is available online to transfer students prior to their enrollment.

## Foreign Transcript Credit

All foreign 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 a foreign 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 only accepts evaluations from the following agencies of proven reliability:

World Education Services, Inc.
P.O. Box 745 Old Chelsea Station

New York, NY 10113-0745
Telephone: 212-966-6311
Toll-free: 1-800-937-3895
E-mail: infor@wes.org
www.wes.org
Foreign Credentials Service of America
1910 Justin Lane
Austin, TX 78757-2411
Telephone: 512-459-8428
Fax: 512-459-4565
E-mail: info@fcsa.biz www.fcsa.biz
Josef Silny \& Associates, Inc.
7101 SW 102 Avenue
Miami, FL 33173
Telephone: 305-273-1616
Fax: 305-273-1338
E-mail: info@jsilny.com
www.jsilny.com
The evaluations provided by the services listed above should include an explanation that the institution is recognized by the ministry of education in the 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 independent decision of the credit to be given.

Information and applications are available on the Web from the services. If you need further information, please contact the University Registrar.

## 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.
Spring term entry: All data due no later than November 2.
NOTE: Priority scholarship deadline is April 1 for fall entry and November 2 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 in order 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. Please note that this $\$ 450$ fee and deposit are nonrefundable. Students seeking financial aid should wait until they receive their financial aid award before submitting a deposit. All foreign passport holders are required to pay a one-time nonrefundable $\$ 150$ international student fee.

Note that admitted transfer students cannot actually enroll at SMU until their final transcript has been received and evaluated for transferability. (For this reason, we discourage fall term entry transfer students 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.

## 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 a readmission application through the Division of Enrollment Services/ Undergraduate Admission (The application is online at www.smu.edu/admission/ forms.asp). Any student who has been suspended is also required to apply for readmission. Students who have been suspended are required to attach a statement to their readmission application, indicating the reasons why they now feel ready to return to SMU. Although the Division of Enrollment Services facilitates the application process, an academic dean determines readmission.

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

The deadline for filing this application and supporting materials is the last business day prior to the first day of classes of the term of re-entry. Returning students are strongly advised to apply for readmission 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. In addition, the availability of academic advising and courses may be limited immediately prior to and at the beginning of the term.

There is no readmission fee. All students who return to SMU after any period of non-enrollment 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 Policies and Procedures section of this catalog). In addition, each college within SMU has specific policies regarding readmission, 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 G.P.A. nor used for actions such as the determination of admission, academic probation, suspension, honors, scholarships and graduation. Please see the University Enrollment and Academic Records Standards section for details of this policy. The academic forgiveness application is available through the Division of Enrollment Services.

## INTERNATIONAL STUDENTS

Foreign citizens applying to SMU as first-year and transfer undergraduate students are expected to meet all requirements for admission.

Students for whom English is not the native language are expected to take an internationally recognized English language test such as TOEFL (Test of English as a Foreign Language) or an assessment from IELTS (International English Language Testing System). A score of at least 213 (computer test) or 80 (Internet-based test) on the TOEFL is required for admission consideration. Students with scores slightly below those mentioned above will be required to successfully complete SMU's summer Intensive English Program prior to matriculation. Transfer students 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 an international university are required to submit specific documentation as noted under Foreign Transcript Credit (see page 23 for an explanation).

The expenses to be incurred in attending the University are listed in the Financial Information section beginning on 28. Additional costs that international students may expect include room and board during school holidays, travel expenses, international student insurance and a one-time 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 the student is eligible, provided the appropriate application deadline has been met.

When an international student has been admitted and provided an adequate Certificate of Financial Responsibility or bank letter, the International Office 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 at SMU must be covered by health insurance in the amounts specified for "Exchange Visitors" by the U.S. government. Health insurance may be purchased through the University by self-enrollment with the Uni-versity-contracted insurance plan or elsewhere.

## NONDEGREE STUDENTS

Nondegree students are those applicants for admission who wish to be enrolled 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) have already earned a college degree, 2) are degree-seeking students in good standing and visiting from another four-year college or university, or 3) are participants in special SMU programs such as the TAG program. Nondegree students are admitted through the Office of Nondegree Credit Studies and are eligible to register in day and evening classes for which they have satisfied prerequisites. Admission through the Office of Nondegree Credit Studies as a nondegree-seeking student does not qualify a student as a degree applicant.

Applications for admission may be obtained by contacting the Office of Nondegree Credit Studies, Southern Methodist University, P.O. Box 750382, Dallas, TX 75275-0382; 214-768-4272. Or visit: www.smu.edu/education.

A catalog supplement, Financial Information: Southern Methodist University, 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 is available on the Bursar Web site at www.smu.edu/bursar. For more information, call 214-768-3417.

Students registering in Continuing Student Enrollment must ensure that payment is received in the Division of Enrollment Services by the due date (published on the Bursar Web site). No confirmation of receipt of payment will be sent. Invoice notifications are e-mailed to the student's SMU e-mail address after registration for the student to view on the web. If notification has not been received two weeks prior to the due date, Enrollment Services should be contacted. The registration of a student whose account remains unpaid after the due date may be canceled at the discretion of the University. Students registering in New Student Enrollment and Late Enrollment must pay at the time of registration.

Students are individually responsible for their financial obligations to the University. All refunds will be made to the student, with the exception of federal parent PLUS loans and the SMU Monthly Payment Plan. 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. Students with Title IV financial aid need to sign an authorization to credit account (ACA) form. Students with a federal parent PLUS Loan need to have the parent sign an authorization to credit account parent (ACAP) form. A student whose University account is overdue or who is in any other manner indebted 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.

Students who elect to register for courses outside of their school of record will pay the tuition rate of their school of record.

## WITHDRAWAL FROM THE UNIVERSITY

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, obtain approval from their academic dean and submit the form to the Division of Enrollment Services-University Registrar. The effective date of the withdrawal is the date on which the Student Petition for Withdrawal is processed in the Registrar's Office. Discontinuance of class attendance or notification to the instructors of intention to withdraw does not constitute an official withdrawal.

Reduction of tuition and fees is based on the schedule listed in the Financial Information: Southern Methodist University and is determined by the effective
date of the withdrawal. The schedule may be found at www.smu.edu/bursar, or by calling 214-768-3417.

Please note, however, 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; 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 staff of the Division of Enrollment Services.

Medical withdrawals have conditions that must be met prior to re-enrollment at SMU. Medical withdrawals must be authorized by the Medical Director; Psychiatric Director; Counseling and Testing Director; or Vice President for Student Affairs.

Students who live in University housing must obtain clearance from the Office of Residence Life and Student Housing.

## PAYMENT OPTIONS

## The SMU Payment Plan

The SMU Payment Plan allows total annual charges to be broken into monthly installments and spread over 10 months, beginning in June.

For more information about this plan contact:
SallieMae
One AMS Place
PO Box 100
Swansea MA 02777
1-800-635-0120 or 1-877-279-6092

## The Four-Year Single Payment Plan

The Four-Year Single Payment Plan allows families to avoid the effects of tuition and fee increases by paying for four years in one single payment (four times the first-year tuition and fees).

For more information about this plan contact:
Division of Enrollment Services
Southern Methodist University
PO Box 750181
Dallas TX 75275-0181
214-768-4635

## Other Commercial Plans

The SMU Division of Enrollment Services receives mailings from other entities offering extended payment plans for credit-worthy families. Contact us if you would like more information.

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 by the Division of Enrollment Services-Financial Aid to have need for such assistance.

More than 77 percent of all students receive some type of financial aid. SMU has a generous program of merit-based scholarships, grants, loans and part-time jobs to recognize academic achievement and talent in specific fields and to meet financial need.

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 (IB) 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 (FAFSA), available on the Web at www.fafsa.ed.gov, and the College Scholarship Service/PROFILE (CSS/PROFILE), found at profileonline.collegeboard.com, by February 15. (The FAFSA and CSS/PROFILE are required for need-based aid consideration.) SMU Title VI code: 003613 and PROFILE 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 FAFSA available www.fafsa.ed.gov, and CSS/PROFILE, found at profileonline.collegeboard.com, by June 1. (The FAFSA and CSS/PROFILE are required for need-based aid consideration.)
3. Continuing students who:
a. File FAFSA or FAFSA Renewal and CSS/Profile by May 1, after the parents' and students' income tax returns have been filed with the Internal Revenue Service.
To obtain additional information contact this office:
Division of Enrollment Services
Southern Methodist University
PO Box 750181
Dallas TX 75275-0181
214-768-3417
enrol_serv@smu.edu/financial_aid, 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. 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.

Undergraduates Formal Satisfactory Academic Progress is measured at the end of the spring term of a student's second academic year of enrollment at SMU (and at the end of every spring term thereafter) until student graduates OR, for a transfer student, at the end of a the first spring term of enrollment at SMU (and at the end of every spring term thereafter) until student graduates. Qualitative Measures and Quantitative Measures are taken. The end of each spring term represents the end of each academic year at SMU.

Qualitative Measure of Satisfactory Academic Progress. At the end of the spring term of a student's second year of enrollment (or first spring term for a transfer student), a student must be making Satisfactory Academic Progress measured by the student's cumulative G.P.A. of 2.0 or better since that is the standard for graduation at SMU.

Quantitative Measure of Satisfactory Academic Progress. At the end of the spring term of a student's second academic year (or at the end of the first spring term for a transfer student) a student should have met or exceeded these yearly federal guidelines:

Year 1-13\%-16 hours
Year 2-25\%-31 hours
Year 3-43\%-53 hours
Year 4-60\%-74 hours
Year 5-80\%-98 hours
Year 6-100\%-124 hours
SMU policy (implemented end of Spring Term 2007) will measure Quantitative Satisfactory Academic Progress by determining if a student has earned 80 percent of the classes he/she attempted.

These students who are not making Quantitative or Qualitative Satisfactory Academic Progress will be sent a letter that explains what action is necessary to make an appeal. A student who is denied federal aid funds because that student is not deemed to be making satisfactory progress toward the student's degree goal according to this policy will have the right to appeal to the Financial Aid Appeals Committee.

The mission of the Department of Residence Life and Student Housing (RLSH) is to advance the goals and objectives of the University by creating residential communities that empower residents to value learning, citizenship and leadership. In a very real sense, the residential experience enhances the University's efforts to recruit and retain great students. Doing this requires more than a housing operation that manages a series of dormitories. To support SMU's mission, goals and objectives, RLSH must develop and sustain 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 facilities are well maintained and safe, and that students have opportunities to grow personally and excel academically.

## HOUSING POLICY FOR ALL STUDENTS

All first-year undergraduate students are required to live on campus. Exceptions may be granted at the discretion of the director of Residence Life and Student Housing to those students who plan to live with a parent or legal guardian in the Dallas/Fort Worth area. For housing purposes, "first-year" means the first two terms of college and successful completion of 24 SMU credit hours. Upperclass, transfer and graduate students have no on-campus living requirements.

## 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 should request campus housing when applying for admission to the University. The housing application/contract form will be sent from the Division of Enrollment Services with the notice of acceptance for admission to the University. The application/contract should be completed and returned to Enrollment Services, together with a check or money order in the amount of $\$ 550$ to cover the Advance Tuition Deposit, the Matriculation Fee and the Advance Housing Deposit. These fees are nonrefundable.

New graduate students should submit the completed application/contract along with a check or money order of $\$ 100$ 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). Rent for the fall term will be billed and is payable in advance of the term for students who register before August 1 , and rent for the spring term will be billed and is payable in advance of that term for students who register before December 1. Students who register after these dates must pay at time of registration. Rent 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 director of RLSH before acceptance of the housing contract. It is important that applicants become familiar with the housing contract, since it is a legally binding contract.

## UNDERGRADUATE RESIDENCE HALLS

First-year 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 Morrison-McGinnis, Cockrell-McIntosh, VirginiaSnider (honors community), Shuttles, Mary Hay and Peyton (fine arts community), the Multicultural House and the Daniel House (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

Four 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 Leadership and Community Involvement.

Moore Hall is designated for sophomores and above and consists of two-person efficiency apartments. Each apartment has a kitchen/sleeping area and a bathroom. The kitchen area contains an electric stove, refrigerator, sink, garbage disposal and dishwasher, as well as built-in cabinets, table and two chairs. The bedroom area contains two single beds, two desks and chairs, two dressers, two closets and a bookcase.

Martin Hall, an efficiency apartment hall, houses single and married graduate students, and married undergraduate students.

Hawk Hall, a one-bedroom-apartment facility, houses married students (graduate and undergraduate) with families. Families with no more than two children may be housed in Hawk Hall.

## SMU APARTMENTS

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 RLSH prior to submitting the housing application. Whenever possible, the housing staff will work with that student in adapting the facility to meet special needs.

## GENERAL HOUSING INFORMATION

In the residence halls each room or apartment is equipped with a telephone, local telephone service, voicemail 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 d, and rooms have individual climate-control. The SMU Apartments are unfurnished and telecommunication services (i.e., telephone, cable, Internet connections) are not provided. Washing machines and dryers are located in all residence halls and adjacent to SMU Apartments, Multicultural House 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 Multicultural House, Daniel House, Service House and SMU Apartments are exempt from the meal plan requirement. With the exception of Daniel House, Martin, Hawk and Moore, 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, contact the Department of Residence Life and Student Housing, Southern Methodist University, PO Box 750215, Dallas TX 75275-0215; telephone 214-768-2407; fax: 214-768-4005; www.smu.edu/housing; e-mail: housing@smu.edu.

The standards herein are applicable to all undergraduate 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.

## CONFIDENTIALITY OF EDUCATION RECORDS

The Family Educational Rights and Privacy Act of 1974 is a federal law that grants to students the right to inspect, obtain copies of, challenge, and, to a degree, control the release of information contained in his or her education records. The act and regulations are very lengthy, and for that reason SMU has issued guidelines that are available at the University Registrar's FERPA Web site (http://smu.edu/ ferpa/). Policy 1.18 of the University Policy Manual, accessible at http://smu.edu/ policy/, 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. For more information, visit http://smu.edu/ferpa/.

## ENROLLMENT

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 Offices of the Academic Deans monitor progress and maintain official degree plans for all students in their schools. Students should schedule conferences with staff in the dean's office upon admission to the school and prior to their final term to ensure that they are meeting all general education and graduation requirements.

The fall, spring and summer terms each have an enrollment period during which the formal process of enrollment in the University is completed. Prior to each enrollment period, the University registrar 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 in May or June, July, August and January. Information concerning the programs is distributed by the Office of New Student Programs.

Each student is personally responsible for complying with enrollment procedures and for 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. Petition instructions are available on the Web at www.smu.edu/registrar. Petitions are to be submitted to the record offices of the appropriate academic deans within six months of the term in which the discrepancy appeared. Petitions submitted later than six months after the discrepancy may not be considered.

## ACADEMIC ADVISING POLICY

Academic advising is an important process for each undergraduate student at SMU. All students must meet with their assigned academic adviser prior to enrolling for an academic term. At this time, the adviser will assist students in planning majors and minors, understanding their Degree Progress Reports and scheduling courses that will count towards their graduation requirements. After the initial required advising session, students are encouraged to seek assistance from their adviser when considering adding or dropping courses.

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

Students are assigned an academic adviser by their academic dean. Students who enroll without first meeting with their assigned academic adviser may be subject to sanctions including, but not limited to, the following: cancellation of the term enrollment and restriction from the self-service enrollment functions.

## Student File Number

A student's SMU identification number is an eight-digit number assigned by the University. The SMU ID number should be furnished on all forms when requested, as it is the primary means for identifying the student's academic records and transactions related to the records.

## 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.

## Transfer Courses From Other Institutions

Once students have matriculated at SMU, they may transfer no more than 30 hours to SMU from accredited colleges and universities. To ensure 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 following people: 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 pre-approval 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 it will be awarded. In either case, permission may be denied for educational reasons.

Official college transcripts are required for all college-level work attempted, regardless of transferability. Students are responsible for making sure a transcript of all transfer work attempted is sent to the University registrar 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.

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 they meet the criteria for transfer work outlined in the Transfer Admission Criteria section of this catalog. Credit may be denied for educational reasons.

Residency Requirement
University policy requires that of the 122 minimum required term hours for a degree, at least 60 hours must be earned in residence at SMU. The 60 -hour residency requirement refers to the number of academic hours completed as SMU course enrollments at the SMU Main Campus, SMU-in-Legacy, SMU-in-Taos, at an SMU education abroad program, and at other approved SMU locations; and, test and other credits awarded by SMU departments as SMU courses. Nonresidency hours are recorded as transfer credits.

Therefore, regardless of the number of transferable credits completed elsewhere, to receive an SMU degree, students need to earn 60 credit hours in residence at SMU. For further degree requirements, please refer to the individual school sections of this catalog.

## Name Change

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

## Mailing Addresses, Telephone, E-mail Address and Emergency Contact

Each student must provide the University registrar with a current home address, telephone number, a 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.

Undergraduate students are also required to provide their parents' current home addresses and telephone numbers. Students who are independent may file an exception to the parent requirement by contacting the University registrar.

Students are expected to keep current all their addresses and telephone numbers, including emergency contact details through Access.SMU, the University's webbased self-service system. Changes to parent information should be reported on the web form found at www.smu.edu/registrar. Students may be prevented from enrolling if their information is insufficient or not current.

The University issues all students an e-mail address. Students may have other e-mail addresses, but the University-assigned e-mail 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 e-mail addresses on file. It is the responsibility of students to keep all their addresses current and to regularly check communications sent to them as they are responsible for complying with requests, deadlines and other requirements sent to any of their mailing addresses on file or to their SMU e-mail.

## 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 may declare this information in lieu of providing cellular telephone numbers. However, 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."

## Transcript Service*

A transcript is an official document of the permanent academic record maintained by the University registrar. 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 for all students of the University. Copies of high school records and transfer transcripts from other schools must be requested from the institutions where the coursework was taken.

Transcripts are $\$ 11.25$ per copy. Additional copies in the same request mailed to the same address are $\$ 3$. Additional copies mailed to different addresses are $\$ 11.25$ a copy. Requests may be delayed due to outstanding financial or other obligations or for posting of a grade change, an earned degree or term grades.

Transcripts should be requested on-line at www.smu.edu/registrar. Once on the registrar's page click on Transcript Requests and follow the instructions. Your request will be processed through the National Student Clearing House. Telephone and e-mail requests are not accepted. Students may pick up their transcripts in person at the Registrar's Service Counter, 101 Blanton Building. No partial or incomplete 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.

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 http://smu.edu/registrar/ferpa/forms.asp.

## 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

[^0]objective, change their major or change their minor - first should apply to the academic dean's 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 part-time student who wishes to transfer from the Annette Caldwell Simmons School of Education and Human Development to an undergraduate program offered by Dedman College, Cox School of Business, Lyle School of Engineering or Meadows School of the Arts 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.

## Schedule Changes

The deadline for adding courses, dropping courses without grade record, and changing sections for each enrollment period is listed in the Official University Calendar. 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 in the Official University Calendar (www.smu.edu/registrar).

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

## Withdrawal

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 through his/her academic dean/records office. The petition will be forwarded to the Division of Enrollment Services-University Registrar. The effective date of the withdrawal is the date on which the Student Petition for Withdrawal is processed in the Registrar's Office. Discontinuance of class attendance or notification to the instructors of intention to withdraw does not constitute an official withdrawal.

Reduction of tuition and fees is based on the schedule listed in the publication Financial Information: Southern Methodist University, which is found at www. smu.edu/bursar, and is determined by the effective date of the withdrawal. This information is also available online at www.smu.edu/registrar. Students receiving financial aid should refer to the Financial Information section of the catalog.

The enrollment of students who withdraw on or before the fifth day of regular classes as listed in the Official University Calendar will be canceled. Courses and grades are not recorded for canceled enrollments. A student who withdraws after the fifth class day will receive the grade of $W$ in each course in which enrolled.

Medical withdrawals provide a daily pro rata refund of tuition and fees, and have conditions that must be met prior to re-enrollment at SMU. Medical withdrawals must be authorized by the Medical Director; Psychiatric Director; Counseling and Psychiatric Services Director; Dean of Student Life; or Vice President for Student Affairs. Authorization must be obtained no later than the University's withdrawal date for the term.

Students who live in University housing must obtain clearance from the Office of Housing.

## Leave of Absence

The SMU Leave of Absence (LOA) Policy provides students with a formal process to "stop out" of SMU for either voluntary or involuntary reasons. A leave of absence is generally a temporary departure from the institution- a "time out" which may be necessary during a student's undergraduate career. However, permanent withdrawals from SMU will also be processed under the Leave of Absence Policy. In addition, students who participate in study-away programs that do not fall under the auspices of SMU should also complete the Leave of Absence form. The completion of this process helps all respective offices at SMU monitor a student's leave and have a formal centralized record of the status for all students who are not currently enrolled.

Students may elect to take leaves of absence for a variety of reasons, including: medical reasons due to accident or illness; family crises or some other personal situation that requires them to be away from school for some period of time; financial issues which may take time to resolve; and, academic difficulties which may best be handled by taking time to refocus on college work.

Typically, a leave of absence is for one semester or one academic year. A leave may be extended by contacting the student's academic department representative. The process to return to SMU after a leave of absence period is not difficult if a student has gone through the steps to file for a leave of absence and plans ahead for his/her return. Following these guidelines helps assure that: degree requirements outlined in the catalog of record when a student initially matriculated at SMU still apply on his/ her return; financial aid processing is in place; and, support a student needs to successfully return to SMU and finish his/her undergraduate degree is available.

Students planning a leave of absence should first arrange an appointment to meet with their academic adviser who will assist with this process. The Leave of Absence form, policy and manual are also located online at www.smu.edu/registrar.

## 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 on the Web at www.smu.edu/registrar under Forms Library. 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. If credit is desired, the course must be enrolled for and repeated as a regular course, and the regular tuition must be paid.
3. The student's name does not appear on class rosters or grade rosters.
4. Regular admission and enrollment procedures are not conducted for auditors.
5. The audit fee is nonrefundable. Undergraduate students enrolled full time for any given term ( 12 hours for fall and spring or 6 hours per summer session or 12 hours for the full summer session) may audit one three-hour course at no charge.

## Enrollment for No-Credit

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, is listed on class rolls, 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 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. This enrollment is different from audit enrollments, for which no enrollment or grade is recorded.

## ACADEMIC PROGRESS: PROBATION, SUSPENSION, REINSTATEMENT, DISMISSAL

The University's goal for, and expectation of, all undergraduate students is that they make regular and satisfactory progress towards their degree. There are three classifications 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 classifications. In addition, a student who has been suspended may seek Academic Reinstatement under the standards set out in this policy.

## Definitions: <br> Academic Probation, Academic Suspension, Academic Reinstatement and Academic Dismissal <br> 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. In addition, Academic Probation is not noted in the permanent academic record. However, a student on Academic Probation may be subject to certain conditions during the period of probation, and will also be subject to Academic Suspension if he or she does not clear Academic Probation within the appropriate time period (usually by the end of the next term).

## 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 the permanent academic record. While on Academic Suspension, a student is not in good academic standing for certification purposes and is not eligible to enroll as a student.

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 in residence 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 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 permanent academic record.

# Probation and Suspension Rules Relating to General Education Requirements (Applicable to All Undergraduate Students) 

## Academic Probation

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

1. For a student who enters SMU directly from high school or enters SMU with less 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 in residence OR
2. For a part-time student, an Evening Bachelor student, or a student transferring more than 15 hours, the student fails to complete the Written English and Mathematical Sciences Fundamentals of the General Education Curriculum after completion of 15 units in residence.

## Academic Suspension

For all undergraduate students, a student will receive Academic Suspension if:

1. For a student who enters SMU directly from high school or enters SMU with less 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 in residence OR
2. For a part-time student, an Evening Bachelor student, or a student transferring more than 15 hours, the student fails to complete the Written English and Mathematical Sciences Fundamentals of the General Education Curriculum after completion of 30 units in residence.
Students will be placed on Academic Probation for missing fundamentals before Academic Suspension for missing fundamentals occurs.

## Dedman College: Students with Undeclared Majors

## Academic Probation

For undeclared majors, a student will be placed on Academic Probation if the student's cumulative SMU G.P.A. is below 2.0 at the end of a regular term.

When the student is placed on Academic Probation because his or her cumulative SMU G.P.A. is below 2.0, then the student will be assigned to a designated probation 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 premajor objectives
2. Biweekly academic counseling sessions with the probation counselor (or his/ her designee)
3. Enrollment in courses, such as ORACLE, aimed at improving academic performance
4. Undergoing 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

The student on Academic Probation has one, regular term in which to raise his or her cumulative SMU G.P.A. to 2.0 or higher. If the student does not do so, the student will be placed on Academic Suspension, subject to the following exception:

- A student may appeal to the University Academic Appeals Committee for a second, consecutive probationary term if the term G.P.A. during the student's first probationary term indicates academic improvement and if the student has undergone all academic recovery efforts agreed upon in the contract with the probation counselor.
If a student is placed on Academic Suspension, the period of Academic Suspension is for a minimum of one regular term. Credits earned at another college or university during a term of suspension may not be applied towards an SMU degree. A grade-point deficiency must be made up at SMU.

As soon as possible after the student is placed on Academic Suspension, the student should contact the probation counselor if the student 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 G.P.A.

## Academic Reinstatement

A student who has been academically suspended once may apply for academic reinstatement to the University. 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 University Academic Appeals Committee, which will make a decision on the request. Ordinarily, the decision whether to grant reinstatement shall be based primarily on whether the student has satisfied the conditions set out for the period of Academic Suspension.

## Dedman College: Declared Majors

Students in Dedman College with declared majors, including the Evening Studies Program whose cumulative SMU grade point average (G.P.A.) falls below 2.0 are placed on Academic Probation. Academic Probation is for a minimum of one regular term (excluding interterms and summer terms). The dean may impose special condi-tions in exceptional probationary situations. Students are removed from probation status when they achieve a cumulative G.P.A. of 2.0 or higher.

Academic Probation. Declared Dedman students who do not maintain a cumulative grade point average of 2.0 or higher are placed on Academic Probation. They are removed from Academic Probation status when they achieve a cumulative G.P.A. of 2.0 or higher.

Academic Suspension. Declared Dedman students whose cumulative G.P.A. remains below 2.0 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 suspen-sion may not be applied toward an SMU degree. A grade-point deficiency must be made up in residence 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 for one term following the term in which the SMU term, cumulative or business G.P.A. (minimum of nine credit hours) falls below 2.0. A student on probation may enroll for a maximum of 12 hours, will not be allowed to enroll for an internship or directed study, must meet with the BBA Director of Academic Advising or a designee at appropriate intervals during the semester, to be determined by the Director, and must attend the Altshuler Learning Enhancement Center (A-LEC) and follow recommendations established by the A-LEC Director. Students who do not meet the requirements of probation will not be removed from probation even if the G.P.A. rises to 2.0 or above.

Academic Suspension. A student on academic probation who fails to maintain an SMU term, cumulative or business G.P.A. (minimum of nine credit hours) of 2.0 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 terms 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. 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 Altshuler Learning Enhancement Center (A-LEC) counselor during the first week of classes and follow through on recommendations from that meeting.

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

Failure at Other Colleges. Students who are on academic probation or 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.

## Meadows School of the Arts

Academic Probation. A student who fails to maintain a 2.0 cumulative or term G.P.A. 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 2.0 G.P.A. at the end of the term.

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

Academic 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 readmission. A student may petition the Associate Dean for Student Affairs for reconsideration and 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.

Lyle School of Engineering
Academic Probation. A student may be placed on academic probation whose term or cumulative G.P.A. falls below 2.0. The minimum period of probation is one term or summer term, but the usual period is one academic year. The student remains on probation until the overall G.P.A. is 2.0 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 and 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. A student on probation who fails to maintain a G.P.A. of at least 2.0 during an academic year 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 conditions that have been created to prevent recurrence of such work. 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.

## 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 does not relieve a student from responsibility for the work of the course during his or her absences. 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. Dedman students who miss two successive class meetings during the official add-drop period 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 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

Students who participate in officially sanctioned, scheduled University extracurricular activities should be given an opportunity to make up class examinations or other graded assignments that are missed as a result of this participation or related travel. The manner in which examinations or other assignments missed as a result 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. In order 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 studentathletes 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 also will miss classes as a result of their participation in officially sanctioned, scheduled University extracurricular activities or related travel also are encouraged to adopt similar procedures to minimize the difficulties caused by such absences.

## 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 about their absence with their professors, students may submit an Absence from Class form available on the Web at http://smu.edu/healthcenter/.

## 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
Senior
Nondegree
60-89 term hours earned
90 or more term hours earned
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 presupposes 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 an additional six hours of presumed preparation.

A full-time load in the fall, spring and summer terms is 12 hours for undergraduates. Persons 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 and some other outside agencies require 12 hours of enrollment for full-time status and do not make exceptions for co-op or student teaching enrollments. Students on financial aid should consult a Financial Aid adviser regarding minimum enrollment requirements for their situation.

Minimum and maximum course loads allowed are based on the school of record:
Dedman College. Premajors or majors in Dedman College must have the approval of the dean to enroll for more than 18 credit hours. For Evening Studies: Students must have the approval of the dean to enroll for more than nine 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 and Cox G.P.A.s are 2.0 or above) show satisfactory progress toward completion of the degree.

Meadows School of the Arts. Students are not permitted to enroll during a fall or spring term for more than 18 hours, unless the G.P.A. for the preceding term is at least 3.0.

During the term in which a student is to graduate, he or she may enroll for 19 hours (nine hours for a summer term) regardless of the preceding term G.P.A. Regardless of the status of a student, credit will not be allowed for more than 21 term hours in a term. A student with less than a 2.0 G.P.A. for the preceding term will not be permitted to enroll for more than 13 hours.

Lyle School of Engineering. Students must have the approval of the Office of Undergraduate Studies to enroll for fewer than 12 hours or more than 18 hours during a fall or spring term. Normally, a student must have a G.P.A. of 3.0 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.

## FINAL EXAMINATIONS

Final course examinations shall be given in all courses where they are appropriate, must be administered as specified in 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 concurrence of the dean of that school, who will allow exceptions only in accordance with guidelines from the Office of the Provost.

## GRADES

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.

| grades | description | grade points per term hour |
| :--- | :--- | :---: |
| A | Excellent Scholarship | 4.00 |
| A- | Excellent Scholarship | 3.70 |
| B+ | Good Scholarship | 3.30 |
| B | Good Scholarship | 3.00 |
| B- | Good Scholarship | 2.70 |
| C+ | Fair Scholarship | 2.30 |
| C | Fair Scholarship | 2.00 |
| C- | Fair Scholarship | 1.70 |
| D+ | Poor Scholarship | 1.30 |
| D | Poor Scholarship | 1.00 |
| D- | Poor Scholarship | 0.70 |
| F | Failure | 0.00 |
| P, CR | Pass, Credit | $*$ |
| I | Incomplete | $*$ |
| NC | No Credit Received | $*$ |
| W | Withdrew | $*$ |
| X | No Grade Received in Registrar's Office | $*$ |

A student may 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 an $I$ is given, the instructor must stipulate in writing to the student and to the University registrar the requirements and completion date that are to be met and the 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 grade for an undergraduate course 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 $I$ will be changed to the grade provided by the instructor at the time the Incomplete was assigned or to an $F$ if no alternate grade was provided. The grade of $I$ is not given in lieu of an $F$ or W, or other grade, each of which is prescribed for other specific circumstances. If the student's work is incomplete and the quality has not been passing, an $F$ will be given. The grade of $I$ does not authorize a student to attend the course during a later term. Graduation candidates must clear all Incompletes prior to the deadline in 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 $I$ to the grade indicated by the instructor at the time the $I$ was given.

A failure is graded $F$. 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 adviser about repeating the course so they will be adequately prepared for work in the following course.

The grade of $W$ cannot be recorded unless completion of 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

[^1]courses from the schedule or withdrawn (resigned) from the University. The grade of $W$ may not be revoked or changed to another grade, as the act of officially dropping/withdrawing is irrevocable.

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

## Pass/Fail Option

Students may take one course per term on a pass/fail basis. The maximum total credits with a grade of pass that may count toward a degree is 12 hours.

A student must indicate intention to take a course pass/fail no later than the 12th day of classes (the fourth day in summer terms) by filing a form available in the Office of the Academic Dean. After the 12th day of classes (the fourth day in summer terms), students may not change their pass/fail declaration back to a letter grade. If a course is graded 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 CHOICES for Living (Wellness), courses required to fulfill the General Education Curriculum (GEC) may not be taken pass/fail. Courses in the academic majors and minors also are excluded, but in some programs courses may be taken pass/fail after the minimum program requirements have been met. (There may be other courses required to meet certain professional accreditation standards or entrance requirements, such as teacher accreditation 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.)

Business students may elect the pass/fail option in business elective courses only after satisfactory completion of the previous term, including completion of 48 hours of business courses taken on a regular letter-grade basis, as well as all requirements of the student's declared major. The exception to this are courses within Cox that are designated as pass/fail only.

Under the pass/fail option, pass ( P ) grades are $A, B$ and $C$ (including $C$-); failure (F) grades are $D$ 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 grade-point average, although the credit hours are included in the total number of hours earned. The grade $F$ is calculated in the grade-point average.

## Grade-Point Average

This average 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 gradepoint average is truncated at three decimal places.

## Changes of Grades

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 a written petition requesting the change of grade 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 reevaluation 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 in grade 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 a grade 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 registrar.

## 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). "College Prep" courses completed a summer prior to matriculation are NOT eligible to be repeated under this rule. The grade from the repeated course, even if lower, will be the grade used to calculate the student's grade-point average. 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 if the course is not taught again within that period. The student must declare which courses he or she will repeat under this policy with his or her academic dean by the 12th day of classes. 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. Students are cautioned that for some purposes, such as admission into an academic program, both grades 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 on the student's permanent academic record. Both grades will be included in the calculation of the grade-point average and in the determination of academic probation, suspension, honors and graduation. Only the repeated course and not the initial credit hours count toward the number needed for graduation.

The courses a student can repeat are determined by the school of record:
Dedman College. 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 Dean's Office.

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

Meadows School of the Arts and 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.

## Academic Forgiveness

Academic Forgiveness permits a student to have academic work taken 10 or more years prior to the term of admission or readmission forgiven and not included in the grade-point average or hours earned used for actions such as the determination of admission, academic probation, suspension, honors and graduation. A student must request academic forgiveness at the time of admission or readmission. Currently enrolled students cannot request academic forgiveness. Once declared and the student has enrolled, academic forgiveness cannot be rescinded.

A student can declare academic forgiveness only for courses taken 10 or more years prior to the term of admission or readmission. The student can select the term at which academic forgiveness starts. Academic forgiveness applies to all courses taken during that term, regardless of the grade earned, and to all courses taken prior to that term. Academic forgiveness cannot be applied to only some courses for a term or to only some terms within the forgiveness period.

Forgiven academic work taken at SMU remains on the permanent academic record. Academic Forgiveness is recorded on the record. The forgiven grades are excluded from the grade-point average and hours earned. Transfer applicants must provide transcripts from all institutions attended including those where all work may be forgiven.

## Academic Petitions and Waivers

Petitions and/or requests for waivers concerning general education requirements, graduation requirements and the evaluation of transfer work should be submitted to the Office of the Dean.

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.

## Appeal of Grades

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 denial of a request for a grade change, and who maintains that the original grade was capriciously or unfairly determined, may appeal to the chairperson 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.

## 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 offices of Services for Students With Disabilities and of the University Registrar.

## 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.

## GRADUATION

Students must file an Application for Candidacy to Graduate form with their academic dean's office during the term at the end of which they have completed all degree requirements. Applications should be filed by the deadline date in theOfficial University Calendar. Applications cannot be accepted after the degree conferral date. Students will be charged an Apply to Graduate fee during the term the application is filed.

## 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 term also may participate in the University Commencement Convocation. Students also may 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 term may also participate.

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 an Application for Candidacy to Graduate or a declaration of Intent to Participate form.

## 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.

## 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 G.P.A.s announced at the beginning of each academic year for each of the four undergraduate schools - Cox, Dedman (including Evening Studies), Meadows and Lyle. The minimum G.P.A.s 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 G.P.A.s for each school will be determined by pooling all graduates in the school from the previous three academic years and determining the G.P.A.s in each school that represent the top 5th, 10th and 15th percentiles. The G.P.A. used is the lower of the student's SMU cumulative G.P.A. and all-college G.P.A. (includes transfer work).

The minimum graduation honors G.P.A.s for students graduating during the 20092010 academic year will be announced in October 2009. Students may obtain information about minimum G.P.A.s required in past years from their academic schools.

Separate from eligibility for graduation honors, the Cox School of Business awards special Cox Honors distinction to students who have successfully completed the requirements for the Cox B.B.A. Honors Program. Departmental Distinction may be awarded in Dedman College and the Meadows School of the Arts. Students may also earn Honors in the Liberal Arts. These honors require completion of requirements prescribed by the department or school. Further information may be obtained from the individual departments and schools.

In keeping with the University's educational mission, the General Education Curriculum 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. These courses 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. Undergraduate students who enter the University in the 2009-2010 academic year will complete 41 term hours of academic coursework that will include a twocredit Wellness Program. The five components of the GEC are listed below. Rather than a checklist of requirements, they should be viewed as individual parts of the larger project of becoming a broadly educated person. Please take time to consider how each of these components contributes to that objective.

## SUMMARY OF GENERAL EDUCATION REQUIREMENTS

## Fundamentals

1. Rhetoric (Writing)
2. Mathematical Sciences
3. Information Technology

Wellness
Science/Technology

6 hours
3 hours
3 hours
2 hours
6 hours
(At least three hours must be in a Natural Science)

Perspectives
Cultural Formations
Human Diversity Total

15 hours
6 hours
3 cocurricular hours
41 hours

For exemptions and exceptions to General Education requirements, see page 79.

## Fundamentals (12 term 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, with the exception of students who begin their Written English Program with ENGL 1302 (see below), the 12 required term hours in Fundamentals should ideally be completed within the first year (see page xx regarding Academic Probation and Suspension.

## Written English (Six term hours)

Students must successfully complete a two- or three-course sequence in Written English. Most students will satisfy this requirement by taking ENGL 1301 (Introduction to College Writing) in the fall, and ENGL 1302 (First-Year Seminar in Rhetoric: Contemporary Issues) in the spring; students scoring a 4 on the Advanced Placement Test will place out of 1301 ; those students scoring a 5 on the Advanced Placement Test will place out of 1301 and 1302. In either case, the first-year writing seminars allow students to work closely with faculty in small classes focusing on topics of mutual interest. All seminars share the goal of assisting first-year students in the development of skills in critical reading and expository writing. Students 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 following guidelines govern the placement of students in Written English courses:

- If the VSAT score is 470 or below, students will be required to take ENGL 1300 before enrolling in ENGL 1301 and 1302.
- If the VSAT score is above 470, students are required to take ENGL 1301 and 1302 in the fall and spring of their first year.
Students participating in the University Honors Program satisfy their Written English requirements with ENGL 2305 and 2306 in the fall and spring of their first year. The list of English courses available per term can be accessed at www.smu.edu/registrar/.


## Mathematical Sciences (Three term hours)

One of the following courses is required to ensure that students possess the necessary skills in mathematics and quantitative reasoning. The list of mathematics courses offered per term can be accessed at www.smu.edu/registrar/. For class descriptions, see the Mathematics or Statistical Science sections of this catalog.
MATH 1307 Introduction to Mathematical Sciences
MATH 1309 Introduction to Calculus for Business and Social Science
MATH 1337 Calculus with Analytic Geometry I
STAT 1301 Introduction to Statistics

## Information Technology (Three term hours)

Any course from this category will introduce students to emerging informational 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/ socl/GEC.asp. For class descriptions, see the Engineering section of this catalog.
CSE 1340 Introduction to Computing Concepts
CSE 1341 Principles of Computer Science I (typically attracts majors)
EMIS 1305 Computers and Information Technology
EMIS 1307 Information Technology in Business
ITOM 2308 Information Systems for Management (available to pre-Business and Business majors only)
ME 1305 Information Technology and Society
MSA 1315 Mass Media and Technology

# Wellness - Choices for Living (Two term hours) Associate Professor Peter Gifford, Chair 

Associate Professors: Peter Gifford, Bryan Robbins, Lynn Romejko Jacobs; Wellness Lecturers: Birdie Barr, David Bertrand, Piotr Chelstowski, Christin Carter, Mike Dunst, Brian Fennig, Ted Gellert, Donna Gober, Mandy Golman, Gloria Hook, Rhonda Trietsch, Anne Weil, Arthur Zwolski.

This requirement recognizes that education should also serve to enhance the physical and mental well-being of students at SMU. The Department of Wellness aims to provide leadership and facilities for helping students become more aware of the comprehensive nature of wellness; to identify personal relationships with wellness; to provide techniques to help students respond positively to any imbalances in their lifestyle; to familiarize students with campus wellness facilities, equipment and services; to promote a lifetime of physical fitness; to promote the learning of a lifetime physical activity; and to 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 per term can be accessed at www.smu.edu/registrar/.

## Choices I Classes

Designed to be taken during a student's first year, CHOICES I classes (WELL 1101) are part of the General Education Curriculum and, therefore, are required for graduation. The class is called Concepts of Wellness, and students are introduced to a broad range of personal experiences with the seven elements of wellness (social, physical, environmental, occupational, intellectual, emotional and spiritual), which the CHOICES for Living program addresses. Interaction occurs in a relaxed, small group environment that features a series of lectures, discussions, personal assessments and other action-oriented activities. Registrants are also expected to complete approximately seven hours of out-of-class experiences under the guidance of their instructor.
WELL 1101 Choices I: Concepts of Wellness

## Choices II Classes

Designed to be taken during a student's second year, successful completion of a CHOICES II class is a requirement for graduation. A variety of physical activity offerings are made available each semester. Students are guided in a fun, nurturing environment through the skills, rules and competition of a given activity with the primary objective to increase the likelihood of participating in the activity for a lifetime. A special fee is charged to help defray the extra cost involved in some CHOICES II classes: Fencing (\$90); Golf (\$125); Scuba (\$150); Mountain Sports (Taos Campus \$475); Beginning Marathon Training (\$75); Rock Climbing (\$50); and Spinning (\$10).
WELL 2109 Bench Aerobics
WELL 2110 Jogging
WELL 2111 Weight Training
WELL 2112 Weight Training for Women
WELL 2113 Fitness Activities
WELL 2114 Walking
WELL 2115 Beginning Triathlon
WELL 2116 Beginning Marathon Training
WELL 2117 Spinning
WELL 2118 Group Fitness
WELL 2119 Pilates
WELL 2122 Rock Climbing
WELL 2129 Golf
WELL 2131 Mountain Sports
WELL 2132 Racquetball
WELL 2135 Table Tennis
WELL 2136 Tennis
WELL 2139 Fly-Fishing
WELL 2140 Badminton
WELL 2141 Swimming
WELL 2142 Ballroom and Folk Dance
WELL 2144 Scuba Diving
WELL 2145 Beginning Swimming
WELL 2146 Lifeguard Training Today
WELL 2147 Power Yoga
WELL 2148 Aikido
WELL 2149 Karate
WELL 2150 Judo
WELL 2151 Self-Defense

WELL 2153 Fencing
WELL 2161 Basketball
WELL 2170 Volunteer Activities
WELL 2190-2191 Wellness Practicum
WELL 2322 Inward and Outward Bound
WELL 3144 Advanced Scuba
WELL 3341 Techniques of Athletic Training
WELL 3342 Advanced Techniques of Athletic Training
WELL 3343 Therapeutic Modalities/Rehabilitation

## Science and Technology (Six term 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 that this is the case, students must take two courses in Science and Technology; at least one must be from Category A, the fields of biology, chemistry, earth sciences, physics or ENCE 1331, and no more than one may be from the other Science and Technology fields designated in Category B below. 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/socl/GEC.asp. For class descriptions, see the Anthropology, Biology, Chemistry, Engineering, Earth Sciences or Physics sections of this catalog.

## A. Fields of Biology/Chemistry/Earth Sciences/Physics/ENCE 1331

Three to six (3-6) term hours required
BIOL 1303 Essentials of Biology
BIOL 1304 Essentials of Biology
BIOL 1305 Our Natural Environment
BIOL 1308 Plant Biology
BIOL 1310 Aquatic Biology
BIOL 1401 Introductory Biology
BIOL 1402 Introductory Biology
CHEM 1301 Chemistry for Liberal Arts
CHEM 1303/1113 General Chemistry
CHEM 1304/1114 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
GEOL 1315 Introduction to Environmental Sciences
GEOL 2320 Southwestern Environment: A Geological Approach
ENCE 1331 Meteorology
PHYS 1301 The Ideas of Modern Physics
PHYS 1303/1105 Introductory Mechanics
PHYS 1304/1106 Introductory Electricity and Magnetism
PHYS 1307/1105 General Physics (combines PHYS 1307/1105)
PHYS 1308/1106 General Physics (combines PHYS 1308/1106)
PHYS 1311 Elements of Astronomy
PHYS 1313 Fundamentals of Physics
PHYS 1314 The Physical Perspective
PHYS 1320 Musical Acoustics
B. Other Science/Technology

Zero to three (0-3) term hours required
ANTH 2315 Human Evolution: Biological and Social Beginnings of Humankind ANTH 2363 The Science of Our Past: An Introduction to Archaeology CSE 1331 Introduction to Web Programming

```
EE 1301 Modern Electronic Technology
EE }1382\mathrm{ Fundamentals of Electrical Engineering
ENCE 1301 Environment and Technology: Ecology and Ethics
ENCE 1378 Transportation Infrastructure
ME 1301 Machines and Society
ME 1202/1102 Introduction to Engineering
ME 1303 Energy, Technology and the Environment
```


## Perspectives ( 15 term 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 locate 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.

Asterisks indicate courses that will also satisfy the Human Diversity cocurricular requirement. Classes marked with an asterisk (*) fulfill the Human Diversity requirement. The list of Perspectives courses offered per term can be accessed at www.smu.edu/registrar/socl/GEC.asp.

## 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.

Meadows School of the Arts
MSA 1350 The Arts in Their Cultural Context: The City of Imagination
Division of Art
ASCE 1300 Ceramics - Introduction to Studio I
ASDR 1300 Introduction to Studio - Drawing
ASDR 1310 Drawing in Italy
ASDS 1300 Introduction to Studio - Design I
ASPH 1300 Basics of Photography
ASPT 1300 Introduction to Studio - Painting
ASSC 1300 Introduction to Studio - Sculpture I
Division of Cinema-Television
CTV 2332 American Popular Film
CTV 2351 International Film History
CTV 2364 History of Cinema-TV Comedy
CTV 3300 Film/TV Genres
CTV 3310 Screen Artists
CTV 3311-12 Great Directors
Division of Dance
DANC 1301-1302 Beginning Ballet (Nonmajors)
DANC 1303-1304 Beginning Modern Dance (Nonmajors)
DANC 1305-1306 Beginning Jazz Dance (Nonmajors)
DANC 2301-2302 Intermediate Ballet (Nonmajors)
DANC 2303-2304 Intermediate Modern Dance (Nonmajors)
DANC 2305-2306 Intermediate Jazz Dance (Nonmajors)

Division of Music<br>MUHI 1321 Music: The Art of Listening<br>MUHI 2310 The Broadway Musical: Vaudeville to Phantom<br>MUHI 3339 Music for Contemporary Audiences<br>*MUHI 3340 Jazz: Tradition and Transformation<br>*MUHI 3341 Women and Music: "Like a Virgin": From Hildegard to Madonna<br>MUHI 3342 Music, Musicians, and Audiences in 19th-Century Paris<br>Division of Theatre<br>THEA 1380 Dramatic Arts: Mirror of the Age<br>THEA 3311 The Art of Acting<br>THEA 4373 Creative Dramatics

## Group II: Literature (3 hours)

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

## Dedman College

Department of English
ENGL 1320 Chivalry
ENGL 1330 The World of Shakespeare
*ENGL 1360 The American Heroine: Fiction and Fact
ENGL 1362 Crafty Worlds: Novels in Our Time
ENGL 1363 The Myth of the American West
*ENGL 1365 Literature of Minorities
ENGL 1370 Tragedy and the Family
ENGL 2310 Imagination and Interpretation
ENGL 2311 Poetry
ENGL 2312 Fiction
ENGL 2313 Drama
ENGL 2314 Doing Things with Poems
ENGL 2315 Introduction to Literary Study
ENGL 2361 Fortune, Fame and Scandal: The American Dream of Success
ENGL 3320 Topics in Medieval Literature
ENGL 3330 Topics in Early Modern Literature
ENGL 3331 British Literary History I: Chaucer to Pope
ENGL 3332 Shakespeare
ENGL 3335 Transatlantic Encounters I
ENGL 3340 Topics in British Literature in the Age of Revolutions
ENGL 3341 British Literary History II: Wordsworth to Yeats
*ENGL 3344 Victorian Gender
ENGL 3345 Transatlantic Encounters II
ENGL 3346 American Literary History I
ENGL 3347 Topics in American Literature in the Age of Revolutions
ENGL 3350 Topics in Modern and Contemporary British Literature
*ENGL 3354 Non-Western Culture and Literature
ENGL 3355 Transatlantic Encounters III
ENGL 3360 Topics in Modern and Contemporary American Literature
*ENGL 3362 African-American Literature
*ENGL 3363 Chicana/Chicano Literature
ENGL 3366 American Literary History II
*ENGL 3373 Masculinities: Images and Perspectives (FL 3359)
ENGL 3375 Expatriate Writers: The Invention of Modernism
ENGL 3376 Literature of the Southwest
*ENGL 3377 Literature and the Construction of Homosexuality
Department of Foreign Languages and Literature
*CHIN 4381 Readings in Chinese Literature and Culture
*CHIN 4382 Chinese Culture and Society in Film
*FL 3306 The Heart of Aztlán: Chicano Literature of the Southwest
FL 3308 Introduction to General Linguistics
*FL 3312 Women in Modern China
*FL 3331 Survey of Russian Literature in Translation
FL 3340 Semiotics and Interpretation
FL 3350 Existentialism and Literature
*FL 3359 Masculinities: Images and Perspectives (ENGL 3373)
FL 3391 Special Topics: Italian Literature in Translation
FL 3393 Dante's Poetic Vision
FL 3394 Boccaccio's Decameron and the Medieval Storytelling Tradition
FREN 4371 Survey of French Literature: From the Middle Ages to the Revolution
FREN 4372 Survey of Literature in French: From Romanticism to the Present
*SPAN 4395 Introduction to Hispanic Literature

## 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.

## Dedman College <br> Department of Philosophy

PHIL 1300 An Introduction to Practical Reasoning
PHIL 1301 Elementary Logic
PHIL 1305 Introduction to Philosophy
PHIL 1306 Introduction to Philosophy: Minds, Machines and Persons
PHIL 1316 Introduction to Ethics
PHIL 1317 Business Ethics
PHIL 1318 Contemporary Moral Problems
PHIL 3302 Problems in the Philosophy of Religion (RELI 3302)
PHIL 3351 History of Western Philosophy (Ancient)
PHIL 3352 History of Western Philosophy (Modern)
Department of Religious Studies
RELI 1301 Ways of Being Religious
*RELI 1303 Introduction to Eastern Religions
RELI 1304 Introduction to Western Religions
*RELI 1305 Introduction to Primal Religions
RELI 1311 Judaism, Christianity and The Bible
RELI 3302 Problems in the Philosophy of Religion (PHIL 3302)
*RELI 3306 Introduction to the Hindu Tradition
*RELI 3307 Introduction to Buddhism
RELI 3310 The Social-Scientific Study of Religion (SOCI 3320 - only counts for Group III)
RELI 3319 Introduction to the Hebrew Bible
RELI 3326 Introduction to the New Testament
*RELI 3329 Introduction to Islam
RELI 3330 The History of Christianity
*RELI 3360 The History of Judaism
*RELI 3366 Magic, Myth and Religion Across Cultures (ANTH 3366 - only counts for Group III)

## 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.

[^2]ARHS 1304 Introduction to Western Art, Part II: Renaissance through Modern
ARHS 1306 Introduction to Architecture
*ARHS 1307 World Art Traditions: A Survey
*ARHS 1308 Epic of Latin America
ARHS 1312 Picturing American West
ARHS 1315 Medieval Messages: Symbol and Storytelling in Medieval Art
ARHS 1331 Nineteenth Century European Art
ARHS 1332 Twentieth-Century Art: Sources and Styles of Modern Art
ARHS 3306 Mummies, Myths and Monuments of Ancient Egypt: Art of Expression of
Eternal Egypt
ARHS 3311 Mortals, Myths and Monuments of Ancient Greece (CLAS 3311)
ARHS 3320 Medieval Art
ARHS 3331 Art and Culture of the Italian Renaissance
ARHS 3333 Art and Architecture in Italy
ARHS 3338 Baroque Art in Italy, Spain and the New World
ARHS 3344 Spanish Paintings at the Prado Museum
ARHS 3347 Eighteenth-Century European Art and Theater: Staging Revolution
ARHS 3360 Modern Painters in Spain
ARHS 3367 History of Photography
ARHS 3373 American Art and Architecture to 1865
ARHS 3374 American Art and Architecture, 1865 to 1945
*ARHS 3382 Arts of Andean Tradition: Chavin to Inca
*ARHS 3383 The Ancient Maya: Art and History

## Dedman College

Department of History
*HIST 1301 World Cultures and Civilization I
*HIST 1302 World Cultures and Civilization II
HIST 1303 Millennialism Through the Ages
HIST 1321 First-Year Seminar in American History
HIST 1322 First-Year Seminar in European History
HIST 1323 First-Year Seminar in Non-Western History
HIST 2311 Out of Many: U.S. History to 1877
HIST 2312 Unfinished Nation: U.S. History Since 1877
HIST 2321 Philosophical and Religious Thought in the Medieval West
HIST 2339 A History of Technology in the United States
*HIST 2355 History of the Ancient Near East and Egypt
HIST 2365 Europe in the Modern World: Renaissance to 1760
HIST 2366 Europe in the Modern World: 1760 to the Present
*HIST 2379 A History of Islamic Empires
*HIST 2392 Modern Africa
*HIST 2394 China Before 1850
*HIST 2395 Modern East Asia
HIST 2398 American Politics and Culture: FDR to Obama
HIST 3307 The U.S. and the Cold War, 1945-1989
*HIST 3312 Women in American History
*HIST 3313 African Americans in the United States, 1607 to 1877
*HIST 3314 African Americans in the United States, 1877 to the Present
HIST 3318 The Human History of Natural Disaster in the United States
*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 3340 The Revolutionary Experience in Russia, 1900 to 1930
*HIST 3341 Soviet/Post-Soviet Society and Politics, 1917 to the Present
HIST 3350 Life in the Medieval World, A.D. 306 to 1095
HIST 3351 Life in the Medieval World, 1095 to 1350
HIST 3354 Warfare and Diplomacy in Antiquity
HIST 3360 English Society in the Age of Elizabeth the Great
*HIST 3362 Searching for the American Dream: U.S. Immigration/Migration HIST 3370 The American Revolution
*HIST 3372 The South in American History
*HIST 3390 The Modern Middle East: From the Ottoman Empire to OPEC
*HIST 4304 At the Crossroads: Gender and Sexuality in the Southwest
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.

## Dedman College

Department of Economics
ECO 1310 Exploring Economic Issues
ECO 1311 Principles: Consumers, Firms, and Markets (Microeconomics)
ECO 1312 Principles: Inflation, Recession and Unemployment (Macroeconomics) Department of Political Science
PLSC 1320 Introduction to American Government and Politics
PLSC 1340 Introduction to Comparative Politics
PLSC 1360 Introduction to Political Theory
PLSC 1380 Introduction to International Relations

## 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.

[^3]SOCI 3363 Crime and Delinquency
*SOCI 3370 Minority-Dominant Relations
*SOCI 3371 Sociology of Gender

## Cultural Formations (Six term 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 the natural sciences when related to either of these other two areas of knowledge. 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 must be 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 strongly encouraged to realize these interdisciplinary goals. Courses must be 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 must be critical in approach, writing-intensive and focus on primary sources.

CF courses must be taken at SMU, either on the Dallas campus, at SMU-in-Taos or through the Study Abroad International Programs. Courses transferred from other institutions may not receive CF credit under any circumstances. CF credit will only be given for courses taken at SMU that bear the CF, CFA or CFB prefix.

Cultural Formations may also carry departmental co-listings; if the course is taken with the departmental 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. Please note that the departmental co-listing of a CF course may NOT receive Perspectives credit. Cultural Formations and Perspectives are mutually exclusive categories; one cannot count for the other.

Students must complete two CF courses between their sophomore and senior years. The list of CF courses can also be accessed at www.smu.edu/registrar/socl/ GEC.asp.

## Cultural Formations (CF) Courses

Most CF courses are cross-listed within various academic departments. Descriptions of these courses may be found under the individual department sections in this catalog. Asterisks indicate courses that will also satisfy the Human Diversity cocurricular Requirement.
*CF 3300. Race, Gender and Culture in the African Diaspora. A comparative analysis of the historical, economic, social and cultural experiences of peoples of African descent in societies in the Western hemisphere.
CF 3302 (ENGL 3329, MDVL 3329). The World of King Arthur. This course will investigate Britain's greatest native hero and one of the world's most compelling story stocks: the legend of King Arthur and the Round Table. This course will explore the early Arthurian materials in chronicle, history, archaeology and folklore, as well as the later romance, epic and artistic traditions.

CF 3303 (PLSC 3387). Political Geography. This course examines 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.

CF 3304. France-Amérique Between the World Wars: Making a New Culture. This course will explore the political, economic, ideological, cultural relationships and exchanges between France and America during the Interwar period and their impact on the modeling of our contemporary world.

CF 3305 (ENGL 3383). Literary Executions: Imagination and Capital Punishment. This course studies the literary treatment, in different forms and periods, of capital punishment. Its aim is to locate a social issue of continuing importance within literary traditions that permit a different kind of analysis from that given in moral, social and legal discourse. The literary forms include drama, lyric, novel and biography; the periods of history range from the English Reformation and the Renaissance to the English Civil War, the French Revolution, and contemporary America. The course emphasis falls upon literary techniques of imaginative participation and distancing.
*CF 3306 (HIST 3363). The Holocaust. This course examines the destruction of the European Jews emerging from pre-World War I anti-Semitism and Nazi racism. It considers Jewish responses to genocide, behavior of bystanders and possibilities of rescue.
CF 3307 (PHIL 3374). 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?
CF 3308 (PHIL 3363). Aesthetic Experience and Judgment. This course examines basic questions in the understanding and appreciation of art: What is beauty? What is art? What characteristics make something a good work of art? What is the correct way to interpret the meaning of a work of art? Are there ways to establish or prove that something is beautiful or that a work of art is good? Some issues pertaining to particular art forms, such as music and literature, will also be examined. Classical writers such as Plato, Aristotle, Hume, Kant and Nietzsche will be discussed, as well as contemporary authors.
CF 3309 (HIST 3306). Colony to Empire: U.S. Diplomacy, 1789 to 1941. This course begins with the diplomacy of the American Revolution and ends with the Japanese attack on Pearl Harbor. It will examine the expansionist tendencies of early American foreign policy, Indian removal, the Mexican War and the relationship between continental expansion (Manifest Destiny) and the crisis over slavery. It will also address the movement toward an overseas empire in the Caribbean and the Asian Pacific, climaxing with the war against Spain and the Open Door. Policy constitutes the next unit of study. The issues surrounding American involvement in the two world wars are the chief concerns of the final portion of the course.
*CF 3310 (HIST 3326). The Venture of Islam. A survey of Islamic civilization from Muhammad to the modern era through readings in Islamic history and society, arts and letters, science and philosophy, and the legal order to present a broad picture of the dynamics and achievements of Muslim civilization.
*CF 3311 (HIST 3316). History of Sex in America: An Introduction. This course will test the hypothesis that gender and sexuality are constructed categories. Readings in anthropology, history, literary criticism and psychiatry will be utilized.

CF 3312 (HIST 3368). Warfare in the Modern World. This course explores the nature, origins and evolution of the phenomenon of total war from the late democratic and industrial revolutions of the late 18 th and early 19th centuries through World War II, giving particular emphasis to questions of doctrine and theory; problems of organization and command; and the scientific, technological and psychological dimensions as well as the impact on modern culture.
CF 3313 (HIST 3358). 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.
CF 3314 (HIST 3376). Social and Intellectual History of Europe. This course will examine the intellectual in modern European society. It will explore major intellectual and social issues raised by and affecting a number of figures instrumental in shaping the European world of the 19th and 20th centuries. In a fundamental sense, however, the themes developed will be outside time and place. Consequently, they should interest those concerned with the relationship of their values and ideas to the society in which they live today.
*CF 3315 (HIST 3387). 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.
CF 3316 (RELI 3318). The Hero in the Bible and the Ancient Near East. An examination of the 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.
*CF 3317 (HIST 3301). Human Rights: America's Dilemma. The study of human rights requires intellectual history and moral courage, for no nation or society in human history has been totally innocent of human rights abuses. This course will examine certain violations of human rights within their historical contexts and will also focus on America's human rights record, with regard to its own policies and its relationship to human rights violations in other countries. Attention will also be given to the evolution of both civil and human rights as entities within global political thought and practice.
*CF 3318 (HIST 3305). The Hispanos of New Mexico, 1848-Present. History of the MexicanAmerican subculture of New Mexico, with a brief overview of the Indian, Spanish and Mexican periods, so that events, after formal U.S. possession in 1848, are seen in context. The course, however, focuses on the era after the Mexican Cession and stresses the indigenous background of the "Indo-Hispanos."
*CF 3319 (ANTH 3327). Culture Change and Globalization: Social Science Perspectives. Introduction to anthropological perspectives on global transformations: world economic integration, Third World development and sociocultural change, ethnic resurgence and nationalism, population migration and changes in women's roles and statuses.
*CF 3320 (HIST 3308). History of Hispanics in the U.S. Through Film. In this course, selected events and developments in the histories of Mexican Americans, Puerto Ricans, Cuban Americans and other Latinos are examined, as depicted in film, video and television. The objective is to understand how these powerful media have shaped society's view of Hispanic participation in the history of the United States. While learning to recognize distortions and stereotypes, students will also learn to recognize positive depictions of Latino history.
CF 3321 (MDVL 3321). The Birth of the Individual. This course examines several basic notions pertaining to selfhood, including consciousness, cognition, motivation, personal identity and decision, as found in medieval texts.
*CF 3322 (HIST 3329). Women in Early Modern Europe. A study of the influence of women in European society and intellectual movements from the Renaissance through the French Revolution.
*CF 3323 (THEA 4381, 4382, 4383, or 4384). Gender in Performance (Studies in Theatre, Drama and Performance). This course will explore and discuss performed gender through historical periods and contemporary theatre. Students will be expected to have a high level of participation and will be assigned projects that add to class dynamics and challenge
"traditional" thinking about gender stereotypes in dramatic literature, history, and performance.
CF 3324. An Archaeology of Values: The Self and Ethics From Kant to Baudrillard. Following a line of writers from Kant to Freud to Baudrillard, the course explores the rocky development of the self in relation to history, economic and moral values, and rapidly transforming social relations in the modern period.
*CF 3325 (HIST 3355). 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).
CF 3326. Utopia: Voyage Into a Possible Future. Through the study of major literary works on the topic of social ideals and communal experiments, this course focuses on the value systems and the social realities these works reflect.
CF 3327 (HIST 3373). Science, Religion and Magic in Early Modern England. This course studies the interaction between three ways of thinking about nature and the place of human beings within nature - science, magic and religion. Early modern England is the focus of this course because all three ways of thinking are prevalent, contested and can be set in a rich cultural context. Some of the great figures of English science, like Robert Boyle and Isaac Newton, were practicing alchemists. Others, like Francis Bacon, looked to the new science as a way to prepare for the Second Coming of Christ. The religious divisions of the English Reformation and the Civil Wars brought about political dissension and produced many competing views of nature and society.
CF 3328 (HIST 3374). Diplomacy in Europe: Napoleon to the European Union. This course examines the evolution of the European state system and the idea of "Europe" from the post-Napoleonic settlement of 1815 through the end of the Cold War and the creation of the European Union. Some themes considered are the changing art of diplomacy, the relationship of domestic structure to foreign policy, the impact of war, the role of ideology, technological change, economics and the expansion of European great power politics to a worldwide framework.
CF 3329. The Mathematical Experience. The variety of mathematical experience presented through discussion of its substance, its history, its philosophy and how mathematical knowledge is elicited. The course will focus on questions regarding the roles of proof, rigor and institution in mathematics and the limits and applicability of mathematical knowledge.
CF 3330 (HIST 3391). From Pew to Bleacher: American Culture and Institutions. This course introduces students to American culture and civilization. The course considers the formation of five sets of cultural institutions that have shaped American life: the Church; print culture; museums, galleries, and libraries; theatre, Hollywood, and television; and amateur and professional sports. Students will read autobiographies, novels and synthetic histories; they will view Hollywood movies, MTV excerpts and sporting events; and they will visit museums, fairs and parks in the Dallas-Fort Worth area. Students will emerge from the course with an understanding of the central features in the formation of culture in 19th- and 20th-century America.
CF 3331 (RELI 3305). Religion as Story. An interpretation of stories as modes of religious discernment as well as means of religious communication. Special attention is given to selected narrative forms such as myth, fairy tale, novel and autobiography.
*CF 3332 (RELI 3321). 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. Readings will include personal memoirs of survivors of ghettos, concentration camps and Nazi Germany. Postwar 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 postwar relations between Jews and Germans will be considered.

CF 3333. Clash of Cultures, 1450-1850. This course is an examination of how the global equilibrium of 1450 gave way to a clash of cultures and eventual European domination. The Western Church was reformed; business grew; new states were created; families were uprooted. Colonialism, modern warfare, nationalism and Marxism appeared on the world stage.
CF 3334 (ANTH 3334). Fantastic Archaeology and Pseudoscience: Lost Tribes, Sunken Continents, Ancient Astronauts and Other Strange Ideas About the Past. Did ancient astronauts visit the Earth? Are there secrets of the Maya calendar that archaeologists aren't revealing? Is creation a scientific alternative to evolution of humanity? This course investigates these and other claims about our past, and how archaeologists respond to them.
CF 3335 (FL 3335, HIST 3335). One King, One Law: France 1500-1789. This course studies the culture of France through its history and literature. It emphasizes the historical developments, ideas and literary texts that define the period and illuminate both French classicism and absolutism. The course focuses on the early modern period because then France both set cultural tone and made significant contributions to the transformation of Western civilization.
CF 3336 (HIST 3397). Modernity and Crises of Identity: The Reorientation of the West. Drawing on the works of major intellectuals and artists, this course explores crises of identity in Western culture during the decades prior to World War I.
CF 3337. Nuclear Physics and Society. How do applications of nuclear physics affect society? Topics include nuclear weapons and proliferation, nuclear power generation, and nuclear waste management - issues relevant to current public-policy challenges.
*CF 3338. Defining the Southwest: From the Alamo to Hollywood. An interdisciplinary seminar designed to introduce students to the idea of regionalism in American life, to identify the distinctive features that make the Southwest a region, and to suggest the variety of ways in which different disciplines understand the regional distinctiveness of the Southwest.
*CF 3339 (RELI 3365). Understanding the Self: East and West. This course provides an examination of several basic notions pertaining to selfhood, including consciousness, cognition, motivation, personal identity and decision, as found in Eastern and Western sources.
CF 3340 (MDVL 3327). The Unicorn: Understanding Varieties of the Truth in the Middle Ages. As moderns, we make distinctions between what we see as verifiable reality (history) and what we see as created, imaginative reality (fiction). This course investigates the question of how history and fiction were perceived in the Middle Ages.
CF 3341 (PHIL 3362). Creativity, Discovery and Science. This course 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? The course will address in some 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 a scientific discovery? This course will combine 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 students with some science background will be well equipped to appreciate the relevant issues.
CF 3342 (PHIL 3371). 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.
*CF 3343 (RELI 3375). Wives, Lovers, Mothers, Queens: Expressions of the Feminine Divine in World Religions and Culture. This course is a historical and cross-cultural over-
view of the relationship between feminine and religious cultural expressions through comparative examinations and analyses of various goddess figures in world religions.
*CF 3344 (RELI 3376). Constructions of Gender: Sexuality and the Family in South Asian Religions. This course will provide a comprehensive historical overview of gender issues as represented in the great textual traditions of South Asia. These categories include Vedic materials, medical literature, treatises on law and sexual behavior, and texts that outline the great debates over questions of gender identity and salvation preserved in certain Jaina and Buddhist materials. To make these classical texts more relevant, readings in recent anthropological studies of religion will also be included to enable the student to trace recurring themes, images and symbols. This will allow the student to gain a sense of the continuity of traditions and attitudes as well as innovation and contemporary variants.
CF 3345 (ENGL 3374). Literature of Religious Reflection. This course will examine issues of faith and doubt in British and American literature, drawn from texts reflecting Christian humanism, secular rationalism, individualistic romantic faith, scientific modernism and other modern alternatives.
*CF 3346 (RELI 3352). Love and Death in Ancient Mythology. This course presents 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.
*CF 3347 (FL 3363, WGST 3347). Figuring the Feminine. The feminist inquiry of France from the Middle Ages to the present. The course introduces students to a large body of French texts (in translation) by and about women that bear witness to women's struggle for civil, social and political adulthood. Contemporary feminist theory and feminist action in France constitute an attempt to rethink the very terms and the goals of human enterprise.
CF 3348. 21st Century Property Issues. Not a course in "how to do law" but a study of how (and how well) law and economics, history and philosophy do in resolving current property issues ranging from fighting over Barry Bonds' baseball, to selling human organs. Readings include substantial law decisions to law journal articles.
*CF 3349 (FL 3349, HIST 3392). 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. This course explores links between literature and politics, literature and history, thought and action in 20th-century Africa, the Caribbean and North America.
CF 3350. Introduction to Media Literacy: Semiotics and the Myths of Our Time. Society is a complex social text. We are bombarded daily with countless intertwining messages, in many different languages, some of them verbal, most not. Only some enter our awareness, yet all affect the way we think of ourselves and the world. The students will learn how to read a variety of verbal and nonverbal languages and texts, from advertising to network news, and from fashion and cuisine to sitcoms and gender roles.
CF 3351 (MDVL 3351). The Pilgrimage: Images of Medieval Culture. This course p resents an exploration of the medieval world through one of its own literal and metaphorical images. Moving from Jerusalem, the earthly and heavenly city, students set out through time and space on a pilgrimage to Constantinople, the exotic empire of New Rome. From there, they travel to Rome itself and flow across the map of Europe on the pilgrimage roads of the Middle Ages, investigating the pleasures of the way: the music, art, monuments and literature of that thousand years of human experience called the Middle Ages.
*CF 3352 (MDVL 3352). Ideas and Ideals of Gender in the Middle Ages. This team-taught course will focus on the status of women in the Middle Ages, the emergence of sacred and secular law and ideology regarding women, and the impact of ideas regarding the feminine on the development of (mostly) Western thought.
CF 3353 (MDVL 3353). 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.
CF 3354 (THEA 4351). Historical Cultures Within Theatrical Design. Using the elements of design, the course will focus on the exploration of political, social, economic and artistic influences of various cultures in history, and how the designer uses this information to create a theatrical production, film or opera.
CF 3356 (RELI 3337). Christianity and American Public Life. The objectives of this course include the following: 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.
CF 3357 (RELI 3317). Human Meaning and Value in Personal Life. This course explores the two positive marks of a productive life - love and work - and the two threats to an abundant life - suffering and death.

CF 3358. 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. Focus on art, art history, folklore and religion. (SMU-inOахаса)
*CF 3359 (ENGL 3359). American Narratives of Discovery. This course focuses on the generic process of culture and integrates tools and methods from anthropology, philosophy, geography, history and literature. It engages value issues that are both aesthetic (analyzing the narrative strategies employed by authors formulating an intercultural dialogue) and ethical (Was the Conquest a criminal act? Should modern day Indian tribes be left to their own devices?).
CF 3360. The North American Great Plains: Land, Water, Life. In the late 19th century, the North American Great Plains, which extend from central Canada to West Texas, was mapped as the Great American Desert, a place to be crossed, not settled. This course looks across disciplinary boundaries to see what geology, ecology, climate studies, archaeology, ethnology and history reveal of past, present and (perhaps) the future of life of European Americans and Native Americans on the Great Plains.

CF 3361 (RELI 3309). Bioethics From a Christian Perspective. This course studies 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.
CF 3362. The Europeans: A Case Study of Two Nations. This course examines the national identity and cultural configuration of France and Germany within the European context, with frequent references to other European nations. It looks at "European consciousness" - how Europeans think about themselves as citizens of their respective countries and of Europe.
*CF 3363 (ENGL 3371, HIST 3357). Joan of Arc: History, Literature, and Film. This course considers the life and later reception of the extraordinary peasant girl, Joan of Arc (ca. 1412 to 1430 May 1431), who in two years changed the course of European history before she was burned at the stake.

CF 3364 (ENGL 3367). Ethical Implications of Children's Literature. This course will examine children's literature from an ethical perspective, particularly the construction of notions of morality and evil in the works with emphasis upon issues of colonialism, race, ethnicity, gender and class.
*CF 3365 (FL 3325). Perspectives on Modern China. A survey course on the social and cultural history of modern China, from the perspectives of literature and cinema.
CF 3366 (HIST 3336). Cultural History of the United States. An interdisciplinary study of Americanliterature, painting, architecture, music, theatre, popular amusements and social customs viewed against the major currents of American intellectual history from 1877 to the present.
*CF 3368 (RELI 3368). Wholeness and Holiness: Religion and Healing Across Cultures.
This course explores various ways in which human beings in different times and cultures have understood the relationship between religion and healing. Drawing on a wide range of ethnographic examples and theoretical perspectives, we will investigate the interface between medical and religious models of health. Through reading, films, lectures, classroom discussion and in-class activities, we will examine the religious and medical implications of such phenomena as out-of-body experiences, prayer, diet, massage, visualizations, meditation, acupuncture, herbs and martial arts; we will delve into the healing functions (physical, psychological, and social) of trance, possession, exorcism and shamanic journeys; we will explore the religious dimensions of contemporary holistic healing; and we will investigate the models of selfhood implied by different religious healing modalities.
CF 3369 (FL 3369). Perspectives on Modern Germany. This interdisciplinary inquiry focuses on Germany's quest for identity as a European nation-state, on the circumstances leading to two world wars and the Holocaust, and on the country's recent experience of reunification within the framework of the European Union.
*CF 3370 (ENGL 3364, WGST 3370). 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.
CF 3371. Ideas of Enlightenment in Western Culture. Explores Plato, Augustine and Kant on "What is enlightenment?" Their three different, competing ideas shape our contemporary understandings of the educated, virtuous and free person.
*CF 3372 (RELI 3364). Native-American Religions. An investigation of the mythologies of North America, centering on Southwestern cultures (especially Pueblo and Navajo) and Northern Plains cultures (especially Lakota). Native texts will be approached by way of modern theories of the interpretation of myth, ritual and religion. Topics will include the cultural history of the regions, theories of myth, creation myths, culture heroes, trickster tales, sacred music and dance, and rites of healing and passage. An important dimension of the course will be interaction with the local Pueblo culture through field trips and guest speakers.
CF 3374 (ANTH 3374). Cultures and Environments of the Southwest. This course examines patterns of land-use and resource-use in prehistoric and early historic times in the Southwest. Focus is on the mutual influence of cultures and resources in the northern Rio Grande. The course draws on archaeological, archival, ethnographic and ecological evidence. Comparisons involve Pueblo and Plains Indians, Colonial Spanish, Territorial U.S. and U.S. Forest Service.
*CF 3375 (ARHS 3377). Art and Architecture of Hispanic New Mexico. This course examines the artistic and cultural legacies of colonial New Mexico: Spanish city planning and church design; retablos, santos and their place in religious experience; art in the secular life of towns; and haciendas of colonial and postcolonial New Mexico. Field trips. (SMU-inTaos)
*CF 3376. Southwest Ethnic Diversity. This interdisciplinary course examines the way in which the three cultures of the American Southwest have coexisted. Students are introduced to the history of the Spanish colonial period and American frontier, and the range of Native American cultures and lifestyles as a context for contemporary ethnic relations. Native and Hispanic arts and crafts are studied as an expression of ethnicity. The course explores the factors that support or discourage the formation and persistence of ethnic identity and the fluidity of cultural boundaries.
CF 3377 (THEA 4381, 4382, 4383, or 4384). Ritual, Festival and Theatre (Studies in
Theatre, Drama and Performance). This course will examine how theatre has been connected to the performance of both ritual and festival, examining the common connections as well as the differences between these three public forms of expression: sites of performance, community values, power and control, subversion, and cultural comparison.
CF 3378 (THEA 4381, 4382, 4383 or 4384). Solo Performance (Studies in Theatre, Drama and Performance). This course surveys major figures and issues in contemporary solo performance and performance studies, acquainting students with artists, forms and venues
ranging from the mainstream to the alternative. We will view videos and video documentation of the work and read performance texts, performance theory and interviews/writings by and about the artists and their work. The two major assignments are a research and analysis paper examining an issue related to the course and a brief original piece applying in performance what we have studied.
CF 3379. German Culture in Weimar. The course traces German culture using Weimar as the location to study literature, music and film in their historical context from Goethe's Weimar, the Weimar Republic, through National Socialism and the recent Unification.
CF 3380 (ENGL 3380). The Literature of Vision. An examination of how shamans, prophets and imaginative writers seek to communicate "things invisible to mortal sight," whether as a confirmation of or a challenge to the leading ideas of their time.
*CF 3381 (ARHS 4371, WGST 3381). Modern Myth-Making: Studies in the Manipulation of Imagery. This course examines the quest for enduring cultural heroes and projection of changing social messages as reflected in images from past epochs to modern times. Examples traced range from politician to musician, from the fine arts to television.
CF 3382 (THEA 4381, 4382, 4383, or 4384). American Dramatic Literature (Studies in Theatre, Drama and Performance). This course will provide an opportunity for in-depth study of texts in a variety of genres and styles by looking at popular literature. Students will work with scripts as organic markers of political and aesthetic taste, events, and world view, learning to use practices of performance studies and anthropology to look closely at the authenticity of live performance in its relationship to audience values.
CF 3383. Contemporary Urban Problems. This seminar is designed to introduce students to conceptualizing social problems and to the distinctive conditions defined and treated as social problems in the American Southwest. The course aims to improve students' skills in critical reasoning and evaluative writing on the alleviation of social problems.
*CF 3385 (SOCI 3383). Race, Culture and Social Policy in the Southwest. This interdisciplinary seminar introduces students to applying the concepts of race and culture to social problems and policy in the American Southwest. The course combines lectures, readings, field trips, survey research and documentary films to focus on special topics on the Southwest.
CF 3387. Order Out of Chaos. Deterministic chaos, fractal structures, self-organization and nonlinear dynamics comprise an approach to the study of complicated realistic systems common to a great diversity of natural and social sciences. Students will study the significance of the relatively new science as well as relationships and applications to medicine, the natural sciences, economics, history, philosophy and the social sciences.
CF 3388 (PLSC 3342). Making Democracy Work. This course aims to answer the fundamental question that mankind has asked since ancient Greece of why does democracy thrive in some nations, while it struggles in others and in many more has yet to take root?
CF 3389 (PLSC 3389). International Political Economy. The course introduces students to international political economy, focusing on the development of regimes for international trade and finance. The objective is to understand how nation-states manage international economic relations.
*CF 3390 (FL 3310). Transnational Chinese Cinema. This course will introduce students to the subject of Asian cinema through films produced in the People's Republic, Taiwan and Hong Kong. In considering cinema as a system for the construction of meaning, this course examines national identities in film aesthetics.
CF 3392 (ARHS 3318, HIST 2353). Currents in Classical Civilization. The interdisciplinary study of the art, literature and history of the ancient Greek and Roman worlds, including ideals of democracy, individualism, immortality, heroism, justice, sexuality nature, etc.
CF 3393. Evolution and Creationism as Public School Issues. An in-depth examination of controversies concerning organic evolution from social, educational and legal perspectives. Discussion includes alternative philosophies of science and evidence from fossil and living organisms.

CF 3394 (HIST 3344). The Oxford Landscape, From the Stone Age to the Tudors. This course studies the historical landscape of the upper Thames Basin and Oxford, the region's urban focus for over a millennium. Students can read this history on site, using resources from anthropology, history, architecture, city planning, political and social organization, and imaginative literature. Readings and trips concern local Neolithic, Bronze Age and Iron Age (Celtic) cultures as well as the historical phases of regional experience from the first Roman probe of 55 B.C. to the start of the Tudor Dynasty in A.D. 1485.
*CF 3395. 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.
CF 3396. Rome and the Italians: History, Culture and Politics. This course, taught in Italy, explores the cultural and political identity of Italy as it evolved from antiquity to present day.
CF 3397. Science and Politics in a Nuclear Age: Change and Resolution of Conflict. Investigation of societal changes associated with the development of scientific discoveries such as nuclear energy. Consideration is given to resulting conflicts and their resolution at local, national and international levels.
*CF 3398 (ENGL 3365). 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.
*CF 3399 (RELI 3377). 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.
*CF 3401 (HIST 3401). The Good Society. This course will focus on the historical construction of the concept of the "good society" in Western culture. Although the term did not enter our literature until Graham Wallas published The Good Society in 1915, we can clearly distinguish its origins in the religious, political and intellectual traditions of Europe and the United States. Affiliated with the Center for Inter-Community Experience.
CF 3402. Divided Loyalties: The Problem of Identity in a Global World. Focusing on questions of individualism, citizenship and public identity, this course investigates tensions among localism, nationalism and globalism within contemporary literature and culture. In order to enhance understanding of course readings, students will participate in Center for Inter-Community Experience (ICE) programs in the multiethnic, multinational East Dallas community of Garrett Park East.
*CF 3403. Imagined Communities: Place, Nation and Construction of Cultural Identity. The flagship course of the Center for Inter-Community Experience, "Imagined Communities" investigates from historical and contemporary perspectives the forms of local, national and transnational identities that characterize American life. In order to enhance understanding of course readings, students will participate in Center for Inter-Community Experience (ICE) programs in the multiethnic, multinational East Dallas community of Garrett Park East.
CF 3404. Social Class and the Democratic Public Sphere. This course explores the concept of class in American life and investigates the effects of class differences and tensions on American democratic institutions. In order to enhance understanding of course readings, students will participate in Center for Inter-Community Experience (ICE) programs in the multiethnic, multinational East Dallas community of Garrett Park East.
*CF 3405. Troubled Youth. This course explores American adolescence from contemporary and historical perspectives, covering the period from the eighteenth century onward, and focusing on the period between the Civil War and the present.
*CFA 3300 (ARHS 4300). 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 will encompass philosophical, anthropological, archaeological, materialist, cultural-historical and art-historical perspectives on line and cultural signification in the visual arts.
*CFA 3301 (ANTH 2321, CLAS 2321, ENGL 2371). The Dawn of Wisdom: Ancient Creation Stories From Four Civilizations. Explores the visions of the cosmos expressed in the art, archaeology and literature of Egypt, Mesopotamia, Greco-Roman civilization and the New World, emphasizing the role of human beings as central and responsible actors therein.
*CFA 3302 (WGST 2322). Gender: Images and Perspectives. An examination of the constant and changing understanding of women reflected in myths, research, and theories of biology, history, religion, the social sciences, literature and language.
*CFA 3303 (WGST 2380). Human Sexuality. This course explores the biosocial aspects of human sexuality and sex behaviors. A multidisciplinary and cross-cultural perspective will address a wide range of theoretical and pragmatic sexual issues.
*CFA 3304 (PLSC 4341). Comparative Rights and Representation. This course will explore the tension that exists between rights and democratic representation. Issues explored include judicial social policy making, individual vs. collective rights, aboriginal rights and affirmative action.
CFA 3305. Literature and Film: Adaptations by Italian Directors of Literary Texts. Through the study of major literary works and their cinematic adaptations, the course focuses on the value systems and the social realities the works reflect. The analogies and the differences that exist between literary and cinematic approaches will be explored by reading the texts and confronting them with their filmic renderings.
CFA 3306 (RELI 3316). Religion and Science. An exploration of how religion and science understand such topics as the origins and destiny of the universe and the evolution of life.
CFA 3307 (RELI 3371). Religion and Culture in the Greco-Roman World. This course investigates the intersections of political history, social history, philosophical thought and religious belief and practice in the ancient Greco-Roman world, with particular attention to Judaism and Christianity in their Greco-Roman context.
*CFA 3308 (WGST 2308). Revisions: Woman as Thinker, Artist and Citizen. 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 will also explore areas of women's experience traditionally undervalued, such as friendship, sexuality, motherhood and old age.
*CFA 3309 (WGST 2309). 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. Authors include Sappho, Plato, Michelangelo, Emily Dickinson, Walt Whitman, E.M. Forster, Virginia Woolf, James Baldwin, Audre Lord, Adrienne Rich and Tony Kushner. Cinematography includes Pedro Almodovar, Derek Jarman, Maria Luisa Bemberg, Sally Potter and James Ivory.
*CFA 3310 (ETST 2301, SOCI 3305). 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 within a global context.
CFA 3311 (CLAS 2311). Myth and Thought in the Ancient World. The goal of this course is to explore the conceptual and philosophical underpinnings of ancient understandings of reality in Western and non-Western cultures. The materials for investigation will be primarily textual, including myths, epics, tragedies and philosophical discourse in ancient Greece. Key points of concern will include concepts of the human condition; the nature of the good life; the problems of death, evil and misfortune; the relationships between humans and gods and between the individual and society; and the difference between illusion and reality. The relationship between modern thought and ancient thought, both Western and non-Western, will also be a recurring theme.
CFA 3312. Making History: Representations of Ethical Choices. Interdisciplinary course examining ethical issues associated with the writing of "historical fictions" and the production of historical exhibits. Students will complicate conventional distinctions between disciplines and genres by looking at how playwrights, novelists, filmmakers and museum curators/directors shape their productions from the raw materials of historical data. They
will explore the ways in which historical memory is created and represented, further developing and refining their own engagements with texts, films and museums.
*CFA 3313 (ARHS 3392). Islamic Art and Architecture: The Creation of a New Art. This course will treat issues significant to the creation and expansion of Islamic art from the 7th to the 15 th century. Topics to be discussed include 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.
CFA 3314 (DANC 2370). Movement as Social Text. The course will look at ways in which movement and dance have meaning in different cultural, social and historical contexts. Examinations of examples of dance in a cross-cultural context, encompassing both Western and non-Western dance forms, will be included. Emphasis will be placed on the nature of movement, its unique properties, the ways in which it conveys meaning, and its relationship to culture.
*CFA 3315 (WGST 2315). Gender, Culture and Society. An interdisciplinary study of gender ideology stressing anthropological and literary perspectives, this course will analyze gender difference as a structuring principle in all societies and explore some of its representations in literature, film and contemporary discourse.
*CFA 3316 (ANTH 3333). The Immigrant Experience. An interdisciplinary focus on the issue of immigration in the United States. The course explores historical, ethical, social, cultural and political dimensions of the immigrant experience, as well as America's attitudes toward the immigrant. Controversial issues, such as bilingual education and illegal immigration, will be examined.
CFA 3317. Global Perspectives on Environmental Issues. Many of the major environmental issues our planet faces - greenhouse climate changes, air and water pollution, acid rain and related atmospheric problems, ozone shield destruction, toxic and radioactive waste disposal, land-use management, energy resource development, geologic hazards, population growth and food supplies - will be examined from scientific as well as cultural, political and ethical viewpoints.
*CFA 3318 (HIST 2384). Latin America: The Colonial Period. An introductory survey covering the development of Latin American society from prediscovery to the early 19th century.
*CFA 3319 (HIST 2385). Latin America in the Modern Era. An 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.
*CFA 3320 (FL 3323, HIST 2323). 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.
CFA 3321. Ways of Thinking in the Ancient World. Distinctions between heaven and earth, divine and human, "spirit" and "matter," living and living well, mind (language) and "reality," are categories of thought explored in this course. This is a course in how thinking gets done, as well as in some of what human beings have thought.
CFA 3322 (RELI 3358). Psychology of Religion. Covers the psychological, biological and social foundations of religion and its consequences. Topics include mystical experience, conversion, prayer, cults and the effects of religion on health, prosocial behavior and prejudice.
CFA 3323. The Emergence of the Modern Mentality of the West. This course examines some of the major changes in philosophical thought and religious life that took place between the end of the Middle Ages and the Industrial Revolution. It focuses on contrasts between magic and science, the rise of the capitalist spirit, and conflicts between traditional beliefs and modern skepticism.
CFA 3324 (THEA 4385). English Theatre, Restoration to the Present (Studies in Theatre, Drama and Performance). Surveys English theatre, Restoration to today. Focuses on selected
scripts and social contexts: audiences, society, theatrical forms, modes of production, theatre architecture, and broader historical, economic and political forces and influences.
*CFA 3325 (HIST 3379). A Cultural History of New Mexico. This course, taught only at SMU-in-Taos, explores the struggles between the state's dominant ethnic groups - Native Americans, Hispanos and Anglos - over rituals, spaces and objects.
*CFA 3326 (PLSC 4322). 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.
CFA 3327. Environmental Problems and Policy: A European Perspective. As the threats of local, regional and global environmental problems grow, so does the public political and scholarly debate about the remedies to control them. A study of current issues, options and politics from the European perspective.
CFA 3328 (FL 3309). Contemporary France. This course will provide an interdisciplinary immersion in the main concerns of France today. It will explore its institutions, social issues, and intellectual and cultural interests as they relate to the past and strive to meet the challenge of the 21st century, particularly the making of Europe.
CFA 3329 (FL 3307). The Belle Epoque and the Birth of Modernity. Through its focus on the Belle Epoque, this course will give students the opportunity for in-depth study of one of the richest periods in the history of French culture. Through a variety of cultural objects, they will study the shift of civilization that occurred at the turn of the 20th century based on major changes in concepts of the individual, space, and time, and learn how they gave birth to our modern civilization and culture.
CFA 3330 (FL 3303, SPAN 3373). Spanish Civilization. Through lectures, readings, study trips and audiovisual presentations, this course presents an interrelated overview of Spanish culture and thought, especially as related to contemporary Spain. This course addresses from multiple disciplinary (anthropology, history, sociology, Spanish literature, etc.) perspectives a vast array of interrelated social and cultural practices and beliefs.
*CFA 3331 (ANTH 2331). The Formation of Institutions: Roots of Society. With illustrations from the prehistoric past, the earliest recorded civilization and "contemporary ancestors" (bands and tribes of the present), this course will trace the development of familiar notions like the family, property and the state, resulting in an appreciation of the fundamental questions posed by our common life on Earth and the variety of answers that human societies have given to those questions.
*CFA 3332 (CLAS 2332). 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.
CFA 3334 (PLSC 4323). The Politics of Change in America, 1930-2000. Focusing on American politics and society from 1930 to the present, this course will examine how America has changed, explain why change occurs, and assess the consequences of these changes.
*CFA 3336 (ANTH 3336). 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.
CFA 3337 (DANC 3374). 20th-Century Musical Theater. This course will examine the significance of dance in the American musical as a medium for reflecting the cultural evolution in America from a social and historical perspective.
CFA 3338 (RELI 3338). Christ as Cultural Hero. An exploration of the impact of Jesus on the history of Western culture, not only in religion and philosophy, but also in the fine arts, literature and politics.
CFA 3339 (RELI 3339). 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 New England.

CFA 3340 (ARHS 4350, CTV 4351, THEA 4381-4384). Mapping Modernism: Artistic Collaborations in Paris and Moscow, 1890-1940. This class examines early 20th-century modernism through the lens of fertile collaborations and exchanges in art, dance, film, music and theatre in Paris and Moscow between 1890 and 1940.
*CFA 3341. Native Americans in Western Legal Thought. A survey of Spanish and AngloAmerican legal treatment of native North Americans from first contact to the present, comparing and contrasting versions of Western jurisprudence and examining whenever possible Native American responses.
CFA 3342. British Studies I. This course is an interdisciplinary, writing-intensive course within the humanities and social sciences taken at a British or Irish university. It can be taken only by students in the yearlong SMU-in-Britain program.

CFA 3343. British Studies II. This course is an interdisciplinary, writing-intensive course within the humanities and social sciences taken at a British or Irish university. It can be taken only by students in the yearlong SMU-in-Britain program.
*CFA 3344. Tradition, Community and Identity in Black African Cinema. An introduction to film by black African filmmakers. The course explores African film's relationship to history, African identity, the African political context and African oral tradition.
CFA 3345 (HIST 4319). The 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.
CFA 3346. The Taos Experience: an Independent Research Seminar. This course is designed to introduce students to the history of New Mexico and its disparate peoples and cultures, as well as independent research. After reading general histories and specific case studies, students will then embark on a thesis-length independent research project.
*CFA 3348 (HIST 3348). 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.
*CFA 3350 (ANTH 3350). 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.
CFA 3352. French Cinema, 1895-1945. An introduction to French cinema's major works, filmmakers and trends from 1895 to 1945, with an emphasis on film's unique manner of constructing and transmitting culture.
CFA 3353. French Cinema, 1945-Present. An introduction to French cinema's major works, filmmakers and trends from 1945 to the present, with an emphasis on film's unique manner of constructing and transmitting culture.
CFA 3355 (PLSC 4355). Comparative Political Economy of Industrialized Democracies. This course examines the nature and workings of the political economies of industrialized democracies of North America, Europe and the Pacific in comparative perspective.
*CFA 3358 (ANTH 3358). Indians of the Southwest, 16th Century-Present. An introduction to the non-Pueblo and Pueblo peoples of the Greater Southwest, with a focus on IndianIndian and Indian-Euro American relations and the resultant transformations. Topics will include class of cultures, tourism, gambling, legal rights and urbanism.
CFA 3359 (PLSC 3359). From Communism to Democracy. An interdisciplinary survey of the rise and fall of communist regimes, followed by an analysis of the successes, obstacles and consequences of the democratic transition in the former Eastern Europe and Soviet Union. Particular attention will be paid to cultural, social, economic and political influences that affect divergent paths to democracy.
CFA 3360 (FL 3360). The 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.
*CFA 3362 (CTV 2362). 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.
CFA 3363 (PLSC 4363). 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.
*CFA 3365 (ANTH 3365). The Rise and Fall of Superpowers: The Dynamics and Ethics of Empire. A comparative introduction to institutions and organizational dynamics of three ancient empires (Roman, Chinese, Inca), with discussions of the lessons that these civilizations can teach American citizens about our own society.
*CFA 3368. Orient and Occident: Encounters Between the Middle East and the West in the Modern Era. This course exposes students to the broad dimensions of Islamic belief and practice, 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.
*CFA 3370. Australian Aboriginal Studies. This course provides an understanding of the history and culture of the indigenous peoples of Australia in a way that makes students more interested in, and sensitive to, the history and culture of indigenous peoples.
*CFA 3371. Inventing Americas I: Explorations and Encounters. A comparative, interdisciplinary examination of literary, ethnographic, artistic and cinematic texts reflecting cultural encounters in the Americas during the colonial period.
*CFA 3372. Inventing Americas II: Identity Formations. A comparative, interdisciplinary examination of literary, ethnographic, artistic and cinematic texts reflecting the formation of individual, group, and national identities in the Americas since the 19th century.
CFA 3373. Narrative, Religion and the Construction of Belief. This course explores narrative as a foundation of religion and as primary agent in the construction of belief, comparative reading and analysis of texts from a wide variety of religious, philosophical and literary traditions.
CFA 3374 (ENGL 3348). 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.
CFA 3375 (CTV 3375). Postwar European Cinema, 1945-Present. Presents an overview of postwar European cinema focusing on major films, directors and national movements, with particular emphasis on Italian film. Considers cultural and stylistic features that differ from Hollywood genre models.
CFA 3377 (PHIL 3377). Animal Rights: The Ethics of Human Treatment of Animals. An examination of the moral status of nonhuman animals and its implications for the common use of animals as food and experimental subjects for humans.
CFA 3378 (ENGL 3368). 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.
*CFA 3379 (ENGL 3379). Literary and Cultural Contexts of Disability: Gender, Care and Justice. This course examines issues of disability from literary, cultural and philosophical perspectives. It grapples with current debates in disability studies, providing the student with a variety of contexts in which to examine them.
*CFA 3380 (HIST 2380). Ethnic Regions in the "Western World." This interdisciplinary course examines the ways regional ethnic minorities - such as the Basques, Quebecois and Chicanos - have functioned within larger societies in Western Europe and North America.
CFA 3381 (PLSC 3381). Current Issues in International Relations. An interdisciplinary survey of contemporary issues and challenges in the international arena. The student will research and propose solutions, taking into account the multidimensional aspects of these international challenges.
*CFA 3382 (WGST 3382). 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.
*CFA 3384 (ANTH 3384). 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.

CFA 3386 (THEA 4386). 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.
CFA 3388 (ANTH 3388). Warfare and Violence: The Anthropology and Ethics of Human Conflict. This course provides 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.
CFA 3390 (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.
*CFA 3399 (ANTH 3399). Ice Age Americans. The first Americans came here from northeast Asia and Siberia over 12,000 years ago, when North America was in the grip of an Ice Age. Their story, being pieced together by disciplines as different as archaeology, linguistics and molecular biology, is revealing how these pioneers faced the challenge of adapting to a world without other people, which became increasingly exotic as they moved south, and was itself changing as the Ice Age came to an end. This is the story of the first discovery of America, when it truly was a New World.
*CFB 3301 (ANTH 3301, SOCI 3301). 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.
CFB 3302 Contemporary East Asian Cinema, 1997-Present. The course will be divided into four sections, one on each of the national cinemas we will be studying; Hong Kong cinema after the Colony's return to the People's Republic of China as a Special Administrative Region; the cinema of Thailand after the Asian Economic Crisis and the massive devaluation of the bhat; South Korean cinema after the bailout of the Korean Stock Exchange by the International Monetary Fund and the extensive corporate restructuring which followed; and the Japanese cinema in the stagnant late nineties as Japan struggled to overcome the economic and cultural hangover from the burst bubble of the 1980s economic boom.
CFB 3303 (PHIL 3333). Native American Philosophy. An examination of major topics in philosophy from a variety of Native American standpoints, with an emphasis on the tribes residing in the Southwest. Throughout the course, students will explore Native American themes of metaphysics, epistemology and value theory. Students will read essays that address philosophical questions pertaining to knowledge, time, place, history, science, religion, nationhood and ethics. They will also identify connections between the philosophical assumptions and the mythology and folklore of the Pueblo Indians.
CFB 3309 (HIST 3309). North American Environmental History. This course 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.
*CFB 3310 (ANTH 3310). Gender and Sex Roles: A Global Perspective. This course compares the life experiences of men and women in societies throughout the world. Discussion will include the evidence regarding the universal subordination of women and examine explanations that propose to situate women's and men's personal attributes, roles and responsibilities in the biological or cultural domain. In general, through readings, films and lectures, the class will provide a cross-cultural perspective on ideas regarding gender and the ways societies are organized in relation to gender.

CFB 3311 (ANTH 3385). Sustainable Living. Seminar focused on environmental challenges facing society and strategies for achieving a more sustainable existence. From global warming and climate change to extinction and the loss of biodiversity, it is clear that our world is changing and that we humans are responsible for much of this deterioration. Environmental issues are highly politicized and polarized, often broken into black and white divisions (e.g., liberal versus conservative), but it remains clear that the future of our planet is something that we must all be concerned about. This course examines the state of our environment and the place of humans in nature, focusing on aspects of sustainable living. With a critical eye, we will evaluate the state of knowledge on numerous environmental issues, and the ways that, as everyday Americans, we can lessen our environmental impact and work towards a more sustainable future.
CFB 3312 (CLAS 1312). 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.
*CFB 3313. Genetic Determinism and Free Will: The Impact of Human Genetics and Biotechnology on Human Choice. Students will be introduced to human genetics and biotechnology, with philosophical analysis of its impact on genetic determinism and free will. Related societal issues will be examined.
*CFB 3322 (HIST 3322). Native American History. This course examines the roles Native Americans played in the history of North America (excluding Mexico) from 1500 to the present.
CFB 3333 (PHYS 3333). The Scientific Method: (Debunking Pseudoscience). This course provides students with an understanding of the scientific method sufficient to differentiate experimentally verifiable scientific fact and theories from pseudoscience in its many guises: paranormal phenomena, free-energy devices, alternative medicine and many others.
CFB 3336 (ANTH 3336) Concepts of Evolution. A history of the conception and development of the idea of evolution and the conflicts it has generated. Students will read and discuss original sources from ancient Greece to present.
CFB 3337 (HIST 3337). Ethical Dilemmas in a Global Age. This course is a cross-cultural exploration of major ethical problems emanating out of the radically changing context of human existence in recent decades.
CFB 3342 (CCPA 3342). Critical Theory: Post Colonial. This class explores the impact that communication practices in organizational, interpersonal and mass media contexts have on the construction of ethnicity, gender and sexuality in both U.S. and post-colonial contexts.
CFB 3348 (ANTH 3348). 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.
CFB 3351 (ANTH 3351). Forensic Anthropology: Stories Told 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.
*CFB 3353 (RELI 3353). Borderlands: Latino/a Religions in the United States. An introduction to Latino/a religions and religious practices in the United States, with a special emphasis on social constructions.
CFB 3364 (PHIL 3364). 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.
CFB 3375 (MNO 3375). Corporate Social Responsibility and Ethical Leadership. This course is designed to develop the student's capacity to recognize and evaluate ethical issues related to business management, including: a) quandaries faced by individual managers; b) issues concerning corporate structure, policies and business culture; c) more systemic issues related to the role of business in a democratic society and the conduct of business on the international scene. The cross listing of CFB 3375 and MNO 3375 is subject to the same rules that restrict credit for all other CF, CFA, and CFB courses that are cross-listed with
departmental courses (see General Education Rules 9 and 10). In addition, students who take either CFB 3375 or MNO 3375 (formerly OBBP 3375) may not take ACCT 3391, nor may students taking ACCT 3391 take either of the other two courses for credit. Students seeking accounting certification should note that ACCT 3391 is a gateway course for eligibility to take the CPA examination.
CFB 3382. The History of Mexico and New Mexico from their Origins until 1848. The central aims of the course are: to summarize the pre-colonial and colonial histories of Mexico, and to survey, as a component of the Mexican past, New Mexico's history. The history of art and architecture is integral to the general history.
*CFB 3384 (RELI 3384). Hinduism and Colonial Encounters. A critical study of the history of colonialism in India and its impact on social, religious and political discourse.

CFB 3386 (ARHS 4386). Patrons and Collectors. A social history of art from the point of view of its consumers. Art patronage and collecting are examined from antiquity to the present, with emphasis on the modern period.
*CFB 3390 (ANTH 3390). The Plundered Past: Archaeology’s Challenges in the Modern
World. This course will provide and 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.
CFB 3399 (ARHS 3399/ARHS 6399). 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.

## Human Diversity Cocurricular Requirement (Three term hours)

One Human Diversity cocurricular course (three term hours) dealing with nonWestern 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. Throughout this section of the General Education Curriculum, any course marked with an asterisk is one that will satisfy the Human Diversity requirement. In addition, a wide offering of elective courses that meet this cocurricular requirement is available. The list of Human Diversity courses offered per term can be accessed at www.smu.edu/registrar/socl/GEC.asp.

## 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 requirement, 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 Vice Provost for General Education. Appeals may be made to the Vice Provost of the University.

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 forty-two (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 year-long course,
both semesters 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 year-long 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. School of Engineering Bachelor of Science in Computer Engineering degree
b. School of Engineering Bachelor of Science degree in Computer Science with a Premedical Specialization
c. School of Engineering Bachelor of Science in Electrical Engineering degree
d. School of Engineering Bachelor of Science in Environmental Engineering degree
e. School of Engineering Bachelor of Science in Civil Engineering degree
f. School of Engineering Bachelor of Science 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 Bachelor of Science (B.S.) degree will be allowed to fulfill the General Education requirements for the Dedman College program as the General Education requirements 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 English, Mathematical Sciences and Information Technology Fundamentals requirements through SMU coursework.
5. The following requirements for Fundamentals should be followed:
a. 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 suspension. 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 a grade of $F$.
b. Students who have not completed the Fundamentals Mathematical Sciences requirement within their first year must be enrolled in an appropriate math course each term thereafter until completion of the requirement. Students who do not meet this standard will be subject to suspension.
c. University academic progress policy requires that full-time regular students have completed the English and Mathematics requirements by the end of their fourth regular term of enrollment (the second term for full-time students transferring in 15 or more units from another institution). Part-time regular students have 48 credit hours to complete these requirements; part-time transfer students have 24 credit hours to complete them. Students who do not meet this standard will be subject to suspension.
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 departmental 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. (Please note that the departmental co-listing 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 at SMU, either on the Dallas campus, at SMU-in-Taos or through the Study Abroad International 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 co-listing 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 (A-LEC)

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 education goals, and to succeed at any level of the undergraduate curriculum.

## Overview of Services

Each year approximately 33 percent of undergraduates take advantage of A-LEC programs, courses and services. All A-LEC 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 A-LEC by their advisers, faculty or resident assistant, but most students choose to come on their own.

Tutoring services. The A-LEC 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 at the A-LEC Web site.

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 term, the A-LEC offers approximately 20 study strategy workshops. Among the topics covered are note taking, time management, testtaking strategies and textbook study-reading.

ORACLE (Optimal 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 ORACLE at the same time they register for their other courses. ORACLE is listed in the catalog as EDU 1110. Every fall, sections are reserved for premed students, international students, and students with documented leaning differences.

Academic counseling. Three full-time staff members are available to work individually with students on study strategies. One of these three specializes in working with students with learning differences.

Learning Disabilities Specialist. Individual academic support is provided for students with documented learning disabilities and ADHD. To be eligible, students first must be registered with the Office of Services for Students with Disabilities. Assistance is available in the areas of transitioning, learning strategies instruction, coaching, educational planning and self-advocacy.

## SMU 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 more than 2.9 million volumes. PONI, a fully interactive Web- and Windows-based client-server system, features access to bibliographic records of materials housed in all SMU Libraries and hypertext links to other databases, digitized collections and relevant Web sites.

SMU Libraries rank first in total volumes held among non-ARL (Association of Research Libraries) universities in the United States. The SMU Libraries comprise the largest private research library in the Southwest and rank third within the region 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 the Dedman School of Law)
3. Bridwell Library (reporting to the Perkins School of Theology)
4. Business Information Center (reporting to the Cox School of Business)

The Business Information Center
The Business Information Center (BIC) is located in room 150 of the Maguire Building. The mission of the BIC is to provide the SMU community with 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, the BIC offers the SMU community 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; over 150 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 Cary M. Maguire Energy Institute Resource Collection and the Career Management Center Library. Librarians are available all hours that the BIC is open, offering reference assistance both in-person and virtually via e-mail and telephone. Librarians provide course specific, in-class instruction at the request of instructors and lead workshops on performing business research.

## Bridwell Library

Bridwell Library of the Perkins School of Theology is the University's principal research resource for the fields of theology and religious studies. It offers a collection of over 350,000 volumes, 1, 200 current periodical titles, and provides access to a wide array of online full-text 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 variously through lectures, publications and exhibitions. Reference librarians are available to help students discover and use the many resources of Bridwell Library.

## Underwood Law Library

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 630,000 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

The largest of the SMU library units is Central University Libraries (CUL), with holdings of more than 2.1 million volumes. CUL comprises Fondren Library, the Hamon Arts Library, the Science and Engineering Library, the DeGolyer Library and SMU Archives, the ISEM (Institute for the Study of Earth and Man) Reading Room and the Norwick Center for Media and Instructional Technology. CUL also supports SMU programs at the Legacy campus and SMU-in-Taos.

Fondren Library, with more than one million volumes of books, government publications and bound journals, serves students and faculty in the areas of humanities, social sciences, business and education. Its Information Commons provides a single location within the library where students can use library books and online resources as well as the latest computer software and technology to prepare their assignments. Fondren Library is a selective depository for government information resources and has large electronic collections of retrospective periodicals and special collections in the humanities and social sciences.

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.

Hamon Arts Library, located in 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 180,000 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 Jerry Bywaters Special Collections wing has as its focus the art and artists of the Southwest, the musical life of Dallas, regional theatre history, fashion history and regional architecture. The G. William Jones Film and Video Collection, founded in 1967, holds over 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 pre-nickelodeon films.

Science and Engineering Library contains holdings of more than 700,000 volumes and serves students and faculty in the areas of the sciences and engineering. The Science and Engineering Library is responsible for the University's map collection, which includes more than 220,000 topographic and geologic maps and aerial photographs, and the DeGolyer Earth Sciences collection of more than 15,000 geological volumes.

CUL has a corporate research service - IIS - housed in the Science and Engineering Library, providing cost-recovery, fee-based information services to the business and corporate community outside the University.

DeGolyer Library is a non-circulating special collections branch of CUL that contains more than 120,000 volumes. In addition to rare books, it holds over 2 million manuscripts, 500,000 photographs, 2,500 newspaper and periodical titles, 2,000 maps and an extensive collection of ephemera, including 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 a large collection of books on early voyages and travels, especially those bearing on the European discovery and exploration of the New World. The collection of Western Americana is numbered among the finest in the country, and the library also has exceptionally well-developed collections in the fields of business history, such as the JCPenney archives, and transportation history, in particular the history of railroads. Its holdings in the history of science and technology, which include the Texas Instruments archives, have much to offer the researcher. Literary collections include 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. 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.

University Archives, part of the DeGolyer Library, is the official repository for SMU records and other materials of historical importance. The Archives contains manuscripts, photographs, documents and memorabilia concerning 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.

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

The Norwick Center for Digital Services. The Norwick Center for Digital Services in CUL encompasses student multimedia and collaborative technology areas, digitization/production services and a screening room. The Student Multi-media Center provides students with access to high-end computers, software, collaborative spaces and staff assistance to develop a variety of digital projects such as DVD's and web video, digital portfolios, and other media-intensive projects. Digital Projects focuses on digitizing library collections for preservation and increased access. The screening room allows for video screenings and computer projection for instruction and training.

## LABORATORIES AND RESEARCH FACILITIES

The University provides many laboratories and much 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. (Descriptions of the engineering laboratories can be found in the Lyle School of Engineering section. Other University facilities are described in sections for the individual schools.)

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 several departmental computer laboratories.

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 over 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.

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, is maintained and operated by the University and now monitors remote seismic and infrasound stations in southwest Texas near Lajitas, seismically one of the world's quietest regions. The Lajitas array is used to test technology designed to detect small earthquakes from great distances. In addition to the Lajitas seismic array, SMU operates seismic and infrasound arrays at Mina, Nevada, Grenada, Mississippi, 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 is a research museum affording opportunities for advanced study of fossil faunas and floras and their climatic and paleoecologic significance. The collection, which specializes in vertebrate paleontology, includes more than 150,000 fossils from the United States, Central America and northeastern Africa.

The Pollen Analysis Laboratory is operated in conjunction with the Shuler Museum of Paleontology. The 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. Microscopic analysis of the resulting pollen sample residues takes place in a separate laboratory housing transmitted light 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.
The Geothermal Laboratory is the focus of an extensive program of research in the thermal field of the Earth. Geothermal energy resources and the thermal fields of sedimentary basins are special topics of concentration. The research is worldwide in scope. 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 $750^{\circ} \mathrm{C}$. There are also 10 cold-seal reaction vessels. In addition, 1 atm furnaces are available that can be used to temperatures of $1400^{\circ} \mathrm{C}$.
The Electron Microprobe Laboratory contains a fully automated JEOL 733 electron microprobe with four wavelength dispersive X-ray spectrometers, a Link eXL energy dispersive X-ray and associated sample preparation equipment. It is available
on a regular basis for various research projects in the Institute for the Study of Earth and Man, the University and other research institutions.
The Stable Isotope Laboratory is a general research facility available to support both academic and student research in 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 and gases) into gases suitable for measuring the isotope ratios of hydrogen, carbon, nitrogen and oxygen at natural abundance.
The Variable Pressure Scanning Electron Microscope (SEM) Laboratory contains a Zeiss SMT 1450 VPSE SEM used for generating electron photomicrographs with 5 nanometer resolution. The facility is open to researchers and students from Earth Sciences, Environmental Sciences, Engineering and Chemistry. The SEM 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 Earth Sciences, Chemistry, Environmental Sciences and Engineering.

## 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 outside of Spain 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 utilized 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.

## Office of Information Technology

The Office of Information Technology (OIT), located on the 4th floor of the Blanton Student Services Building, is responsible for providing computing and communications services in support of the academic and administrative functions for students, faculty, staff, alumni, and patrons of the University. These services include an SMU e-mail account, access to enrollment and financial data online, Internet access both on and off campus, 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 connections through dial-up access and Virtual Private Networks (VPN).

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

The OIT Help Desk provides technical support for most computing issues from 7:30 a.m. until 6:30 p.m. Monday through Thursday and from 7:30 a.m. to 5:30 p.m. on Friday. Both phone and in-house support is available for on- and off-campus connectivity issues and computer virus 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. Labs are located in each of the Residence Halls and throughout the campus libraries. 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.

The Computer Corner by HiEd, located in the Hughes-Trigg Student Center, is the on-campus computer store. It offers a number of discounts on hardware and other peripherals. Students also may take advantage of software discounts on Microsoft and Adobe applications through a campus license agreement. Computer repair service is offered on a per-charge basis.

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

For additional information on services provided by OIT, visit smu.edu/help or call the Help Desk, 214-768-HELP.

SMU offers degrees in five undergraduate and graduate schools and two graduate professional schools, including Dedman College (SMU's college of humanities and sciences), the Algur H. Meadows School of the Arts, the Edwin L. Cox School of Business, the Annette Caldwell Simmons School of Education and Human Development, the Bobby B. Lyle School of Engineering, the Dedman School of Law and the Perkins School of Theology. 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 that commitment by encouraging students to combine broad, interdisciplinary inquiry with in-depth study in a particular field of interest.

## PREFACE TO THE CURRICULUM

SMU holds as a philosophical basis for our undergraduate curriculum our 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."

Students being graduated from SMU must successfully complete courses in written English, quantitative reasoning, information technology and science and technology. In addition, recognizing the increasingly fluid nature of knowledge, we require students to take courses in both disciplinary and interdisciplinary studies. Finally, our students must choose one of the more than 130 majors approved in the five undergraduate schools.

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 of our undergraduates, and to offer our students the exceptional opportunity to explore a wide variety of frontiers and vistas that will challenge and encourage further intellectual investigation not only during their years on our campus but also for the rest of their lives. With these goals in mind we have developed our undergraduate curriculum to reflect both the depth and breadth of our educational objectives. A student's undergraduate years should ideally echo his or her first years of life in one critically important way: During our first years, our intellectual vistas expand exponentially every day. A similar expansion and enrichment should likewise occur during our undergraduate years. SMU invites its students to take every advantage of the exceptional opportunities before them. Our curriculum provides the frame within which such life-changing experience can, and should, take place.

## BACCALAUREATE DEGREE PROGRAMS

SMU offers Bachelor of Arts and Bachelor of Science degrees in Dedman College; Bachelor of Arts, Bachelor of Music and Bachelor of Fine Arts degrees in the Meadows School of the Arts; the Bachelor of Business Administration degree in the Edwin L. Cox School of Business; and Bachelor of Science, Bachelor of Science in Computer Engineering, Bachelor of Science in Electrical Engineering, Bachelor of Science in Civil Engineering, Bachelor of Science in Environmental Engineering, and Bachelor of Science in Mechanical Engineering degrees in the Lyle School of Engineering. Dedman College also offers the Bachelor of Humanities and Bachelor of Social Sciences degrees. For the degrees available in specific fields of study, consult the appropriate school's section in this catalog.

## HONORS PROGRAMS

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 located in the General Education Curriculum, and is thus open to students of all majors across campus. The program is designed to prepare honors students for the challenges of rapid change and yet take advantage of the possibilities such a world will present. To this end, the program emphasizes the values of what has been historically known as a liberal arts education, namely, the abilities 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 studies and the exploration of topics across disciplines.

The University Honors Program focuses on general education courses, ideally taken in the first five terms at SMU. Students begin with a two-term, first-year Honors Rhetoric course 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 ENG 2305, "Interpreting, Understanding and Doubting," and the second is ENG 2306, "The Ethical, the Catastrophic and Human Responsibility." Classes are small ( 15 students) and taught by excellent teachers. Individual sections of the course meet together periodically for discussion. Out of such encounters an honors "community" emerges. In addition, honors students choose three honors courses from the Perspectives categories of the General Education Curriculum (see this section of the catalog for a listing of these categories). 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. Finally, students are asked to take two Cultural Formations courses that deal with contemporary and historical topics whose understanding requires interdisciplinary or multidisciplinary approaches drawing on the humanities, social sciences and sciences.

Another significant element in the honors academic experience are the Richter Research Fellowships, which are designed for undergraduates to conduct independent research, under the supervision of a faculty adviser. All honors students who have completed their second year are eligible to apply. Richter projects have included literacy in Ghana, micro-business financing in India, charity hospital organization in India, and solar and wind power in the Netherlands.

The University Honors experience 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 organized around scholars and artists in residence or distinguished visitors to the campus. Honors students benefit, too, from the sense of solidarity built in campus venues dedicated especially to them: optional residence quarters, and seminar and activity spaces. The program also takes advantage of the exciting world of the Dallas/Fort Worth Metroplex. Visits to museums, studios and centers of national and international business allow students to explore the enormous opportunities for learning that only a great urban center can provide. At the same time, and unlike programs in larger universities, the University Honors Program at SMU is not segregated from the larger world of the campus. Honors students have the option of interacting with their fellow students in the corridors of the student center, on the playing fields, and in the numerous student governing, social, preprofessional, political, cultural and social organizations that enhance student life. Honors students help make the entire SMU world more intellectually exciting and vibrant.

The University is committed to providing both attention and resources to the University Honors Program. Enrollment in Honors courses is limited, and the University takes care to invite only its best teachers and most creative intellects to participate in the program. Faculty mentors and advisers are available for information, help and advice.

Entrance to the University Honors Program is by invitation or by application after at least one term of course work at SMU. At the end of their undergraduate years, students who maintain a 3.0 grade-point average in their honors courses and at least a 3.25 overall receive a diploma inscribed with the designation "Honors in the Liberal Arts," both a credential and a souvenir of their intellectual achievements.

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 their 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 "Department Honors" or "Division Honors." More information on these programs can be found under the individual department and division listings in this catalog.

Students interested in the University Honors Program should contact Dr. David D. Doyle, Jr., Director, at ddoyle @ smu.edu, or visit www.smu.edu/honors.

## Academic Advisement

Academic Advisement engages students with professional staff and faculty in order to cultivate the individual academic and personal growth that students need as they navigate their academic careers. Academic Advisement begins when students first pick up or click on information about SMU. It continues through the processes of admission and orientation. It matures in students' accomplishment of learning objectives and outcomes as described in an advisement syllabus, and it comes to fruition when students graduate from their chosen schools and colleges into the global marketplace of commerce and ideas.

## Academic Advising

In addition to naming a department in Dedman College, Academic Advising refers to intentional meetings between students and professional designated advisers in order to select and schedule academic work and to monitor degree progress.

## Advising for Pre-Majors

Through the Dedman College Advising Center every student entering Dedman College 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.

## Advising for Majors

After completing 24 term hours and meeting other program admission requirements, students may transfer their advisement focus and their records into the school that houses their major field of study. Those who elect study in the humanities, sciences, or social sciences enter Dedman College. Others, depending on their qualifications and desires, may enter Cox School of Business, Meadows School of the Arts. the Annette Caldwell Simmons School of Education and Human Development, or the Lyle School of Engineering. The University requires students who intend to continue their study at SMU 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 commence work with a major adviser, a faculty or staff member who focuses on grooming students for the field of study.

## INTERNATIONAL STUDENTS

## The International Center

The International Center supports Southern Methodist University and international students/scholars and their families by engaging in the following activities: 1) advising all international students/scholars on visa compliance requirements; 2) advising schools and departments within the University on compliance requirements; 3) reporting to the federal government via the SEVIS system; 4) recruiting foreign passport holders and Americans studying outside the United States for University undergraduate programs; 5) working with SMU alumni abroad; and 6) facilitating mutually beneficial institutional partnerships.

We strive to carry out these activities in a professional manner and are committed to operating in the best interests of SMU and in the best interests of the international constituencies we serve.

The International Center, 6185 Airline, Suite 216, Dallas, TX 75205, makes admission decisions on first-year candidates who are foreign citizens and on American citizens studying outside the United States as well as undergraduate international transfer students. Once a first-year candidate or an undergraduate international transfer student is accepted to the University and has provided an adequate Certificate of Financial Responsibility or bank letter, the Office of International Admissions and Relations issues the form I-20 mentioned below.

Foreign 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.

Students for whom English is not the native language are expected to take an internationally recognized English language test such as TOEFL or IELTS. A score of at least 550 (paper test) or 80 (Internet-based) on the TOEFL or a score of 6.5 on the academic IELTS is required for admission consideration. Students with scores slightly below those mentioned above will be required to successfully complete SMU's summer Intensive English Program prior to matriculation. Transfer students 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 an international university must submit the following (in English or with an English translation):

- An official transcript.
- Course descriptions.
- Professional evaluation (see page 23 for explanation).

The expenses incurred in attending the University are listed under Financial Information. Additional costs that international students may expect include room and board during school holidays, travel expenses, and international student insurance, and a one-time 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 merit-based scholarships.

When an international student has been admitted and provided an adequate Certificate of Financial Responsibility or bank letter, the Office of International Admissions and Relations will issue form I-20, the 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 at Southern Methodist University must be covered by health insurance in the amounts specified for Exchange Visitors by the U.S. government. Health insurance may be purchased through the University by selfenrollment with the University-contracted insurance plan or elsewhere.

## Required Testing

SMU requires all applicants except foreign citizens attending secondary schools outside the United States to submit SAT I scores and/or American College Test (ACT) scores. These examinations are conducted in a number of test centers throughout the United States and in foreign countries several times each year. It is recommended that students take the SAT I or ACT more than once. Although scores from tests taken after January are acceptable, waiting for scores may delay the final admission decision. Foreign students whose native language is not English are required to submit a score of at least 80 on the Internet-based TOEFL, a score of at least 550 on the paper-based TOEFL, or a score of 6.5 on the academic IELTS test.

Students may obtain additional information about the College Entrance Examination Board (CEEB) and its tests (SAT I, SAT II, TOEFL) from their high school counselors or by writing to the CEEB at PO Box 592, Princeton NJ 08540. (www. collegeboard.org). Students requesting further information about the American College Test also may contact their high school counselors or write to the ACT National Office, 2201 North Dodge Street, PO Box 168, Iowa City IA 52243.(www.act.org).

## International Certificate Programs

SMU awards 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. Credits will not be awarded for standard-level exams.
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 score of "C", or for 0-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.

## Foreign Transcript Credit (Transfer Students Only)

All foreign 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 syllabuses. It is the student's responsibility to procure this evaluation, and to assume financial responsibility for it.

Because of the importance of this information, SMU accepts evaluations from the following institutions of proven reliability:

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
E-mail: infor@wes.org
www.wes.org

## AACRAO

One Dupont Circle, NW, Suite 520
Washington, DC 20036
Telephone: 202-293-9161
Fax: 202-872-8857
E-mail: info@aacrao.org
www.aacrao.org

## Educational Credential Evaluators, Inc.

 PO Box 92970Milwaukee, WI 53202-0970
Telephone: 414-289-3400
www.ece.org

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

## Josef Silny \& Associates Inc.

7101 SW 102 Avenue
Miami, FL 33173
Telephone: 305-273-1616
Fax: 305-273-1338
E-mail: info@jsilny.com
www.jsilny.com

The evaluation should include an explanation that the institution is recognized by the ministry of education in the 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 independent decision of the credit to be given. Information and applications are available on the Web from the services. If you need further information, please contact the Office of Admission.

# ENGLISH AS A SECOND LANGUAGE PROGRAM 

John E. Wheeler, Director

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 General Education offers the following ESL resources to students from all schools and departments of SMU.

## The Courses (ESL)

1001. 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 both undergraduate and graduate students who may be fully competent in their field of study yet require specialized training in order to effectively communicate in an American classroom setting. The course is noncredit and no-fee, and is transcripted as pass or fail. ESL Program approval is required, and students may apply online at www.smu.edu/esl.
1002. 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. ESL Program approval is required, and students may apply online at www.smu.edu/esl.
1300, 1301, 1302. ESL Rhetoric. The ESL sequence of first-year writing aims to provide students with the tools they will need to successfully complete writing assignments required of them during their University course work. The ultimate goal of ESL Rhetoric is to bring students' analytical reading and writing skills in line with the standards expected of their native English-speaking peers. In addition to the principles of effective writing taught in regular Rhetoric classes, ESL Rhetoric students are given extra practice in vocabulary development, grammar skills, standard American English pronunciation, and conversational fluency. The 1302 courses are specially designed around themes that are pertinent to the realities and experiences of non-native speakers of English. ESL sections of Rhetoric grant students the same amount of credit as do regular Rhetoric classes, and "ESL" will not appear on the transcript. ESL Program approval is required.
20XX. Intensive English Program (IEP). All 2000-level courses are exclusive to IEP. This multilevel year-long 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 six-week summer term. This is a non-credit, non-transcripted program, and separate tuition fees will be charged. ESL Program approval is required, and the application package may be downloaded via the IEP link at www.smu.edu/esl.
1003. 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 will appear on the transcript as pass or fail. ESL Program approval is required, and students may apply online at www.smu.edu/esl.
1004. 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 will appear on the transcript as pass or fail. ESL Program approval is required, and students may apply online at www.smu.edu/esl.
1005. 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 will appear on the transcript as pass or fail. ESL Program approval is required, and students may apply online at www.smu.edu/esl.

## Conversation Buddy Program

Once at the beginning of each semester, all students are notified via campus e-mail of this opportunity to practice their language skills in an informal, one-onone setting outside the classroom for one to two hours a week. Every effort is made to match native speakers of English with a native speaker of a language or culture in which they may have an interest. In this way, both the ESL student and the native English speaker benefit from a two-way language exchange. Participation in this program is an option available for students enrolled in a Choices II Wellness class to partially fulfill the out-of-class corequirements of the class; students should talk to their CHOICES II instructor for details. To apply for a Conversation Buddy, send an e-mail to smithjr@smu.edu.

## ESL Self-Study Lab

A collection of audio- and videotapes plus computer software is available for selfstudy use at the Fondren Library Information Commons. Students will find materials to help them improve their pronunciation, listening, vocabulary and grammar skills.

## THE INTERNATIONAL CENTER/EDUCATION ABROAD

SMU Education Abroad offers students the opportunity to live, study and travel abroad. Fall and spring term programs are maintained in Australia, China, Costa Rica, Denmark, Egypt, England, France, Ireland, Japan, Kenya, Scotland, Spain, Switzerland and Wales. Summer and winter programs directed by SMU faculty are offered in China, England, France, Germany, India, Italy, Mexico, Russia, and South Africa. Programs in other countries are added from time to time. Most, but not all, programs are available annually. Instruction is in English, except for programs focusing on foreign languages and literature. Students in good standing at SMU and other universities may participate in SMU Education Abroad Programs. A minimum G.P.A. of 2.7 is normally required for semester programs, and between a 2.5 and 3.0 for summer and winter programs. The University reserves the right to call students back or to close international programs whenever it determines that the health or safety of its students may be at risk.

## Semester Programs

SMU-in-Australia. Students have an exciting opportunity to 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-Beijing-ACC. This is an intensive language program in association with Associated Colleges in China. Students enroll in either intermediate or advanced Chinese courses and live on the campus of the Capital University of Business/Economics. A pledge to speak only Chinese throughout the program is required.
SMU-in-Beijing-CET. Students study beginning, intermediate or advanced Chinese language and literature with CET Beijing. CET immerses students into Chinese society and specializes in student-centered learning by providing students with new skills and an appreciation of cultural differences.
SMU-in-Cairo. Students have the opportunity to study in Cairo, Egypt, during the fall or spring term in a program offered in cooperation with the American University in Cairo (AUC). The program offers courses in such disciplines as the arts, business, engineering, humanities and social science.
SMU-in-Copenhagen. Through DIS, Danish Institute for Study Abroad, SMU students may enroll for one or two terms of study in Copenhagen. Courses are offered in environmental studies, humanities, international business and medical practice and policy. All courses are taught in English.
SMU-in-Costa Rica. Students evaluate the success of Costa Rica's world-renowned land and biodiversity management systems and develop alternative economic development and conservation strategies. An understanding of the forces that are driving Costa Rica's policies, as well as those driving change, will be key as students analyze potential solutions.
SMU-in-England, Ireland, Scotland and Wales: IFSA Butler. The University offers counseling and assistance in gaining admission to a British university. For all work successfully completed under this arrangement, appropriate academic credit will be recorded at SMU. In the past, students have studied arts, sciences, engineering, economics, history and English at various British universities.
SMU-in-Kenya. Students conduct research in three parks to help the Amboseli-Tsavo ecosystem in maintaining its integrity while promoting sustainable cohabitation between human communities, wildlife and other natural resources.
SMU-in-Switzerland. In collaboration with Franklin College, students have the opportunity to study liberal arts courses with an emphasis on cross-cultural perspectives.
SMU-in-Paris and SMU-in-Spain. The University has well-established programs in both Paris and Madrid. Participants in SMU-in-Spain should have completed four terms of collegelevel Spanish. Orientation trips and cultural events are an integral part of both programs. Participation in either program for a full academic year is recommended, but students may attend either the fall or spring term.
SMU-in-Japan. SMU students have an unusual and challenging opportunity to 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.

## SUMMER AND INTER-TERM PROGRAMS

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.
SMU-in-China: Language. This program provides students with full linguistic and cultural immersion while exploring a richly historic city. It offers two contiguous intensive language courses in modern Chinese at the intermediate level.
SMU-in-India. The Temerlin Advertising Institute and the Mudra Institute for Communications in Ahmedabad (MICA) offer this study abroad opportunity. Students will enroll in advertising courses and will participate in a study tour across India.

SMU-in-Italy. This program emphasizes the study of art history, cinema and studio art. Students will live and study in Orvieto. Through field trips, students will have the opportunity to compare life in different urban settings, including Orvieto, Florence and Rome.
Archaeology-in-Italy. This program gives students the opportunity to excavate in one of the most beautiful and historically important valleys of Tuscany, near the modern town of Vicchio. The excavation site, Poggio Colla, 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-London. Taking advantage of London as an international center, this program enables students to select two courses in the field of communications. Field trips have included excursions to Bath, Brighton and Scotland.
Internships in London. This opportunity abroad is offered in collaboration with EUSA. Students are placed into a professional internship and receive business and political science course credit.
SMU-in-Moscow. 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-Summer-in-Paris. Paris, at the crossroads of Europe, is the setting for this study 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 also includes the extraordinary wealth of lesser known museums and landmarks. Knowledge of the French language is not necessary for this program.
SMU-in-the-South of France. 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.
SMU-in-South Africa. This program brings to life the history and culture of one of the most dynamic countries in Africa and today's world. Classes include the History of South Africa and another centered on a unique musical theatre production.
SMU-in-Suzhou, China. This program, hosted at Suzhou University, allows students to immerse themselves in the people, culture and history of China. Students earn three credits; study tour destinations include Nanjing, Xian, Shanghai and Beijing. Knowledge of the Chinese language is not required.
SMU-in-Weimar, Germany. This summer program is designed for students who wish to combine their study of the German language with the study of German history and culture and/or music history in one of Germany's most beautiful and culturally rich cities.
SMU-in-Xalapa, Mexico. The Xalapa program offers an intensive six-week exposure to the Spanish language and the people and culture of Mexico. The program focuses on intermediate and advanced-level Spanish language studies. Students live with local families.
SMU-in-Oaxaca, Mexico. This brief winter program offers a Cultural Formations course introducing students to the rich cultural history of Oaxaca, a state in southern Mexico known for its diverse ethnic groups and artistic styles

More information is available from International Center/Education Abroad, Southern Methodist University, 6185 Airline Road, Suite 216, Dallas, TX 752750391; telephone 214-768-2338; Web site: www.smu.edu/studyabroad.

# Education Abroad Course List <br> F=Fall Term; S=Spring Term <br> SMU-in-Australia 

## Anthropology

ANTH 2301 Introductory Cultural Anthropology
ANTH 4390/BA 3301 Asian Study Tour and Seminar
ANTH 4391/SOCI 4399 Community Service

## Business

BA 4111/BA 4112/BA 4113 Business Internship

## Biology

BIOL 3303 Evolution
BIOL 3306 Physiology
BIOL 3307 Ecology
BIOL 3342 Plant Kingdom
BIOL 3357 Biology of Invertebrates
BIOL 5304 Molecular Biology
Cultural Formations
CFA 3370 Australian Aboriginal Studies
Economics
ECO 1311 Principles of Microeconomics
ECO 1312 Principles of Macroeconomics
ECO 3301 Price Theory
ECO 3302 National Income and Employment
ECO 4357 International Trade
ECO 4358 International Macroeconomics Theory and Practice
ECO 4366 Economics of the Public Sector
ECO 4371 Theory of Industrial Sector
ECO 5350 Introductory Econometrics
ECO 5360 Economic Development: Macroeconomic Perspectives
Entrepreneurship
CISB 5397 Entrepreneurship (Starting a Business)
Finance
FINA 3300 Special Topics in International Finance
FINA 3320 Financial Management
FINA 3330 Money and Capital Markets
FINA 4325 Advanced Financial Management
FINA 4328 Management of Financial Institutions
History
HIST 3395 Problems in Asian History
HIST 4365 The Making of Australian Society
Law
BL 4300 International Business Law
Marketing
MKTG 3340 Fundamentals of Marketing
MKTG 3344 Integrated Communication Advertising Management
MKTG 3347 Services Marketing
MKTG 3348 International Marketing
Management of Operations
MNO 3300 Special Topics in International Management
MNO 4371 Leadership and Culture

## Political Science

PLSC 4340 Special Studies in Comparative Government and Politics
Students wishing to take other Curtin courses must petition the appropriate SMU department for approval.

## SMU-in-Cairo

## Anthropology

ANTH 2301 Introductory Cultural Anthropology
ANTH 3303 Psychological Anthropology
ANTH 3310 Gender and Sex Roles: A Global Perspective
ANTH 3317 Peoples of Southeast Asia
ANTH 3327 Culture Change and Globalization: Social Science Perspectives
ANTH 3333 The Immigrant Experience
ANTH 3361 Language in Culture and Society
ANTH 3366 Magic, Myth and Religion Across Cultures
ANTH 3368 Urban Life: A Cross-Cultural Perspective
ANTH 4350 Special Topics
Arabic
ARBC 1301 Arabic Language Level I

## Art History

ARHS 1303 Introduction to Western Art I
ARHS 3306 Mummies, Myths and Monuments of Ancient Egypt
ARHS 3348 The Art and History of the Book
ARHS 3392 Islamic Art and Architecture
ARHS 3398 Introduction to Museum Studies
ARHS 4301 Directed Studies and Tutorials
ARHS 4302 Directed Studies and Tutorials
ARHS 4303 Directed Studies and Tutorials

## Economics

ECO 3301 Price Theory
ECO 3302 National Income and Employment
English
ENGL 3370 Special Topics
Finance FINA 3320 Financial Management
History
HIST 2379 History of Islamic Empires
HIST 3390 Modern Middle East, 1914-Present
HIST 4398 Independent Study
HIST 4399 Independent Study
Marketing
MKTG 3340 Fundamentals of Marketing
MKTG 3342 Marketing Research
MKTG 3348 International Marketing
Management of Organizations
MNO 3370 Management of Organizations
Political Science
PLSC 3345 Governments and Politics of the Middle East
PLSC 3347 Governments and Politics of Africa

PLSC 3383 The American Foreign Policy Process
PLSC 4340 Seminar: Comparative Government and Politics
PLSC 4348 Seminar: Comparative Government and Politics
PLSC 4360 Special Studies in Political Theory
PLSC 4380 Special Studies in International Relations
Religion
REL 4398 Independent Study
Sociology
SOCI 3311 Qualitative Research Methods
SOCI 3351 Marriage and Family
Students wishing to take other AUC courses must petition the appropriate SMU department for approval.

## SMU-in-Copenhagen

Humanities and Social Sciences and International Business
ANTH 3355/PLSC 4343 Nationalism and Minorities in Europe
ARHS 1331 European Art of the 19th Century (F)
ARHS 1332 European Art of the 20th Century (S)
BA 3300 Special Topics in International Business
BA 3301/ECO 2301 Special Topics in International Business (S)
CFA 3327 Environmental Problems and Policy: A European Perspective
CTV 3310 Contemporary European Film: Screen Artists (S)
DANC 2373 Dance History I: Court and Ballet
DNSH 1301 Danish Language, Level One
ECO 2301 Topics in Economics
ECO 3321 International Economic Policy
ECO 4358 International Macroeconomic Theory and Practice
FINA 4329 International Finance in a European Context
FL 3331 Survey: Russian Literature in Translation (F)
FL 3332 Special Topics: Russian Literature in Translation(S)
HIST 3343 Twentieth-Century European History
HIST 4314 The Jews in Europe: From the Middle Ages to the Present
BL 4300 International Business Law
MKTG 3348 Special Topics in International Marketing
PHIL 3333 Topics in Philosophy
PHIL 3370 Nineteenth-Century Philosophy
PLSC 4340 Danish Politics and Society
PLSC 5341 European Politics: The European Union
PLSC 5383 European Conflict and Security Issues
PSYC 5334 Psychological Disorders of Children
RELI 3329 Introduction to Islam
RELI 3359 Nordic Mythology
SOCI 3301/CFB 3301 Heath, Healing and Ethics
SOCI 4363 The Administration of Justice
Marine Environmental Studies and Medical Practice and Policy
BIOL 3308 Biology of Marine Mammals
BIOL 3365 Complexity of Cancer
Students wishing to take other DIS courses must petition the appropriate SMU department for approval.

## SMU-in-Paris

## Art History

ARHS 3329 Paris Art and Architecture I: From the Beginnings through the Reign of Louis XIV (F)
ARHS 3346 Paris Art and Architecture II: From 1715 through the Present Day (S)
ARHS 3352 Normalcy and Deviance in Modern European Art: Impressionism to Surrealism (F)
ARHS 3353 Impressionism in Context (S)
ARHS 4344 Images of Power: Kings, Nobles and Elites in 17th-Century France (F)
Business Administration
BA 3300 Business in Europe
Communications
CTV 3310 Screen Artists (S)
CTV 4305 Motion Pictures of Paris (F)
Cultural Formations
CF 3304 France-Amérique Between the World Wars: Making a New Culture (F)
CFA 3328 Contemporary France (S)
English
ENGL 3375 Expatriate Writers in Paris: The Invention of Modernism
French
FREN 1401 Beginning French
FREN 4102 Beginning French: Second Semester
FREN 2401 Intermediate French
FREN 3455 Advanced French I
FREN 3356 Advanced French II
FREN 4373 French Civilization: The Age of Enlightenment (F)
FREN 4374 French Civilization: The 19th Century (S)
FREN 5380 or 5381 Tutorials for Juniors and Seniors
History
HIST 3349 Images of Power (F)
HIST 3366 Problems in European History: France, America and the Atlantic World, 1600 to 1900 (S)
HIST 5392 Seminar in European History: Introduction to Archival Research in France
Political Science
PLSC 4380 Historical and Contemporary Issues of the European Construction
Studio Art
ASDR 1300 Introduction to Studio Drawing
ASDR 2300 Drawing II
ASDR 3300 Drawing: Intermediate Level
ASPT 2304 Painting Workshop in Paris
ASPT 2305 Painting in Paris

## SMU-in-Japan

Anthropology
ANTH 4391 Directed Studies (F)
Art History
ARHS 3394 Arts of Japan (F)
Business
BA 3300 Special Topics: Japanese Business (F)

```
Economics
    ECO 4357 International Trade (F)
History
    HIST 3395 Problems in Asian History (S)
Japanese
    FL 3322 Postwar Japanese Culture and Society (F)
    JAPN 1501 Japanese Level 1 (F)
    JAPN 3501 Japanese Level 2 (F)
    JAPN 4501 Japanese Level }3\mathrm{ (F)
    JAPN 5501 Japanese Level }
    JAPN 6501 Japanese Level 5
Political Science
    PLSC 3346 Government and Politics in Japan (F)
Religious Studies
    RELI 3367 Religious Life of China and Japan (F)
Sociology
    SOCI 3300 Contemporary Urban Problems: Japanese Society (F)
```


## SMU-in-Spain

## Art History

ARHS 3344 Paintings at the Prado (F)
ARHS 3360 Modern Painters in Spain (S)

## Business Administration

BA 3300 Corporate Social Responsibility and Ethical Leadership
MKTG 3340 Fundamentals of Marketing

## Cultural Formations

CFA 3330/FL 3303/SPAN 3373 Spanish Civilization
CFB 3375 Corporate Social Responsibility and Ethical Leadership
Philosophy
PHIL 1318 Contemporary Moral Problems

## Religion

RELI 1301 Ways of Being Religious
RELI 3302 The Philosophy of Religion: The Problem of God
Spanish
SPAN 3311 Conversation and Composition
SPAN 3358 Advanced Grammar
SPAN 4357 Introduction to Spanish Linguistics
SPAN 4395 Introduction to Hispanic Literature
SPAN 5311 Spanish Literature Since 1700
SPAN 5334 Contemporary Spanish Novels (F)
SPAN 5335 Contemporary Spanish Theater (S)

## SUMMER PROGRAMS

SMU-in-China: Business

## Business

BA 3301 Special Topics in International Business
SMU-in-China: Language

## Chinese

CHIN 2401-02 Intermediate Chinese
CHIN 3311-12 Advanced Chinese

## SMU-in-India

Advertising
ADV 4317 Consumer Behavior
ADV 4382 Integrated Marketing Communication within the Indian Context

## SMU-in-Italy

## Art History

ARHS 3333 Art and Architecture in Italy, 1300-1700

## Cinema

CTV 3375/CFA 3375 Postwar European Cinema: 1945-Present

## Drawing

ASDR 1310 Drawing in Italy
Archaeology-in-Italy
ARHS 3603 Archaeological Field Methods in Italy
ARHS 6303 (for graduate students)
SMU-in-London
Corporate Communications and Public Affairs
CCPA 5301 Civil Society Internships
CCPA 5302 History and Philosophy of Freedom of Speech
CCPA 5303 Advanced Topics
Journalism
CCJN 5301 Mass Media in Great Britain
Cinema-Television
CTV 3375/CFA 3375 Postwar European Cinema: 1945-Present
Internships in London
PLSC 3381/ CFA 3381 Current Issues in International Politics
BA 4111, 4112, and 4113 Business Internship
SMU-in-Moscow
RUSS 1401 Beginning Russian
RUSS 3302 Intermediate Russian: Practicum in Conversation and Phonetics
RUSS 3304 Advanced Russian: Grammar Practicum
RUSS 3361 Comparative Grammar of Russian and English
CFA 3320/FL 3323/HIST 2323 Russian Culture

## SMU-in-Oxford

## Anthropology

ANTH 3336/CFB 3336 Gender and Globalization: Cultural and Ethical Issues
English
ENGL 3329/CF 3302 The World of King Arthur
ENGL 3389 The Gothic Novel
ENGL 4333 Shakespeare
HistoryHIST 3345 England in Medieval and Early Modern TimesHIST 3365/FL 3380 Problems in European History
HIST 3374/CF 3328 Diplomacy in Europe: From Napoleon to the EU
HIST 4388 Georgian and Victorian England
Political Science
PLSC 4340 Anglo-American Democracy
PLSC 4348 Comparative Empires
SMU-Summer-in-Paris
History
HIST 3335/CF 3335 One King, One Law: The Culture of Absolutism, France 1500-1789
HIST 3389/CF 3368 Problems in Middle Eastern History
SMU-in-South Africa
CCPA 3341 Ethnicity, Culture and Communication
CF 3349 The African Diaspora: Literature and History of Black Liberation
SMU-in-The South of France
French
FREN 1401 Beginning French
FREN 2201 France Today
FREN 2401 Intermediate FrenchFREN 3355 Advanced French IFREN 3356 Advanced French II
FREN 4355 Advanced Spoken French (Track 1)
FREN 4355 Advanced Spoken French (Track 2)
FREN 4370 Introduction to French Literary Texts
FREN 4373 French Civilization (Track 1) or CF 3362 The Europeans: A Case Study
SMU-in-Suzhou, China
CF 3395/FL 3395 A Cultural Journey Into China
SMU-in-Weimar, Germany
Cultural Formations
CF 3379 German Culture in Weimar
German
GERM 1401 Beginning German
GERM 2313 Second-Year German
GERM 3313 Germany Today: People, Culture, Society
SMU-in-Xalapa, Mexico
Spanish
SPAN 2311/2312 Second-Year Spanish (six credit hours)
SPAN 3310 The Latin American Short Story
SPAN 3355 Advanced Conversation
SPAN 3358 Advanced Grammar
SPAN 3374 Spanish American Civilization
SPAN 4391 Commercial Spanish for International Trade
SPAN 5336 Contemporary Novel
INTER-TERM PROGRAM
SMU-in-Oaxaca
CF 3358 Culture of Oaxaca: A Sense of Place

## SMU-IN-LEGACY PLANO, TX

In the fall of 1997, SMU opened a campus in Plano's Legacy Business Park and expanded its reach into North Texas. The journey of SMU-in-Legacy began with a few 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 it more convenient for working professionals to enroll in graduate-level programs necessary to advance their careers, 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.

Today, SMU-in-Legacy serves more than 800 adult students (excluding enrollment in non-credit courses) through a variety of evening and weekend programs leading to Master's degrees and/or professional certificates in business administration, counseling, dispute resolution, education and learning therapies, engineering, and digital game technology (The Guildhall). During the summer, nearly 2,000 children participate in a variety of programs designed to enhance their academic skills. The campus is set on 16 landscaped acres and consists of four buildings with close to 200,000 square feet and more than 50 classrooms, seminar spaces and computer labs. An additional nine acres adjacent to the facility gives SMU-in-Legacy room to grow in the future.

For more information, contact SMU-in-Legacy, 5236 Tennyson Parkway, Plano, TX 75024; 972-473-3400 or www.smu.edu/legacy

## SMU-IN-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 each year, offering courses in the humanities, natural and social sciences, business, performing and studio arts, as well as archaeological research. The campus plans a full fall term beginning in 2009.

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 both Pot Creek Pueblo and historic Fort Burgwin. Pot Creek Pueblo, one of the largest prehistoric sites in the northern Rio Grande Valley, is 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.

In 2009, three summer semesters will be offered in Taos: May Term, June Term and August Term. May and August are short, intense semesters in which students may take up to four credit hours. June Term is a longer, more traditional summer semester 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 best take advantage of the campus's proximity to important Northern New Mexican cultural sites. A full 15-18 credit fall term will be offered for the first time in 2009. Students will take courses on the Taos campus during the fall term, with an emphasis on curricular offerings for premajor (secondyear) SMU students.

Literature describing the campus and its programs is available from the SMU-in-Taos Office, Southern Methodist University, P.O. Box 750145, Dallas, TX 75275, 214-768-3657. Course descriptions and additional information can be found at http://smu.edu/taos, or can be obtained via e-mail, smutaos @smu.edu.

## RESERVE OFFICERS' TRAINING CORPS

Air Force. Air Force ROTC courses are not offered on the SMU campus. SMU students 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 (UNT) in Denton. Students who participate in the UNT Air Force ROTC program are responsible for their own travel and other physical arrangements. 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.

The program is open to all students. First-year students may enroll in the fouryear program, and students with at least two undergraduate or graduate academic years remaining may apply for the two- or three-year program. Students who complete their program with at least a Bachelor's degree will be awarded commissions as U.S. Air Force officers.

Scholarships, available to qualified students in both four-year and two-year programs, provide full tuition, fees, textbook allowance, and a monthly tax-free $\$ 100$ subsistence allowance. National competition is based on SAT or ACT results, Air Force Officer Qualifying Test results or college academic record, and extracurricular and athletic activities. Uniforms and textbooks for AFROTC courses are issued at no cost to cadets. Students with at least six months' active military service may be granted waivers on a portion of the general military course.

UNT's Air Force ROTC courses are described under Aerospace Studies in the Dedman College section of this catalog. Further program information and application procedures may be obtained by contacting AFROTC-Det 835, P.O. Box 305400, Denton TX 76203-5400; 940-565-2074; afrotc @ unt.edu.

Army. 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 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 participate in the Army ROTC on-campus program by enrolling as they enroll for other SMU courses. Army ROTC courses are listed under ROTC in the Schedule of Classes and permission to enroll must be obtained from Karen Coleman at kcoleman@lyle.smu.edu or 214-768-3039.

The vice president for Student Affairs oversees programs, services and activities for students that complement their academic pursuits and promote student development, success and co-curricular learning. The Division of Student Affairs includes the departments of Student Programs and Development, Residence Life and Student Housing (RLSH), the Memorial Health Center and Counseling Center (CAPS), the Hegi Family Career Development Center, the Dedman Center for Lifetime Sports, the Office of the Chaplain, and 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 want general information and assistance or simply do not know where to ask a question. 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 undergraduate students at SMU are subject to the jurisdiction of the Honor Code and as such will be required to sign a pledge to uphold the Honor Code (www. smu.edu/studentlife/). 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 will be nominated by the Faculty Senate. The council's responsibility is to maintain and promote academic honesty.

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. Student Conduct and Community Standards Office (www.smu.edu/ studentconduct), part of the Office of the Dean of Student Life, 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 the student becomes more fully aware of the importance of responsibility for oneself 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 Dean of Student Life Office 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. This book is available from the Dean of Student Life Office, third floor, Hughes-Trigg Student Center, or online at www.smu.edu/studentlife.

Loss of Personal Property. The University is not responsible for the loss of personal property belonging to students in any building or on any grounds owned by the University, whether the loss results from theft, fire or unknown cause.

## SERVICES FOR STUDENTS WITH DISABILITIES

The office of Services for Students with Disabilities strives to support the educational, career, social and recreational choices of SMU students with documented disabilities through coordination of services and reasonable accommodations. It is the responsibility of the students themselves to establish eligibility for services or accommodations through this office. They must provide 1) appropriate current documentation in keeping with our documentation guidelines, and 2) a request indicating what kind of assistance is being sought along with contact information. Documentation takes 1 to 2 weeks to be reviewed. Students with disabilities are encouraged to contact this office at 214-768-4557 to learn what opportunities and services are available. It is recommended that this contact be made as early as possible so students can establish their eligibility for services in a timely fashion and take full advantage of services for which they may be eligible. Visit our Web site: www.smu.edu/OSSD for more information.

## NEW STUDENT ORIENTATION AND STUDENT SUPPORT

The Office of New Student Orientation and Student Support (www.smu.edu/ newstudent) provides on-going programs and services that support new students and families in transition to SMU. Academic Advising, Registration and Orientation (AARO) takes place in May, July, August and January for all incoming students. The office also coordinates Mustang Corral, a three-day, off-campus orientation retreat, and the Encore Series, which provides ongoing programming to students during their first year at SMU.

## STUDENT ACTIVITIES AND MULTICULTURAL STUDENT AFFAIRS

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 and Multicultural Student Affairs (SAMSA) provides over 160 extracurricular opportunities for SMU students through organizations and clubs. There are 37 academic and professional associations, five campus programming councils, eight community service coalitions, 29 fraternities and sororities, eight governing boards, eight honor societies, 13 multicultural societies, three political organizations, 20 recreational athletic clubs, 34 religious organizations and 14 special-interest groups. SAMSA can also assist students in forming a new organization. Our staff is ready to assist and guide students in their experience outside the classroom. 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 Student Activities and Multicultural Student Affairs Center

Our office is located on the 3rd Floor of the Hughes-Trigg Student Center and is the hub of activity for SMU student organizations. Permanent office space is
provided for major campus-wide student groups. More than 160 campus organizations have their activities coordinated through this area. Many out-of-class programs planned and implemented by students are considered co-curricular in that they are designed to complement one's educational experience. The major groups sponsoring campus-wide programs are the Asian Council, Association of Black Students, College Hispanic American Students, Program Council and Student Foundation. These 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. SMU Policies for Community Life, the SMU Student Handbook, is compiled in conjunction with the Student Senate and contains the student code of rights and responsibilities.

## Fraternity and Sorority Life

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 14 national fraternities, 14 national sororities and one co-educational Greek organization fraternity on campus. Formal recruitment activities are held at the beginning of the spring term each year. The governing bodies for these groups are the Interfraternity Council, the Multicultural Greek Council, the National PanHellenic 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) - in order 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 at www.smu.edu/fsl.

## 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.

## STUDENT CENTER

## Hughes-Trigg Student Center

Hughes-Trigg Student Center (www.smu.edu/htrigg/) 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 wheelchair-accessible and features important services and resources to meet the daily needs of students, faculty, staff and visitors. . These include a 500seat theater, 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 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 center of the SMU community."

## STUDENT MEDIA

The student newspaper, The Daily Campus, the student yearbook, Rotunda, and the Web sites, smudailycampus.com and smurotunda.com, are produced by SMU students under the auspices of Student Media Company, Inc., a nonprofit educational corporation legally and financially independent of SMU. The print edition of The Daily Campus is published Tuesday through Friday during the fall and spring terms and monthly during the summer, and the Rotunda yearbook delivers in late summer. The company also publishes The Directory of Students, Staff and Faculty.

## VOLUNTEER PROGRAMS

The Office of Leadership and Community Involvement (www.smu.edu/lci/) provides resources, training and opportunities that enable students, faculty and staff to work with community agencies in community outreach activities and experiential education. The office maintains a current listing of volunteer and service-learning opportunities and serves as a resource for student service organizations. Students gain leadership experience through SPARC (Students Promoting Awareness, Responsibility and Citizenship), which coordinates Community Service Day, Alternative Spring Break and Habitat for Humanity.

## WOMEN'S CENTER

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 Women's Center provides a voice for women and the lesbian, gay, bisexual, and transgendered community, with the goal of eliminating barriers, diminish prejudices, and creating 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 UNIVERSITY MINISTRIES

The Office of the Chaplain and Religious Life (www.smu.edu/chaplain/) is responsible for the administration of religious life on campus. The chaplain is the pastor and minister to the University community and typically leads all-university services of worship during the year. These include the University Service of Memory, the Ash Wednesday Service, and occasional memorial services for members of the University community. Roman Catholic Mass is celebrated each Sunday in Perkins Chapel at 9 a.m. and 5 p.m. The chaplains are available for personal counseling with students, faculty and staff during office hours. There are 33 active
religious life organizations for students. The Quiet Place, a setting for interfaith meditation, prayer and reflection, is open daily and is adjacent to the Office of the Chaplain in the Hughes-Trigg Student Center. The Office of the Chaplain sponsors the annual SMU Civil Rights Pilgrimage Seminar Tour during spring break and the annual presentation of the Robert O. Cooper Peace and Justice Fellowship Award and Lecture.

## HEGI FAMILY CAREER DEVELOPMENT CENTER

Services. 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 Career 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. Lifetime services are offered to current students and all SMU alumni. Counselors work with students at all stages of their career development process - from choosing a major to evaluating a job offer. Counseling may include career assessments, focusing career goals, developing effective resume and cover letters, graduate school research, and job search strategies.

Workshops. The career counseling staff conducts topical and timely workshops for students, as well as targeted presentations for student organizations, Residence Life and Student Housing, and academic classes. Sample topics include: Major and Career Decision-Making; Working Abroad; Applying to Graduate School; Resume and Cover Letter Prep; Salary Negotiation 101; Interview for Success; and Job Search Strategies; Overview of Hegi Career Center Services.

MustangTrak. The Hegi Career Center manages MustangTrak, a passwordprotected, Web-accessible job posting service that is available to all students and alumni worldwide. The online database includes full-time jobs, part-time jobs and internships for all majors. More than 60 new jobs and internships are added weekly and include listings from more than 45 industries. Students must first complete the online orientation at www.smusaddleup.com to register for MustangTrak.

On-Campus Interviewing. In the 2007-2008 school year, over 100 employers visited the campus to recruit more than 400 students seeking entry-level and internship positions through the on-campus interviewing program. To interview with these organizations, students must be registered on MustangTrak, where they will also find an updated list of employer interview schedules and information sessions.

Career Events. The Career Center sponsors two Annual Career and Internship Fairs featuring more than 80 employers and attracting more than 600 students. Dozens of other specialized recruitment and networking events also take place throughout the year, such as the "Careers In..." Brown Bag Series, Speed Networking, and Resumania.

Contact Information. Appointments can be made with career counselors MondayFriday, 8:30 a.m. to 5:00 p.m. To schedule an appointment, please call 214-768-2266 or come by Hughes-Trigg, Suite 200. Please visit www.smu.edu/career for more information about our services, MustangTrak and career events.

## HEALTH SERVICES <br> SMU Memorial Health Center

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 (CAPS), and the Office for Alcohol and Drug Abuse Prevention are located
on the second floor. The Health Center (www.smu.edu/healthcenter) is accredited by the Accreditation Association for Ambulatory Health Care, Inc. (AAAHC).

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 from 8:30 a.m. to 4 p.m. Monday through Friday. For Saturday clinics and extended hours see the Health Center website (smu.edu/healthcenter). For appointments and health information, call 214-768-2141. After hours and during holidays, a nurse advice line is available at 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 nonmajor 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. Refer to the Health Center website (smu.edu/healthcenter) for hospital information and location of an urgent care facility.

Costs. Undergraduate and graduate students paying the full fee (which includes a health service fee) receive fully covered primary care physician services at the Health Center for that term. Appointments with the gynecologist or dermatologist, lab, X-ray, pharmacy, and supplies will be charged at reasonable rates. Graduate students not paying full fees have the option to pay the health center fee of $\$ 140$ per term or $\$ 50$ per visit not to exceed $\$ 140$ per term.

Mandatory Health Insurance Policy. In order to ensure that students have appropriate health care coverage, SMU requires its students to maintain insurance as a condition of enrollment. All International students enrolled in one or more credit hours are required not only to maintain coverage, but their coverage must be in the S.M.U. Student Insurance Plan. International students may apply for a waiver if the: a.) student is covered by a comparable Embassy plan or b.) a student can provide documented evidence of comparable health insurance coverage by a U.S. employer, including medical evacuation and repatriation. All domestic students taking at least nine credit hours are required to provide proof of comparable U. S. health coverage or to enroll in the S.M.U. Student Insurance Plan. All students may view the plan benefits, waive and enroll online at www.ahpcare.com/smu or call Academic Health Plans for further details at 888-308-7320. A student must be enrolled in at least one credit hour to qualify for the S.M.U. Student Health Plan. Insurance packets are also available at the Health Center. Domestic students who have other insurance will be provided an itemized receipt upon request at the time of service. This receipt is adequate to file with insurance companies for reimbursement. Health insurance is separate from the student health center fees and is paid for independently.

Pharmacy. A complete pharmacy with registered pharmacists is open Monday through Friday 8:30 a.m. to $5 \mathrm{p} . \mathrm{m}$. Many prescription plans are accepted.

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 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 provide proof of immunizations against measles, rubeola (red or regular measles), and rubella (German or three day measles). These immunizations must be documented by a physician, public health record, or school health record. Students will not be allowed to register without compliance. Students are encouraged to check their Access.SMU account for health forms and immunization status. Immunizations are available at the Student Health Center.

Class Absence Due to IIIness. 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. Refer to the Health Center website (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)

Counseling and Psychiatric Services (CAPS). 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, learning disabilities, sexual identity, eating/body image concerns and sexual assault/sexual harassment matters. Any laboratory tests or pharmaceuticals ordered will be charged to the student. Appointments may be scheduled between 8:30 a.m. and 5 p.m. Monday through Friday by calling 214-768-2877.

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, 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. For more information visit 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. For more information, visit smu.edu/healthcenter/healtheducation or call 214-768-2393.

## 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. The 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.

## Intramurals

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, but who do not want to train and devote the practice time required for NCAA competition. 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 outdoor, zerodepth 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.

## 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 plethora 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 fullbody massages. All SMU Fitness programs have a fee for participation.

## Outdoor Adventures

Outdoor Adventures comprises Outdoor Recreation (outdoor trips), The Rental Shop (renting outdoor equipment), SMU Climbing Center (climbing wall and bouldering wall), and Challenge and Team-Building Activities (incorporating a portable challenge course). SMU OA offers fun and challenging outdoor recreation activities, community-building programs and leadership opportunities through backpacking, rock climbing, kayaking, canoeing and more.

## 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 Cheerleading Squad, Pom-Pom Squads 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 a superb one.

Intercollegiate Athletics
SMU is a member of the National Collegiate Athletic Association (Division I-A) and participates in Conference USA. 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).

Other Recreational Facilities
The Perkins Natatorium, the Barr Outdoor Pool, the Morrison-Bell Track, Moody Coliseum, outdoor tennis courts and open recreational fields combine to provide students with a full range of leisure possibilities.

## HOUSING

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

Southern Methodist University is pleased to provide information regarding academic programs, enrollment, financial aid, public safety, athletics and services for persons with disabilities. The information is available in a conveniently accessible Web site at smu.edu/srk. You 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. For more information visit smu.edu/srk.

1. Academic Programs: http://smu.edu/srk 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: http://smu.edu/srk

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 (FERPA) governs Southern Methodist University'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: http://smu.edu/srk/

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 Family Education Loan or Federal 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: http://smu.edu/srk/

Director of Student Financials, 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. Services for Students with Disabilities: http://smu.edu/srk

220 Memorial Health Center, 214-768-4557
A description of special facilities and services available to students with disabilities.
6. Athletics: http://smu.edu/srk/

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: http://smu.edu/srk

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 Web site at 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. It would not only provide the basic foundations in liberal arts education to all SMU students through the General Education Curriculum but 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 2008, it enrolled more than 2,000 undergraduate majors and more than 350 graduate students. More than 270 full-time faculty are based in the college. Undergraduate students in Dedman College may major in any one of 53 programs, and choose from 52 minor programs. The college offers 15 graduate programs leading to a Master's degree and 13 programs leading to a Doctor of Philosophy degree. Its 16 academic departments include: Anthropology, Biological Sciences, Chemistry, Earth Sciences, Economics, English, Foreign Languages and Literatures, History, Mathematics, Philosophy, Physics, Political Science, Psychology, Religious Studies, Sociology and Statistical Science. In addition, the college offers two part-time multidisciplinary evening degrees: Bachelor of Humanities and Bachelor of Social Sciences.

## ACADEMIC PROGRAMS OF STUDY

Majors in Dedman College include:

| Anthropology | Foreign Languages and Literatures | International Studies |
| :--- | :--- | :--- |
| Biochemistry | Foreign Languages - French | Latin American and Iberian Studies |
| Biological Sciences | Foreign Languages - German | Markets and Culture |
| Chemistry | Foreign Languages - Spanish | Mathematics |
| Environmental Chemistry | Foreign Languages - Italian | Medieval Studies |
| Economics | French | Philosophy |
| Finance Applications | German | Physics |
| Systems Analysis | Italian Area Studies | Political Science |
| English | Spanish | Psychology |
| $\quad$ Creative Writing | Geology | Public Policy |
| Environmental Science | Environmental Geology | Religious Studies |
| Environmental Studies | Geophysics | Social Sciences (Evening Program) |
| Ethnic Studies | History | Sociology |
| African/African American Studies | Humanities (Evening Program) | Statistical Science |
| Mexican-American Studies | Individualized Studies in the Liberal Arts |  |

Minors available include:

| African-American Studies | English | Mathematics |
| :--- | :--- | :--- |
| (see Ethnic Studies) | (Foreign Languages and Literatures) | Medieval Studies |
| Anthropology | Chinese | Mexican-American Studies |
| Archaeological | French | (see Ethnic Studies) |
| Biomedical | German | Natural Sciences |
| Cultural | Italian | Philosophy |
| Biological Sciences | Italian Area Studies | Ethics |
| Chemistry | Japanese | Physics |
| Classical Studies | Latin | Political Science |
| Economics | Russian Area Studies | American Politics |
| Econometrics | Spanish | Comparative Politics |
| Economic Growth and Development | Geology | International Relations |
| Economics of Decision Making | Environmental Earth Sciences | Political Theory |
| Economics of Industrial Organization | History | Psychology |
| International Economics | Human Rights | Religious Studies |
| Labor Economics | International Studies | Sociology |
| Monetary Economics | Asian Studies | Statistical Science |
| Public Economics | European Studies | Women's and Gender Studies |
|  | Latin American and lberian Studies |  |

Specific degree requirements and additional information for any of these programs can be found in the departmental sections of this catalog.

Dedman College students may also complete minors in other schools on campus, including the Edwin L. Cox School of Business, the Meadows School of the Arts and the Bobby B. Lyle School of Engineering. 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, a number of Dedman College students participate in the University Honors Program described in the Academic Programs section of this catalog and subsequently graduate with "Honors in the Liberal Arts."

DEPARTMENTAL DISTINCTION
Students participating in the University Honors Program are encouraged to join the Departmental Distinction Program to earn the designation of "Liberal Arts Honors With Departmental Distinction" on their transcripts.

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. More specific information on the programs in each department can be found in the Courses of Study in Dedman College section.

Successful completion of the departmental honors program earns the student "Departmental Distinction."

## 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.

## Prelaw

To be a prelaw student at SMU does not require any particular major or academic program. Prelaw seniors who go on to law school may have majors in all four 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 prelaw 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, foreign 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 prelaw student's capacity to analyze, understand and rationally organize his or her thoughts. And, in some fields of law practice, it is useful for a student to have a fundamental knowledge of technology, engineering, computers and accounting.

## 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 prelaw information, as well as assistance in the application process, undergraduate students may consult the prelaw services in the Dedman College 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. For more information, contact the Admissions Officer, Dedman School of Law, PO Box 750110, Dallas TX 75275-0110, or visit www.law.smu.edu/ admissions.

## 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. 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 fourteen 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 will apply toward SMU's general education curriculum 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 Health Professions Advising Office in the Dedman College Advising Center.

## 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.*
- Dedman Internship Program Orientation and Standardized University Release of Liability for Education Internship are required.
- Internships 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. (Students and site supervisors will complete evaluations of the experience. These evaluations would not be considered in determination of the grade.)
- Internships require a written component based on and reflective of the experiential dimension.
- Internships are 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.
* Noncredit-bearing internships may either be paid or unpaid and are without faculty, department or program supervision. Internship orientation is strongly suggested. A University Release of Liability is required.


## TEACHER EDUCATION

The University offers a program of studies in teacher education and recommends candidates for certification by the State Board of Educator Certification. The recommendation is based on a candidate's successful completion of 24 term hours in education (EDU) courses and six hours of student teaching. In addition, candidates must pass the TExES examinations. Education courses are designed to include all standards tested on the TExES and to prepare students for the requirements including a major. (Prospective secondary teachers must have majors in appropriate teaching fields.) For more information, please contact the Teacher Certification Office at 214-768-2346. For a general description of the program in teacher education, please see the Annette Caldwell 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 foreign 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 in order to prepare a proposed plan of study.

Students are individually responsible for knowing and complying with all regulations and requirements that may apply to their respective programs.

## TRANSFER COURSES FROM OTHER INSTITUTIONS

Once matriculated at SMU, students wishing to enroll for and transfer in 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, the dean of Dedman College and their dean of record. A maximum of 30 credit hours of post-matriculation transfer work may be approved. Approval may be denied for educational reasons. Post-matriculation work from two-year institutions will not be approved.

## ADMISSION

All incoming first-year students to the University are admitted to Dedman College. Please see the Admission to the University section of this catalog for requirements. Students wishing to pursue majors in the humanities or in the social or natural sciences or in various multidisciplinary programs remain 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 is open to qualified undergraduate and graduate applicants without regard to race, color, religion, national origin, sex, age, disability, veteran status or sexual orientation.

## Admission From Other Schools Within SMU

An individual enrolled in another school of the University may apply to the dean of the school in which the student is currently enrolled for permission to transfer into a degree-granting program in Dedman College. A student who has achieved a cumulative grade point average of 2.0 on all SMU work attempted will normally be admitted to candidacy for a degree in Dedman College. Additional requirements for programs with subset curriculums may exist. Please 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.

Dedman College offers four undergraduate degrees: the Bachelor of Arts, the Bachelor of Science, the Bachelor of Social Sciences and the Bachelor of Humanities. For the degree available in a specific area of study, consult the individual programs of study outlined in the following sections of this catalog.

## 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. 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 in which the major is declared, or those of a subsequent academic year. Course work counting toward a major must include at least 18 advanced hours in residence and may not be taken pass/fail. All advanced courses required for the major must be passed with a grade of $C$ - or better. In addition, Dedman College requires a cumulative G.P.A. of 2.0 for all courses attempted for completion of a major or minor. All courses attempted that could count towards the major/minor are included in determining the major/ minor G.P.A. Majors must be officially declared (or changed) through the Office of the Dean.

## 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. Course work 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 residence. In addition, Dedman College requires a cumulative G.P.A. of 2.0 for all courses attempted for completion of a major or minor. All courses attempted that could count towards the major/minor are included in determining the major/minor G.P.A. Minors must be officially declared (or changed) through the Office of the Dean.

## GENERAL REQUIREMENTS

## Student Responsibility for Completion of Degree Plan

Students are required to schedule a degree plan conference (New Majors Meeting) in the Dedman College Advising Center at the time of their acceptance into a major in the college. Detailed information concerning academic regulations and degree requirements will be provided at that time. 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 Office of the Dean a formal application for graduation by September 1 for December 2009 graduation, by January 25 for May 2010 graduation, or by June 4 for August 2010 graduation.

## Credits

A candidate for a degree in Dedman College must have:

- A minimum total of 122 term hours of credit, including the requirements for general education and the requirements for a major.
- A minimum total of 42 advanced hours (3000 level or above).
- A maximum total of 2 hours of Wellness.
- A maximum total of 3 hours of internship credit.


## Grades

A candidate for a degree in Dedman College must attain:

- A minimum cumulative G.P.A. of 2.0 on all work attempted at SMU.
- A minimum cumulative G.P.A. of 2.0 on 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 G.P.A. of 2.0 for all work attempted for completion of major or minor requirements.
- No more than 12 hours with a grade of $P$.


## Residency

As minimum requirements, a candidate for a degree in Dedman College must take the following hours in residence at SMU:

- 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. 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 Cox School of Business, Meadows School of the Arts or the 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 G.P.A. For students who have transferred to SMU, two grade-point averages will be calculated: for all work attempted, and for work completed at SMU. Honors will be based on the lower of the two averages.

## Departmental Distinction

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. The program of study normally will be undertaken in both the junior and senior years. This award is conferred by the major department on the basis of certain 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 may be obtained from the individual departments.

For more information about Dedman College programs and faculty, please visit www.dedman.smu.edu.

## Courses of Study in Dedman College


#### Abstract

AEROSPACE STUDIES www.unt.edu/afrotc Students at SMU can participate in the Air Force ROTC program at the University of North Texas. Students who participate in the UNT Air Force ROTC program are responsible for their own travel and other physical arrangements.

Students register for the Aerospace Studies courses at the same time and in the same manner as they register for other SMU courses. The AFROTC courses are fully accredited, and may be taken as electives in most academic majors. Successful completion of degree requirements and the AFROTC program can lead to a commission as a second lieutenant in the United States Air Force.

For more information concerning tax-free allowances, scholarships, and application procedures, contact: AFROTC, The University of North Texas, PO Box 305400, Denton TX 76203; 940-565-2074; afrotc@unt.edu.


## The Courses (AERO)

1030 (fall), $\mathbf{1 0 4 0}$ (spring). Foundations of the U.S. Air Force. A survey course designed to introduce students to the USAF and the AFROTC. Featured topics include mission and organization of the Air Force; officership and professionalism; military customs and courtesies; Air Force officer opportunities, and an introduction to communication skills.
2030 (fall), 2040 (spring). The Evolution of USAF Air and Space Power. A course designed to examine general aspects of air and space power through a historical perspective. Using this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies) and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. In addition, students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders, and will continue to develop their communication skills.
2920. 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.
3310 (fall), 3320 (spring). 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. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied.
4310 (fall), 4320 (spring). 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. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills.
4920. 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: 12 hours of credit in aerospace studies; permission of division chair. Student must meet employer's requirements. May be repeated for credit.

ANTHROPOLOGY<br>www.smu.edu/anthro<br>Professor David Meltzer, Department Chair

Professors: Caroline Brettell, Robert Van Kemper, David Meltzer, Ben Wallace, Ronald Wetherington; Associate Professors: Michael Adler, Victoria Lockwood, Carolyn SmithMorris, David Wilson; Assistant Professor: R. Alan Covey, Sunday Eiselt, Brigette Kovacevich, Nia Parson, Sarah Willen; Adjunct Lecturer: John Phinney; Emeritus Professors: Lewis Binford, Harold Hietala, Anthony E. Marks, Ladislav Novak, Garth Sampson, Fred Wendorf.

Anthropology is divided into four subfields: I) archaeology, II) cultural/social anthropology, III) anthropological linguistics and IV) 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 2.0 G.P.A. in anthropology and are urged to consult their departmental adviser periodically to review their progress.

## For Undergraduate Students

Requirements for the B.A. Degree. Intended for students who want 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. However, 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).

Requirements for the B.S. Degree. Intended for students who want more specialized training in anthropology, it 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 4366 or 5334; six term hours of fieldworkrelated study (Option 1: 5381 or 5382 and 4333 or 5681 OR Option 2: 5344 and SOCI 3311 or SOCI 3312); one of the following: 3361 or 5359; and three term hours of independent study (4391 or 4392). In addition, three term hours of statistics (generally STAT 2331), and six term hours of foreign language are required.

Requirements for the Minor. A 15-hour minor may be taken in one of three tracks: archaeology, cultural anthropology and 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 furnished by the department. A grade of $C$ - or better must be earned in all advanced courses taken in fulfillment of the requirements for an anthropology minor.

Distribution. Many ANTH courses are acceptable for Perspectives 6. Many anthropology courses also fulfill the cocurricular requirements.

## General Anthropology Minor

1. ANTH 2301: Introductory Cultural Anthropology 3 hours
2. A minimum of one course in each anthropological subfield 12 hours (archaeology, cultural anthropology, linguistics, physical anthropology)
(Nine hours of which are advanced)
[NOTE: ANTH 4350/51/52 may be counted for the relevant subfield.]
Archaeology Minor
3. ANTH 2301: Introductory Cultural Anthropology 3 hours
4. Archaeological Concepts (one of the following) 3 hours

ANTH 2302 People of the Earth
ANTH 2363 The Science of Our Past


## Cultural Anthropology Minor

1. ANTH 2301: Introductory Cultural Anthropology 3 hours
2. Cultural Concepts (two of the following) 6 hours

ANTH 2331 The Formation of Institutions: Roots of Society
ANTH 3301 Health, Healing and Ethics
ANTH 3303 Psychological Anthropology
ANTH 3310 Gender and Sex Roles: A Global Perspective
ANTH 3319 Human Ecology
ANTH 3327 Culture Change and Globalization
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 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
ANTH 4191, 4291, 4391 Independent Study and Research (cultural anthropology topic)
ANTH 4304 Migration, Ethnicity and Nationalism
ANTH 4305 Applied Anthropology
ANTH 4306 Anthropology and Education
ANTH 4309/6309 Human Rights, Indigenous Peoples and Nation States
ANTH 4344 Global Population Processes: Anthropological Perspectives
ANTH 4350/4351/4352 Special Topics in Anthropology (when relevant)
ANTH 4381 Internship in Anthropology (when relevant)
ANTH 4384 Global Issues and Development
ANTH 4390 Current Issues in Anthropology (cultural anthropology topic)
ANTH 4391/4392 Independent Study (cultural anthropology topic)
ANTH 4399 Senior Seminar (when relevant)
ANTH 5336 Anthropology and Medicine
ANTH 5344 Research Methods in Ethnology
3. Regional Ethnography 6 hours

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 from the 16th Century to the Present
ANTH 3376 Caribbean Transformations: From Columbus to Carnival
The Departmental Distinction Program. 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: (a) complete the usual course work for a B.A. or B.S. degree with at least a 3.5 G.P.A. in anthropology and with at least a 3.0 G.P.A., overall; (b) with a grade of $B$ or higher, pass ANTH 4366
and ANTH 5334 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; (c) 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 subdisciplinary professional style and format; and (d) pass an oral examination of one hour in length (with at least three departmental faculty members), covering the results of the research project and general issues and concepts in anthropology according to the subfield specialty.
NOTE: All 2000- and 3000-level anthropology courses are open to first-year students.

## The Courses (ANTH)

1321. 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.
1322. 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. Meets Human Diversity corequirement.
1323. People of the Earth: Humanity's 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. Meets Human Diversity corequirement.
1324. 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. Fulfills General Education Curriculum requirements for Science/Technology.
2321 (ENGL 2371, CFA 3301). The Dawn of Wisdom: Ancient Creation Stories from Four Civilizations. Explores the visions of the cosmos expressed in the art, archaeology and literature of Egypt, Mesopotamia, Greco-Roman civilization and the Maya, emphasizing the role of human beings as central and responsible actors therein. Prerequisite: ENGL 1302 or departmental approval. Meets Human Diversity corequirement.
2331 (CF 3331). The Formation of Institutions: Roots of Society. Explores the nature of social institutions and how they change and become more complex. A case-study approach that examines selected non-Western societies at different levels of complexity. Meets Human Diversity corequirement.
1325. 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 material. Fulfills General Education Curriculum requirements for Science/Technology.
3301 (SOCI 3301, CFB 3301). 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. Meets Human Diversity corequirement.
1326. 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.
1327. 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. Meets Human Diversity corequirement.
1328. 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. Meets Human Diversity corequirement.
1329. The "Other" in America: Popular Perceptions and Government Policy Through Time. An examination of attitudes during the past 200 years towards "others" in America, as reflected in popular culture (films and fiction), as well as in national and local government policies.
3309 (ARHS 3309). The Etruscans and Iron Age Italy. The art and architecture of early Italy, including Etruscan art, early Roman art and "Italic" art will be studied with respect to the cultural context and environment.
3310 (CF 3301). Gender and Sex Roles: A Global 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. Meets Human Diversity corequirement.
1330. 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. Meets Human Diversity corequirement.
1331. Meso-American Archaeology. Examines development of civilizations from village life to the great empires of Mexico. How civilizations begin, grow, change and collapse. Meets Human Diversity corequirement.
1332. 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. Meets Human Diversity corequirement.
1333. Peoples of Africa. A contemporary study of cultures and social structures of SubSaharan African peoples and an examination of the dynamics of contemporary African societies. Meets Human Diversity corequirement.
1334. Origins of Civilization. Considers those cultural and historic factors that led from the development of agriculture to the first urban states in Egypt and Mesopotamia. Meets Human Diversity corequirement.
1335. Cultures of the Pacific Islands. Survey of 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. Meets Human Diversity corequirement.
1336. 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. Meets Human Diversity corequirement.
1337. 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. Meets Human Diversity corequirement.
1338. Human Ecology. Examines interactions between human populations and their environments. Relationships between population size, technology, climate and behavior in various living societies are explored. Meets Human Diversity corequirement.
1339. 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. Meets Human Diversity corequirement.
3327 (CF 3319). 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. Meets Human Diversity corequirement.

3333 (CFA 3316). The Immigrant Experience. Course explores historical, social, cultural and political dimensions of the US immigrant experience, and America's attitudes towards immigrants. Controversial issues such as bilingual education and illegal immigration will be examined. Meets Human Diversity corequirement.
3334 (CF 3334). Fantastic Archaeology and Pseudoscience: Lost Tribes, Sunken Continents, Ancient Astronauts and Other Strange Ideas about the Past. Did ancient astronauts visit the Earth? Are there secrets of the Maya calendar that archaeologists aren't revealing? Is Creation a scientific alternative to evolution of humanity? This course investigates these and other claims about our past, and how archaeologists respond to them.
3336 (CFA 3336). 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. Meets Human Diversity corequirement.
3344. 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. Meets Human Diversity corequirement.
3346. 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. Meets Human Diversity corequirement.
3348. 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.

3350 (CFA 3350). 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).

3351 (CFB 3351). Forensic Anthropology: Stories Told 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.
3353. 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. Meets Human Diversity corequirement.
3354. 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. Meets Human Diversity corequirement.
3355. 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.
3356. 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.
3358. 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-Euroamerican relations and the resultant transformations. Topics will include clash of cultures, tourism, gambling, legal rights and urbanism. Meets Human Diversity corequirement.
3361. 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. Meets Human Diversity corequirement.

3365 (CFA 3365). Ancient Superpowers: Imperial Dynamics and the Ethics of Modern
Empire. A comparative introduction to institutions and organizational dynamics of three ancient empires (Roman, Chinese, Inca), with discussions of the lessons that these civilizations can teach American citizens about our own society.
3366 (RELI 3366). 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. Meets Human Diversity corequirement.
3368 (SOCI 3368). 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. Meets Human Diversity corequirement.
3374 (CF 3374). Cultures and Environments of the Southwest. Patterns of land use and resource use in prehistoric and early historic times in the Southwest. Focus is on the mutual influence of cultures and resources in the northern Rio Grande.
3376. 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. Meets Human Diversity and Perspectives corequirement.
3384 (CFA 3384). 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.
3385. Sustainable Living. Seminar focused on environmental challenges facing society and strategies for achieving a more sustainable existence.
3388 (CFA 3388). 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.
3390 (CFA 3390). 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.
3399 (CFA 3399). Ice Age Americans. Ice age peopling of America, reconstructed by archaeology, linguistics and molecular biology, among other disciplines, and what that reveals of how people adapted to a truly New World. Meets Human Diversity corequirement.

## For Undergraduate and Graduate Students

All 4000- and 5000-level courses in anthropology require introductory coursework in the appropriate subdiscipline, or permission of instructor.
4191, 4192, 4291, 4292, 4391, 4392. Independent Study and Research. For advanced undergraduates. Prerequisite: Approval of the director of Undergraduate Studies and a faculty sponsor.
4300. World Archaeology. An archaeological overview of the human trajectory, beginning with the origins of modern humans, and then looking at human interactions with specific environments, and sociocultural development over time.
4303. 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.
4304. Migration and Ethnicity. Examines three interrelated topics: migration, ethnicity and nationalism. Focuses on major theoretical positions and on specific ethnographic cases. Prerequisites: 18 hours of anthropology or permission of the instructor for nonanthropology majors.
4305. 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).
4306. 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).
4307. Seminar in International 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).
4309. Human Rights, Indigenous Peoples and Nation States. An examination of human rights issues among contemporary indigenous peoples, especially the impact of governmental and nongovernmental organizations, large-scale development programs and global tourism on their cultures and societies.
4311. 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).
4325. Zooarchaeology. A lecture and laboratory course focused on the methods, techniques and implications of the analysis of animal remains from archaeological sites. Prerequisites: ANTH 2302 or ANTH 2363 or permission of instructor.
4333. Laboratory Methods in Archaeology. Classification and analysis of archaeological materials (various topics). Prerequisites: Advanced standing and ANTH 5381 or 5382 or permission of instructor.
4336. Concepts of Evolution: A History. Using original writings, interpretive texts and biographies, this seminar will examine the rise of evolutionary ideas from ancient times through the 20th century.
4343. Health and Medical Systems. Examines the epistemology and history of biomedicine, medical bureaucracy, professionalism, medical education, alternative and popular medicine, economics and health care.
4344. Global Population Processes: Anthropological Perspectives. Focuses on anthropological understanding of population processes - nuptiality, fertility, mortality, migration - and examines them within historical and cross-cultural frameworks. Prerequisites: 18 hours of Anthropology or permission of the instructor for nonanthropology majors.
4346. Environmental Anthropology and Development. Analyzes the process of globalization from the perspective of environmental anthropology and development. Prerequisite: ANTH 2301.
4350, 4351, 4352. Special Topics in Anthropology. An in-depth look at particular problems and issues in contemporary anthropology. Topics will vary.
4366. Theoretical Perspectives in Anthropology. Development of modern anthropological paradigms, with intensive readings in science, ethnology and ecological anthropology and a focus on the potential utility of theoretical coherence within the discipline. Prerequisite: Eighteen hours of anthropology or permission of instructor.
4377. 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.
4381. 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.
4384. 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).
4385. Coastal and Aquatic Archaeology. Seminar on the use of coastlines, oceans, rivers, marshes, lakes and islands throughout human history. Prerequisites: ANTH 2302 or ANTH 2363 or permission of instructor.
4390. Current Issues in Anthropology. Seminar on selected anthropological topics.
4399. 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.
5310. 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.
5033. Proseminar on Ethics in Archaeology. Focuses on ethical issues in current archaeology, including collaboration with descendant communities, study of human remains, repatriation of cultural property, and research collaboration in international contexts.
5334. History of Anthropology. Analytical history of anthropology from the classical period to the 20th century. More than just what happened when, this course explains the content and development of theory, method and interpretation. Prerequisite: Eighteen hours of anthropology or permission of instructor.
5336. Anthropology and Medicine. Cross-cultural study of the cultural construction and social organization of medical systems in preindustrial and industrialized societies, including political economy of health, ethnomedicine, international health, ethnopharmacology, bioethics. Prerequisite: ANTH 2301 or 3301 or permission of instructor.
5344. 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).
5355 (SWST 5355). 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.
5359. 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.
5381, 5382. 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.
5681, 5981. 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. Summer only.

## Anthropology Courses By Subfield

Courses listed under 4350/51/52 or 4390/09 may count for any of the subfields, depending on the topic.

## Subfield: General

2331 The Formation of Institutions: Roots of Society
3319 Human Ecology
3385 Sustainable Living

4191, 4291, 4391, 4192, 4292, 4392 Independent Study and Research
4366 Theoretical Perspectives in Anthropology
4399 Senior Seminar in Anthropology
5334 History of Anthropology

## Subfield I: Archaeology

2302 People of the Earth: Humanity's First Five Million Years
2363 The Science of Our Past: An Introduction to Archaeology
3304 North American Archaeology
3312 Meso-American Archaeology
3313 South American Indians of the Past and Present
3315 Origins of Civilization
3318 Prehistory of the American Southwest
3334 Fantastic Archaeology and Pseudoscience
3356 Before Civilization
3365 Ancient Superpowers: Imperial Dynamics and the Ethics of Modern Empire
3374 Cultures and Environments of the Southwest
3384 Paradise Lost? The Archaeology and Ethics of Human Environmental Impacts
3388 Warfare and Violence: The Anthropology and Ethics of Human Conflict
3390 The Plundered Past: Archaeology's Challenges in the Modern World
3399 Ice Age Americans
4300 World Archaeology
4325 Zooarchaeology
4333 Laboratory Methods in Archaeology
4385 Coastal and Aquatic Archaeology
4390 Current Issues in Anthropology
5355 Seminar in the Southwest
5381, 5382 Field Methods in Archaeology
5681, 5981 Field Methods in Archaeology
Subfield II: Cultural/Social Anthropology
2301 Introductory Cultural Anthropology
3301 Health, Healing and Ethics: Cross Cultural Perspectives on Sickness and Society
3303 Psychological Anthropology
3310 Gender and Sex Roles: A Global Perspective
3311 Mexico: From Conquest to Cancun
3313 South American Indians of the Past and Present
3314 Peoples of Africa
3316 Cultures of the Pacific Islands
3317 Peoples of Southeast Asia
3323 East Asia Cultural Traditions and Transformations
3327 Culture Change and Globalization: Social Science Perspectives
3333 The Immigrant Experience
3336 Gender and Globalization
3344 Cultural Aspects of Business
3346 Culture and Diversity in American Life
3348 Health as a Human Right
3350 Good Eats and Forbidden Flesh: Culture, Food and the Global Grocery Market
3353 Indians of North America
3354 Latin America: Peoples, Places and Power
3355 Society and Culture in Contemporary Europe
3358 Indians of the Southwest from the 16th Century to the Present
3366 Magic, Myth and Religion Across Cultures
3368 Urban Life: A Cross Cultural Perspective

```
    3376 Caribbean Transformations: From Columbus to Carnival
    3385 Sustainable Living
    3388 Warfare and Violence: The Anthropology and Ethics of Human Conflict
    4 3 0 3 \text { Political Economy of Health}
    4 3 0 4 \text { Migration and Ethnicity}
    4305 Applied Anthropology
    4 3 0 6 \text { Anthropology and Education}
    4 3 0 7 \text { Seminar in International Health}
    4343 Health and Medical Systems
    4344 Global Population Processes: Anthropological Perspectives
    4 3 4 6 \text { Environmental Anthropology and Development}
    4 3 5 2 \text { Special Topics in Anthropology}
    4384 Global Issues and Development: An Overview
    4390 Current Issues in Anthropology
    5 3 3 6 \text { Anthropology and Medicine}
    5 3 4 4 \text { Research Methods in Ethnology}
Subfield III: Anthropological Linguistics
    3361 Language in Culture and Society
    4311 Applied Linguistics
    5 3 5 9 ~ L i n g u i s t i c s ~ ( G e n e r a l ) ~
Subfield IV: Physical Anthropology
    2 3 1 5 \text { Human Evolution: Biological and Social Beginnings of Humankind}
    3302 Monkeys and Apes: The Nonhuman Primates
    3350 Good Eats and Forbidden Flesh: Culture, Food and the Global Grocery Market
    3351 Forensic Anthropology: Stories Told by Bones
    4 3 3 6 \text { Concepts of Evolution: A History}
    4 3 5 1 \text { Special Topics in Anthropology}
    4 3 5 2 \text { Special Topics in Anthropology}
    5 3 1 0 \text { Human Osteology: Biology of the Human Skeleton}
```


## BIOCHEMISTRY

www.smu.edu/biochemistry Professor Steven Vik, Director
The Biochemistry Program at SMU offers courses leading to a Bachelor of Science 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 at SMU 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 (ACS) for professional training in biochemistry. Option 2 allows a stronger emphasis on biology, but does not qualify a student for ACS certification. 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 Bachelor of Science degree in biochemistry may not also obtain a minor in chemistry or biology.

## Core Courses <br> (57 credits)

Chemistry ( 25 credits):
CHEM 1303, 1304; 1113, 1114 General Chemistry
CHEM 3351 Quantitative Analysis
CHEM 3371, 3372, 3117, 3118 Organic Chemistry
CHEM 5383, 5384 Physical Chemistry
Biological Sciences (11 credits):
BIOL 1401, 1402 Introductory Biology
BIOL 3304 Genetics
Biochemistry (4 credits):
BIOL/CHEM 5310 Biological Chemistry: Macromolecular Structure and Function
BIOL/CHEM 5110 Biological Chemistry: Laboratory
Mathematics ( 9 credits):
MATH 1337, 1338, 2339 Calculus
Physics (8 credits):
PHYS 1105, 1106, 1303/1307, 1304/1308 General Physics

## Additional Courses (Choose either Option 1 or Option 2)

Option 1 (11 credits)
Required (Five credits):
CHEM 5185 Laboratory Methods in Physical Chemistry
CHEM 5192 Inorganic Synthesis Laboratory
CHEM 5392 Advanced Inorganic Chemistry
Electives (Choose six credits, one of which must be BIOL/CHEM 5311 or BIOL/CHEM 5312):
BIOL/CHEM 5311 Biological Chemistry: Metabolism
BIOL/CHEM 5312 Physical Biochemistry
BIOL 5304 Molecular Biology: Control and Expression of Genetic Information
CHEM 5397 Biotransformations and Biocatalysis
CHEM 5398 Medicinal Chemistry
Option 2 (Nine credits)
Required (Six credits):
BIOL 3350 Cell Biology
BIOL/CHEM 5311 Biological Chemistry: Metabolism
Electives (Choose three credits):
BIOL/CHEM 5312 Physical Biochemistry
BIOL 5304 Molecular Biology: Control and Expression of Genetic Information
The Departmental Distinction Program. 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 G.P.A. of at least 3.5 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 G.P.A. of at least 3.5 in courses required for the major, the B.S. degree will be awarded with departmental distinction.

## BIOLOGICAL SCIENCES

www.smu.edu/biology<br>Professor William Orr, Department Chair<br>Professors: Christine Buchanan, Richard Jones; Paul Ludden; William Orr, Larry Ruben, John Ubelaker, Steven Vik; Associate Professors: Robert Harrod, Pia Vogel; Assistant Professors: Johannes Bauer, James Waddle; Lecturers: Eva Oberdorster, John Wise; Adjunct Associate Professor: Teresa Strecker; Emeritus Professors: Venita Allison, John McCarthy, Franklin Sogandares-Bernal.

Requirements for the B.S. Degree. 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 1401 and 1402 and eight additional courses that: 1) total at least 26 advanced term hours, 2) include BIOL 3304 (Genetics) and BIOL 3350 (Cell Biology) 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 term hours of chemistry, including Organic Chemistry I and II, with labs; eight term hours of general physics; MATH 1337; and one additional course chosen from MATH 1338, STAT 2331 and STAT 5371. Although statistics is used extensively in biological research, preprofessional students should be aware that certain medical schools require a full year of calculus.

Requirements for the B.S.-M.S Degree. 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 3.2 G.P.A. 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 and 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, 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 and 6322. During year five students will typically complete BIOL 6123, 6124, two additional graduate courses and sufficient research credits to total 15 credit hours in each term of the fifth year. To remain in the program, students will maintain a 3.0 G.P.A. in science courses and exhibit satisfactory progress in their lab work.

The Departmental Distinction Program. 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 the degree of Bachelor of Science 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 G.P.A. in these courses of at least 3.5 and an overall G.P.A. of at least 3.5. For students who have transferred to SMU, two grade point averages will be calculated, that for
all work attempted, and that for work completed 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 3.5 G.P.A. for all biological sciences courses attempted will determine if the B.S. degree will be awarded "with departmental distinction."

Requirements for the B.A. Degree. 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 premed adviser about additional science requirements. A candidate for the B.A. degree must complete a minimum of eight courses in biological sciences, including 1401 and 1402 and six courses that: 1) total at least 18 advanced term hours, 2) include BIOL 3304 (Genetics) and BIOL 3350 (Cell Biology), 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 term hours of chemistry, including Organic Chemistry I, with lab.

Requirements for the 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.

Requirements for the Minor. Students majoring in other departments may obtain a minor in Biological Sciences by completing BIOL 1401, 1402, and at least nine advanced credit hours, which must include BIOL 3304, 3350 and an advanced laboratory course. Each advanced course must be taken in residence. CHEM 1303, 1304, 1113 and 1114 also are required for the minor. A student may not earn minors in both biology and the natural sciences.

## Courses for Nonscience Majors (BIOL)

The courses outlined in this section are designed to satisfy the curricular requirements of nonscience students. BIOL 1303 is not open to students who have earned prior credit in BIOL 1401; and BIOL 1304, 1305, 1308 and 1310 are not open to students who have earned prior credit in BIOL 1402. Nonscience majors should note that BIOL 1401 and 1402 may also be taken to satisfy distribution requirements.
1303, 1304. Essentials of Biology. An introduction to the major concepts of biological thought for the nonscience major. First term: cell biology, physiology, inheritance, developmental biology and human reproduction; second term: evolution, diversity of plants and animals, and ecology. Includes one laboratory session each week.
1305. Our Natural Environment. An introduction to major environments and their resident populations. Offered in summer session at Fort Burgwin, SMU-in-Taos, New Mexico. Includes equivalent of one laboratory session each week.
1308. 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.
1310. 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.

## Courses for Biology Majors (BIOL)

Students who wish to earn the B.A. or B.S. degree in biology are encouraged to complete BIOL 1401 and 1402, and CHEM 1303 and 1304 (with labs) in their freshman year. However, with the approval of an academic adviser, a student may
postpone BIOL 1401 and 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.
1401, 1402. Introductory Biology. An introduction to the study of living organisms. First term: cell structure, metabolism and genetics; second term: ecology, evolution, diversity and physiology. Three lecture hours and one three-hour laboratory each week. This two-term offering is a prerequisite for all advanced courses in biological sciences.
3222. Molecular Genetics Laboratory. Students will gain experience in investigative methods used in modern medical research, molecular biology, genetics, bioinformatics, forensic science and the pharmaceutical and biotechnology industries. Prerequisite: BIOL 3304, or permission of instructor.
3303. Evolution. A study of the principles of biological evolution. Includes natural selection, adaptation, molecular evolution, and the formation of new species, the fossil record, biogeography, and principles of classification. Three lecture hours each week. Prerequisite: BIOL 1401, 1402 and 3304.
3304. Genetics. An introduction to the structure, function and transmission of the hereditary material. Three lecture hours each week. Prerequisites: BIOL 1401 and CHEM 1304 or permission of instructor.
3306. Physiology. Homeostatic control mechanisms in vertebrates. Three lecture hours each week. Prerequisites: BIOL 3304 and BIOL 3350.
3307 (GEOL 3307). Ecology. Basic principles and concepts of ecology with emphasis on population and community interactions. Three lecture hours each week.
3342. Plant Kingdom. A survey of the plant kingdom emphasizing life histories and developmental morphology. Two lecture hours and one three-hour laboratory each week.
3350. Cell Biology. The structure and function of cells. Three lecture hours each week. Prerequisite or corequisite: CHEM 1304.
3354. Parasitology. Comparative study of protozoa and helminthic parasitic organisms and their role in diseases. Two lecture hours and one three-hour laboratory each week.
3357. Biology of Invertebrates. A general survey of the invertebrates with emphasis on identification of local species, morphological adaptations, systematics and ecology. Two lecture hours and one three-hour laboratory each week.
3365. 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: BIOL 3350 .
3380. Molecular Mechanisms of Disease. Emphasis on current advances in the understanding of disease processes at the molecular level. Prerequisite: BIOL 3350.
3403. Microbiology. The biology of microorganisms, with an emphasis on diversity, disease and the environment. Three lecture hours and one three-hour laboratory each week. Prerequisite: BIOL 3304; Recommended preparation: CHEM 3371 and CHEM 3117.
4132. Senior Seminar. Discussion of current problems of biological interest. One hour each week. Prerequisite: BIOL 1401, 1402; senior standing, major in biology.
4160. Toxicology Laboratory. Modern biochemical and molecular techniques will be used to assess the impact of environmental contaminants on liver biomarkers in fish. One threehour laboratory each week. Prerequisites: BIOL 3350 or BIOL 3306; Prerequisite or corequisite: BIOL 4360.
4331. Developmental Biology. Developmental processes in animals. Three lecture hours each week. Prerequisite: BIOL 3304.
4360. 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. Three lecture hours per week. Prerequisites: BIOL 3350 or BIOL 3306.
4370. Biotechnology and Nanotechnology. Introduction to current techniques and emerging applications of biotechnology and nanobiotechnology in medicine, agriculture, forensic and aquatic sciences, and bioremediation. Prerequisites: BIOL 3304 and CHEM 3371, or permission of instructor.
5102. Structural Biology Seminar. This seminar course includes readings and discussions of the period 1933-1963 when structural molecular biology emerged. Readings include both original research articles and historical reviews. Prerequisite: BIOL/CHEM 5310 or consent of instructor.
5110 (CHEM 5110). Biological Chemistry Laboratory. One three-hour laboratory period each week. Prerequisite or corequisite: BIOL 5310.
5166 (GEOL 5166). Vertebrate Anatomy Laboratory. A laboratory course to accompany BIOL/GEOL 5366. Exercises include basic anatomy, dissections and examinations of fossil skeletons. Corequisite: BIOL 5366 (GEOL 5366).
5304. 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: BIOL 3304, CHEM 3372.
5305. 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: BIOL 3304 and junior standing.
5310 (CHEM 5310). 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 each week. Prerequisites: CHEM 3371 and 3372. The accompanying laboratory (BIOL 5110) is strongly recommended for biology majors.
5311 (CHEM 5311). 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.
5312 (CHEM 5312). Physical Biochemistry. Physical chemistry of macromolecules and biological membranes, with an emphasis on the thermodynamics of solutions. Prerequisites: MATH 1338, CHEM 3372, CHEM 5310 (CHEM 5381 or CHEM 5383 is recommended).
5325. 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. Prerequisite: BIOL 3304 and junior standing.
5358. Ecology of Parasitism. The biotic and abiotic factors influencing parasite communities. Emphasis on the free-living stages of parasites. Two lecture hours and one three-hour laboratory per week. Prerequisite: BIOL 3354.
5366 (GEOL 5366). 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. Prerequisites: BIOL 1401, 1402 or GEOL 1308. The accompanying laboratory is a corequisite for biology majors and strongly recommended for all other students. Corequisite: BIOL 5166.

## Special Courses (BIOL)

2101. Introductory Research I. A minimum of five hours per week doing supervised laboratory research. This course is offered on a pass/fail basis only. Prerequisite: At least sophomore standing, BIOL 1401, 1402 and consent of the instructor.
2102. Introductory Research II. A minimum of five hours per week doing supervised laboratory research. This course is offered on a pass/fail basis only. Prerequisite: BIOL 2101 and consent of the instructor.
2103. Internship in Biology. Biological research at an institution other than SMU. Credit does not apply toward the degree requirement for two laboratory courses. A student cannot have previously completed BIOL 3398.
2104. Undergraduate Research I. A minimum of nine 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 nor can a student have previously completed BIOL 3395. Prerequisite: Junior standing, and approval by the faculty sponsor and the Undergraduate Studies Committee of the department.
2105. 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.
2106. Senior Seminar. Discussion of current problems of biological interest. One hour each week. Prerequisite: Senior standing in biology.
2107. Honors Research I. For students in the departmental distinction program. Prerequisite: Admission to the departmental distinction program.
2108. Honors Research II. For students in the departmental distinction program. Prerequisite: Admission to the departmental distinction program.

## SMU-in-Taos Courses

3343. 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.
3344. Systematic Botany. An introduction to the history, nomenclature, family characteristics, identification and biosystematics of the lowering plants. Lectures and laboratories conducted at Fort Burgwin, New Mexico.
3345. Host-Parasite Relationships. Analysis of host-parasite relations from an evolutionary and ecological viewpoint. Lectures and laboratories conducted at Fort Burgwin, New Mexico. Prerequisite: BIOL 3354.

## SMU Abroad Courses

3308. 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. (SMU-in-Copenhagen only) Prerequisites: BIOL 1401 and 1402.
3309. 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 as well as survival strategies and adaptations of the most important organisms. (SMU-in-Copenhagen only) Prerequisites: BIOL 1401 and 1402; CHEM 1303 and 1113.
3310. Ecology and Human Impact in the North and Baltic Seas. Marine ecosystems and communities, 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. (SMU-inCopenhagen only) Prerequisites: BIOL 1401 and 1402; CHEM 1303 and 1113.
3311. 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. (SMU-in-Costa Rica only) Prerequisites: BIOL 3307 and at least one college-level course in Spanish.
3312. 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. (SMU-in-Kenya only) Prerequisite: BIOL 3307.


#### Abstract

CHEMISTRY www.smu.edu/chemistry Professors: Edward Biehl, John Buynak, Michael Lattman, John Maguire, Mark Schell, Patty Wisian-Neilson; Associate Professors: Werner Horsthemke, David Son, Brent Sumerlin; Adjunct Professor: Raj Vempati; Lecturers: Helen Babbili, Andrea Adams; Adjunct Lecturer: Jennifer O'Brien.


The atmosphere of the Chemistry Department is an informal one where students have easy access to the faculty. The advanced classes are small and most advanced laboratories are taught by the professorial staff. This gives the faculty the opportunity to get to know their undergraduate majors quite well. The department believes that this close personal contact between faculty and students is important to success in undergraduate education. Undergraduate majors are heavily involved in research, working in teams with faculty, postdoctoral fellows and graduate students. Our majors are accepted into the leading graduate and professional schools in the nation. On the average, two-thirds of our graduates seek advanced degrees. Those majors at the Bachelor's level who choose employment find excellent positions.

## For Undergraduate Students

Requirements for the B.S. Degree. The completion of a minimum of 44 term hours in the department, including CHEM 1113, 1114, 1303, 1304, 3351, eight hours Organic Chemistry I \& II with labs, 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, eight term hours of general physics; MATH 1337, 1338, 2339. This degree is certified by the American Chemical Society for professional training in chemistry.

Requirements for the B.S. Degree in Environmental Chemistry. CHEM 1113, 1114, 1303, 1304, 3351, eight hours Organic Chemistry I \& II with labs, 5310, 5383, 5384, 5486, 5390 and either 5392 or GEOL 3451. In addition, eight term hours of general physics; MATH 1337, 1338, 2339; GEOL 6363; at least one introductory environmental science elective, chosen from GEOL 1301, GEOL 1315, GEOL 2320, GEOL 2321, ENCE 2304 or ENCE 2421; at least one advanced environmental science elective, chosen from BIOL 3307, BIOL 3343, GEOL 3353, GEOL 3366, GEOL 5384 or ENCE 5333; at least three term hours of undergraduate research (CHEM 4397 or GEOL 4399) on a topic in environmental chemistry. The research project can be conducted in the laboratory of an SMU faculty member or as an internship with a private company, and will culminate in a written report. Students planning to attend graduate school are advised to complete MATH 2343 or a statistical science course at the 4000 or 5000 level. This degree program is certified by the American Chemical Society for professional training in environmental chemistry.

Requirements for the B.A. Degree. The completion of a minimum of 26 term hours in the department, including CHEM 1113, 1114, 1303, 1304, eight hours Organic Chemistry I \& II with labs, 5381 (or 5383), plus at least seven additional hours at the advanced level, to be chosen in consultation with the department adviser. In addition, eight term 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.

The Departmental Distinction Program. 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 G.P.A. in those courses of 3.5 . The student will undertake an independent research project under the supervision of a departmental faculty member, and enroll in CHEM 4397. During the senior
year, a senior thesis will be written and presented to the department. Upon approval of the departmental faculty at the completion of these requirements, and provided the student maintains a minimum 3.5 G.P.A. in all chemistry courses, the student will be awarded the "departmental distinction" designation.

Requirements for the Minor. 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.

## The Courses (CHEM)

1301. Chemistry for Liberal Arts. A course designed for students with weak backgrounds in chemistry and for liberal-arts students.
1303, 1304. 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.
1302. General Chemistry Laboratory. One three-hour laboratory period each week. Prerequisite or corequisite: CHEM 1303.
1303. General Chemistry Laboratory. One three-hour laboratory period each week. Prerequisite: CHEM 1113; Prerequisite or corequisite: CHEM 1304.
1304. Organic Chemistry Laboratory. One three-hour laboratory period each week. Corequisite: CHEM 3371.
1305. Organic Chemistry Laboratory. One three-hour laboratory period each week. Corequisite: CHEM 3372.
1306. 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.
3371, 3372. 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.
1307. Research. For students who hold research fellowships but are not enrolled in any credit-hour courses. No tuition.
1308. Undergraduate Research. Prerequisites: Junior or senior classification and permission of the instructor.

## Courses for Undergraduate and Graduate Students

5108. Special Topics in Chemistry. Special topics of current interest. Content varies from term to term.

5110 (BIOL 5110). 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.
5185. 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.
5188. 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.
5192. Inorganic Synthesis Laboratory. This course introduces students to advanced techniques and methods used in the synthesis of inorganic compounds. Corequisite (or prerequisite): CHEM 5392.
5308. 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.

5310 (BIOL 5310). 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.

5311 (BIOL 5311). 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.
5312 (BIOL 5312). Physical Biochemistry. Physical chemistry of macromolecules and biological membranes, with an emphasis on the thermodynamics of solutions. Prerequisites: MATH 1338, CHEM 3372, CHEM 5310. (CHEM 5381 or CHEM 5383 is recommended.)
5333. 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.
5381. 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.
5383. 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.
5384. 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.
5390. 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.
5392. 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.
5393. Advanced Organic Chemistry. Three hours of lecture each week. Prerequisite: CHEM 3372.
5396. Advanced Physical Chemistry. Three hours of lecture each week. Prerequisite: Permission of instructor.
5397. Biotransformations and Biocatalysis. This course will cover the history, application and current trends of biotransformations and biocatalysis with an emphasis on how biocatalysts are developed and used in pharmaceutical research. Prerequisites: CHEM 3371 and CHEM 3372.
5398. 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.
5486. Instrumental Analysis. A course involving the theory, operation and application of instrumentation used in the modern chemical laboratory. Two hours of lecture and two threehour laboratory periods each week. Prerequisite: CHEM 3351 or permission of instructor.

## CLASSICAL STUDIES

Associate Professor Melissa Dowling, Director
The Classical Studies minor offers an integrated program studying the various aspects of the civilization of ancient Greece and Rome. The minor requires 18 term 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:
A. Classical Languages (Six hours)

LATN 2311, 2312 or other advanced Latin courses
Classical Greek at 2000 level, when available
B. Classical Studies (At least one course from each group) (12 Hours)

Group 1 (Art History)
ARHS 3303 Archaeological field methods in Italy
ARHS 3307 Art and Society in Late Antiquity, 300-700
ARHS 3312 Etruscan and Roman Art
ARHS 3313 Etruscan and Iron Age Italy
ARHS 3314 The Art and Architecture of Ancient Pompeii
ARHS 3315 Classical Sculpture
ARHS 3316 Art in Rome (SMU-in-Rome)
ARHS 3317 Ancient Painting
ARHS 3319 Art of the Roman Empire
CLAS 3311 (ARHS 3311) Mortals, Myths and 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)
ANTH 2321 (ENGL 2371) The Dawn of Wisdom: Ancient Creation Stories from
Four Civilizations
ARHS 3318 Currents in Classical Civilization
ARHS 3603 Archaeological Field Methods of Italy
CLAS 2311 Myth and Thought in the Ancient World (SMU-in-Taos)
CLAS 2332 Society Expanding - Polis and Empire
RELI 3320 Introduction to Classical Judaism
RELI 3326 Introduction to New Testament
RELI 3349 Early Christianity
RELI 3371 Religion and Culture in the Greco-Roman World

## The Courses (CLAS)

2311. 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.
2312. 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.

3311 (ARHS 3311). 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.
3312 (CFB 3312). 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

Professors: David Blackwell, Eugene Herrin, Louis Jacobs, Lee McAlester, Jim Quick, Brian Stump, John Walther, Crayton Yapp; Associate Professors: Bonnie Jacobs, Neil Tabor; Research Professors: Steven Bergman, Anthony Fiorillo, Roy Mink, John Wagner, Alisa Winkler, Dale Winkler, Pierre Zippi; Research Associate Professor: H. Troy Stuckey; Research Assistant Professors: Jason McKenna, Mihan House McKenna, Xinlin Du.

Earth Sciences provide 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, environmental geology, planetary geology, paleontology and natural resource and energy management.

Earth Sciences attract students with broad interests in geology, chemistry, biology, environmental science, archaeology, physics, astronomy, oceanography, applied mathematics or engineering. 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, prelaw, computer science, archaeology, foreign languages, English, history, journalism and premed. Earth Science is an interdisciplinary, applied science that integrates well with other fields.

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 a substantial amount of financial aid available for undergraduate majors, including department scholarships, appointments as teaching assistants, 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 Environmental 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 is the home of the Environmental Science and Studies Interdisciplinary programs and directly advises students in the Geoscience track of the Environmental Science Program (see the degree program listing in the Dedman College section for details).

## Major in Geology

The B.A. or B.S. degree in Geology typically consists of a core sequence that provides a basic background in plate tectonics, earth materials (mineralogy, 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 arrange concentrations in paleontology, geochemistry or resource geology that integrate classroom learning with field and laboratory experience.

Requirements for the B.A. Degree. A minimum of 28 hours in Earth Sciences, selected from the following:

1. One course chosen from GEOL 1301, 1305, 1307, 1308, 1313 or $1315-3$ hours
2. GEOL 3340 (Face of the Earth); 3451, 3452 (Earth Materials I and II) - 11 hours
3. Earth Science electives at the 3000 level or above -12 hours minimum
4. Geology Field Studies (one course chosen from GEOL 3240, 3241, 3242, 3243
or 3343) - two to three hours
Required support courses - Nine hours minimum:
5. CHEM 1301 or 1303 - three hours
6. PHYS 1301, 1303 (recommended), or 1313 - three hours minimum
7. MATH 1337 - three hours

NOTE: 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.S. Degree. A minimum of 36 or 38 hours in Earth Sciences, selected from the following:

1. One course chosen from GEOL 1301, 1305, 1307, 1308, 1313 or $1315-3$ hours
2. GEOL 3340 (Face of the Earth); 3451, 3452 (Earth Materials I and II); 3454 (Structural Geology) - 15 hours
3. Earth Science electives at the 3000 level or above - 12 hours minimum
4. Geology Field Studies (one course chosen from GEOL 3240, 3241, 3242, 3243 or 3343) two to three hours
5. GEOL 4296 and 4298 (Senior Thesis Research Project), or 4657 (Field Geology) - four to six hours
Required support courses - 17 hours minimum:
6. CHEM 1303, 1113, 1304 and 1114 - eight hours
7. PHYS 1303 - three hours
8. MATH 1337, 1338 (Calculus with Analytic Geometry I and II) - six hours

## NOTES:

- 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.
- Experience with a modern scientific computing language is essential. This experience can be gained in a course such as GEOL 3359 (Computer Methods in the Earth Sciences).
- The requirements for the major are considered minimal. Students planning careers in the earth sciences should take additional course work according to the geoscience emphasis that best fits their goals. 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:

1. One course chosen from GEOL 1301 (Earth Systems), 1305 (Oceanography), 1307
(Solar System), 1308 (Evolution and Life History), 1313 (Earthquakes and Volcanoes), or 1315 (Introduction to Environmental Sciences) - three hours
2. Earth Science electives at the 3000 level or above - 12 hours minimum
3. Geology Field Studies (one course chosen from GEOL 3240, 3241, 3242, 3243 or 3343) or an Earth Sciences elective at the 3300 level or higher, if not used to meet the requirement listed above - two to three hours

## Major in Geophysics

Geophysical techniques are used to understand the physical behavior of planet 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, selected from the following:

1. One course chosen from GEOL 1301, 1305, 1307, 1308, 1313 or 1315 - three hours
2. GEOL 3340 (Face of the Earth), 3451, 3452 (Earth Materials I and II) - 11 hours
3. GEOL 3454 (Structural Geology), 5320 (Dynamic Earth I) and 5392 (Introduction to Seismology) - 10 hours
4. Earth Science electives at the 3000 level or above, one of which must be in Geophysics nine hours minimum
Required support courses - 30 hours minimum:
5. CHEM 1303 and 1113 - four hours
6. PHYS 1303,$1105 ; 1304,1106$ - eight hours
7. MATH 1337, 1338, 2339 (Calculus with Analytic Geometry I, II, III); 2343 (Elementary Differential Equations); 3337 (Advanced Mathematics for Science and Engineering I); and 3353 (Introduction to Linear Algebra) - 18 hours

## 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. This experience 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 course work that best fits their goals.


## Major in Environmental Geology

Environmental problems today 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 Environmental Earth Sciences is intended to provide students with a quantitative understanding of the chemical and physical processes of environmental change. Because of its multidisciplinary scope, students are strongly encouraged to take appropriate courses in other departments.

Requirements for the B.S. Degree. A minimum of 35 hours in Earth Science, selected from the following:

1. One course chosen from GEOL 1301 (recommended), 1305, 1307, 1308, 1313 or 1315 three hours
2. GEOL 3340 (Face of the Earth); 3451, 3452 (Earth Materials I and II) - 11 hours
3. GEOL 3330 (Resources and the Environment), 5384 (Hydrogeology) and 5386 (Geochemistry) - nine hours
4. Two GEOL electives selected from 3240-3243, 3343 (Geology Field Studies), 3353 (Modern and Ancient Climates), 3454 (Structural Geology), 3472 (Principles of Sedimentation), or 4390 (Introduction to Geophysical Prospecting) - six to eight hours minimum
5. GEOL 4296 and 4298 (Senior Thesis Research Project), or 4657 (Field Geology) - four to six hours
6. Geol 3366 (Environmental Geology and Geochemical Cycles), 5384 (Hydrogeology) and 5386 (Geochemistry) - nine hours

## Required support courses - 26 hours minimum:

1. CHEM 1303, 1113, 1304 and 1114 - eight hours
2. PHYS 1303 - three hours
3. MATH 1337, 1338, 2339 (Calculus with Analytic Geometry I, II, III); and 2343 (Elementary Differential Equations) - 12 hours
4. ENCE 5311 (Environmental and Hazardous Waste Law) - three hours

## NOTES:

- Experience with a modern scientific computing language is essential. This experience can be gained in a course such as GEOL 3359 (Computer Methods in Earth Sciences).
- The requirements for the Environmental Geology major are considered minimal. Students should consult a faculty adviser for recommendations on additional course work 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 feed into a major. 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 in the Earth Sciences. The Department of Earth Sciences is responsible for administration of this minor.

Requirements for the Minor. A minimum of 18 hours, to be selected from the following, with at least nine of the 18 term hours taken at the 3000 level or above:

1. One course chosen from GEOL 1301 (Earth Systems), 1305 (Oceanography), 1307 (Solar System), 1308 (Evolution and Life History) or 1313 (Earthquakes and Volcanoes) - three hours
2. One course chosen from GEOL 1315 (Introduction to Environmental Sciences), $3340^{1}$ (Face of the Earth), $3353^{2}$ (Modern and Ancient Climates), 3363 (Environmental Geology Seminar), or $3366^{2}$ (Environmental Geology and Geochemical Cycles) - three hours
3. Four courses to be selected from the following list -12 hours:

GEOL 3240-43, 3307, 3330, 3340, 3343, 3353, 3363, 3366, 5384, 5386 (if not used to meet the requirement listed above)
BIOL 1305 Our Natural Environment*
BIOL $3307^{3}$ Ecology
BIOL $3342^{3}$ The Plant Kingdom
BIOL $3343^{3}$ Field Botany*
ENCE 5311 Environmental and Hazardous Waste Law*

## The Courses (GEOL)

1301. Earth Systems. Examines geologic change within the earth as governed by physical, chemical and biological processes, and interactions between the solid earth, oceans, atmosphere, and biosphere. Three hours of lecture and one two-hour laboratory each week. Recommended for all geology tracks.
1302. Oceanography. A study of the physical (geological), biological and chemical processes responsible for the existence of the ocean as we know it today. Examines the impact of man on the oceans and oceanography's role in resource development, climatic and environmental modification, and other human concerns. Three hours of lecture and one two-hour laboratory each week.

[^4]1307. 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. Three hours of lecture and one two-hour laboratory each week.
1308. Evolution and Life History. Evolution as observed in the fossil record in light of biological principles. Evolution as a process, origins of life, adaptation, extinction, emphasizing examples from geological record. One four-hour field trip each week. Recommended for the paleontology track.
1313. 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 will emphasize the geologic insights provided by earthquakes and volcanoes, and their impact on society.
1315. Introduction to Environmental Sciences. Fundamental principles of ecology, hydrology, geology, population dynamics, land-use management, and related fields will be used as the basis for understanding many of the major environmental issues that face our 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. Three hours of lecture and one two-hour laboratory. Field trips will take the place of some laboratory classes.
2320, 2321. Southwestern Environments: A Geologic 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.
3107. Departmental Seminar. Students attend and critically evaluate departmental seminars given by visiting scientists, visiting engineers, faculty and graduate students. Prerequisites: Major in Geology, Geophysics or Environmental Geology.
3241, 3242, 3243, 3343. Geology Field Studies. Project- and mapping-oriented, two-week field trips to classical geological localities inside or outside of the United States. Trips will normally be conducted either during the May Interterm or between terms. Examples of planned trips include the Caribbean, Hawaii, Grand Canyon, Lake Superior/Canada and New Mexico/Colorado. Prerequisites: One 1300-level course in Earth Sciences and permission of instructor.
3307 (BIOL 3307). Ecology. Basic principles and concepts of ecology with emphasis on population and community interactions. Three lecture hours each week. Prerequisites: BIOL 1401, 1402 or permission of instructor.
3330. Resources and the Environment. A study of earth materials and processes and how they bear on planning, resource, conservation, and pollution problems arising from humankind's intense use of the planet earth. Prerequisites: 1300-level course in Earth Sciences or permission of instructor.
3340. Face of the Earth. A study of the theory of plate tectonics for understanding earthquake, volcano and mountain belt formations. Specific application of the theory is illustrated in terms of its application to understanding features of the regional geology of North America such as the Coastal Region and the San Andreas fault. Prerequisites: One 1300-level course in Earth Sciences or permission of instructor.
3353. 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. Prerequisites: One 1300-level course in Earth Sciences or permission of instructor.
3359. 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.
3360. Process Geomorphology. Analysis of geological processes and other factors that influence or control the origin and development of landforms of the earth. Laboratory exercises and field trips are included. Prerequisites: One 1300-level course in Earth Sciences or permission of instructor.
3361, 3363. 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. Prerequisites: One 1300 -level Earth Sciences course or permission of instructor.
3366. Environmental Geology and Geochemical Cycles. An introduction to the physical and chemical processes occurring in the Earth's atmosphere, oceans, rivers and groundwater at both a local and a global scale. Prerequisites: High school algebra and chemistry and one 1300-level course in Earth Sciences.
3369. Paleobiology. A survey of biological diversity, phylogenetic analysis, rates of evolution, extinction, biogeography, taphonomy and paleoecology. Prerequisites: One 1300-level course in Earth Sciences or permission of instructor. BIOL 1401 is also a suitable prerequisite.
3374. Introduction to Petroleum Geology. An introduction to stratigraphy, sedimentation and petroleum geology. Prerequisites: One 1300-level course in Earth Sciences or permission of instructor.
3451, 3452. Earth Materials I and II. 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, introduction to relationships among rock textures, origins and rock-forming processes. Prerequisites: One 1300-level course in Earth Sciences and credit or registration in CHEM 1301 or 1303 (for 3451); credit or registration in GEOL 3340 (for 3452).
3454. Structural Geology. Introduction to the stress-strain relations of rocks, the origin of faults, the brittle to ductile transition, mechanics of thrusting and folding. Laboratory problems in structure contouring, fault solutions, stereonet manipulation, analysis of folded terrains. Prerequisites: Credit or registration in GEOL 3452, or permission of instructor.
3472. Principles of Sedimentation. A study of the origin and postdepositional 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. Prerequisites: Credit or registration for GEOL 3451 or permission of instructor.
4199, 4299, 4399. 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.
4296, 4298. Senior Thesis Research Project. Significant scientific project is undertaken during the student's senior year. GEOL 4296 and 4298 are a one-year sequence.
4321. 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 G.P.A. of at least 3.0 and completion of GEOL 3452; sponsorship of a professor and approved organization, agency or company.
4390. Introduction to Geophysical Prospecting. Introduction to geophysical exploration techniques. Lecture and laboratory. Prerequisites: MATH 1338 or permission of instructor.
4600. Earth and Planetary Geology. Field camp that provides intensive, hands-on experiences with physical geology and observational planetary geology. Prerequisites: GEOL 3451, 3452 and permission of instructor.
4657. Field Geology. Geologic mapping and field trips in a summer field-camp setting. Prerequisites: GEOL 3454, 3472 or permission of instructor.
5110, 5210, 5310. Independent Study in Geoscience. Independent study of a selected topic in geoscience. Individual study under direction of a faculty member allowed for 5110 or 5210; group projects allowed for 5310.
5166. (BIOL 5166) Vertebrate Anatomy Laboratory. A laboratory course to accompany GEOL 5366 . Exercises include basic anatomy, dissections and examination of fossil skeletons. Corequisite: GEOL 5366.
5199, 5299, 5399. 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 co-taught together with faculty of the department. Prerequisites: GEOL 3340 or permission of the instructor.
5261. Mineral Chemistry. A study of the major rock-forming minerals with emphasis on solid solution, chemistry in relation to crystal structure, conditions of occurrence, and stability relations.
5320. Dynamic Earth I. Physical and chemical structure of the earth and its evolution through geologic time. Dynamic processes in the mantle and crust. Development of the theory of plate tectonics as a unifying mechanism for large-scale geologic processes. Implications of plate tectonics, and contemporary applications to geological and geophysical problems. Prerequisite: Permission of instructor.
5360. Electron Microprobe Analysis. Design and operation of the instrument. Correction procedures and computer automation. Analytical techniques and mineral chemistry.
5366 (BIOL 5366). 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. Prerequisites: BIOL 1401, 1402 or GEOL 1308 or permission of instructor. The accompanying laboratory, BIOL 5166, is strongly recommended.
5368. Paleoecology. Interactions between the living world and the Earth's changing environments through geologic time. Prerequisites: GEOL 3369 or permission of instructor.
5369. Introduction to Palynology. The course provides an overview of palynology: concepts and uses. Taphonomic processes and applications in paleoecology, paleoclimatology, archeology, plant taxonomy and plant evolution are considered. No prerequisites. One field trip.
5370. Global Change. An introduction to relatively short-term geologic changes in the Earth's environments. Tempo and mode in the three principal sources of such changes - extraterrestrial events, variations in the Earth's internal dynamo, and the evolving ocean-atmo-sphere-biosphere system - will be emphasized. Prerequisites: GEOL 3340 or permission of instructor.
5371. Paleontology of Quaternary Vertebrates. The history of vertebrate life in North America during the last 3 million years, with special emphasis on mammals. Origins, distribution, distinctions, environmental interpretations, and faunal analysis. Prerequisites: GEOL 3369 or consent of instructor.
5372. Principles of Sedimentation. Study of the origin and evolution of sedimentary rocks in terms of interpretation of marine and non-marine sedimentary record.
5374. 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.
5380. 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.
5382. Igneous and Metamorphic Petrology. The origin, occurrence and classification of igneous and metamorphic rocks. Problems of genesis are considered in the light of chemical equilibria and features of geological occurrence. Lecture, no lab. Prerequisites: GEOL 3452 or permission of the instructor.
5384. 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 ground-water contamination. Prerequisites: MATH 1338 and CHEM 1304, or permission of instructor.
5386. 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 solution of geochemical problems. Prerequisites: GEOL 3452 or permission of instructor.
5389. Theory of Digital Data Processing in Geophysics. 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. Prerequisites: MATH 2343 or permission of instructor.
5391. 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.
5392. Introduction to Seismology. Basic principles of seismology. Prerequisites: MATH 2343 and permission of instructor.
5394. Geophysical Problem Solving. 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. Using models in the real world. Term project. Prerequisites: MATH 2343, 5353; knowledge of a programming language.
5398. Geomorphology. Analysis of endogenic and exogenic processes that influence the origin or development of planet surfaces, with an emphasis on the Earth's large-scale processes and phenomena. Prerequisites: GEOL 3452 or permission of the instructor.
5399. Special Topics in Earth Sciences. Topics of special interest not covered by the curriculum, taught by visiting scientists and those with temporary appointments at SMU. Can be co-taught together with faculty of the department. Prerequisites: GEOL 3340 or permission of instructor.
5481. Igneous and Metamorphic Petrology. The origin, occurrence and classification of igneous and metamorphic rocks. Problems of genesis are considered in the light of chemical equilibria and features of geological occurrence. Lecture and laboratory. Prerequisites: GEOL 3452 or permission of instructor.

## ECONOMICS

www.smu.edu/economics
Professors: Nathan Balke, Raveendra Batra, Rajat Deb, Tom Fomby, Kathy Hayes, Daniel Millimet, Santanu Roy, Kamal Saggi, Daniel Slottje, Shlomo Weber; Associate Professors: Thomas Osang, Saltuk Ozerturk; Assistant Professors: Bo Chen, Kyle Hyndman, Anna Kormilitsina, Isaac Mbiti; Lecturers: Helen Reynolds, Rupinder Saggi, Elizabeth Wheaton.

Requirements for Major. 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 G.P.A. of at least 2.0 in economics courses attempted, and the student must receive at least a $C$ - in all economics, finance, math
and statistics classes counting toward the major. MATH 1309 or 1337 is required prior to enrolling in ECO 3301 or 3302; STAT 2301, 2331 or 4340 is required prior to enrolling in any economics course at the 4000 level or above. 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.

Requirements for the B.A. Degree. The Bachelor of Arts 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 and any economics course at the 4000 or 5000 level).

Requirements for the B.S. Degree. The Bachelor of Science 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 and 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).

Requirements for the B.S. Degree with Finance Applications. The degree combines specialized training in economics with a concentration in areas significant to financial markets. This degree 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 and 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).

Requirements for the B.S. Degree 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 and 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); MATH 1338 and 2339; CSE 1341, 1342, 2341, 2353 and 3358.

Requirements for the Five Year Joint Bachelor's and Master's Degree in Economics. The joint Bachelor's and Master's degree in economics provides an excellent opportunity for advanced undergraduates to begin pursuit of a Master's degree while still an undergraduate. Students with a cumulative G.P.A. of 3.0 overall and 3.3 in economics may apply for the program after the fall term of their junior year. However, the interested student should consult the undergraduate adviser in the Economics Department even earlier to ensure a timely completion of the program within five years. STAT 2301, 2331, or 4340 and MATH 1309 or 1337 are required before being admitted into the program (MATH 1338 is recommended). Students must also take ECO 6381 (Analysis I), ECO 6382 (Analysis II), and ECO 5350 (Introduction to Econometrics) before or during their senior year. These nine hours of course work will also apply towards requirements for a Bachelor of Arts or a Bachelor of Science in Economics.

Students are eligible for the Master of Economics - Applied Track, Master of Economics - Law and Economics Track, and the Master of Economics - International

Economics and Policy Track. All the requirements for the Master's and Bachelor's degrees must be met.

## 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 Introduction to Econometrics
ECO 5375 Economic and Business Forecasting
ECO 5385 Data Mining Techniques for Economists ECO 6352 Applied Econometrics
Economic Growth and Development (2 out of 4)
ECO 5359 Economic Development: Microeconomic Perspectives
ECO 5360 Economic Development: Macroeconomic Perspectives
ECO 5361 Natural Resources and Energy Economics
ECO 5362 Economic Growth
Economics of Industrial Organization (2 out of 2)
ECO 4371 Theory of Industrial Structure
ECO 4382 Economics of Regulated Industry
International Economics (2 out of 2)
ECO 4357 International Trade
ECO 4358 International Macroeconomic Theory and Policy
Labor Economics (2 out of 3)
ECO 4351 Labor Economics
ECO 4361 Economics of Education
ECO 5357 Economics of Human Resources
Economics of Decision Making (2 out of 4)
ECO 5340 Decision Making Under Uncertainty
ECO 5341 Strategic Behavior
ECO 5353 Law and Economics
ECO 5355 Political Economics
Monetary Economics (2 out of 2)
ECO 4385 Macro Theory and Policy
ECO 4386 Topics in Monetary Economics
Public Economics (2 out of 3)
ECO 4366 Economics of the Public Sector
ECO 5365 Public Finance
ECO 5370 Cost-Benefit Analysis
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.

Requirements for the Minor. 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 G.P.A. of at least 2.0 in economics courses attempted, and the student must receive at least a $C$ - in all economics classes counting toward the minor. Non-lecture classes cannot be used toward an economics minor.

Instead of a general minor in economics, a minor in a specialized field (International Economics, Public Economics, Labor Economics, Econometrics, Economic Growth and Development, Monetary Economics, Economics of Decision Making, and Economics of Industrial Organization) 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.

For more information about the Economics Department, visit www.smu.edu/ economics.

## The Courses (ECO)

1310. Exploring Economic Issues. Discusses current economic issues and problems in a suitable manner for students not majoring in economics or related sciences. No prerequisites. No credit is allowed for students who have received credit for ECO 1311 or 1312.
1311. Principles: Consumers, Firms and Markets (Microeconomics). Enables a concerned citizen to make an intelligent appraisal of current controversies relating to consumers and producers. Explains tools of economic analysis. No prerequisites.
1312. Principles: Inflation, Recession and Unemployment(Macroeconomics). The second term of a liberal arts education sequence discusses issues such as inflation, unemployment and growth from both national and global perspectives. Tools of economic analysis include models of open economies. Prerequisite: ECO 1311.
1313. Price Theory (Intermediate Microeconomics). Considers more advanced problems of microeconomics. The focus is on understanding how consumers behave, how firms make pricing and output decisions, and the structure of markets and how this impacts the behavior of firms and consumers. Economic theory postulates certain behavioral rules for consumers and firm managers, and makes certain assumptions concerning the institutional structure of society (its laws, property rights, customs, etc.). Various testable propositions can be derived from the operation of the society's economic system. These propositions are investigated by working through actual models. Prerequisites: ECO 1311 and 1312, and either MATH 1309 or 1337.
1314. National Income and Employment (Intermediate Macroeconomics). This course is designed to investigate the factors that influence the level of aggregate income in an economy. It attempts to study the decision-making that ultimately results in the determination of the levels of consumption, investment or employment. For the most part, primitive general equilibrium models are employed to investigate these questions, as well as to analyze the impact of various government fiscal policies. The behavior of business cycles and patterns across various countries is also analyzed. Prerequisites: ECO 1311 and 1312, and either MATH 1309 or 1337. Corequisite: ECO 3301.
1315. 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. Prerequisites: ECO 1311 and 1312. Note: ECO 3321 cannot be taken after or concurrent with ECO 4357.
1316. Money and Banking. Analyzes central and commercial banking for students majoring in economics, business and related sciences. A student may not receive credit for both ECO 3355 and FINA 3330 (Money and Capital Markets). Prerequisites: ECO 1311 and 1312.
4101, 4201, 4301. Topics (to be specified in title). Prerequisites: ECO 3301 and 3302 or permission of instructor.
1317. Labor Economics. This course is an introduction to the study of labor economics. It provides an overview of labor supply and labor demand models, with extensions to models of taxes and tax credits, welfare and social security. The focus then shifts to models of wage determination and extensions such as the effects of minimum wage, performance-based pay, unions and discrimination. This course will be equally devoted to both theoretical and empirical analysis of these issues. Prerequisite: ECO 3301 and one of the following: STAT 2301, 2331 or 4340.
1318. International Trade. The purpose of this course is to provide an understanding of international trade in goods and services among countries and to develop a framework for analyzing trade policy issues. Major topics covered include the determinants of trade; the gains from trade; the relation between trade and foreign direct investment; trade and labor migration; the effects of trade restrictions such as import tariffs or export subsidies; and the analysis of regional economic integration such as the European Union or NAFTA. The course covers only the real effects of trade; international financial issues will not be treated. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1319. International Macroeconomic Theory and Policy. (Formerly ECO 4356 International Finance and Investments.) This course 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. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1320. 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. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1321. Economics of the Public Sector. This course discusses both the positive and normative aspects of government expenditures. The focus is on theoretical principles useful for analyzing the role of government intervention. Problems of market failures due to externalities and the presences of public goods (like national defense) serve as the starting point for explaining why government spending occurs. The free-rider problem and incentive mechanisms for preference revelation will be covered. A brief survey of voting and social choice models is presented. Specific government expenditure policies are explored. These topics may vary from year to year. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1322. Foundations of Financial Economics. This course applies the tools of economic analysis to financial decision-making. Emphasis is placed on developing a framework for understanding the economic nature of these problems and their solutions.Topics include the introduction to financial economics, time value of money, investment decisions, risk and return, capital asset pricing model, capital budgeting, capital structure, dividend policy, hedging, mergers and acquisitions and international financial management. Prerequisites: ECO 3301, 3355, ACCT 2301, and ITOM 2305 or STAT 2301, 2331 or 4340. Note: ECO 4368 cannot be taken if student has taken FINA 3320).
1323. Theory of Industrial Structure. (Formerly Structure of American Industry.) This course focuses on the structure (internal organization) and behavior (market strategy) of firms in the market place. Firm structure and behavior are worth studying, since most real markets violate the standard of competitive assumptions and, therefore, may not maximize social welfare. This course considers both the exercise of market power (e.g., price discrimination) in relatively simple markets with a single firm as well as the more complicated exercise of market power (e.g., limit pricing, product differentiation, vertical foreclosure) in markets with multiple firms. Particular attention is paid to such policy-relevant issues as the relationship between market concentration and market power and the relationship between "meeting the competition" and predatory pricing. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1324. Special Topics in Economic History and Development. Economic principles are used to explore important and controversial questions. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1325. Financial Economics and Investment Behavior. The objective of this course is to give the student a theoretical basis for financial analysis within the context of the total process of investment decision-making. Theoretical foundations will be developed for the analysis of equities and bonds as well as portfolio performance. Prerequisite: ECO 3301, 4368 or FINA 3320, and ITOM 2305 or STAT 2301, 2331 or 4340, or permission of instructor. Note: ECO 4378 cannot be taken if student has taken FINA 4320 or FINA 4326.
1326. Economics of Regulated Industries. The existence of government regulation of business prompts economists to ask both why such regulations exist and what impact they have on firms' behavior, market structure (in particular, firms' market shares) and social welfare. The parallel goals of the course are to provide (1) a solid analytical foundation for investigating the above questions and (2) a thorough and detailed description of the most important government regulations (including antitrust, product quality, and patent laws). Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1327. Macroeconomics: Theory and Policy. The purpose of this course is to take students beyond the traditional macroeconomics course. Among the topics examined are new developments in the analysis of business cycles, the causes and consequences of inflation and the sources of economic growth. Special emphasis is placed on "taking theory to the data," so that students begin to see more clearly how to evaluate current macroeconomic theories and controversies. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1328. Topics in Monetary Economics. Monetary economics is one of the largest fields in economics. Rather than touching on a large number of topics, this course will provide students who have had intermediate macroeconomics with a course where fewer topics in monetary economics are covered intensively at a more advanced level. The course will take an in-depth look at selected topics of current interest in the field of monetary theory and policy. The topics covered may vary from year to year. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1329. 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, 3302, two advanced economics classes (4000 level or above), a 2.5 G.P.A. in economics classes, and one of the following: STAT 2301, 2331 or 4340.
1330. Development of Economic Doctrine. Analyzes the development of modern economics. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1331. Economics Internship. Undertake an analysis of a particular economics problem at the interning firm or organization, complete 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 classes ( 4000 level or above), a 3.0 G.P.A. in economics classes, and one of the following: STAT 2301, 2331 or 4340.
1332. Business and Economic Forecasting Internship. Similar to ECO 4395, but with a focus on an econometric analysis of a particular empirical issue appropriate to the interning firm or organization. Prerequisites: ECO 3301, 3302, 5350, and 5375, a 3.0 G.P.A. in economics classes, and one of the following: STAT 2301, 2331 or 4340.
1333. Law and Economics Internship. Similar to ECO 4395, but with a focus on the economic and legal analysis of a particular issue appropriate to the interning firm or organization. Prerequisites: ECO 3301, 3302,5353, one other advanced economics course ( 4000 level or above), a 3.0 G.P.A. in economics classes, and one of the following: STAT 2301, 2331 or 4340.
1334. Departmental Distinction 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. Prerequisites: ECO 3301, 3302 , two advanced economics courses ( 4000 level or above), 3.7 G.P.A. in economics classes, 3.5 G.P.A. overall, senior standing, and one of the following: STAT 2301, 2331 or 4340.
1335. Research/ReadingSeminar in Economics. The research/reading seminar is designed for honors students and other exceptional undergraduate students at the junior or senior level who would like to investigate a select number of topics in economics in great depth. Under the guidance of a faculty member, the students will read a number of professional journal articles and books in economics and discuss the assigned readings in a seminar format. Note: This course can only be taken once. Prerequisites: ECO 3301, 3302, 3.5 G.P.A. in economics classes (or related major), 3.0 G.P.A. overall, or permission of instructor, and one of the following: STAT 2301, 2331 or 4340.
5101, 5201, 5301. Topics (to be specified in title). Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1336. Urban Economics. This course applies economic concepts to an understanding of urban form, urban growth, trends in size and structure of urban areas, and the predominant urban public issues of transportation, housing, land-use planning, and environmental controls. This course provides an opportunity to study particular topics in depth. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1337. Decision-Making Under Uncertainty. Provides a basis for the modeling of decisionmaking under conditions of incomplete information. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
1338. Strategic Behavior. This course introduces the basic concepts and tools of game theory, with applications to various areas of economics. In particular, we study how individuals and firms behave when they are well aware that their decisions affect the behavior of others. The areas of application are numerous and diverse: technology adoption, bargaining between labor unions and management, insurance, welfare policies, optimal pricing and location, division of an estate, strategy on the battlefield, etc. The various topics are unified by the techniques employed for determining the outcome in particular situations. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1339. Introductory Econometrics. Discusses the economic analysis of quantitative data and introduces computer analysis. Prerequisites: ECO 3301, and one of the following: STAT 2301, 2331, or 4340 or ITOM 2305.
1340. Law and Economics. Dick's advice in Henry VI, "Let us first kill all the lawyers," is well taken, but impractical. For better or for worse, laws and lawyers are becoming more and more important in defining how we live and how our economy operates. This course is designed to apply the tools of economic analysis to legal questions. The primary purpose of this course is to examine economic theories that explain the development of common law and constitutional law. Secondly, the course will look at the economic implication of certain laws, particularly laws regulating contracts, antitrust laws and liability rules. Prerequisite: ECO 3301 and one of the following: STAT 2301, 2331 or 4340.
1341. Political Economics. This course is a study of both methods and applications of political economics models via theoretical and empirical investigation of various topics with emphasis on asymmetric information, income redistribution and fairness, federalism and formation of institutions, and strategic behavior of special interest groups. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.
1342. Economics of Human Resources. This course examines several topics of interest to modern labor economists: individual labor supply and time allocation, human capital investments and the return to education, unemployment, job search, minimum wage, children and marriage, inequality, income mobility and immigration (both legal and illegal). The course will be equally devoted to theoretical modeling and interpreting empirical evidence, and to the analysis of policies such as subsidizing education, unemployment insurance, minimum wage, and restriction of immigration. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340. Recommended: ECO 4351.
1343. 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, migration, and credit and insurance markets. Prerequisite: ECO 3301, and one of the following: STAT 2301, 2331 or 4340.

Note: Students who have taken ECO 5360 prior to fall 2007, will not receive credit for this course.
5360. 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: ECO 3302, and one of the following: STAT 2301, 2331 or 4340.
5361. Natural Resources and Energy Economics. This course is designed to develop an understanding of the economics of energy and natural resource use and policy. Topics include natural resource supply and demand, the economics of renewable and non-renewable resource usage, sustainable economic growth, the environmental effects of natural energy conservation, energy security and the (de)regulation of U.S. electricity and natural gas markets. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340
5362. Economic Growth. This course examines the facts and theories of economic growth, the economics of technological change and the role of governments and markets in promoting or impeding economic development. Prerequisites: ECO 3301, 3302, and one of the following: STAT 2301, 2331 or 4340.
5365. Public Finance. This course begins by developing the principles to be used when evaluating a tax. This framework includes efficiency and equity considerations, incentive effects, tax incidence, and dead weight loss. These concepts are used to evaluate specific revenue sources such as taxes on personal income, corporate income, payroll and valueadded. A theoretical analysis of intergovernmental transfers will be completed and used to evaluate the structure of fiscal federalism in the United States. Prerequisites: ECO 3301, and one of the following: STAT 2301, 2331 or 4340. Recommended: ECO 3302.
5370. Cost-Benefit Analysis. Individual economic decisions coordinated through a fully functioning set of competitive markets guarantee an efficient outcome. However, in a large number of instances markets may fail to operate satisfactorily, requiring the government to intercede to promote efficiency and/or equity. This course introduces students to the tools for evaluating alternative methods of government intervention. In particular, it develops a framework for evaluating costs and benefits of economic projects from the government's point of view. Prerequisite: ECO 3301 or graduate standing, and one of the following: STAT 2301, 2331 or 4340.
5375. 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: STAT 2301, 2331 or 4340 or ITOM 2305.
5385. Data Mining Techniques for Economists. A study of data mining techniques used by economists in the fields of applied economics, marketing and finance. These techniques include classification methods, affinity analysis, and data reduction and exploration methods. Prerequisite: ECO 5350 or an equivalent course, and one of the following: STAT 2301, 2331 or 4340 .
5390. 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. Prerequisites: ECO 4368, 4378 and 5350, and one of the following: STAT 2301, 2331 or 4340.

## ENGLISH

## www.smu.edu/english <br> Associate Professor Nina Schwartz, Department Chair

Professors: Timothy Crusius, Dennis Foster, Ezra Greenspan, Ross Murfin, Jack Myers, Jasper Neel, C.W. Smith, Willard Spiegelman, Steven Weisenburger; Associate Professors: Richard Bozorth, Darryl Dickson-Carr (Director of Graduate Studies), David Haynes (Director of Creative Writing), Michael Holahan, Michael Householder, Beth Newman, Timothy Rosendale, Rajani Sudan, Bonnie Wheeler (Director of Medieval Studies); Assistant Professors: Angela Ards, Irina Dumitrescu, Daniel Moss, Martha Satz,Lisa Siraganian;Senior Lecturers:

Carolyn Channell, Jo Goyne, Pamela Lange, Tom Stone; Lecturers: Jacqueline Bradley, Mallory Dubuclet, Elizabeth Dwelle, Diana Grumbles (Director of First-Year Writing), Marta Harvell, Vanessa Hopper, Diana Howard, Mary Jackman, Harold Knight, Pauline Newton, Ona Seaney, Lori Ann Stephens, Vicki Tongate; Professor Emeritus: John Lewis.

The Bachelor of Arts 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.

Requirements for the B.A. Degree. The major requires a minimum of 33 term hours of English courses, including no more than 12 hours at 2000-level and below (of these hours, no more than three hours at 1000-level) and at least 12 hours of 4000-level courses, distributed as follows:
A. Fundamentals (six hours total):

ENGL 2311 Poetry or ENGL 2314 Doing Things with Poems
ENGL 2315 Introduction to Literary Study
B. Reading Historically - one course at the 3000- or 4000-level from each group
(12 hours):

1. Medieval Literature (c. pre-1500)
2. Early Modern Literature (c. 1500-1775)
3. Literature in the Age of Revolutions (c. 1775-1900)
4. Modern to Contemporary Literature (c. 1900-present)
C. Criticism and Theory (three hours)
D. Major Electives (12 hours)

The following courses are not acceptable as major electives: ENGL 1300, 1301, 1302, 2302 and 2305.

4000 -level courses in creative writing 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 G.P.A. of 2.0 among all courses attempted for the major.

The department strongly recommends 12 hours of foreign 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 foreign 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.)

## The Creative Writing Specialization Within the English Major

Students pursuing a Creative Writing Specialization within the English major must fulfill all requirements for the English major. All 12 elective hours within the regular major will be devoted to courses selected from the list below. 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.

ENGL 2391 Introductory Poetry Writing.
ENGL 2392 Introductory Fiction Writing.
ENGL 3391 Intermediate Poetry Writing. Prerequisite: ENGL 2391 or permission of instructor.
ENGL 3392 Intermediate Fiction Writing. Prerequisite: ENGL 2392 or permission of instructor.
ENGL 4391 Advanced Poetry Writing. Prerequisite: ENGL 3391 or permission of instructor.
ENGL 4392 Advanced Fiction Writing. Prerequisite: ENGL 3392 or permission of instructor.
ENGL 4393, 4395 Directed Studies in Poetry Writing. Prerequisite: Permission of instructor.
ENGL 4394, 4396 Directed Studies in Fiction Writing. Prerequisite: Permission of instructor.

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.

ENGL 4397 Craft of Poetry I. Prerequisite: ENGL 2391 or permission of instructor.
ENGL 4398 Craft of Fiction I. Prerequisite: ENGL 2392 or permission of instructor.
The Departmental Distinction Program. Open to seniors by invitation. To enter the program, a student ordinarily must earn an overall G.P.A. of at least 3.0 by the middle of the junior year, and a 3.5 average or better in courses fulfilling requirements for the major. Candidates for distinction must take ENGL 5310 Seminar in Literary Theory 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 Independent Studies (culminating in a Senior Thesis); or ENGL 6320-80 Graduate Proseminar in English (requires permission of instructor); or (for creative writing specialists only) ENGL 4393, 4394, 4395 or 4396 Directed Studies in Poetry Writing or Directed Studies in Fiction Writing. Candidates must earn a $B+$ or better in the option selected, and attain a 3.5 G.P.A. in all courses counting towards 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.

Requirements for the Minor in English. The minor in English requires 15 term hours of course work, 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: ENGL $1300,1301,1302,2302$ and 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)
Criticism (10-19)
Medieval (20-29)
Early Modern (30-39)
Age of Revolutions (40-49)
Modern to Contemporary (50-69)

```
1300; 1301; 1302; 2302; 2305; 2306; 2406;
3301; 3305; 3308; 5301; }530
2310; 2311; 2312; 2313; 2314; 2315; 3310;
4310;}531
1320; 3320; 3329; 4320; 4321; 4323
1330; 3330; 3331; 3332; 3335; 4330; 4331;
4332; 4333; 4336;4339
3340; 3341; 3344; 3345; 3346; 3347; 3348;
4340; 4341; 4343; 4345; 4346; 4349
1360; 1362; 1363; 1365; 2361; 3350; 3354;
3355; 3359; 3360; 3362; 3363; 3364; 3365;
```

|  | $\begin{aligned} & 3366 ; 3367 ; 3368 ; 3375 ; 3376 ; 4350 ; 4351 ; \\ & 4356 ; 4360 ; 4369 \end{aligned}$ |
| :---: | :---: |
| Other Literature and Language Courses |  |
| (70-89) | 1370; 1380; 1385; 2371; 3189; 3370; 3371; |
|  | 3373; 3374; 3376; 3377; 3378; 3379, 3380; |
|  | 3381; 3382; 3383; 3389; 4370; 5378; 5381 |
| Creative Writing (90-99) | 2391; 2392; 3391; 3392; 4391; 4392; 4393; |
|  | 4394; 4395; 4396; 4397; 4398 |

1300. 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.
1301. 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.
1302. 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.
1303. 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 to Hilltop Scholars placing out of ENGL 1301.

## Note: Courses numbered 1320-1380 have no prerequisites.

1320. Chivalry. The development of the ideal of chivalry from its origins in the medieval legends of King Arthur to modern literature.
1321. The World of Shakespeare. Introductory study of eight or nine of Shakespeare's important plays, placed in historical, intellectual and cultural contexts.
1322. The American Heroine: Fiction and Fact. Images of the American heroine in popular and traditional literature, studied in terms of their reflection of the evolving roles of American women.
1323. 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.
1324. 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."
1325. 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.
1326. Tragedy and the Family. The study of individual tragedies and kindred texts in various genres and from various periods.
1327. Introduction to Literature. An introduction to the study of literature including a range of literary genres and periods, varying by term.
1328. History of British Literature. A survey of the history of British literature, from its medieval beginnings to the 20th century.
1329. Interpreting, Understanding and Doubting. Insights from literature, linguistics, philosophy, psychology and science that explore major modes of interpreting the world in the 20 th century and that define what constitutes knowledge in the 21st century. Open only to students in the University Honors Program.
1330. 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: ENGL 2305.
1331. 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: ENGL 2305

## NOTE: ENGL 1301 or $\mathbf{2 3 0 5}$ or departmental approval is a prerequisite for all courses

 listed below.2302. 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.
2303. Imagination and Interpretation. An introduction to literary studies based on topics that will vary from term to term.
2304. Poetry. Analysis, interpretation and appreciation of poetry, with attention to terms and issues relevant to the genre.
2305. Fiction. Analysis, interpretation and appreciation of fiction, with attention to terms and issues relevant to the genre.
2306. Drama. Analysis, interpretation and appreciation of dramatic works, with attention to terms and issues relevant to the genre.
2307. 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.
2308. 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.
2309. Literature and Myth. A study of myth as story, as content for literature and as an analytic term.
2310. Fortune, Fame and Scandal: The American Dream of Success. 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.
2371 (ANTH 2321, CFA 3301). 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.
2311. Introductory Poetry Writing. Workshop in which student poetry and directed exercises in basic techniques form the content of the course.
2312. Introductory Fiction Writing. Workshop in theory and technique and writing of fiction.

ENGL 1302, 2306 or departmental approval is a prerequisite for all of the courses listed below:
3189. 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.
3301. Advanced Expository Writing. Emphasis on styles and formats appropriate to academic writing, and on individual problems and needs.
3305. Writing and the Public Intellectual. Study and practice of writing for a broad, well informed public, including history and current status of the public intellectual. Includes advanced practice in revising and editing expository prose.
3308. 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.
3310. 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.
3320. 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 different subtitle.
3322. 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: ENGL 1301 or 2305 or departmental approval.
3329 (CF 3302, MDVL 3329). 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.
3330. Topics in Early Modern Literature. Study of a theme, issue or topic in writers from c. 1500 to 1775 , varying by term. May be repeated for credit under different subtitle.
3331. 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.
3332. 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.
3335. 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.
3340. Topics in British Literature in the Age of Revolutions. Study of a theme, issue or topic in British literature from c. 1775-1900, varying by term. May be repeated for credit under different subtitle.
3341. 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.
3344. Victorian Gender. The literature and social history of the period, exploring the perceived "truths" about gender that prevailed in 19th-century Britain and contrasting those "truths" with the responses of contemporaries as well as with the realities that contradict them.
3345. 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.
3346. 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.
3347. 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.

3348 (CFA 3374). 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.
3350. 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.
3354. Non-Western Culture and Literature. Major 20th-century "third world" literary and cultural texts with emphasis on political and economic contexts of colonialism and postcolonialism.
3355. 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.

3359 (CF 3359). 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.
3360. 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.
3362. African-American Literature. Major African American writers and their works, and various social and historical influences.
3363. 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 will be helpful to students, but is not a prerequisite for the course.
3364 (CF 3370, WGST 3370). 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.
3365 (CF 3398). 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.
3366. 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.
3367 (CF 3364). 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.
3368 (CFA 3378). Literary and Artistic Taos: The Town Seen Through Multiple Lenses. Survey of the literary and artistic heritage of early-twentieth-century Taos, centered on the Native Americans, the artistic and literary salon of Mabel Dodge, and D.H. Lawrence.
3370. Special Topics. Examination of a subject that includes material from a range of historical periods. Examples could include "Pastoral Literature," "Shakespeare in England and India," "Irony, Satire and Politics." Topics vary by term; may be repeated for credit under different subtitle.

3371 (CF 3363, HIST 3357). Joan of Arc: History, Literature and Film. The life and later reception of the extraordinary peasant girl, Joan of Arc (ca. 1412 to 1431), who in the two years before she was burned at the stake changed the course of European history.
3373 (FL 3359). 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.
3374 (CF 3345). 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.
3375. Expatriate Writers: The Invention of Modernism. Introduction to the rise of literary modernism in early 20th-century Europe through selected readings of expatriate authors working in Paris.
3376. Literature of the Southwest. Nineteenth- and 20th-century Anglo, Hispanic and Native American literature of the Southwestern United States.
3377. 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.
3378. 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.

3379 (CFA 3379). 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.
3380 (CF 3380). 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.
3381. 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.
3382. 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.
3383 (CF 3305). Literary Executions: Imagination and Capital Punishment. The literary treatment of capital punishment in drama, poetry, novel and biography.
3389. 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.
3391. Intermediate Poetry Writing. Prerequisite: ENGL 2391 or permission of instructor.
3392. Intermediate Fiction Writing. Prerequisite: ENGL 2392 or permission of instructor.

NOTE: Twelve hours of English, including ENGL 2311 or 2314 and including ENGL 2315 (excluding 1300, 1301, 1302, 2302, 2305), or instructor's approval is prerequisite for all courses numbered 4310 through 4389.
4310. 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.
4320. Medieval Writers. Intensive study of one or two medieval writers. May be repeated for credit under different subtitle.
4321. 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.
4323. 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.
4330. 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.
4331. Restoration and Enlightenment Writers. Intensive study of one or two major writers from the period. May be repeated for credit under different subtitle.
4332. Studies in Early Modern British Literature. Advanced study of British literature from c. 1500 to 1775, focused on a specified problem, topic or theme. May be repeated for credit under different subtitle.
4333. Shakespeare. Advanced studies in Shakespeare's poetry and plays, in historical, cultural and theatrical contexts. May be repeated for credit under different subtitle.
4336. 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.
4339. 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.
4340. Romantic Writers. Intensive study of one or two major British writers from the period. May be repeated for credit under different subtitle.
4341. Victorian Writers. Intensive study of one or two major British writers from the period. May be repeated for credit under different subtitle.
4343. 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.
4345. 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.
4346. 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.
4349. 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.
4350. Modern and Contemporary British Writers. Intensive study of one or two major writers from the period. May be repeated for credit under different subtitle.
4351. 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.
4356. Modern and Contemporary American Writers. Intensive study of one or two major writers from the period. May be repeated for credit under different subtitle.
4360. 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.
4369. 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.
4370. 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.
4391. 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.
4392. 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.
4393, 4395. Directed Studies in Poetry Writing. Prerequisite: Open only to advanced students by permission of instructor.

4394, 4396. Directed Studies in Fiction Writing. Prerequisite: Open only to advanced students by permission of instructor.
4397. 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.
4398. 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.
5301. Discourse in the Social Sciences. History, characteristics and functions of scientific writing with a focus on the rhetoric of inquiry and science as persuasion. Practice in editing scientific prose. Prerequisite: Permission of instructor.
5309. 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.
5310. Seminar in Literary Theory. A seminar for candidates for departmental distinction, designed to acquaint them with particular approaches to literature. Prerequisite: Permission of instructor.
5378. Linguistics: General. Introduction to the study of language as a part of human culture.
5381, 5382, 5383, 5384. 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

Coordinating Committee: Associate Professor and Director: Bonnie Jacobs (Earth Sciences); Professor: Michael Lattman (Chemistry); Professor: Larry Ruben (Biological Sciences); Professor: Robert Gregory (Earth Sciences). Chemistry: Professors: Edward Biehl, John Buynak, Michael Lattman, John Maguire, Mark Schell, Patty Wisian-Neilson; Associate Professors: Werner Horsthemke, David Son; Brent Sumerlin; Earth Sciences: Professors: David Blackwell, Robert Gregory, Eugene Herrin, Louis Jacobs, James Quick, Brian Stump, John Walther, Crayton Yapp; Associate Professors: Bonnie Jacobs, Neil J. Tabor; Biological Sciences: Professors: Christine Buchanan, Richard Jones, William Orr, Larry Ruben, John Ubelaker, Steven Vik; Associate Professors: Robert Harrod, Pia Vogel; Assistant Professor: James Waddle.

The natural systems that constitute the 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 the 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 the 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 post-graduate 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 will come together their senior year in a multidisciplinary seminar in environmental science. Juniors and seniors may do an internship (e.g., with an environmental lawyer, an assessment and remediation company or a nonprofit agency) for course credit and by special arrangement.

A total of 122 credits is required for a Bachelor of Science in Environmental Science. Included are 30 credits in general education, 24 credits as free electives (can be 27 credits if the information technology requirement is satisfied with the Environmental Sciences Program), 50 credits of core courses, and 18 credits of environmental science electives taken with an emphasis in chemistry, earth science or biology.

## Core Courses <br> (50 course credits)

Biology (seven credits):
BIOL 1402 Introductory Biology II
BIOL 3307 (GEOL 3307) Ecology
Chemistry (15 or 16 credits):
CHEM 1303 General Chemistry I
CHEM 1113 General Chemistry I Laboratory
CHEM 1304 General Chemistry II
CHEM 1114 General Chemistry II Laboratory
CHEM 3371 Organic Chemistry I
CHEM 3117 Organic Chemistry I Laboratory
and either
CHEM 3372 and 3118 Organic Chemistry II and Organic Chemistry II Laboratory or CHEM 3351 Quantitative Analysis
Earth Sciences (11 credits):
GEOL 1301 Earth Systems or
GEOL 1315 Introduction to Environmental Sciences
GEOL 3451 Earth Materials I
GEOL 3452 Earth Materials II
Environmental Science (three credits):
GEOL 3363 Environmental Geology Seminar
Mathematics (six credits):
MATH 1337 Calculus with Analytic Geometry I
MATH 1338 Calculus with Analytic Geometry II
Physics (eight credits):
PHYS 1303 Introductory Mechanics and
PHYS 1105 General Physics Laboratory I or
PHYS 1307 General Physics I and
PHYS 1105 General Physics Laboratory I and
PHYS 1304 Introductory Electricity and Magnetism and
PHYS 1106 General Physics Laboratory II or
PHYS 1308 General Physics II and
PHYS 1106 General Physics Laboratory II

## Chemistry Emphasis, Upper-Division Courses

(18 credit hours)
Required (nine or 10 credits):
CHEM 3372 and 3118 Organic Chemistry II and Organic Chemistry II Laboratory or
CHEM 3351 Quantitative Analysis
CHEM 5381 Physical Chemistry or 5383 Physical Chemistry I
Electives (choose nine or more credits):
CHEM 4397 Research
CHEM 5390 Environmental Chemistry
GEOL 3366 Environmental Geology and Geochemical Cycles
GEOL 5384 Hydrogeology
GEOL 5386 Geochemistry
GEOL 3353 Modern and Ancient Climates
ME 5317 Groundwater Hydrology and Contamination

# Earth Sciences Emphasis, Upper-Division Electives (choose 18 credit hours) 

CHEM 3351 Quantitative Analysis
CHEM 3372 and 3118 Organic Chemistry II and Organic Chemistry II Laboratory
CHEM 5381 or 5383 Physical Chemistry or 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 and/or 4298 Senior Thesis Research Project (up to 4 credits) 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
ENCE 3341 Introduction to Solid and Hazardous Waste Management
STAT 2331 or 4340 Introduction to Statistical Methods or Statistical Methods for Engineers and Applied Scientists

## Biology Emphasis

(18 credit hours)
Required (four credits)
BIOL 1401 Introductory Biology I
Electives (choose 14 or more credits)
BIOL 3303 Evolution
BIOL 3304 Genetics
BIOL 3306 Physiology
BIOL 3311 Tropical Ecology and Sustainable Development (SMU-in-Costa Rica)
BIOL 3312 Wildlife Ecology (SMU-in-Kenya)
BIOL 3342 Plant Kingdom
BIOL 3343 Field Botany (Taos)
BIOL 3347 Systematic Botany (Taos)
GEOL 3353 Modern and Ancient Climates
BIOL 3354 Parasitology
BIOL 3357 Biology of the Invertebrates
BIOL 3403 Microbiology
BIOL 5166 Vertebrate Anatomy Lab (Corequisite BIOL 5366)
BIOL 5366 Vertebrate Anatomy and Origins (Corequisite BIOL 5166)
BIOL 5110 Biological Chemistry Lab (Co- or Prerequisite BIOL 5310)
BIOL 5311 Biological Chemistry: Metabolism

## SMU Abroad Courses

ENSC 3310. Economic and Ethical Issues in Sustainable Development. 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 3311. Principles of Resource Management. 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)
ENSC 3312. Directed Research. Scientific writing, oral, graphic and tabular presentation of results derived from experimental design, field techniques, basic descriptive statistics and parametric and nonparametric quantitative analysis. (SMU-in-Costa Rica only)
ENSC 3313. 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 3315. Environmental Policy and Socioeconomic Values. 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)
ENSC 3316. Directed Research. Scientific writing, oral, graphic and tabular presentation of results derived from experimental design, field techniques, basic descriptive statistics and parametric and nonparametric quantitative analysis. (SMU-in-Kenya only)

## Internship Course

ENSC 3322. 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/dedman/majors/environmentalstudies

 Professor Bonnie Jacobs, DirectorThe B.A. in Environmental Studies provides students with the tools necessary to address society's environmental problems through careers in government, nongovernmental or educational organizations, public policy, business and related fields. It is an interdisciplinary program that incorporates courses from numerous departments and three schools around 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.

Requirements for the B.A. Degree. 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 Prerequisite: BIOL 1402 or permission of instructor.
    GEOL one 1000-level class of student's choice.
    GEOL }1301\mathrm{ Earth Systems
    GEOL 1307 The Solar System
    GEOL }1308\mathrm{ Evolution and Life History
    GEOL }1313\mathrm{ Earthquakes and Volcanoes
    GEOL 1315 Introduction to Environmental Sciences (Dallas and SMU-in-Taos)
    GEOL 3353 Modern and Ancient Climates Prerequisite: GEOL 1301 or permission of
        instructor.
    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 Prerequisite: CEE Math
        Fundamentals or equivalent.
    Senior Thesis with a field, research or other practical component taken in a department
    relevant to the student's interests. For example:
        ANTH 4391 or 4392 Independent Study Prerequisite: Approval of the director of
            Undergraduate Studies and a faculty sponsor.
        CCJN 5308 Honors Thesis
        ECON 4398 Departmental Distinction in Economics Prerequisite: 3.7 G.P.A. in
            economics classes and 3.5 G.P.A. overall. Student must have a faculty sponsor prior
            to enrollment.
        GEOL 4399 Integrative Research Prerequisite: Permission of faculty adviser.
    ENSC 3312 Directed Research (SMU-in-Costa Rica)
    ENSC 3316 Directed Research (SMU-in-Kenya)
```


## Elective Courses

```
A total of \(\mathbf{1 5}\) credit hours required, a minimum three credit hours at 3000 level or above. In consultation with an academic adviser, choose at least one course from each group.
```


## Natural Sciences and Statistics

(Minimum of three credit hours required.)
BIOL 3303 Evolution Prerequisite: BIOL 1401, 1402 and 3304.
BIOL 3308 Biology of Marine Mammals (SMU-in-Copenhagen) Prerequisite: BIOL 1401 and 1402.
BIOL 3309 Marine Biology of European Coastal Waters (SMU-in-Copenhagen)
Prerequisite: BIOL 1401 and 1402; CHEM 1303 and 1113.
BIOL 3310 Ecology and Human Impact in the North and Baltic Seas (SMU-inCopenhagen) Prerequisite: BIOL 1401 and 1402; CHEM 1303 and 1113.
BIOL 3342 Plant Kingdom
BIOL 3343 Field Botany (SMU-in-Taos)
ENCE 2421 Aquatic Chemistry Prerequisite: CHEM 1303 and 1304.
ENSC 3313 Techniques in Wildlife Management (SMU-in-Kenya)
GEOL 3330 Resources and the Environment Prerequisite: 1300-level course in Earth Sciences or permission of instructor.
GEOL 3340 Face of the Earth Prerequisite: 1300-level course in Earth Sciences or permission of instructor.
GEOL 3359 Computer Methods in Geological Sciences Prerequisite: Permission of instructor.
GEOL 3363 Environmental Geology Seminar (Air Quality) Prerequisite: 1300-level course in Earth Sciences or permission of instructor.

GEOL 3366 Environmental Geology and Geochemical Cycles (Global Geochemical Pollution) Prerequisite: High school algebra and chemistry and one 1300-level course in Earth Sciences.
GEOL 3472 Principles of Sedimentation Prerequisite: Credit or registration for GEOL 3451 or permission of instructor.
GEOL 5370 Global Change Prerequisite: GEOL 3340 or permission of instructor.
GEOL 5368 Paleoecology Prerequisite: GEOL 3369 or permission of instructor.
GEOL 5384 Hydrogeology Prerequisite: MATH 1338 and CHEM 1304 or permission of instructor.
STAT 3380 Environmental Statistics Prerequisite: STAT 2301 or 2331 or equivalent.
STAT 5371 Experimental Statistics I Prerequisite: Junior standing or permission of instructor.
STAT 5372 Experimental Statistics II Prerequisite: STAT 5371.

## Social Sciences and Humanities

(Minimum of three credit hours required.)
ANTH 3319 Human Ecology
ANTH 3374 Cultures and Environments of the Southwest (Dallas and SMU-in-Taos)
ANTH 3384 Paradise Lost?: Human Environmental Impacts (Dallas and SMU-in-Taos)
ANTH 3385 Sustainable Living
ANTH 4346 Environmental Anthropology Prerequisite: ANTH 2301.
ECO 4366 Economics of the Public Sector Prerequisite: ECO 1301.
ECO 4382 Economics of Regulated Industries Prerequisite: ECO 3301.
ECO 5301 Environmental Economics Prerequisite: ECO 3301 and 3302, or permission of instructor.
ECO 5360 Economic Development Prerequisite: ECO 3301 and 3302 or equivalent courses.
ECO 5361 Natural Resources and Energy Economics Prerequisite: ECO 3301 and 3302.
ENSC 3310 Economic and 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
SOC 4321 Immigration and Population Issues Prerequisite: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.

## Business and Engineering <br> (Minimum of three credit hours required.)

ENCE 1302 Introduction to Environmental and Civil Engineering
ENCE 2304 Introduction to Environmental Engineering and Science Prerequisite: CHEM 1303 and MATH 1338.
ENCE 3341 Introduction to Solid and Hazardous Waste Management Prerequisite: ENCE 2304 and 2421.
ENCE 3355 Environmental Impact Evaluation, Policy, and Regulation Prerequisite: ENCE 2304.
ENCE 5325 Disaster Management
MNO 3375 Corporate Ethics and Organizational Responsibility Prerequisite: MNO 3370 (for Cox majors and minors only).
MNO 4371 Leadership and Culture Prerequisite: MNO 3370 (for non-Cox students, approval of Cox BBA Advising Office, junior standing and two courses in psychology or sociology may be substituted for the prerequisite.)

## ETHNIC STUDIES

www.smu.edu/dedman/majors/ethnicstudies
Professor Kenneth Hamilton, Director
Ethnic studies offers an interdisciplinary program that examines the AfricanAmerican 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. Under ethnic studies, the following options are offered:

- The major leading to the Bachelor of Arts in Ethnic Studies with specialization in either African and African-American Studies (33 hours) or Mexican-American Studies (34 hours).
- The major leading to the Bachelor of Science in Ethnic Studies with specialization in either African and African-American Studies (36 hours) or MexicanAmerican 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 the social sciences and, consequently, requires less work in methodology and statistics.
A. Foundation. Six hours required of all students majoring in ethnic studies. ETST 2301 Race and Ethnicity in the United States (Colisted SOCI 3305 and CFA 3310) SOCI 3370 Minority-Dominant Relations
B. Basic Courses. Eighteen hours comprised of the minor in African and AfricanAmerican Studies, and 19 hours comprised of the minor in Mexican-American Studies form the basis of the ethnic studies major.

1. African and African-American Studies minor (nine 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 to 1877
HIST 3314 African Americans in the United States, 1877 to the Present
b. Nine hours of additional basic courses, of which six 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
2. Mexican-American Studies minor ( 10 of the 19 hours required must be at the 3000 level or above):
a. Ten hours of core courses are required.

ETST 4352 Conversations and Community (Colisted SPAN 4352)
HIST 3324 The Mexican Americans, 1848 to the Present
SOCI 3372 Chicanos in the Southwest
SPAN 1401 Beginning Spanish (or higher level)
b. Nine hours of additional basic courses selected from the following:

ANTH 3312 Meso-American Archaeology
ARHS 3383 The Ancient Maya
ARHS 3385 The Aztecs Before and After the Conquest: Mesoamerica, 1400-1600
ENGL 3363 Chicana/Chicano Literature
FL 3306 The Heart of Aztlán: Chicano Literature of the Southwest
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
C. Cross-Cultural Requirement. Ethnic studies majors in the African and AfricanAmerican option are required to take three hours in Mexican-American Studies. Majors in the Mexican-American Studies option are required to take three hours in African-American Studies.
D. Supporting Courses. 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. Thirty-six hours are required to complete the B.S. option in African and African-American Studies. Thirty-seven 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)

2301 (SOCI 3305, CFA 3310). 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 within a global context. No prerequisites.
2305. 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.
4352 (SPAN 4352). 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. Field work, away from
campus, will include a maximum of two hours per week in addition to the required three contact hours in the classroom. Prerequisites: C- or better in SPAN 2302 and approval of instructor for language majors. Approval of instructor for all other candidates.

## EVENING DEGREE PROGRAM

www.smu.edu/dedman/eveningstudies
The Evening Degree Program offers multidisciplinary Bachelor of Humanities (B.H.) and Bachelor of Social Sciences (B.S.S.) degrees for students who wish to complete their undergraduate education in the evening on a part-time basis. Applicants must have earned at least 45 term hours of transferable course work with a 2.5 G.P.A., including the Written and Mathematical Sciences Fundamentals requirements of the General Education Curriculum. In addition, applicants must meet the University's admission requirements for transfer students.

The Bachelor of Humanities (B.H.) degree requires the completion of 36 term hours in course work taken from art history, English literature, history, philosophy and/or religious studies. Courses are selected in consultation with the major adviser and include the following:

First Concentration (15 term hours, including 6 hours advanced)
Second Concentration (nine term hours, including 6 hours advanced)
Third Concentration (nine term hours, including 6 hours advanced)
Fourth Concentration (three term hours)
The Bachelor of Social Sciences (B.S.S.) degree requires the completion of 36 term hours in course work taken from anthropology, economics, political science, psychology and/or sociology. Courses are selected in consultation with the major adviser and include the following:

First Concentration (15 term hours, including 6 hours advanced)
Second Concentration (nine term hours, including 6 hours advanced)
Third Concentration (nine term hours, including 6 hours advanced)
Fourth Concentration (three term hours)
For more information concerning admission and program requirements, contact the Dedman Dean's Office, Southern Methodist University, 214 Dallas Hall, PO Box 750235, Dallas TX 75275-0235; phone 214-768-2298.

## FOREIGN LANGUAGES AND LITERATURES

## fllc.smu.edu

French: Associate Professor: William Beauchamp; Assistant Professors: Barbara Abad, Marius Conceatu, Dayna Oscherwitz; Senior Lecturer: Rita Winandy; Lecturers: Gwen Aaron, Denis Bettaver, Paola Buckley, Heather Garrett-Pelletier, Martine Kincaid; Adjunct Lecturer: Kathleen Hugley-Cook; Chinese: Lecturers: Yan Xia, Xiaoshen Zhang; German: Associate Professors: Gordon Birrell, Marie-Luise Gättens; Visiting Assistant Professor: Sebastian Wogenstein; Hindi: Adjunct Lecturer: Manju Bansal; Italian: Lecturers: Brandy Alvarez, Damiano Bonuomo, Teresa Brentegani; Adjunct Lecturer: Maria Patel; Japanese: Lecturer: Keiko Schneider; Latin: Adjunct Lecturer: Patti Rawlins; Russian: Adjunct Lecturer: Tatiana Zimakova; Spanish: Associate Professors: Olga Colbert, Denise DuPont, Francisco Morán, Elizabeth Russ; Assistant Professors: Luis Maldonado-Peña, Alberto Pastor, Rubén Sánchez-Godoy, Gabriela Vokic, Alicia Zuese; Senior Lecturers: Verónica León, Betty Nelson; Lecturers: Miroslava Detcheva, Maria Eguez, Susana Fernandez-Solera, George Henson, Linda Koski, Leticia McDaniel, Angie Morón-Nozaleda, Roger Parks, Luis Polanco, Elizabeth Rojas-Auda, Daniel Wiegman, Adjunct Lecturers: Gabriel Guillen, Gabriel Martinez-Serna.

The B.A. degree is offered in French, German, Italian Area Studies, Spanish and Foreign Languages.

Academic minors are available in Chinese, French, German, Italian, Italian Area Studies, Japanese, Latin, Russian Area Studies and Spanish.

## Requirements for Departmental Distinction

1. Overall 3.5 G.P.A. by the middle of the junior year.
2. Overall 3.7 G.P.A. 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.

## B.A. in Foreign Languages

Students wishing to specialize in two foreign languages may receive the B.A. degree in Foreign Languages by completing the requirements for the minor plus two additional advanced courses in Language I, and by completing the requirements for the minor in Language II. Courses are to be selected in consultation with the major adviser in Language I. Minors in area studies may not be applied to this major. Language I must be chosen from French, German, Italian and Spanish.

## Chinese

Requirements for the Minor in Chinese: Seventeen term hours, including 14 hours of language training, beginning with the intermediate level or higher, as well as one course in Chinese culture, history or literature, as follows:

1. CHIN 2401 and 2402.
2. Two courses from the following: CHIN 3311, 3312, 4381 and 4382.
3. One course from the following list of supporting courses:

CHIN 4381, CHIN 4382, FL 3310, 3312, 3325, 3395, 3397, 3398; HIST 3393, 3395, 3398; RELI 3377, RELI 3378.
Students taking CHIN 4381 and 4382 for the language component of the requirement must take another course from the list of supporting courses. Students testing into any course above 2402 will have to earn nine credit hours in residence (six credit hours in Chinese language and three credit hours in Chinese culture) in order to receive the minor in Chinese.

## The Courses (CHIN)

1401, 1402. 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. Four credits per term. Prerequisite for 1402: $C$ - or better in 1401 or permission of area chair.
2401, 2402. 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. Four credits per term. Prerequisite for 2401: $C$ - or better in CHIN 1402 or permission of area chair. Prerequisite for 2402: C- or better in CHIN 2401 or permission of area chair.
3311. Advanced Chinese. Emphasizes the requirement 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.
3312. Advanced Chinese. (Second 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.
4185, 4285, 4385. Internship in Chinese. Offers students experience in organizations where knowledge of Chinese and the cultures of Chinese-speaking countries is relevant: Corporations involved in international business, government agencies, health clinics, etc. Prerequisite: Junior or senior standing; an overall G.P.A. of 3.0 or higher; G.P.A. in Chinese of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.
4381. Readings in Chinese Literature and Culture. An upper-level course designed for students who have finished third-year Chinese. Students will enhance their four language skills, especially reading and writing, through a wide variety of primary, unedited texts. Prerequisite: CHIN 3312 or consent of area chair.
4382. Chinese Culture and Society in Film. An upper-level 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.

## Foreign Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)
FL 3310 Transnational Chinese Cinema
FL 3312 Women in Modern China
FL 3325 Perspectives on Modern China
FL 3395 Journey to China

## Danish (DNSH)

1301. Danish Language, Level One. Three-hour lecture, beginning Danish, level one. Offered in SMU-in-Copenhagen only.

## French

All courses are conducted in French.
Requirements for the B.A. Degree in French: Twenty-eight credit hours in advanced French courses beginning at the 3000 level. Courses are to be selected in consultation with the major adviser and must include the following:

## 1. FREN 3455, 3356, 4370.

2. Any two courses chosen from among 4371, 4372, 4373, 4374, 4375, 4376.
3. Six hours of 5000-level courses.
4. Six elective hours at either the 4000 or 5000 level.

Study with SMU-in-Paris and/or SMU-in-the-South of France is strongly recommended.

Requirements for the Minor in French: A total of 20 hours, including:

1. FREN 2401 or the equivalent.
2. Sixteen advanced hours: FREN 3455, 3356, 4370 and two additional courses at the 4000 level.

## The Courses (FREN)

## Language Courses

1401, 1402. Beginning French. Stresses acquisition of basic skills: speaking, listening comprehension, reading and writing. Five classes per week. Four credits per term. Prerequisite for 1402: $C$ - or better in 1401 or permission of area chair.
2201. France Today: Culture, Society, 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)
2401. Intermediate French. Continues to strengthen the four language skills, with added emphasis on reading and writing. Five classes per week. Four credits per term. Prerequisite: $C$ - or better in FREN 1402 or permission of area chair.
3356. 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. Prerequisite: $C$ - or better in FREN 3455.
3455. Advanced French I. 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. Four credits per term. Prerequisite: C- or better in FREN 2401.
4103. Advanced Readings in French. Optional one-hour credit 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 course materials in original French, as well as to discuss and write about them in French. Corequisite: FL 3349/ CF 3349/HIST 3392; Prerequisite: $C$ - or better in FREN 4370 or equivalent and consent of instructor.
4185, 4285,4385. 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 G.P.A. of 3.0 or higher; G.P.A. in French of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.
4355. 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. Prerequisites: $C$ - or better in FREN 3455 and 3356.
4356. 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. Prerequisites: $C$ - or better in FREN 3455 and 3356.
4357. 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 French 3455 and 3356.

## Literature and Culture Courses

4365. 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 3356 and 4370, or permission of the instructor and French area chair.
4366. 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 FREN 3455 and 3356 .
4367. 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 French 3455, 3356 and 4370.
4368. 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 French 3455, 3356 and 4370.
4373, 4374. French Civilization. The evolution of French society, with emphasis on cultural, artistic and intellectual trends. Prerequisites: $C$ - or better in FREN 3455 and 3356. (SMU-in-Paris and SMU-in-the-South of France only)
4369. Introduction to French History and Culture. Survey of French political and cultural history from Roman Gaul to the Fifth Republic. Characteristic institutions, social groups and individuals. Key cultural myths. Prerequisites: C- or better in French 3455, 3356 and 4370.
4370. 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 French 3455, 3356 and 4370.
4371. Commercial French for International Trade. An advanced course for international trade and communication. Prerequisites: C- or better in FREN 3455 and 3356.

## 5180. Independent Study.

5320, 5321. 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. Prerequisites: $C$ - or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.
5334, 5335. Genre Studies. The examination of the works of several authors as a means of understanding the nature and evolution of a particular genre. Specific topics vary. Prerequisites: $C$ - or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.
$\mathbf{5 3 4 4}, \mathbf{5 3 4 5}$. Literary Movements. The exploration of the conventions that shape a specific movement through a reading of representative texts by various authors. Specific topics vary. Prerequisites: C- or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.
5350, 5351. Problems in French Literature. The definition of a particular theme as elaborated by a group of writers, usually covering different time periods and genres. Specific topics vary. Prerequisites: $C$ - or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.
5361. Literary Translation: Theory and Practice. Explores the relationship between interpretation and translation. Individual projects in a workshop setting. Prerequisites: $C$ - or better in FREN 4371 and 4372.

5365, 5366. Topics in French and Francophone Cinema. A seminar in French and Francophone film studies. Topic varies. Prerequisites: $C$ - or better in FREN 4370 and any two other courses at the 4000 level, or permission of area chair.

5367, 5368. 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.

5380, 5381. Tutorial for Juniors and Seniors. By invitation of the entire area only. Special project set up with the help of the area chair. Prerequisites: Permission of the department.

## Foreign Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section. These courses do not count toward the French major. They are electives.)

FL 3361 Special Topics: French Literature in Translation (SMU-in-Paris only)
FL 3365, 3366 Special Topics: French Literature in Translation

## German

All courses are conducted in German.
Requirements for the B.A. Degree: Twenty-four term hours of courses at the 3000 level and above. Courses are to be selected in consultation with the major adviser and must include the following:

[^5]3. Six advanced courses to be selected in consultation with the major adviser.

Study in the SMU-in-Weimar summer program or in an approved term or junioryear program in a German-speaking country is highly recommended. Suggested electives outside the German area: a second foreign language; literary criticism; other foreign literature in translation; English and American literature; courses in linguistics, semiotics or philology; courses in German art history, philosophy or history.

Requirements for the Minor in German: Eighteen term hours of German as follows:

1. GERM 2311, 2312.
2. GERM 3311.
3. Three additional advanced courses to be selected in consultation with the adviser.

The Courses (GERM)
1101. Conversational Practice in German. An introduction to the German sound system and systematic practice of simple speech patterns.
1303. Basic Conversation. Systematic description of speech patterns and of carefully designed discussion models for students with no prior knowledge of German.
1401, 1402. Beginning German. Stresses acquisition of basic skills: Speaking, aural comprehension, reading and writing. Classes meet five hours a week. Four credits per term. Prerequisite for 1402: C- or better in 1401 or permission of area chair.
2101. Conversational Practice in German. Systematic practice of speech patterns and simple discussion models as well as rapidity drills and free delivery practice. Prerequisite: GERM 1402 or the equivalent, or permission of instructor.
2311, 2312. Culture, Grammar, Literature. Second-year German. Discussions and compositions based on literary and cultural texts. Review of grammar. Language laboratory. Prerequisite for 2311: $C$ - or better in GERM 1402 or permission of area chair. Prerequisite for 2312: $C$ - or better in GERM 2311 or permission of area chair.
3311. 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: $C$ - or better in GERM 2312 or the equivalent.
3313. Germany Today: People, Culture, Society. Explores current German culture; readings in newspapers and magazines to acquaint students with today's German cultural and political scene; conversations, oral presentations and compositions. Prerequisite: $C$ - or better in GERM 3311 or permission of instructor.
3370. Advanced German Grammar and Usage. Intensive study of advanced grammatical forms, syntactical structures and usage distinctions in modern German. Weekly short written assignments. Course is not open to native speakers of the language. Prerequisite: $C$ - or better in GERM 3311 or permission of instructor.
4185, 4285, 4385. Internship in German. Offers students 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 G.P.A. of 3.0 or higher; G.P.A. in German of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.

## German Literature Courses

3320. Contemporary German Culture. An exploration of the German culture scene through magazine and newspaper articles, short stories, television and films from the post-war era to the present. Prerequisite: $C$ - or better in GERM 3311 or permission of instructor.
3321. Great German Stories: Kafka, Mann, Wolf and Others. Short narrative forms from the beginning of the 20th century to the present: Mann, Kafka, Brecht, Böll, Seghers, Bachmann, Wolf and others. Includes consideration of two post-war German literatures (the German Democratic Republic and the Federal Republic). Prerequisite: $C$ - or better in GERM 3311 or permission of instructor.
3322. 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: $C$ - or better in GERM 3320 or 3313, or permission of instructor.
3323. Modern Drama. Critical reading of dramatic works by major German, Austrian and Swiss authors, with some attention to critical theory: Büchner, Schnitzler, Brecht, Dürrenmatt, Aichinger, Bachmann, Müller, Jelinek and others. Prerequisite: C- or better in GERM 3320 or 3313, or permission of instructor.
3324. Nineteenth-Century Stories, Fairy Tales and Novellas. Short narrative forms from Romanticism through Realism to fin-de-siècle Vienna: Grimm, Eichendorff, Kleist, Storm, Schnitzler and others. Prerequisite: C- or better in GERM 3320 or 3313, or permission of instructor.
3325. Great Plays for Listening. Selections from conventional to experimental post-war plays by Böll, Dürrenmatt, Aichinger, Mayröcker and others. Prerequisite: $C$ - or better in GERM 3320 or 3313 , or permission of instructor.
3326. History, Culture and Identity in Post-War 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: $C$ - or better in GERM 3320 .
3327. Childhood and Youth in German Literature and Film. The course traces the representation of childhood and youth through German literature and film from the 19th century to the present. Prerequisites: GERM 3320 or 3330.
3328. 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: $C$ - or better in any 4000-level course, or permission of instructor.
3329. Problems with the Self. Poems, essays and novellas dealing with the perception of self in various periods of German literature. Goethe, Bettina von Arnim, Büchner, Mann and others. Prerequisite: $C$ - or better in any 4000-level course, or permission of instructor.
3330. Directed Studies. Permission of department.

## Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)
FL 3369 Perspectives on Modern Germany

## Hindi (HIN)

1401, 1402. Beginning Hindi. Introduction to standard Hindi. Emphasizes intensive drills on speaking and listening with special attention to individual pronunciation and intonation. Reading and writing in the Hindi writing system (Devanagari) will be introduced and studied. Prerequisite for 1402: $C$ - or better in 1401 or permission of the area adviser.
2401, 2402. Intermediate Hindi. Emphasizes intensive speaking and listening drills with special attention to individuals, along with reading and writing in the Devanagari system. Hindi grammar and syntax will be reviewed and reinforced. Prerequisite for 2401: At least a $C$ - in Hindi 1402. Prerequisite for 2402: At least a $C$ - in Hindi 2401.

## Italian

All courses are conducted in Italian unless otherwise noted.
Requirements for the B.A. Degree in Italian Area Studies: Twenty-seven term hours, of which 15 must be in courses in Italian at the 3000 level and higher. Courses are to be selected in consultation with the major adviser and must include the following:

1. ITAL 3357 (Italian Grammar and Composition) and ITAL 3373 (Italian Culture).
2. Nine hours in advanced courses at the 4000 level including ITAL 4324 (Contemporary Italian Literature).
3. Six hours of Italian literature-in-translation courses or FL courses in Italian culture or Italian cinema.
4. Six hours of approved area-studies courses.

Study with an SMU-approved program in Italy is strongly recommended. A second modern foreign language and/or Latin is also recommended.

Requirements for the Minor in Italian: Twenty term hours, including ITAL 2401, 2402 and 12 advanced hours as follows:

1. ITAL 3357.
2. ITAL 3373.
3. Two additional advanced Italian courses (4000-level) selected in consultation with the adviser.

Requirements for the Minor in Italian Area Studies: Twenty term hours, including ITAL 2401, 2402, and the following advanced or supporting courses:

1. ITAL 3357.
2. ITAL 3373.
3. One additional advanced Italian course (4000-level) chosen in consultation with the adviser.
4. One area-studies course chosen in consultation with the adviser from the following: FL 2395, 3390, 3391, 3392, 3393; ARHS 3312, 3314, 3331, 3332; HIST 3351, 3358, 3359, 3361, 3365, 3366, 3376.

## The Courses (ITAL)

1401, 1402. 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. Prerequisite for 1402: $C$ - or better in 1401 or permission of area chair.
2401, 2402. Intermediate Italian. Strengthening and practice of all four language skills in Italian (listening, speaking, reading, writing). Computer, video and audio assignments are required. Prerequisite: $C$ - or better in ITAL 1402 or permission of area chair.
3357. Italian 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.
3373. Italian Culture. The evolution of Italian society with emphasis on cultural, artistic and intellectual trends. Prerequisite: ITAL 2401.
4185, 4285, 4385. 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 G.P.A. of 3.0 or higher; G.P.A. in Italian of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.

## Literature Courses

4323. 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, DíAnnunzio, Pirandello. Prerequisite: ITAL 2401.
4324. Contemporary Italian Literature. The Fascist Period and World War II. Introspection, society and the problem of evil: Moravia, Pavese, Bassani, Buzzati and Ginzburg. Prerequisite: ITAL 2401.
4325. 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 the instructor.
4326. Italian Authors: Contemporary. Prerequisite: ITAL 2401.

4381, 4382. 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.

## Italian Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)

> FL 2201 Italy Today: Contemporary Italian Culture and Institutions
> FL 2395 Italian Culture
> FL 3390 (CTV 3390) Italian Cinema
> FL 3391 Special Topics: Italian Literature in Translation
> FL 3392 Special Topics: Italian Literature in Translation

Japanese
Requirements for the Minor in Japanese: 17 term hours as follows:

1. Intermediate Japanese $(\mathbf{2 4 0 1}, \mathbf{2 4 0 2}) 8$ hours
2. Advanced Japanese $(3311,3312) 6$ hours
3. One course from the following:

ARHS 3394, FL 3398, HIST 3395, JAPN 4381, PLSC 3346.
3 hours

## The Courses (JAPN)

1401, 1402. Beginning Japanese. Focuses on oral and aural proficiency for daily communication situations, mastery of Japanese writing systems (Hiragana, Katakana, basic Kanji), and foundational grammar. Prerequisite for 1402: C- or better in 1401 or permission of area chair.
2401, 2402. Intermediate Japanese. 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 2401: C- or better in JAPN 1402 or permission of area chair. Prerequisite for 2402: C- or better in 2401 or permission of area chair.
3311, 3312. Advanced Japanese. 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 for 3311: $C$ - or better in JAPN 2402 or permission of area chair. Prerequisite for 3312: $C$ - or better in JAPN 3311 or permission of area chair.
4185, 4285, 4385. Internship in Japanese. Offers students experience in organizations where knowledge of Japanese and the cultures of Japanese-speaking countries is relevant: corporations involved in international business, government agencies, health clinics, etc. Prerequisites: Junior or senior standing; an overall G.P.A. of 3.0 or higher; G.P.A. in Japanese of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.
4381. 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 authentic materials. Prerequisite: $C$ - or better in 3312 or permission of area chair.

## Latin

Requirements for the Minor in Latin: Fifteen term hours, beginning with the intermediate level, and an additional three hours of credit in supporting courses.

[^6]
## The Courses (LTN)

1401, 1402. Beginning Latin. Structures of the Latin language - vocabulary, grammar, syntax. Introduction to Roman history and culture. Simple readings from Latin authors. Prerequisite for 1402: C- or better in 1401.
2311, 2312. Second-Year Latin. Transition to authentic Latin prose, readings reinforce the history and culture of Romans. Prerequisite for 2311: $C$ - or better in LATN 1402. Prerequisite for 2312: C- or better in LATN 2311.
3185, 3285, 3385. Internship in Latin. Offers students experience in organizations or institutions where knowledge of Latin is relevant: museums, libraries, historical archives, etc. Prerequisites: Junior or senior standing; an overall G.P.A. of 3.0 or higher; G.P.A. in Latin of 3.3 or higher; sponsorship of a professor and of the organization, agency or institution.
3323. Latin Literature: Topics. 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, religion and philosophy. Prerequisites: Completion of LATN 2312 or equivalent placement with a grade of C or permission of the instructor.
3324. Advanced Latin Grammar Composition. Development of skills in translating complex grammatical structures; practice in writing short compositions with correct syntax and usage. Prerequisites: C- or better in LATN 2312 or permission of instructor.3325. 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. Prerequisites: $C$ - or better in Latin 2312 or permission of instructor.

## Russian

Requirements for the Minor in Russian Area Studies:

1. Fifteen term hours, including RUSS 2341, 2351, RUSS 3341, RUSS 3302, or RUSS 3304 (optional).
2. At least one upper level course from: Culture: RUSS 3323, FL 3331, RUSS 3351, RUSS 3361, RUSS 3362.
3. One or two (two if RUSS 3341 is not chosen as the third language course) of the following upper-level courses taught in English:
History: HIST 3340, HIST 3341, HIST 5367;
FL 3323;
Political Science: PLSC 3351, PLSC 3358, PLSC 3359 (CFA 3359), PLSC 3365, PLSC 4358, PLSC 4384.

## The Courses (RUSS)

1301, 1302. Basic Russian (Russia in Moscow)
1401, 1402. Beginning Russian. Introductory Russian meets daily and gives a basic overview of all structures of the language, providing rudimentary competence in Russian. This course will take students through all aspects of beginning Russian study, including the language, life and culture of today's Russian people. The curriculum used targets all four skills of speaking, reading, listening and writing.
2341. 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 textural comprehension and active conversational skill. Prerequisite: $C$ - or better in RUSS 1402 or permission of area chair.
2351. 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.
3302. Practicum in Russian Conversation and Phonetics. (Russia, summer)
3304. Russian Grammar Practicum. (Russia, summer)
3323. Practicum in Russian Culture. (Russia, summer)
3341. Russian Reading and Conversation. Continuation of RUSS 2341.
3351. Russian Syntax and Composition. Continuation of RUSS 2351.

3361, 3362. Comparative Grammar of Russian and English. 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 (3361): 16 hours of Russian by examination. Prerequisite (3362): RUSS 3361 or permission of area chair.
4185, 4285, 4385. 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 G.P.A. of 3.0 or higher; G.P.A. in Russian of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation. After completion of eight credit hours in Russian, study abroad at St. Petersburg State University in summer and term programs is recommended.
4380, 4381. Directed Studies.

## Russian Culture and Literature Courses in English

(See course descriptions at end of Foreign Languages and Literatures section.)
FL 2343 After Communism
FL 3323 (HIST 2323). Russian Culture

## Spanish

Requirements for the B.A. Degree in Spanish: Twenty-four term hours of advanced courses. Courses are to be selected in consultation with the major adviser and must include the following:

1. Proficiency in written and spoken Spanish demonstrated by course work in advanced Spanish grammar (SPAN 3358) and Spanish conversation (at least one but not more than two courses from SPAN 3311; 3312; 3313; 3355 or 4352; 4355). Students who consider themselves proficient in these areas may petition to substitute other courses from the offerings of the major.

## 2. SPAN 4395.

3. A minimum of nine hours in 5000-level literature courses, including at least one course in Spanish literature and one course in Spanish-American literature.
Study with SMU-in-Spain, SMU-in-Xalapa, or another Hispanic program abroad is strongly recommended. Suggested electives outside the Spanish area are a second foreign language, courses listed under the Latin American and Iberian Studies major, literary criticism, other foreign literature in translation, English and American literature.

## Requirements for the Minor in Spanish:

1. SPAN 2302 or the equivalent.
2. SPAN 3358.
3. At least one but not more than two courses chosen from SPAN 3311, 3312, 3313, 3355 or 4355.
4. Other advanced course(s) for a total of 18 hours.

Prerequisites for Advanced Courses. Students need to complete the sequence of first-year courses (1401 and 1402) and second-year courses (2401 and 2302) before
taking any 3000-level course. Prerequisite for 3000-level courses: SPAN 2302 or 2312, or as stated in individual course descriptions.

Prerequisite for 4000-level courses: see individual course descriptions.
Prerequisite for 5000-level courses in literature: SPAN 4395.
Prerequisite for 5000-level courses in linguistics: SPAN 4357.

## The Courses (SPAN)

1401. Beginning Spanish. Stresses acquisition of basic skills: speaking, aural comprehension, reading and writing. Students attend three one-hour fundamentals classes plus two one-hour practice sessions per week. Computer, video and audio assignments are required. Four credits per term.
1402. Beginning Spanish. (second term) Continuing focus on the four basic language skills. Students attend three one-hour fundamentals classes plus two one-hour practice sessions per week. Computer, video and audio assignments are required. Four credits per term. Prerequisite: C- or better in SPAN 1401.2311, 2312. 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.
2311, 2312. 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.
1403. Intermediate Spanish I. The first semester of intermediate Spanish will continue to strengthen the four language skills with added emphasis on reading and writing. Students will focus on the following communicative goals: describing, comparing, reacting and recommending, and narrating about the past. Students attend two one-hour fundamentals classes plus three one-hour practice sessions per week. Computer, video and audio assignments in the Foreign Language Teaching Technology Center are required. Four credits per term. All classes are conducted in Spanish. Prerequisite: $C$ - or better in SPAN 1402.
1404. Intermediate Spanish II. Continued strengthening of all four language skills in Spanish (listening, speaking, reading, writing). Students will focus on expressing likes and dislikes, making hypotheses and speaking of the future. Prerequisite: $C$ - or better in SPAN 2401.
1405. 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 one 3000 -level course.
1406. Conversation and Composition: Peninsular Culture. Focus on improving linguistic proficiency within the context of studying Spanish Peninsular cultures. Course content varies; may include Peninsular film, music, art, etc. Prerequisites: $C$ - or better in SPAN 2302 or equivalent.
1407. Conversation and Composition: Mexican Culture. Focuses on improving linguistic proficiency within the context of studying Latin American culture. Course content varies; may include Mexican film, music, art, food, etc. Prerequisites: $C$ - or better in SPAN 2302 or equivalent.
1408. Conversation and Composition: Latin American Culture. Focuses on improving linguistic proficiency within the context of studying Latin American culture. Course content varies; may include Latin American film, music, art, etc. Prerequisites: $C$ - or better in SPAN 2302 or equivalent.
1409. Spanish Conversation. An advanced course for majors and non-majors intended to increase active command of the language. Limited enrollment. Prerequisite: $C$ - or better in SPAN 2302 or equivalent. Not for students who score "Advanced" on Oral Proficiency exam. (See SPAN 4355.)
1410. Spanish Phonetics. A detailed analysis both in theory and practice of Spanish speech patterns, vowels, consonants and intonation. Prerequisite: $C$ - or better in one 3000-level Spanish course.
1411. Advanced Spanish Grammar. A thorough study of Spanish grammar. Practice in writing short compositions. Limited enrollment. Prerequisites: $C$ - or better in SPAN 2302 or equivalent.
1412. Spanish Civilization. A survey of Spanish culture and societies with particular emphasis on artistic and sociological aspects. Prerequisite: $C$ - or better in one 3000-level Spanish course.
1413. Spanish-American Civilization. A survey of Spanish-American culture and societies with particular emphasis on artistic and sociological aspects. Prerequisite: $C$ - or better in one 3000-level Spanish course.
4185, 4285, 4385. 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 G.P.A. of 3.0 or higher; G.P.A. in Spanish of 3.3 or higher; sponsorship of a professor and of the organization, agency or corporation.
4352 (ETST 4352). 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. Field work, away from campus, will include a maximum of two hours per week in addition to the required three contact hours in the classroom. Prerequisites: C- or better in SPAN 2302 and approval of instructor for language majors. Approval of instructor for all other candidates.
1414. Advanced Spoken Spanish. An advanced course in spoken Spanish for those students with a Spanish-speaking background who score advanced to superior on a departmentally administered oral exam based on ACTFL Oral Proficiency levels. (Students who score below "Advanced" level on the departmental exam may enroll in SPAN 3355.) Prerequisite: $C$ - or better in SPAN 2302 and approval of the instructor. Not open to students who have taken SPAN 3355. Limited enrollment.
1415. Introduction to Spanish Linguistics. What is language? How do languages function? How is human language different from other communication systems? Focusing on Spanish, this course also explores language acquisition, language contact and bilingualism. Prerequisites: $C$ - or better in SPAN 3358 and one of the following: SPAN 3311, 3312, 3313, 3355 or 4355; or permission of instructor.
1416. Translation: Theory and Practice. Through readings and exercises in literary texts and an individual term project, students explore the multiple disciplinary aspects of the process of translation. Prerequisite: C- or better in SPAN 3358 and one 3000-level Spanish course.
1417. Commercial Spanish for International Trade. An advanced course in Spanish for international trade and communication. Prerequisites: C- or better in SPAN 3358 and one of the following: SPAN 3311, 3312, 3313, 3355 or 4355; or permission of instructor.
1418. Introduction to Hispanic Literature. Study of the tools necessary for analysis and understanding of literature. Application of these tools through reading of Hispanic texts. Prerequisite: C- or better in SPAN 3358 and one of the following: SPAN 3311, 3312, 3313, 3355 or 4355; or permission of instructor. Limited enrollment. Meets Perspectives requirement for Literature and Human Diversity corequirement.

## General Survey Courses

5310. Spanish Literature Before 1700. An introduction to Spanish prose, drama, lyric and narrative poetry through the Golden Age. Prerequisites: $C$ - or better in SPAN 4395.
5311. Spanish Literature Since 1700. Major writers and movements from 1700 to the present. Prerequisites: $C$ - or better in SPAN 4395.
5312. Spanish American Literature to 1888. Literary figures and trends from the Conquest to Modernism. Meets Human Diversity corequirement. Prerequisites: $C$ - or better in SPAN 4395.
5313. Spanish American Literature Since 1888. Literary figures and trends from Modernism to the present. Meets Human Diversity corequirement. Prerequisites: $C$ - or better in SPAN 4395.
5314. The Literature of Mexico. Readings and discussions of the works of major Mexican writers. Meets Human Diversity corequirement. Prerequisites: C- or better in SPAN 4395.

## Period Survey Courses

5320. The Renaissance and Golden Age: Drama. A study of the early development of Spanish drama and of the flourishing of the theater with Lope de Vega, Calderón de la Barca, and their contemporaries. Prerequisites: C- or better in SPAN 4395.
5321. 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, Zayas, their contemporaries, and their literary predecessors. Prerequisites: C- or better in SPAN 4395.
5322. Nineteenth-Century Prose Fiction of Spain. Major prose writers of the Realistic and Naturalistic movements in the context of 19th-century political, social and economic development. Prerequisites: C- or better in SPAN 4395.
5323. Twentieth-Century Poetry and Drama. Poetry and theater of the generations of 1898 and 1927 and more. Prerequisites: C- or better in SPAN 4395.
5324. 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, Postmodernism, etc. Prerequisites: C- or better in SPAN 4395.

## Genre Studies

5334. The Novel of the Post Civil War Period. Development of the Spanish novel from the end of the Spanish Civil War (1936-1939) to the present day. The course explores issues of gender, memory and historical representation. Prerequisites: C- or better in SPAN 4395.
5335. Genre Studies in Spain. The examination of the works of several authors as a means of understanding the nature and evolution of a particular genre. Prerequisites: $C$ - or better in SPAN 4395.
5336. The Spanish-American Novel. The evolution of the Spanish-American novel and analysis of master works of the 19th and 20th centuries. Meets Human Diversity corequirement. Prerequisites: $C$ - or better in SPAN 4395.
5337. The 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 José Martí and Octavio Paz. Meets Human Diversity corequirement. Prerequisites: C- or better in SPAN 4395.
5338. The Spanish-American Short Story. Evolution of the short story in Spanish America: Palma, Quiroga, Borges, Carpentier, Asturias. Cortázar, Rulfo, García Márquez and others. Meets Human Diversity corequirement. Prerequisites: C- or better in SPAN 4395.
5339. Spanish-American Poetry. Major Spanish American poets, with emphasis on the 20th century: Octavio Paz, Nicolás Guillén, Gabriela Mistral, Pablo Neruda and others. Meets Human Diversity corequirement. Prerequisites: $C$ - or better in SPAN 4395.

## Advanced Courses in Linguistics

5340. The Structure of Spanish. Explication 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. Prerequisites: $C$ - or better in SPAN 4357.

SPAN 5341. Spanish Phonetics and Phonology. Survey of phonetic (acoustic, physical) and phonological (distributional) properties of the Spanish sound system. Comparison with the English sound system. Introduction to phonologically conditioned dialectal variation in the Spanish-speaking world. Prerequisite: $C$ - or better in SPAN 4357.

## Thematic Courses

5360. The Concept of Honor in Spanish Literature. An exploration of the Spanish concept of Honor, especially the way it shapes Hispanic identity over time and distance and across social and gender boundaries. Lecture, 3 hours. Prerequisite: C- or better in SPAN 4395.
5361. Don Quixote: The Idea, The Character, The Book. An exploration of Cervantes's masterpiece, Don Quixote, and its influence on art and society. Prerequisite: $C$ - or better in SPAN 4395.
5362. Contemporary Spanish Women Writers. Explores constructions of gender and identity in contemporary Spanish literature by women. Written texts, music, film and documentary will combine to offer multiple perspectives on the subject. Lecture, 3 hours. Prerequisite: $C$ - or better in SPAN 4395. Meets Human Diversity corequirement.
5363. 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.
5375 Contemporary Fiction by Latin American Women Writers. Explores constructions of gender and identity in 20th-century fiction by Latin American women. Novels, short stories, film and critical texts will be examined. Prerequisite: $C$ - or better in SPAN 4395.

## Other Literary Studies

5380, 5381. 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.

## Culture and Literature Courses in English

(See Course Descriptions following.)
FL 3303 Spanish Civilization
FL 3305 Special Topics: Latin American Literature in Translation
FL 3306 The Heart of Aztlán: Chicano Literature of the Southwest

## Courses in English on Linguistics and World Literatures and Cultures (FL)

2201. 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. Prerequisite: Concurrent enrollment in ITAL 1401, 1402 or 2401 with approval of the instructor.
2202. After Communism. Examines changes in Russian and Eastern European culture since the mid-1980s, when openness and restructuring prepared the ground for the fall of the Soviet Union.
2203. 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.
2204. Spanish Civilization. Significant aspects of Spanish culture are presented and illustrated by examples from Spain's history, music, art, architecture, literature, folklore and contemporary life. Course may be taken as SPAN 3373 if the student does his or her work in Spanish. (Offered at SMU-in-Spain)
2205. Special Topics: Latin American Literature in Translation. Reading of masterworks of Latin American authors. Readings will vary from term to term and will be selected for their relevance to a particular period, genre or theme. Meets Human Diversity corequirement.
2206. The Heart of Aztlán: Chicano Literature of the Southwest. A study of the Chicano/ Mestizo cultural identity in the Southwest, the course includes readings from selected contemporary authors as well as from the early recorded contacts between Native Americans and their European conquerors. Meets Perspectives requirement for Literature and Human Diversity corequirement.
3307 (CFA 3329). The Belle Époque and the Birth of Modernity. 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)
2207. Introduction to General Linguistics. This course is an introduction to the field of linguistics, which is concerned with the study of human language in the broadest sense. Meets Perspective requirement for literature.

3310 (CF 3390). 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. Meets Human Diversity corequirement.
3312. Women in Modern China. Critical examination, from literary and gender perspectives, of the lives and roles of 20th-century Chinese women, including works from major women writers. Meets Human Diversity corequirement and Perspectives requirement for literature.
3323 (CFA 3320, HIST 2323). 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. Meets Human Diversity corequirement.
3325 (CF 3365). Perspectives on Modern China. Survey of China in the 20th century in terms of cultural trends, literature and cinema. The course 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. Meets Human Diversity corequirement.
3331. Survey of Russian Literature in Translation. Russian literature from the 18th century to the present. Works by Tolstoy, Dostoevsky, Chekhov, Solzhenitsyn and others. Meets Perspectives requirement for literature.
3332. Special Topics: Russian Literature in Translation. Texts, periods and thematic and critical approaches will vary from term to term.
3335 (CF 3335, HIST 3335). One King, One Law: France 1500-1789. This course examines the culture of France through its history and literature. It emphasizes historical developments, ideas and literary texts that define and illuminate French Classicism and absolutism. The course focuses on the early modern period, when France set the cultural tone and made significant contributions to the transformation of Western civilization. The course also provides a foundation for understanding subsequent European history and literary movements.
3340. 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. Meets Perspectives requirement for literature.
3349 (CF 3349, HIST 3392). 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. This course explores links between literature and politics, literature and history, and thought and action in 20th-century Africa and the Caribbean. Readings and lectures will be supplemented by class discussion, films and videotapes about the Caribbean and Africa. Meets Human Diversity corequirement.
3350. Existentialism and Literature. Existentialist perspectives on society, individual responsibility, politics and war, as presented in key literary texts by Kierkegaard, Dostoevsky, Malraux, Sartre, Camus, Ellison and others.
3359. Masculinities: Literary 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. Meets Perspectives requirement for Literature.
3360 (CFA 3360). The 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.
3361. Special Topics: French Literature in Translation. Texts, periods, and thematic and critical approaches will vary from term to term. (SMU-in-Paris only)

3363 (CF 3347, WGST 3347). 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. Meets Human Diversity corequirement.
3365, 3366. Special Topics: French Literature in Translation. Texts, periods, and thematic and critical approaches will vary each term.
3369 (CF 3369). 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.
3390. 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.
3391, 3392. Special Topics: Italian Literature in Translation. Texts, periods, and thematic and critical approaches will vary from term to term. Meets Perspectives requirement for literature.
3393. Dante's Poetic Vision. Close reading of The Inferno and The Purgatory. Focuses on significant passages to reveal Dante's poetic genius along with his political and religious concerns in the context of medieval thought. Meets Perspectives requirement for literature.
3394. Boccaccio's Decameron and the Medieval Storytelling Tradition. This course places the Decameron in the context of its predecessors and shows how the realism of the novelle promoted a new poetics framed by the exigencies of the mercantile class. Prerequisites: A rhetoric and/or literature course.
3395. (CF 3395) A Cultural Journey to China. Suzhou, in China's cultural heartland, is the site of this course on the development of Chinese culture: religion, literature, cinema, art, architecture and history. Trips complement readings centered on self, family and state. (SMU-in-Suzhou only)
3397 (HIST 2394). 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.
3398 (HIST 2395). 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.

## HISTORY

www.smu.edu/history
Professor Kathleen Wellman, Department Chair
Professors: Jeremy Adams, Peter Bakewell, John Chávez, Dennis Cordell, Edward Countryman, James Hopkins, Donald Niewyk, Daniel Orlovsky, Sherry Smith, David Weber, Kathleen Wellman, R. Hal Williams; Associate Professors: Crista DeLuzio, Melissa Dowling, Kenneth Hamilton, Benjamin Johnson, Thomas Knock, Glenn Linden, Alexis McCrossen, John Mears; Assistant Professors: Sabri Ates; Ling Shiao; Adjunct Assistant Professor: David Doyle; Adjunct Lecturer: Rick Halperin.

Departmental courses are of three types: 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.

Requirements for the B.A.Degree. Thirty-three term hours in history are required for the major, including a Junior Seminar in Research and Writing (HIST 4300) and one three-hour course at the 5000 level. In addition, majors must take at least
six term 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 term hours in courses at the 3000 and higher levels are required. History majors must earn 2.0 minimum G.P.A.s in their history coursework. Six term hours of advanced placement credit can be applied toward the History major.

Twelve term hours of foreign language are recommended.
The Departmental Distinction Program. A history major with sufficiently high standing may graduate with honors in history by applying for the degree "with 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.

Requirements for the Minor. Students with a general interest in history may pursue a minor by taking 15 term hours of departmental course work. 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.

## Foundation and Special Courses (HIST)

1301, 1302. 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.
1311. Western Civilization to 1527 A.D. 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.
1312. Western Civilization Since 1527. An introductory survey of Western civilization from about the time of the Reformation to the present.

## 2300. The Vision of History: The Western Tradition.

2301. The Vision of History: The American Experience.
2302. Junior Seminar in Research and Writing. Consists 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.
4375, 4376. Departmental Distinction. Honors program open to qualified seniors by invitation of the department.
2303. 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 2.5 overall G.P.A.
4398, 4399. 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.

## United States History

Majors planning a concentration in the U.S. history field are advised to begin their program with one of the "problems" or advanced survey courses (at the 3000-4000 level), not HIST 2311, 2312.

## The Courses (HIST)

1321. First-Year Seminar in American History. Offers the beginning student an opportunity to explore particular topics in American history intensively in a small class setting.
1322. 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.
1323. 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.
1324. 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 evolving social and political ideals.
1325. A History of Technology in the United States. Examines how technological innovations have changed the lives of Americans between the Revolution and the present. Considers how Americans have embraced, resisted, understood and used new technologies.
2380 (CFA 3380). Ethnic Regions in the Western World. An interdisciplinary course that examines the ways regional ethnic minorities - such as the Basques, Québecois, and Chicanos - have functioned within larger societies in Western Europe and North America.
1326. American Politics and Culture, FDR to Obama. Examines life and culture in modern America.

3301 (CF 3317). 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.
3304. 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.
3305 (CF 3318). 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.
3306 (CF 3309). Colony to Empire: U.S. Diplomacy 1789-1941. Examines major events in American foreign policy from the Early National period to Pearl Harbor, emphasizing 19thcentury continental expansion, early 20th-century imperialism, and American involvement in the World Wars.
3307. 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.
3308 (CF 3320). 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.
3309 (CFB 3309). 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.
3310. Problems in American History. Explores historical issues or trends in U.S. history using a case study or comparative format.
3311. 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.
3312. Women in American History. Analyzes women's changing social, economic and political roles in American society from colonial times to the present.
3313. 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.
3314. 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 1960 s, and the flowering of black culture and nationalism.
3316. History of Sex in America (CF 3311). This course will test the hypothesis that gender and sexuality are culturally constructed categories. Readings in anthropology, history, literary criticism and psychiatry will be utilized.
3318. The Human History of Natural Disaster in the United States. A survey of the role of "natural" disasters in US history, with an emphasis on the ways that they (including Hurricane Katrina) are human events, caused or complicated by social practices.
3319. Texas History. Texas as a crossroad of cultures from the 16 th century to the present.
3320. The Spanish Frontier in North America, 1513-1821. (Also listed under Latin American History.) The exploration, colonization and development of the South and Southwest under Spanish rule, 1513 to 1821, including interaction with Indian peoples.
3321. The American Southwest. (Also listed under Latin American History.) History of the American Southwest, from the initial penetration in 1821 to the present.

3322 (CFB 3322). Native American History. Examines the roles Native Americans played in the history of North America (excluding Mexico) from 1500 to the present.
3324. 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.
3327. Economic History of the United States. Development of the United States economy from colonial times until the present. Causes and consequences of American economic growth and instability.
3336 (CF 3366). Cultural History of the United States. Analysis of the literature, art, architecture, music, drama, popular amusements and social customs of America since 1877.
3338. U.S. Social History to 1877. Views history from the bottom up, offering a comparative examination of the American social experience (colonial era to 1877) in terms of race, class, ethnicity and gender.
3339. U.S. Social History since 1877. Views history from the bottom up, offering a comparative examination of the American social experience (1877 to the present) in terms of race, class, ethnicity and gender. Recommended preparation: HIST 3338.
3346. The 20th-Century American West. Examines the American West in the 20th century, emphasizing major social, cultural, 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.
3347. 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.
3348 (CFA 3348). 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.
3362. 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."
3364. 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.
3369. 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.
3370. 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.
3372. The South in American History. Explores the origin, development, and present and future status of the South's position in America.
3379 (CFA 3325). A Cultural History of New Mexico. Explores the history of struggles between the state's dominant ethnic groups - Native American, Hispanos and Anglos - over rituals, spaces and objects. (SMU-in-Taos)
3384. 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. 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.
3388. 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.
3391 (CF 3330). 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.
3394. 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.
3399. 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.
3401 (CF 3401). 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.
4304. 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.
4353, 4354. 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.

## For Undergraduate and Graduate Students

5330, 5331. Seminar in Mexican-American History. An examination of the growing historiography on Mexican-Americans, focusing on the relationship between their ethnic identity and the Southwest. (Also listed under Latin American History.)
5340, 5341. Seminar in American History. Intensive examination of major topics in American history.
5344. 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.
5345. 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.
5350. Twentieth-Century America: A Seminar. Intensive examination of major developments in recent American history.

## European History

1303. 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.
1304. First-Year Seminar in European History. Offers the beginning student an opportunity to explore particular topics in European history intensively in a small class setting.
1305. Philosophical and Religious Thought in the Medieval West. A 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.
2323 (CFA 3320, FL 3323). 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.
1306. 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)
2353 (CF 3392, ARHS 3318). 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.
1307. 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.
1308. Europe in the Modern World, Renaissance to 1760. An introductory survey of the growth of European civilization.
1309. Europe in the Modern World, 1760 to Present. A continuation of HIST 2365.
1310. Georgian and Victorian England, 1714-1867. The political, social and economic institutions of Britain and their development in the 18th and 19th centuries.
1311. 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.
1312. Economic History of Europe: 1000 A.D. to the Present. Survey of the development of the European economy from 1000 A.D. to the present. Sources of growth and institutional changes will be explored.
3329 (CF 3322). Women in Early Modern Europe. A study of the influence of women in European society and intellectual movements from the Renaissance through the Enlightenment.
1313. 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.
1314. 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.
1315. 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.
1316. 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.

3335 (CF 3335, FL 3335). 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.
3337 (CFB 3337). Ethical Dilemmas in a Global Age. A cross-cultural exploration of major ethical issues emanating out of the radically changing context of human existence in recent decades.
3340. 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.
3341. Soviet/Post-Soviet Society and Politics 1917 to 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 to 1921.
3342. Atomic Energy and the Modern World. An examination of the development of atomic energy and how it has affected the way we have lived in the 20th century.
3344 (CF 3394). 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)
3345. 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)
3350. 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.
3351. 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.
3352. 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.
3353. 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.
3354. Warfare and Diplomacy in Antiquity. A study of the methods both of waging and of averting war in antiquity.
3355 (CF 3325). 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).
3356. 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.
3357 (CF 3363, ENGL 3371). 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.
3358 (CF 3313). 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.
3359. 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.
3360. 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.
3361. Roman History and the Roman Mind. The development of Roman civilization from its earliest beginnings to the dawn of the Middle Ages.
3363 (CF 3306). The Holocaust. Examines the destruction of the European Jews as they emerged from pre-World War I anti-Semitism and Nazi racism. Considers Jewish responses to genocide, the behavior of bystanders, and possibilities of rescue.
3365, 3366. 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.
3367. 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.
3368 (CF 3312). 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.
3373 (CF 3327). 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.
3374 (CF 3328). 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.
3375. Social History of Early Modern Europe. Studies European social and cultural development from the Renaissance to the French Revolution.
3376 (CF 3314). Social and Intellectual History of Europe. Studies European social, cultural and intellectual development from 1848 to the present.
3383. 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.
3385. 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.
3397 (CF 3336). 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.

4319 (CFA 3345). 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.
4363. Inside Nazi Germany. The reality beneath the spectacle of the Nuremberg rallies and the efficiency of the totalitarian state.
4369. 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.
4380. History of Spain to 1492. (Also listed under Latin American History.) 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.
4381. History of Spain, 1469 to the Present. (Also listed under Latin American History.) The main social, political and cultural topics of the history of the Iberian Peninsula from Columbus to the present.
4384. 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.
4385. Tudor and Stuart England, 1485 to 1714. The emergence of the modern British state and societies in the 16th and 17th centuries.

## For Undergraduate and Graduate Students

5364. The City of God: Utopias in Christian Tradition. An examination of St. Augustine's masterpiece, along with several of its models and analogues from the Greco-Roman and Hebrew traditions.
5365. 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.
5366. Seminar in French History. An examination of key historians and of the several modes of history-writing that shape our vision of pre-modern France.
5367. The French Revolution and Napoleon, 1789-1815. The nature and causes of revolution, the French Revolution, and the career of Napoleon Bonaparte.
5368. Europe from Napoleon to Bismarck, 1815-1870. Examines the aftermath of Napoleon's empire, with special consideration of the revolutions of 1848.
5369. Europe from Bismarck to World War I, 1870-1918. Studies some of the modern world's most potent ideas: imperialism, social Darwinism, Marxism, racism and positivism in the context of Europe at the peak of its influence.
5370. 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 last 30 years.
5371. 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.
5372. Europe in the Age of Enlightenment, 1715-1789. A study of society and culture in 18th-century Europe, the Enlightenment philosophies, Rococo art, the classical age of music, Enlightened Despotism, and the coming of the French Revolution.
5373. Medieval Renaissances. A reading-and-discussion seminar in two bursts of medieval cultural activity, the Carolingian and 12th-Century Renaissances. Focuses on two case studies (Alcuin and John of Salisbury).
5374. Seminar in Russian History. This advanced seminar covers in depth selected topics in late Imperial and Soviet history. Prerequisite: HIST 3340 or 3341, or permission of instructor.
5375. Athenian Democracy. This seminar examines the development of democratic government in Athens and studies the functioning of that government in peace and in war.
5376. Seminar in European History. Intensive examination of major topics in European history. Prerequisite: Junior standing or permission of instructor.

## Latin American History

Students planning a concentration in Latin American History are urged to take HIST 2384 and 2385, followed by HIST 4380 and 4381.
2384 (CFA 3318). Latin America: The Colonial Period. An introductory survey covering the development of Latin American society from pre-discovery to the early 19th century.

2385 (CFA 3319). Latin America in the Modern Era. An 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.
3317. 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.
3320. The Spanish Frontier in North America, 1513-1821. (Also listed under United States History.) The exploration, colonization and development of the Southwest under Spanish rule, 1513 to 1821, including interaction with Indian peoples. (For History majors, fulfills United States or Latin American requirement.)
3321. The American Southwest. (Also listed under United States History.) History of the American Southwest, from the initial penetration in 1821 to the present.
3380. 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.
3382. History of Mexico. Studies pre-Columbian, colonial and independent Mexico. Stresses culture and social developments.
3386. History of the Caribbean. A survey of Caribbean history aimed at identifying common and contrasting themes in this very diverse part of the world. Topics include the Caribbean before 1492, the slave trade, sugar and the plantation economy, abolition, the dependent Caribbean, and the false promise of independence.
4380. History of Spain to 1492. (Also listed under European History.) 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.)
4381. History of Spain, 1469 to the Present. (Also listed under European History.) 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.)

## For Undergraduate and Graduate Students

5330, 5331. Seminar in Mexican-American History. (Also listed under United States History.)
5382. Seminar in Latin American History. Intensive examination of major topics in Latin America history.

## African, Asian and World History

1323. First-Year Seminar in Non-Western History. Offers the beginning student the opportunity to explore particular topics in non-Western history intensively in a small class setting.
1324. 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.
1325. A History of Islamic Empires. This course introduces students to the history of various Islamic empires and covers the period from 600-1750.
1326. 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.
1327. Modern Africa. An 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.

2393 (FL 3396). 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.
2394 (FL 3397). 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.
2395 (FL 3398). 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.
3325. Islam and Politics. This course aims to familiarize students with the basics of Islam and explore the relationship between Islam as religion and Islam as ideology.
3326 (CF 3310). The 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.
3371. 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.
3377. 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.
3378. 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.
3387 (CF 3315). 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.
3389. 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.
3390. Modern Middle East: 1914-to-Present. This survey course introduces students to the history and politics of the contemporary Middle East.
3392 (CF 3349, FL 3349). 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.
3393. China in Revolution. Examines the "century of revolution" in China, from the mid19th 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.
3395. Problems in Asian History. Explores historical issues, trends or special topics in Asian history using a thematic or comparative format.
3396. Middle Eastern Economic History. Examines economic patterns in Middle Eastern history, politics and social life from the 18th century until the present.
3398. 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.
5395. A History of Iran. This seminar introduces students to the history, cultures and peoples of Iran and familiarizes them with this complex and increasingly important country.

## HUMAN RIGHTS

Rick Halperin, Director

The Human Rights minor, which is appropriate for all majors, is an interdisciplinary program introducing students to the study of University-recognized civil, political, economic, social and cultural human rights.

The minor requires a minimum of six courses ( 18 term hours), of which at least four courses must be at the advanced level ( 3000 or above). HIST 3301 (Human Rights: America's Dilemma) is required for this minor. In addition to this foundation course, no more than two courses from any department may be taken unless given pre-approval by the Human Rights adviser.

In addition to classes, the minor also requires a commitment of students' efforts, time and talent in defense of or in advocacy for human rights. Students will either complete a 20 -hour service-learning placement with a human rights communitybased agency (as a component of HIST 3301) or will receive independent credit (HIST 4398/9) by participating in an SMU Human Rights Program group tour to a location where recent human rights violations have occurred (e.g., Cambodia, Rwanda, Poland) and completing a research paper on a human rights topic related to the site.

## Course Requirements:

In addition to HIST 3301, students must take at least five courses from the following list:
ANTH 1321 Violence and Social Suffering in Global Perspective
ANTH 2301 Introductory Cultural Anthropology
ANTH 3301 Health, Healing and Ethics: Cross Cultural Perspectives on Sickness and Society
ANTH 3310 Gender and Sex Roles: A Global Perspective
ANTH 3311 Mexico: From Conquest to Cancun
ANTH 3327 Culture Change and Globalization: Social Science Perspectives
ANTH 3333 The Immigrant Experience
ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
ANTH 3348 Health as a Human Right
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 from the 16th Century to the Present
ANTH 3388 Warfare and Violence: The Anthropology and Ethics of Human Conflict
ANTH 4303 Political Economy of Health
ANTH 4305 Applied Anthropology
ANTH 4309 Human Rights, Indigenous Peoples and Nation States
ARHS 4349 Seminar in Contemporary Art: Why We Go to Auschwitz: Art, Trauma and Memory
CTV 2384 War on Film
ENGL 1365 Literature of Minorities
ENGL 3367 Ethical Implications of Children's Literature
ENGL 3383 Literary Executions: Imagination and Capital Punishment
HIST 2391 African to the 19th Century
HIST 2392 Modern Africa
HIST 2395 Modern East Asia
HIST 3301 Human Rights: America's Dilemma (required)
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 3312 Women in American History
HIST 3313 African Americans in the United States, 1607-1877
HIST 3314 African Americans in the United States, 1877-Present
HIST 3317 Women in Latin-American Societies
HIST 3322 Native American History
HIST 3341 Soviet/Post-Soviet Society and Politics, 1917 to Present
HIST 3363 The Holocaust
HIST 3371 Conflicts in the Modern Middle East
HIST 3392 The African Diaspora: Literature and History of Black Liberation
HIST 3393 China in Revolution
HIST 3401 The Good Society
HIST 4363 Inside Nazi Germany
HIST 4388/4399 Independent Study (for Human Rights group tour credit)
HIST 5340 Seminar in American History: Women's Rights in the United States
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 Governments and Politics of Japan
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 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 and the Law
PLSC 4380 Contemporary Issues in International Relations
PLSC 4381 National Security Policy
RELI 3321 Religion and the Holocaust
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: Developing Historical, Social and Theoretical
    Understandings of a Modern Problem
SOCI 4364 Correctional Systems
WGST 2309 Lesbian and Gay Literature and Film: Minority Discourse and Social Power
```


## INDIVIDUALIZED STUDIES IN THE LIBERAL ARTS

## Professor Peter Moore, Director

The Individualized Studies major in the Liberal Arts provides students an 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 associate dean for Academic Affairs of Dedman College, 214-768-2168. If the 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 3.5 G.P.A. in the first 24 term hours taken in residence at SMU are eligible to pursue the program in Individualized Studies.

The program 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 the General Education Curriculum (GEC) 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 Bachelor of Arts. The transcript will refer to the major as "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.

The following should be submitted to the program's director:

1. Formal Plan of Study (including goal statement and major plan).
2. Transcript.

With the director's approval and written approval of the Faculty Supervisory Committee, materials will be submitted to the College Undergraduate Council for action.

## Administrative Procedures

The Dedman College Undergraduate Council shall have the final authority to approve all individualized programs. The chair of the Council (or a designee) will act as the director of Individual Studies.

Prior to declaring the major, a number of steps must be completed:

1. The student and chair of the program 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 Dedman College faculty.
2. The student will submit a Plan of Study to the director and to each Supervisory Committee member. If the committee and the director approve the Plan of Study, the plan is then submitted for approval by the 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 normally should be submitted to the Dedman College Undergraduate Council for approval before the completion of 60 total term hours of coursework.

The chair of the Supervisory Committee and the 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

International and Area Studies provides students with the opportunity to design interdisciplinary programs of study that will give them 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 specific geographical areas. These programs include (1) a major or minor in International Studies, (2) a minor in Asian Studies, (3) a minor in European Studies and (4) a major or minor in Latin American and Iberian Studies. Descriptions of each of these programs along with their degree requirements are listed below.

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 course work in the social sciences, business, language and humanities. To maximize the educational experience in these degree programs, all majors 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 majors and minors. For more information, see the "Study Abroad" section in this bulletin, as well as the requirements for each of the programs listed below.

## International Studies <br> Professor Stephen Wegren, Director

The major in International Studies requires 33 hours of study in specific courses in addition to prerequisites for certain courses; this includes 15 hours of study from the basic curriculum. At least 18 hours from the Basic and Area Studies Curricula must be in courses at the 3000 level or above. A cocurricular requirement for the B.A. degree in International Studies is two years of college-level study of a foreign language or equivalent. The language requirement may be met through examination, the transfer of language study credit from another university, or by taking courses on campus.

The minor in International Studies requires 15 hours of study from the basic curriculum, nine hours of which must be in courses at the 3000 level or above. A cocurricular requirement for the minor is one year of college-level study of a foreign language or equivalent.

## Basic Curriculum

The first 15 hours (constituting a minor in International Studies) must include one course from Introduction to World Cultures; one course from International Politics; one course from International Economics; and two courses from The Global Perspective. Of the 15 hours required in the basic curriculum, at least six hours must be in courses at the 3000 level and above. A total of five classes must be taken from the basic curriculum.

[^7]The Global Perspective<br>ADV 3354 International Advertising (SMU-in-London)<br>ANTH 3301 Health, Healing and Ethics<br>ANTH 3310/SOCI 3301 Gender and Sex Roles: A Global Perspective<br>ANTH 3327 Culture Change and Globalization: Social Science Perspectives<br>ANTH 3333 The Immigrant Experience<br>ANTH 3336 Gender and Globalization: Cultural and Ethical Issues<br>ANTH 3344 Cultural Aspects of Business<br>ANTH 3348 Health as a Human Right<br>ANTH 3365 The Rise and Fall of Superpowers<br>ANTH 3366 Magic, Myth and Religion Across Cultures<br>ANTH 3368/SOCI 3368 Urban Life: A Cross-Cultural Perspective<br>ANTH 3384 Paradise Lost? The Archaeology and Ethics of Human Environmental Impacts<br>ANTH 3388 Warfare and Violence<br>ANTH 4303 Political Economy of Health<br>ANTH 4304 Migration and Ethnicity<br>ANTH 4307 Seminar in International Health<br>ANTH 4309 Human Rights, Indigenous Peoples, and National States<br>ANTH 4384 Global Issues and Development: An Overview (Seniors only)<br>ARHS 1307 World Art Traditions: A Survey<br>BA 3300 Topics in International Management (Study abroad programs)<br>CCPA 3321 International Public Relations (SMU-in-London)<br>CTV 2351 International Film History<br>CTV 4399 Global Media Systems<br>ECO 5359 Economic Development: Microeconomic Perspectives<br>ECO 5360 Economic Development: Macroeconomic Perspectives (Prerequisites: ECO 3301 and 3302)<br>ECO 5361 Natural Resources and Energy Economics<br>ECO 5362 Economic Growth<br>ENGL 3354 Non-Western Culture and Literature (20th-century, Third World texts)<br>FINA 4329* International Finance (Prerequisite: FINA 3320)<br>HIST 2380 Ethnic Regions in the Western World<br>HIST 3301 Human Rights: America's Dilemma<br>HIST 3306 Colony to Empire: U.S. Diplomacy 1789-1941<br>HIST 3307 The U.S. and the Cold War<br>HIST 3337 Ethical Dilemmas in a Global Age<br>HIST 3368 Warfare in the Modern World<br>HIST 3397 Modernity and Crises of Identity<br>HIST 3399 U.S. Foreign Policy from the Spanish-American War to Vietnam<br>MKTG 3300 Marketing Management Field Project (SMU-in-Copenhagen)<br>MKTG 3348* International Marketing<br>PLSC 3342 Making Democracy Work<br>PLSC 3365 Communism and Post-Communism<br>PLSC 3381 Current Issues in International Politics<br>PLSC 3382 International Organizations: Global and Regional<br>PLSC 3383 The American Foreign Policy Process<br>PLSC 3387 Political Geography

[^8]PLSC 3390 Negotiating International Trade
PLSC 4342 Why Nations Revolt
PLSC 4354 The Third World and North-South Relations
PLSC 4380 Special Studies in International Relations
PLSC 4380 From Marx to Market (SMU-in-Paris)
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
RELI 3366/ANTH 3366 Magic, Myth and Religion Across Cultures
SOCI 3340 Global Society
SOCI 4321 Immigration and Population Issues

## Area Studies Curriculum

The Area Studies Curriculum requires International Studies majors to specialize in a particular geographical region, defined by a common historical and cultural experience. Students may choose to specialize in Asian, Latin American and Iberian, European, or African and Middle Eastern Studies. A total of 15 hours must be taken in one of the Area Studies programs listed below. 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) in the same geographical area. The final three-hour requirement for the B.A. in International Studies is the Senior Seminar:
INTL 4388. Seminar: International Government and Politics. An overview of the central questions in the study of international government and politics. This senior seminar in international studies is a required course for all majors in international studies. The purpose of the seminar is to provide students with an opportunity to integrate studies. The topic of the seminar is thematic and will vary depending upon the instructor.

## Special Undergraduate Offerings

Opportunities for independent study and research are available to majors in International Studies. Students must have the program director's approval prior to registering for these courses. Prerequisites are stated for each independent study course below. No more than two such courses may be counted toward overall major or minor requirements. The director will indicate where these courses fit in the different sections of the major or the minor.
INTL 4302. Directed Readings in International Studies. Students develop and execute independent reading or research projects under the guidance of an International Studies faculty member, culminating in a written report. Prerequisites: Written approval of the instructor and the program director or a designate, at least sophomore standing, and appropriate introductory and advanced course preparation.
INTL 4306. Internship in International Studies. Undergraduate students who arrange for part- or full-time jobs in International Studies related fields relate these experiences to their academic curriculum through research and writing, under the guidance of an International Studies faculty member. Prerequisites: Written approval of the instructor and the program director or a designate, at least sophomore standing, and appropriate introductory and advanced preparation.
INTL 4307. Departmental Distinction Thesis. Candidates for departmental distinction write a thesis under the direction of an International Studies faculty member, culminating in an oral examination over the field of the thesis. Prerequisite: Admission to departmental honors candidacy.

## ASIAN STUDIES <br> Professor Johan Elverskog, Coordinator

The minor in Asian Studies provides students with an opportunity to design an interdisciplinary program of study that will give them an in-depth knowledge of the history, politics, society and culture of traditional and contemporary Asia. The program embraces all of the subregions of Asia, including East Asia (China, Japan and Korea), South Asia (India, Pakistan and Bangladesh), and the many countries of Southeast Asia. With such a diverse region it is especially important to take account of specific national cultures and traditions. 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.

The minor in Asian Studies requires 15 hours of study in specific courses. The first six hours (two courses) must be chosen from the four categories of the International Studies Basic Curriculum (see above). Each of the two courses must be from a separate category: either World Cultures, International Politics, International Economics or Global Perspective. The next nine hours (three courses) must be chosen from the Asian Studies curriculum (below), with at least one course from each of the two groups: Group I (Social Sciences) or Group II (Humanities and Arts). 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. A cocurricular requirement for the minor in Asian Studies is one year of college-level study of an Asian language. This requirement may be met through examination, the transfer of language study credit from another university, or by taking courses on campus.

## 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)
FL 3350/SOCI 3341 Perspectives on the East Asian Woman
FL 3395 A Cultural Journey into China (SMU-in-Suzhou)
HIST 2393 Japan Before 1850
HIST 2394 China Before 1850 (also SMU-in-Japan)
HIST 2395 Modern East Asia
HIST 3387 Asia and the West
HIST 3393 China in Revolution
HIST 3395 Problems in Asian History
HIST 3395 Early Asia (SMU-in-Australia)
HIST 3395 Traditional South Asia (SMU-in-Australia)
HIST 3398 Women in Chinese History
HIST 4394 Modern History of China (SMU-in-Taipei)
PLSC 3346 Governments and Politics of Japan (also SMU-in-Japan)
PLSC 3352 Chinese Politics
PLSC 4340 Special Studies in Comparative Government and Politics
PLSC 4353 Governments and Politics of East Asia
RELI 3378 Religions of China
RELI 3384 Hinduism and Colonial Encounters
SOCI 3300 Japanese Society (SMU-in-Japan)

## Group II: Humanities and Arts

ARHS 1305 Introduction to Far Eastern Art
ARHS 3394 Arts and Architecture of Japan (also SMU-in-Japan)
ARHS 3395 Arts and Architecture of India
ARHS 3396 Art and Architecture of China (also SMU-in-Taipei)
CHIN 4381 Readings in Chinese Literature and Culture
CHIN 4382 Chinese Culture and Society in Film
FL 3310 Transnational Chinese Cinema
FL 3312 Women in Modern China
FL 3322 Japanese Literature in Translation (SMU-in-Japan)
FL 3325 Perspectives on Modern China
FL 3395 A Cultural Journey into China (SMU-in-Suzhou)
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 (SMU-in-Japan)
RELI 3376 Constructions of Gender: Sexuality and the Family in South Asian Religions
RELI 3377 The Cultural History of Tibet
RELI 3378 Religions of China
RELI 3382 Mysticism, East and West
RELI 3385 Philosophies of India

## EUROPEAN STUDIES

Professor Daniel Orlovsky, Coordinator

The minor in European Studies provides students with an opportunity to design an interdisciplinary program of study that will give them an in-depth knowledge of European history, culture, politics and society. The program embraces all of Euurope, from the Atlantic (including Great Britain and Ireland) to the Urals (including Russia) from 1700 to the present. In the last half of the 20th century, but especially since the end of the Cold War, Europe has been integrating economically, culturally and politically. At the same time, the program is designed to take account of specific national cultures and traditions. 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.

The minor in European Studies requires 15 hours of study in specific courses. The first six hours (two courses) must be chosen from the four categories of the International Studies Basic Curriculum (see above). Each of the two courses must be from a separate category: either World Cultures, International Politics, International Economics or Global Perspectives. The next nine hours (three courses) must be chosen from the European Studies curriculum (below), with at least one course from each of the two groups: Group I(Social Sciences) or Group II (Humanities and Arts). 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. A cocurricular requirement for the minor in European Studies is two years of college-level study of a European language, other than English. This requirement may be met through examination, the transfer of language study credit from another university, or by taking courses on campus.

## Group I: Social Sciences

ANTH 3355 Society and Culture in Contemporary Europe
ANTH 3355/PLSC 4343 Nationalism in Europe (SMU-in-Copenhagen)
BA 3300 European Business Environment: The EU (SMU-in-Copenhagen)
BA 4315 EU Seminar (SMU-in-Copenhagen)
HIST 2366 Europe in the Modern World, 1760 to Present
HIST 3303 Modern England, 1867 to the Present
HIST 3328 Economic History of Europe: 1000 A.D. to the Present
HIST 3330 Women in Modern European History
HIST 3334 France Since 1789
HIST 3340 The Revolutionary Experience in Russia, 1900-1930
HIST 3341 Soviet/Post-Soviet Society and Politics, 1917 to the Present
HIST 3343 20th-Century European History (SMU-in-Copenhagen)
HIST 3346 Modern England, 1714 to the Present (SMU-in-Oxford)
HIST 3363 The Holocaust
HIST 3365/3366 Problems in European History
HIST 3365 The Making of Modern Europe (SMU-in-Spain)
HIST 3366 France, America, and the Atlantic World (SMU-in-Paris)
HIST 3367 Revolutions in European History
HIST 3374 Diplomacy in Europe: Napoleon to the European Union (also SMU-in-Paris)
HIST 3376 Social and Intellectual History of Europe
HIST 3381/PLSC 4340 Political History of Contemporary Spain (SMU-in-Spain)
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 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: Politics and Society (SMU-in-Copenhagen)
PLSC 3358 Government and Politics of Russia
PLSC 3359 From Communism to Democracy
PLSC 4340 Anglo-American Democracy (SMU-in-Oxford)
PLSC 4340 Danish Politics and Society (SMU-in-Copenhagen)
PLSC 4340 Special Studies in Comparative Government and Politics
PLSC 4358 Soviet Politics: Revolution to Revolution
PLSC 4380 Historical and Contemporary Issues of the European Construction (also 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)

## Group II: Humanities and Arts

ARHS 1331 Nineteenth Century European Art
ARHS 1332 Twentieth-Century Art: Sources and Styles of Modern Art
ARHS 2352 From Impressionism to Abstract: European Art, 1870-1920 (SMU-inCopenhagen)
ARHS 3329 Paris Art and Architecture I (SMU-in-Paris)
ARHS 3332 Masters of European Art (SMU-in-Copenhagen)
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 3352 Impressionism, Symbolism and the Deviant Body: Making a Difference (also SMU-in-Paris)
ARHS 3353 Impressionism in Context (SMU-in-Paris)
ARHS 4344/HIST 3349 Images of Power: Kings, Nobles and Elites (SMU-in-Paris)
CTV 2352 History of European Film (SMU-in-Copenhagen)
CTV 3310 Themes in European Film (SMU-in-Copenhagen)
CTV 3310 Screen Artists (SMU-in-Italy)
CTV 4305 Motion Pictures of Paris (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)
FL 2343 After Communism
FL 3303/SPAN 3373 Spanish Civilization (also SMU-in-Spain)
FL 3307 The Belle Epoque and the Birth of Modernity (SMU-in-Paris)
FL 3323/HIST 2323 Russian Culture
FL 3331 Survey of Russian Literature in Translation
FL 3361 Special Topics: French Literature in Translation
FL 3369 Perspectives on Modern Germany
FL 3390 Italian Cinema
FL 3391/2 Italian Literature in Translation
FREN 4373 French Civilization (also SMU-in-Paris)
FREN 4374 French Civilization (also SMU-in-Paris)
FREN 4375 Introduction to French History and Culture
FREN 4376 Introduction to Francophone Cultures
PHIL 3333 European Thought: From Modernism to Postmodernism (SMU-inCopenhagen)
PHIL 3352 History of Western Philosophy (Modern)
PHIL 3370 Nineteenth-Century Philosophy
PHIL 3370 Kierkegaard: Philosophy and the Meaning of Life (SMU-in-Copenhagen)
PHIL 3382 Twentieth-Century European Philosophy

## LATIN AMERICAN AND IBERIAN STUDIES

## Professor Alan Covey, Coordinator

Latin American and Iberian Studies provides students with an opportunity to design an interdisciplinary program of study that will give them an in-depth knowledge of Ibero-American history, culture, politics and society. The program embraces all of the countries of Latin America and the Iberian Peninsula. It is designed to take account not only of specific national cultures and traditions, as they have developed in Latin America, but also the importance of Latin cultures and Hispanic traditions in the United States. To maximize the educational experience,
students are strongly encouraged to spend at least one term or summer studying in Latin America, Spain or Portugal. To this end, Latin American and Iberian Studies provides its majors with several scholarships to attend the SMU-in-Spain term program as well as the SMU-in-Xalapa summer program. Students wishing to attend study abroad programs offered by other universities may have courses credited toward their major upon previous consultation with the Director of Latin American and Iberian Studies.

The major in Latin American and Iberian Studies requires 27 credit hours plus a language requirement as follows:
a. A prerequisite of two years of college level Spanish or Portuguese.
b. Six hours (two courses) from the first three categories of the International Studies Basic Curriculum (see above). The two courses must be from a separate category: either World Cultures, International Politics or International Economics.
c. A mandatory sequence of six hours (two courses), which constitutes the core curriculum for whole major.
First sequence: Colonial History (HIST 2384), or History of Latin America (HIST 3380 - SMU-in-Spain), or Spanish American Civilization (SPAN 3374); Second sequence: Latin America in the Modern Era (HIST 2385), or Government and Politics of Latin America (PLSC 3348).
d. Fifteen hours (five courses) in 3000-level or above courses concentrating in one of the following groups: Social Sciences and Humanities (Group I), Archaeology, Art History and Foreign Languages (Group II). Students who want to take a course from the group in which they do not concentrate may do so upon the permission of the Director of Latin American and Iberian Studies. Courses taken in the first and second sequence once taken do not double count for the group requirement. If a student is also majoring in International Studies, only two courses from the Area Studies curriculum may be double-counted.
The minor in Latin American and Iberian Studies requires 15 hours of study in specific courses. The first six hours (two courses) must be chosen from the four categories of the International Studies Basic Curriculum (see above). Each of the two courses must be from a separate category: either World Cultures, International Politics, International Economics, or Global Perspectives. The next nine hours (three courses) must be chosen from the Latin American and Iberian Studies curriculum (below), with at least one course from each of the two groups: Group I (Social Sciences) or Group II (Humanities and Arts). 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. A cocurricular requirement for the minor in Latin American and Iberian Studies is two years of college-level study of Spanish or Portuguese.

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 History of Latin America (SMU-in-Spain)
HIST 3381/PLSC 4340 Political History of Contemporary Spain (SMU-in-Spain)
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 4322 Latino Politics
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

(Spanish-language and literature courses are restricted to the Latin American and Iberian Studies major and minor. International Studies majors may not take these courses for International Studies credit.)

ANTH 3312 Meso-American Archaeology
ARHS 1308 Epic of Latin America
ARHS 3324 Arts and Cultures of Medieval Spain
ARHS 3338 Baroque Art in Italy, Spain and the New World
AHRS 3339 El Greco to Goya: Painting of the Golden Age
ARHS 3343 Goya and His Time
ARHS 3344 Paintings at the Prado (SMU-in-Spain)
ARHS 3360 Modern Painters in Spain (SMU-in-Spain)
ARHS 3376 Latin American Art
ARHS 3377 Art and Architecture of Hispanic New Mexico
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
ENGL 3363 Chicana/Chicano Literature
Please note that the following six courses are part of the Latin American and Iberian Studies major's Group I. However, they remain in Group II for the International Studies major's regional concentration on Latin America and for the Latin American and Iberian Studies minor.

FL 3303/SPAN 3373 Spanish Civilization (SMU-in-Spain)
FL 3305 Latin American Literature in Translation
FL 3306 The Heart of Aztlán: Chicano Literature of the Southwest
RELI 3353 Borderlands: Latino/Latina Religions in the United States
SPAN 3374 Spanish American Civilization (SMU-in-Xalapa)
Spanish Language and Literature Courses:
SPAN 4361 Translation: Theory and Practice
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
```


## Special Undergraduate Offerings

Opportunities for independent study and research are available to majors in Latin American and Iberian Studies. Students must have the program director's approval prior to registering for these courses. Prerequisites are stated for each independent study course below. No more than two such courses may be counted toward overall major or minor requirements. The director will indicate where these courses fit in the different sections of the major or the minor.
LAAM 4102, 4202 and 4302. Directed Readings in Latin American and Iberian Studies. Students develop and execute independent reading or research projects under the guidance of a Latin American and Iberian Studies faculty member, culminating in a written report. Prerequisites: Written approval of the instructor and the program director or a designate, at least sophomore standing, and appropriate introductory and advanced course preparation.
LAAM 4306. Internship in Latin American and Iberian Studies. Undergraduate students who arrange for part- or full-time jobs in Latin American and Iberian Studies related fields relate these experiences to their academic curriculum through research and writing, under the guidance of an International Studies faculty member. Prerequisites: Written approval of the instructor and the program director or a designate, at least sophomore standing, and appropriate introductory and advanced preparation.

## AFRICAN AND MIDDLE EASTERN STUDIES

## Professor Dennis Cordell, Coordinator

This course of study is offered as an area specialization for International Studies majors only.

## Group I: Social Sciences

ANTH 3314 Peoples of Africa
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 3326 The Venture of Islam
HIST 3378 Problems in African History
HIST 3386 History of the Caribbean
HIST 3389 Problems in Middle Eastern History
HIST 3390 The Modern Middle East: From the Ottoman Empire to OPEC
HIST 4364 History of South Africa: Background to Conflict

HIST 5395 A History of Iran<br>PLSC 3345 Government and Politics of the Middle East<br>PLSC 3347 Government and Politics of Africa<br>\section*{Group II: Humanities and Arts}<br>ARHS 3306 Mummies, Myths and Monuments of Ancient Egypt: Art and Expression of Eternal Egypt<br>ARHS 3328 Byzantine Art<br>ARHS 3354 Modern and Contemporary Art of the Arab World<br>ARHS 3390 Traditional Arts of Africa<br>ARHS 3392 Islamic Art and Architecture: The Creation of a New Art<br>FL 3349/HIST 3392 The African Diaspora: Literature and History of Black Liberation<br>RELI 3329 Introduction to Islam<br>RELI 3372 Biblical Interpretation and the State of Israel

MARKETS AND CULTURE<br>www.smu.edu/sociology/markets.htm Professor Linda Brewster Stearns, Director

The B.A. in Markets and Culture provides students the opportunity to learn about the world's market places from an interdisciplinary study in the social sciences and the humanities. Students will explore the economic principles of markets, the values and history of commerce, and the motives and myths that move people. By choosing from courses in a wide range of disciplines, including sociology, economics, anthropology, political science, history, psychology, literature and foreign languages, students will gain an understanding of the multiple institutions and cultures that shape the world's markets.

Requirements for the B.A. Degree. The markets and culture major requires 36 total hours, consisting of 24 hours of core classes and 12 hours of electives. Only six of the 12 elective hours may be double-counted in another major or minor. The core classes provide the student with the appropriate tools to understand the social basis of economic behavior as well as basic business concepts and practices. A grade of $C$ - or better must be earned in all courses fulfilling the major requirements, and Markets and Culture majors must attain a minimum G.P.A. of 2.0 among all courses attempted for the major.

A cocurricular requirement for a degree in markets and culture is one year of college-level study of a foreign language or equivalent. Majors are strongly encouraged to take advantage of opportunities for study abroad and internships to broaden their classroom experience.

The major offers graduation with distinction to select majors of high academic achievement. The program is open to junior and senior majors. Interested students with a minimum 3.0 overall G.P.A. and a 3.5 G.P.A in the major may consult with the director of the Markets and Culture 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 their 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 3.0 overall G.P.A. at graduation.
2. A minimum 3.5 average in courses taken for the markets and culture major.
3. Preparation of a distinction thesis under the supervision of a faculty member while enrolled in SOCI 4396. SOCI 4396 will be taken in addition to all other requirements for the major. The faculty adviser's grade of the thesis must be $A$ - or higher.
4. Pass 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 Markets and Culture and one additional faculty member selected by the faculty adviser in consultation with the student.
5. Must have completed SOCI 2377, SOCI 3377 and ENGL 2302, with an average of 3.5 .

## Core Courses

SOCI 2377 Markets and Culture
SOCI 3377 Organizations and Their Environment Prerequisite: SOCI 2377.
SOCI 4377 Contemporary Markets and Culture Prerequisites: SOCI 2377 and SOCI 3377.
ECO 3355 Money and Banking Prerequisites: ECO 1311 and ECO 1312 or FINA 3330
Money and Capital Markets (Students may not receive credit for this course and ECO 3355) Prerequisite: FINA 3320.

CSE 2337 Introduction to Data Management (ITOM 2308 Information Systems for Management may substitute.) Prerequisite: EMIS 1305, Prerequisite or corequisite: SOCI 2377.
ACCT 2301 Fundamentals of Accounting I
ENGL 2302 Business Writing Prerequisite: SOCI 2377.
STAT 2301 Statistics for Modern Business Decisions (STAT 2331 Introduction to Statistical Methods or ITOM 2305 Managerial Statistics may substitute.)

## Elective Courses

(Twelve advanced hours required. Courses must be selected from at least three departments with no more than 6 hours in any one area.)

ADV 3354 International Advertising (SMU-in-London)
ANTH 3305 The "Other" in America: Popular Perceptions and Government Policy
Through Time
ANTH 3310 Gender and Sex Roles: A Global Perspective
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 3327 Culture Change and Globalization: Social Science Perspectives
ANTH 3333 The Immigrant Experience
ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
ANTH 3344 Cultural Aspects of Business
ANTH 3346 Culture and Diversity in American Life
ANTH 3350 Good Eats and Forbidden Flesh: Culture, Food and the Global Grocery Market Prerequisites: Advanced standing and ANTH 2301, or permission of instructor.
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
ANTH 3361 Language in Culture and Society
ANTH 3366 Magic, Myth and Religion Across Cultures
ANTH 3368 Urban Life: A Cross-Cultural Perspective
ANTH 3374 Cultures and Environments of the Southwest
ANTH 4303 Political Economy of Health Prerequisites: ANTH 2301, ANTH 3301
or permission of instructor.

ANTH 4304 Migration and Ethnicity Prerequisites: Eighteen hours of anthropology or permission of instructor.
ANTH 4305 Applied Anthropology Prerequisites: Advanced standing and ANTH 2301, or permission of instructor.
ANTH 4344 Global Population Processes: Anthropological Perspectives Prerequisites: Eighteen hours of anthropology or permission of instructor.
ANTH 4384 Global Issues and Development: An Overview Prerequisites: Advanced standing and ANTH 2301, or permission of instructor.
ANTH 4390 Current Issues in Anthropology
BA 3300 Business in Europe (SMU-in-Paris)
BA 3300 European Business Environment: The EU (SMU-in-Copenhagen)
BA 3300 Management and Ethics in a Cross-Cultural Context (SMU-in-Spain)
BA 3300 Special Topics: Japanese Business (SMU-in-Japan)
BA 3301 Economies in Transition: Doing Business with Russia and Eastern Europe (SMU-in-Copenhagen)
BA 4315 EU Seminar (SMU-in-Copenhagen)
CCPA 3321 International Public Relations (SMU-in-London)
CHIN 3311 Advanced Chinese Prerequisites: CHIN 1401, 1402, 2401 and 2402.
CHIN 3312 Advanced Chinese Prerequisite: CHIN 3311.
CHIN 4411 China in the 1990s (SMU-in-Beijing)
CHIN 4412 Chinese Literature and Culture (SMU-in-Beijing)
ECO 3301 Price Theory (Intermediate Microeconomics) Prerequisites: ECO 1311 and 1312.
ECO 3302 National Income and Employment (Intermediate Macroeconomics) Prerequisites: ECO 1311 and 1312. Corequisite: ECO 3301.
ECO 3321 International Economic Policy Prerequisites: ECO 1311 and 1312.
ECO 4351 Labor Economics Prerequisite: ECO 3301.
ECO 4357 International Trade Prerequisite: ECO 3301.
ECO 4358 International Macroeconomic Theory and Policy Prerequisites: ECO 3301 and 3302 .
ECO 4366 Economics of the Public Sector Prerequisite: ECO 3301.
ECO 4368 Foundations of Financial Economics Prerequisites: ECO 3301, 3355, ACCT 2311 and STAT 2301 or ITOM 2305 (cannot be taken if student has taken FINA 3320).
ECO 5360 Economic Development Prerequisites: ECO 3301 and 3302, or permission of instructor.
ENGL 3354 Non-Western Culture and Literature (20th-century, Third World texts)
ENGL 3363 Chicana/Chicano Literature
ENGL 3365 Jewish American Literature and Culture
FINA 4329 International Finance in a European Context (SMU-in-Copenhagen)
FL 3303 Spanish Civilization (SMU-in-Spain)
FL 3312 Women in Modern China
FL 3322 Japanese Literature in Translation (SMU-in-Japan)
FL 3325 Perspectives on Modern China
FL 3361 Special Topics: French Literature in Translation (SMU-in-Paris)
FL 3369 Perspectives on Modern Germany Prerequisites: Sophomore standing or permission of instructor.
FL 3390 Italian Cinema
FL 3391 Special Topics: Italian Literature in Translation
FL 3392 Special Topics: Italian Literature in Translation
FREN 3356 Advanced French II Prerequisite: FREN 3455.
FREN 3455 Advanced French I Prerequisite: FREN 2401.

FREN 4365 Introduction to French Cinema Prerequisites: FREN 3356 and 4370, or permission of instructor and chair.
FREN 4375 Introduction to French History and Culture Prerequisites: FREN 3455, 3356 and 4370.
FREN 4376 Introduction to Francophone Cultures Prerequisites: FREN 3455, 3356 and 4370.
FREN 4391 Commercial French for International Trade Prerequisites: FREN 3455 and 3356.
GERM 3311 Talking and Writing about Modern Germany Prerequisite: GERM 2312 or equivalent.
GERM 3313 German Today: People, Culture, Society Prerequisite: GERM 3311 or permission of instructor.
GERM 4350 History, Culture and Identity in Post-War German Film Prerequisite: GERM 3320.
HIST 3303 Modern England, 1867 to the Present
HIST 3324 The Mexican Americans, 1848 to the Present
HIST 3326 The Venture of Islam
HIST 3327 Economic History of the United States
HIST 3328 Economic History of Europe: 1000 A.D. to the Present
HIST 3330 Women in Modern European History
HIST 3337 Ethical Dilemmas in a Global Age
HIST 3341 Soviet/Post-Soviet Society and Politics 1917 to Present
HIST 3343 Twentieth-Century European History (SMU-in-Copenhagen)
HIST 3349 Images of Power (SMU-in-Paris)
HIST 3364 Consumer Culture in the United States, 1770-1990
HIST 3365 Problems in European History: The Making of Modern Europe (SMU-in-Spain)
HIST 3366 Problems in European History
HIST 3374 Diplomacy in Europe: Napoleon to the European Union
HIST 3376 Social and Intellectual History of Europe
HIST 3380 Problems in Ibero-American History: Latin American History (SMU-in-Spain)
HIST 3382 History of Mexico
HIST 3386 History of the Caribbean
HIST 3387 Asia and the West
HIST 3390 The Modern Middle East: From the Ottoman Empire to OPEC
HIST 3393 China in Revolution
HIST 3395 Problems in Asian History
HIST 3396 Middle Eastern Economic History
HIST 3397 Modernity and Crises of Identity
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 Prerequisites: HIST 3340 or 3341, or permission of instructor.
HIST 5392 Seminar in European History Prerequisite: Junior standing or permission of instructor.
ITAL 3357 Italian Grammar and Composition Prerequisite: ITAL 2401.
ITAL 3373 Italian Culture Prerequisite: ITAL 2401.
JAPN 3311 Advanced Japanese
JAPN 3312 Advanced Japanese Prerequisite: C- or better in JAPN 3311 or permission of area chair.

JAPN 3501 Japanese Level 2 (SMU-in-Japan)
JAPN 4381 Readings in Japanese Culture and Business Prerequisite: JAPN 3312 or permission of area chair.
JAPN 4501 Japanese Level 3 (SMU-in-Japan)
MKTG 3340 Fundamentals of Marketing Prerequisites: ENGL 1301 and 1302;
MATH 1309 or 1337; ECO 1311, 1312; ACCT 2301 and ITOM 2305 or STAT 2301 or 2311 or EMIS 4340 or 5370.
MNO 3300 Environmental Business Strategy (SMU-in-Copenhagen)
MNO 3301 Global Business Strategy (SMU-in-Copenhagen)
MNO 3370 Management of Organizations Prerequisites: ENGL 1301 and 1302;
MATH 1309 or 1337; ECO 1311, 1312; ACCT 2301; and EMIS 4340 or 5370, ITOM 2305 or STAT 2301 or STAT 2331.
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 Governments and Politics of Japan
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: Superpower in Crisis (SMU-in-Copenhagen)
PLSC 3358 Government and Politics of Russia
PLSC 3359 From Communism to Democracy
PLSC 3365 Communism and Post-Communism
PLSC 3381 Current Issues in International Politics (SMU-in-Oxford)
PLSC 3382 International Organizations: Global and Regional
PLSC 3389 International Political Economy
PLSC 3390 Negotiating International Trade
PLSC 4340 Special Studies in Comparative Government and Politics
PLSC 4353 Governments and Politics 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
PLSC 4358 Soviet Politics: Revolution to Revolution
PLSC 4380 Special Studies in International Relations
PLSC 4386 Issues of U.S. - East Asia Relations
PLSC 4388 Seminar: International and Government Politics
PLSC 4391 NAFTA and Free Trade in the Americas
PLSC 4394 Modern History of China (SMU-in-Taipei)
PLSC 5341 European Politics: The European Union (SMU-in-Copenhagen)
PLSC 5383 Seminar on Regional Conflicts (SMU-in-Copenhagen)
PSYC 3341 Social Psychology
PSYC 5343 Organizational Psychology Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
RELI 3329 Introduction to Islam
RELI 3365 Understanding the Self: East and West
RELI 3366 Magic, Myth and Religion Across Cultures
RELI 3378 Religions of China
RELI 3382 Mysticism, East and West
SOCI 3305 Race and Ethnicity in the United States
SOCI 3311 Qualitative Research Methods Prerequisite: SOCI 2300 or 2310.
SOCI 3312 Survey Research Methods and Data Analysis Prerequisite: SOCI 2300 or 2310.

SOCI 3340 Global Society
SOCI 3345 Media Ethics and Gender
SOCI 3360 Law and Society
SOCI 3370 Minority-Dominant Relations
SOCI 3371 Sociology of Gender
SOCI 3372 Chicanos in the Southwest
SOCI 3383 Race, Culture and Social Policy in the Southwest
SOCI 4321 Immigration and Population Issues Prerequisites: Either SOCI 2300 or SOCI 2310, and either SOCI 3311 or 3312.
SOCI 4335 Social Movements and Collective Behavior Prerequisites: Either SOCI 2300 or SOCI 2310, and either SOCI 3311 or 3312.
SOCI 4340 Sociology of Culture Prerequisites: Either SOCI 2300 or SOCI 2310, and either SOCI 3311 or 3312.
SOCI 4353 Political Sociology Prerequisites: Either SOCI 2300 or SOCI 2310, and either SOCI 3311 or 3312.
SOCI 4373 Class, Race, and Gender Inequalities Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
SOCI 4379 Markets and Culture Internship Prerequisites: 3.0 G.P.A. in markets and culture major and 3.0 average in SOCI 2377 and 3377.
SPAN 3311 Conversation and Composition: Peninsular Culture Prerequisite: $C$ - or better in SPAN 2401 or equivalent.
SPAN 3312 Conversation and Composition: Mexican Culture Prerequisite: $C$ - or better in SPAN 2401 or equivalent.
SPAN 3313 Conversation and Composition: Latin American Culture Prerequisite: $C$ - or better in SPAN 2401 or equivalent.
SPAN 3355 Spanish Conversation Prerequisite: $C$ - or better in SPAN 2401 or equivalent.
SPAN 3358 Advanced Spanish Grammar Prerequisite: $C$ - or better in SPAN 2401 or equivalent.
SPAN 3373 Spanish Civilization (SMU-in-Spain) Prerequisite: One 3000-level Spanish course.
SPAN 3374 Spanish American Civilization (SMU-in-Xalapa, Mexico) Prerequisite: Cor better in one 3000-level Spanish course.
SPAN 4391 Commercial Spanish for International Trade Prerequisites: C- or better in SPAN 3358 and one of the following: SPAN 3311, 3312, 3313, 3355; or permission of instructor.
SPAN 4395 Introduction to Hispanic Literature Prerequisite: C- or better in SPAN 3358, or departmental permission.
STRA 5370 Strategic Management in a Global Economy Prerequisites: ACCT 2301 and 2302, EMIS 4340 or 5370 or ITOM 2305 or STAT 2301 or 2331, FINA 3320, MKTG 3340, MNO 3370, ITOM 3306.

## MATHEMATICS

## www.smu.edu/math Professor Douglas Reinelt, Department Chair

Professors: Alejandro Aceves, Ian Gladwell, Richard Haberman, Thomas Hagstrom, Peter Moore, Richard Williams; Associate Professors: Vladimir Ajaev, Thomas Carr, Robert Davis, Mogens Melander; Johannes Tausch; Assistant Professors: Yeo-Jin Chung, Daniel Reynolds, Brandilyn Stigler, Sheng Xu, Yunkai Zhou; Lecturer: Judy Newell; Visiting Lecturer: Adriana Aceres; Emeritus Professors: Montie Monzingo, George Reddien, Lawrence Shampine.

Requirements for the Bachelor of Science Degree 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:
Term Hours
Fundamental Mathematics: MATH 1337, 1338, 2339, 2343 ..... 12
Natural Science: Choose two from PHYS 1303, 1304;
CHEM 1303, 1304; BIOL 1401, 1402; one GEOL 1300 level course ..... 6
Computer Science: CSE 1341 or 1342 ..... 3
Statistics: STAT 4340/CSE 4340/EMIS 4340 (Students may substituteSTAT 5340/EMIS 5370 or EE 3360)3
Advanced Mathematics Elective: MATH 3000+ course ..... 3
Specialization in one of the following five areas: ..... 15In each specialization, five courses must be taken with a minimumof two courses at the 4000+ level, including at least one MATH 4000+ course.
I. Applied and/or Numerical MathematicsMATH 3315/CSE 3365 (mandatory)
Four from MATH 3334, 3337, 3353, 4335, 5315, 5316, 5331, 5332, 5334, 5353,EMIS 3360
II. Computer Science and Computer Engineering
MATH 3315/CSE 3365 (mandatory), CSE 4381 (mandatory)
Three from MATH 3353, 5315, 5316, 5332
III. Engineering
MATH 3315/CSE 3365 (mandatory), MATH 3337 (mandatory)
One from Group I: MATH 5315, 5331, 5332, 5334
Electrical Engineering
Two from Group II: EE 3322, 3330, 3372, 5330, 5332, 5336, 5360, 5362, 5372Mechanical EngineeringTwo from Group II: ME 4360, 5302, 5320, 5322, 5336 (MATH 6336), 5361, 5386
IV. Civil Engineering
MATH 3315/CSE 3365 (mandatory), MATH 3337 (mandatory)
One from Group I: MATH 5315, 5331, 5332, 5334
Two from Group II: ENCE 5361, ENCE 5364, ME 5322
V. Environmental Engineering
MATH 3315/CSE 3365 (mandatory), MATH 3337 (mandatory)
MATH 6336/ME 5336 (mandatory)
One from Group I: MATH 5315, 5331, 5332, 5334
One from Group II: ENCE 5331, 5332, 5334
VI. Operations Research
MATH 3315/CSE 3365 (mandatory) EMIS 3360 (mandatory)
Two from Group I: MATH 3353, 5315, 5316, 5332, 5353
One from Group II: EMIS 5361, 5362, 5369, STAT 5344/EMIS 5364
VII. Pure Mathematics
Five from MATH 3308, 3337, 3353, 4338, 4351, 4355, 4381, 5331, 5332, 5353

Requirements for the Bachelor of Arts Degree 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 Bachelor of Science degree except that there is no natural science requirement. In exceptional circumstances, the Department of Mathematics may choose to waive one course (three term-credit hours) in mathematics.

MATH 6000-level courses may also be taken for either major by students who have fulfilled the prerequisites and have departmental permission.

NOTE: All mathematics majors, either B.S. or B.A., must receive a grade of at least $C$ - in all courses taken in fulfillment of the requirements for the mathematics major.

Requirements for the Mathematics Minor. MATH 1337, 1338, 2339 and nine hours selected from mathematics courses at the advanced (3000+) level. MATH 2343 (Elementary Differential Equations) may replace an advanced-level mathematics course. All courses in the minor must be passed with a grade of $C$ - or higher.

For All Undergraduates: After a student matriculates to SMU, transfer credit for MATH 1307, 1309 or MATH 1337 will not be approved.

## The Courses (MATH)

1303. 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.
1304. 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.
1305. Introduction to Mathematical Sciences. Permutations and combinations, probability, Markov chains, linear programming, elementary statistics and mathematics of finance. Prerequisite: High school algebra.
1306. 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.
1307. Calculus I. Differential and integral calculus for algebraic, trigonometric and transcendental functions, with applications to curve sketching, velocity, maximum-minimum problems, areas and volumes. (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.
1308. Calculus II. A continuation of MATH 1337 through differential and integral calculus, 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).
1309. 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.
1310. Elementary Differential Equations. First order equations, linear equations, Laplace transforms, power series solutions and applications. Prerequisite: A grade of $C$ - or higher in MATH 1338.
1311. 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.

3315 (CSE 3365). 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.
3334. 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.
3337. 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.
3353. 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.
4300. Independent Study in Math. Independent study of a selected topic in mathematics. Prerequisite: By arrangement with faculty sponsor and with departmental approval.
4335. Mathematical Biology. Introduction of mathematical models of biological systems. Population dynamics, infectious diseases, population genetics, molecular and cellular biology. Prerequisites: Grades of $C$ - or higher in MATH 2343 and MATH 3353.
4338. 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.
4351. 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 3353.
4355. 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 3353 .
4381. 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: Grades of $C$ - or higher in MATH 3308, MATH 3353 or instructor's permission.
5315 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: Grades of $C$ - or higher in MATH 3315/CSE 3365 and MATH 2343; a programming course (e.g., C, FORTRAN or MATLAB).
5316. 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 will be in MATLAB with a focus on algorithms. Prerequisites: Grades of $C$ - or higher in MATH 3353; MATH 3315/CSE 3365.
5331. Functions of a Complex Variable. Complex numbers, analytic functions, mapping by elementary functions, complex integration. Cauchy-Goursat theorem, Cauchy integral formulas. Taylor and Laurent series, residues, evaluation of improper integrals. Applications of conformal mapping and analytic functions. Prerequisite: A grade of $C$ - or higher in MATH 3337.
5332. Wavelet Transforms. A mathematical introduction to sampling, data compression, multiresolution analysis, Fourier analysis and wavelet theory, including biorthogonal wavelets and spline wavelets. Prerequisites: Grades of $C$ - or higher in MATH 3337, 3353 and 3315/ CSE 3365.
5334. 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, Bessel functions, Fourier transforms. Prerequisite: A grade of $C$ - or higher in MATH 3337.
5353. Linear Algebra. Spectral theory of Hermitian matrices, Jordan normal form, PerronFrobenius theory, convexity. Applications include image compression, Internet page rank methods, optimization, linear programming. Prerequisite: A grade of $C$ - or higher in MATH 3353.

## MEDIEVAL STUDIES

www.smu.edu/medievalstudies Associate Professor Bonnie Wheeler, Director
Ranging from the 4th 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, ranging from business to religious studies and from biology to music theory and foreign languages and literatures. It 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-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.

Requirements for the B.A. Degree. 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 less 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 Medieval Studies and a committee of two other members of the SMU Medieval Studies faculty.

Distinction in Medieval Studies. The major offers graduation with distinction to select majors of high academic achievement. Interested students with a minimum 3.0 overall G.P.A. and a 3.5 G.P.A. 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 3.0 overall G.P.A. at graduation.
2. A minimum 3.5 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 of the thesis must be $A$ - or higher.
4. Pass 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 Medieval Studies and one additional faculty member selected by the faculty adviser in consultation with the student.
Requirements for the Minor. 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. Individual student programs are approved by the director of Medieval Studies.

As a model, the following is a typical Medieval Studies 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 (ENGL 3329, CF 3302) 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*

[^9]Many courses are offered each year; with few exceptions, the remainder are available at least every other year. Consult with the director about offerings and frequency.

## Medieval Studies

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 (CFA 3313) Islamic Art and Architecture
ARHS 3399 Medieval Jewish-Christian Dialogue in Art \& 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, CF 3363) Joan of Arc in History, Literature and Film
ENGL 3389 Directed Studies (when applicable)
ENGL 4320 Medieval Writers
ENGL 4323 Chaucer
FL 3365 Special Topics: French Literature in Translation (When applicable)
FL 3366 Special Topics: French Literature in Translation (When applicable)
FL 3393 Dante's Poetic Vision
FL 3391 Special Topics: Italian Literature in Translation (When applicable)
FL 3392 Special Topics: Italian Literature in Translation (When applicable)
FREN 5320 Literary Periods (When applicable)
FREN 5321 Literary Periods (When applicable)
FREN 5334 Genre Studies (When applicable)
FREN 5335 Genre Studies (When applicable)
HIST 2321 Philosophical and Religious Thought in the Medieval West
HIST 3332 Ancient and Medieval France
HIST 3344 (CF 3394) The Oxford Landscape: From the Stone Age to the Tudors (SMU-in-Oxford)
HIST 3345 (CF 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, CF 3363) Joan of Arc: History, Literature and Film
HIST 4320 Medieval Europe I
HIST 4321 Medieval Europe 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 Seminar in European History Autobiographical Tradition (when applicable)
LATN 3324 Advanced Latin Grammar and Composition
LATN 3335 Medieval Latin
MDVL 3321 (CF 3321) The Birth of the Individual
MDVL 3323 Tales of Wales
MDVL 3327 The Unicorn: Understanding Varieties of the Truth in the Middle Ages
MDVL }3329\mathrm{ (ENGL 3329, CF 3302) The World of King Arthur
MDVL 3351 (CF 3351) The Pilgrimage: Images of Medieval Culture
MDVL 3352 (CF 3352) Ideas and Ideals of Gender in the Middle Ages
MDVL 3353 (CF 3353) Medieval Ideas
MDVL 3398 Directed Studies
MDVL 3399 Directed Studies
MDVL 4371 Special Topics
MDVL 5301 Independent Studies
MDVL }5302\mathrm{ Independent Studies
MDVL }5398\mathrm{ Independent Studies
MDVL }5399\mathrm{ Independent Studies
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 3075 Collegium Musicum
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
```

The Courses (MDVL)
3321. The Birth of the Individual. Examines several basic notions pertaining to selfhood, including consciousness, cognition, motivation, personal identity and decision, as found in medieval texts.
3323. Tales of Wales. Survey of native Welsh literature (in translation) from the sixth to the 20th century. Primary focus is on medieval and Arthurian texts and their influence on the British and European literary imagination.
3327. The Unicorn: Understanding Varieties of the Truth in the Middle Ages. Investigates the question of how history and fiction were perceived in the Middle Ages.
3329. The World of King Arthur. Investigates Britain's greatest native hero and one of the world's most compelling story stocks: the legend of King Arthur and the Round Table, and the early Arthurian materials and the later romance, epic and artistic traditions.
3351. The Pilgrimage: Images of Medieval Culture. An exploration of the medieval world through one of its own literal and metaphorical images, moving from Jerusalem to the empire of New Rome, to Rome itself and across Europe on the pilgrimage roads of the Middle Ages.
3352. Ideas and Ideals of Gender in the Middle Ages. Focuses on the status of women in the Middle Ages and the impact of ideas regarding the feminine on the development of (mostly) Western thought.
3353. Medieval Ideas. Presents some of the classic achievements of the medieval mind. 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 cultures.
3398, 3399. Directed Study.

5301, 5302, 5398, 5399. Research and writing in medieval fields on special topics at the forefront of current intellectual interest.

## NATURAL SCIENCES <br> 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.

## Required Courses

BIOL 1401, 1402 Introductory Biology
BIOL 3350 Cell Biology
CHEM 1301, 1113, 1304, 1114 General Chemistry
CHEM 3371, 3117, 3372, 3118 Organic Chemistry
Select one of the following:
BIOL 3306 Physiology (note that BIOL 3350 is a prerequisite) or BIOL 3304 Genetics.

## PHILOSOPHY

www.smu.edu/philosophy Professor Eric Barnes, Department Chair
Professors: Eric Barnes, Doug Ehring; Associate Professors: Robert Howell, Steven Sverdlik, Brad Thompson; Assistant Professors: Philippe Chuard, Justin Fisher, Soraya Gollop, Matthew Lockard, Luke Robinson; Lecturers: Ken Daley, Giovanni Mion, Nenad Popovic; Adjunct Professors: Scott Bartlett, Stephen Hiltz, Jean Kazez, James Lamb; Adjunct Associate Professor Emeritus: Benjamin Petty.

Requirements for the B.A. Degree. 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 33103319. At least 12 hours of a foreign language are strongly recommended.

The Departmental Distinction Program. Departmental distinction is awarded to philosophy majors graduating with at least a 3.5 G.P.A. in philosophy and who successfully complete a writing project under the guidance of a faculty member.

Requirements for the Minor in Philosophy. Students majoring in other departments may obtain a 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 one course (three hours) must be chosen from the History of Philosophy sequence ( 3351 or 3352 ). It is recommended that each student minoring in philosophy take one of the department's general introductory courses.

Requirements for the Minor in Ethics. Students majoring in departments other than the Philosophy Department may obtain a minor in ethics. The minor consists of at least 15 hours, which must include the following philosophy courses: 1) PHIL 1305 or 1306 (Introduction to Philosophy); 2) one of PHIL 1316 (Introduction to Ethics), 1317 (Business Ethics), or 1318 (Contemporary Moral Problems); and 3) three from the sequence of PHIL 3371 through 3381.

## The Courses (PHIL)

1300. An Introduction to Practical Reasoning. Learning to analyze, evaluate and present information in order to better assess one's own beliefs and to persuade others more effectively.
1301. 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.
1302. Introduction to Philosophy. A general introduction to the central questions of philosophy. Topics include 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.
1303. 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.
1304. 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 selfinterest, 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.
1305. Business Ethics. A discussion of the moral and political issues surrounding a freeenterprise 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.
1306. 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.
1307. 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.
3302 (RELI 3302). 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.
1308. Philosophy and Gender. A consideration of 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.
1309. Advanced Topics in Philosophy. (May be repeated for credit.)
1310. 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.
1311. Introduction to the 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.
1312. Epistemology. 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.
1313. 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.
1314. Philosophy of Mind. A systematic treatment of the nature of consciousness, self and person.
1315. Topics in Philosophy. (May be repeated for credit.)
1316. History of Western Philosophy (Ancient). A study of the major philosophers from Thales to Plotinus, including Plato and Aristotle.
1317. History of Western Philosophy (Modern). This is a survey course in the history of modern philosophy. The modern period as we are considering it begins with Descartes, Includes Leibniz, Spinoza, Locke and Hume, and ends with Kant. Many seminal writing on central areas of philosophy occurred in this period, and this course provides an introduction to, and background for, these areas. We will be examining key writings from major figures on such issues 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. This course satisfies one part of the history requirement for philosophy majors; and may be used to satisfy the history requirement for philosophy minors.
3362 (CF 3341). Creativity, Discovery and Science. This course 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? The course will address in some 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 a scientific discovery? This course will combine 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 students with some science background will be well-equipped to appreciate the relevant issues.
3363 (CF 3308). Aesthetic Experience and Judgment. A good deal of 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.
1318. Philosophy of Biology. A survey of topics including evolution versus creationism, fitness, units of selection, adaptationism, biological taxonomy, evolution in humans, cultural evolution and niche construction. Prerequisites: A background in philosophy or biology is strongly encouraged.
1319. Philosophy in Literature. A nontechnical introduction to philosophy by an examination of traditional philosophical problems embodied in great works of fiction.
1320. 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.

3371 (CF 3342). 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.
3373. Punishment and Responsibility. 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.
3374 (CF 3307). 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?
3375. 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.)
3376. Bioethics. An examination of ethical questions arising within medical practice, medical research, and the life sciences.
3377 (CFA 3377). Animal Rights. An examination of the moral status of nonhuman animals, and its implications for the common use of animals as food and experimental subjects for humans.
3379. 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.
3380. 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.
3382. 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 NeoMarxist critical theory.
3383. 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).
4381. 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.)
4393, 4394. Independent Study and Research. Special topics to be selected by the student in consultation with the department. Prerequisites: Senior standing and departmental approval.
5310. Phenomenology. An explication of the main features, concepts and methods of phenomenology, and its relation to the history and problems of philosophy and other disciplines. Prerequisite: PHIL 3352 or permission of instructor.
6311, 6312. Philosophical Studies. Independent work on special topics.

# PHYSICS <br> www.smu.edu/physics <br> Professor Ryszard Stroynowski, Department Chair 

Professor: Fred Olness; Associate Professors: Thomas Coan, Kent Hornbostel, Roberto Vega, Jingbo Ye; Assistant Professors: Jodi Cooley-Sekula, Robert Kehoe, Pavel Nadolsky, Stephen Sekula; Senior Lecturer: Randall Scalise; Lecturer: Simon Dalley; Adjunct Lecturer: John Cotton; Emeritus Professors: Jeff Chalk, George Crawford, Vigdor Teplitz; Research Professors: Marc Christensen, Gary Evans, Peggy Gui, Cas Milner, Shane Palmer, Byron Williams.

The Physics Department offers a program consisting of course studies in broad areas of classical and modern physics, and research studies in both experimental and theoretical physics.

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 the physics 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 Degree. This degree program is designed for students who plan careers in physics in industry, laboratories or academia. A candidate for the B.S. degree must complete a minimum of 40 term hours in physics, including PHYS $1105,1106,1303,1304$ (or 1307 and 1308), 3305, 3340, 3344, 3374, 4211, 4321, 4392, 5382 and 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 term 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 term hours in computer science and engineering by completing either CSE 1341 or 2341. 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 Degree. 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 term hours in physics, including PHYS 1105, 1106, 1303, 1304 (or 1307 and 1308), 3305, 3344, 4211, 4392 and 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 term hours of courses in mathematics, including MATH 1337, 1338, 2339, 2343 and one advanced mathematics course.

Minor in Physics. A minor in physics is particularly appropriate for majors in the natural sciences, including premed, mathematics and engineering. The departmental requirement for a minor in physics is 17 term hours in physics, including PHYS 1105, 1106, 1303, 1304 (or 1307 and 1308), and nine hours of advanced course work.

The Departmental Distinction Program. 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 G.P.A. of 3.5. 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 either PHYS 4375 or 4390 during the program, and a senior thesis is to be written and presented to the faculty.

Simultaneous Degree Programs. It is also possible to earn simultaneously a B.S. degree 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.

## Bachelor of Science in Electrical Engineering and Bachelor of Science in Physics

The Electrical Engineering Department and the Physics Department offer an integrated curriculum that enables a student to obtain both a Bachelor of Science in Electrical Engineering (B.S.E.E.) degree and a Bachelor of Science (B.S.) degree with a major in Physics.

## Curriculum Notes

The minimum requirements for the dual degrees of Bachelor of Science in Electrical Engineering and Bachelor of Science in Physics are as follows:


## Bachelor of Science in Mechanical Engineering and Bachelor of Science in Physics

The Mechanical Engineering Department and the Physics Department offer a curriculum that enables a student to obtain both a Bachelor of Science in Mechanical Engineering and a Bachelor of Science in Physics.

## Curriculum Notes

The minimum requirements for the dual degrees of Bachelor of Science in Mechanical Engineering and Bachelor of Science in Physics are as follows:

| Curriculum Requirements |  | Term Credit Hours |
| :---: | :---: | :---: |
| General Education: | ENGL 1301, 1302, Perspectives and Cultural Formation courses | 21 |
| Mathematics: | MATH 1337, 1338, 2339, 2343, STAT 4340 | 15 |
| Sciences: | $\begin{aligned} & \text { PHYS 1303, 1304, 3305, 3344, } \\ & 3374,4211,4321,4392,5382,5383 \end{aligned}$ <br> and two advanced physics electives; <br> CHEM 1303 | 38 |
| Mechanical Engineering: | $\begin{aligned} & \text { ME 1202, 1102, 1305, 2310, 2331, } \\ & \text { 2131, 2340, 2140, 2342, 2142, 3332, } \\ & 3132,3340,3370,4338,4360,4160 \text {, } \\ & 4370,4380,4381 \text { and } 5322 \end{aligned}$ | 50 |
| Leadership Elective: | Select one from EMIS 3308, EMIS 3309, ENCE 3302 or CSE 4360 | 3 |
| Wellness I and II: |  | 2 |
| Minimum total hours requ |  | 129 |

Any deviation from the ME and/or PHYS 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.

## The Courses (PHYS)

1105. General Physics Laboratory. One three-hour laboratory period per week. Taken with PHYS 1303, 1307 if eight hours of credit, including laboratory, are needed.
1106. General Physics Laboratory. One three-hour laboratory period per week. Taken with PHYS 1304, 1308 if eight hours of credit, including laboratory, are needed. Prerequisite: PHYS 1105 or self-test.
1107. The Ideas of Modern Physics. Presents cosmology, relativity, quantum mechanics and particle physics in an essentially descriptive, nonmathematical framework accessible to all SMU students.
1108. Introductory Mechanics $\dagger$. For science and engineering majors. Vectors kinematics, Newtonian mechanics, gravitation, rotational motion, vibrations, waves and fluids. Prerequisite: Concurrent registration in MATH 1337 is allowed based upon satisfactory completion of a calculus course in high school and approval of instructor.
1109. Introductory Electricity and Magnetism $\dagger$. For science and engineering majors. Electricity, magnetism, electromagnetic radiation, optics, special relativity. Prerequisite: PHYS 1303. MATH 1338 recommended.
1307, 1308. General Physics. Principles and concepts of physics; applications in the life sciences. Mechanics, thermodynamics, sound, optics, electricity, magnetism, modern physics. Prerequisite: MATH 1337.
1110. Elements of Astronomy. A course in planetary and stellar astronomy including laboratory and observations.

[^10]1313. Fundamentals of Physics. Contemporary concepts of physics including Newtonian mechanics, gravitation, rotational motion, fluids, the gas laws, vibrations and waves, sound. Intended for the nonscience major. No prior knowledge of physics is assumed.
1314. 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.
1320. 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.
1403. General Physics. Equivalent of PHYS 1303 and 1105.
1404. General Physics. Equivalent of PHYS 1304 and 1106.
1407. General Physics. Equivalent of PHYS 1307 and 1105. Prerequisite: MATH 1337
1408. General Physics. Equivalent of PHYS 1308 and 1106. Prerequisite: MATH 1337.
3305. Introduction to Modern Physics. For science and engineering majors. Special relativity. Elements of quantum physics. Structure of atoms, molecules and solids. Nuclear physics. Elementary particles. Prerequisite: PHYS 1304.
3310. 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).
3320. Physics of Music. Covers the acoustics (physical sound properties) of music. Topics include sound in general, sound of musical instruments, acoustics, electronic synthesis, Fourier transforms, interference, diffraction, resonance. Prerequisites: PHYS 1303 and 1304 or equivalent. PHYS 3344 recommended. A basic knowledge of music is helpful.
3333. 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.
3340. Computational Physics. Introduction to the modeling of physical systems. Emphasis is on algorithm selection and implementation for simulating classical and quantum physics. Prior programming experience recommended.
3344. 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. Prerequisite: PHYS 1303 and MATH 2339 (or taken concurrently).
3345. 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 1303.
3368. 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.
3374. 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.
4112. Laboratory Physics II. Intermediate level experimental physics. Approximately one experiment per week. One three-hour laboratory period per week. Prerequisite: PHYS 1106, 3305.

4190, 4290, 4390. Special Projects in Physics. Directed study of special topics. For physics majors only. Prerequisites: Junior or senior classification and permission of department.
4211. Laboratory Physics I. Introduction to experimental physics. Approximately one experiment per week. One two-hour laboratory period per week. Prerequisites: PHYS 1105, 1106, 3305.
4321. Methods of Theoretical Physics. Matrices, determinants, linear algebra, complex variables, inhomogeneous equations, Sturm-Liouville theory, partial differential equations, special functions, Fourier series and integral transforms, integral equations, calculus of variations, applications. Prerequisites: MATH 2339, 2343.
4375. Research. For physics majors. Students will participate in physics research with a member of the faculty of the Department of Physics. Prerequisite: Permission of instructor.
4392. 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, time-varying electric and magnetic fields.

## For Undergraduate and Graduate Students

5337. 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. Energy bands in solids.
5338. Concepts of Experimental Particle Physics. Principles of elementary particle physics and the experiments by which we learn laws obeyed by these particles, with reading of scientific papers. Prerequisite: PHYS 3305 or equivalent; PHYS 5382 recommended.
5339. Introduction to Quantum Mechanics. A study of the development of quantum theory including blackbody radiation, the Bohr atom, and the photoelectric effect. Wave-mechanics and matrix-mechanics approaches will be studied, as well as a brief introduction to the Dirac formalism. Solutions to the Schrödinger equation for a variety of one-dimensional problems and for the hydrogen atom are discussed. Prerequisite: PHYS 3305 and MATH 3353.
5340. 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.
5341. 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: PHYS 4392 or equivalent, or permission of instructor.
5342. 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.

## POLITICAL SCIENCE <br> www.smu.edu/politicalscience/ Professor Dennis Ippolito, Department Chair

Professors: Seyom Brown, James Hollifield, Calvin Jillson, Michael Lusztig, Harold Stanley, Stephen Wegren; Associate Professors: Bradley Carter, Joseph Kobylka, Luigi Manzetti, Dennis Simon, Matthew Wilson; Assistant Professors: Hiroki Takeuchi, Wendy Watson; Professor Emeritus: James Gerhardt.

## For Undergraduate Students

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; 4000level 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 | $80-99$ |

Requirements for the B.A. degree. 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 and above). Advanced course work must include at least six hours (two courses) in each of two distribution fields, and three hours (one course) in a third.

Minors 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 politics, and American politics. 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.

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 3.0 overall G.P.A. at graduation.
2. A minimum 3.5 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 and will be in addition to all other requirements for the major.
4. Passing with distinction an oral examination of at least one hour, conducted by a faculty distinction examination committee, which reviews the candidate thesis and major curriculum.
5. A minimum 3.5 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.
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.

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

Research Design and Data Analysis (PLSC 4376), but strongly advises students interested in empirical research to do so.

Notes of Importance. 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.

## The Courses (PLSC)

## American Government and Politics

1320. 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.
1321. Principles of Public Policy. Public policy is the study of the outcome of the political process. Parties, pressure groups, bureaucracies and legislative bodies create the decisions that govern domestic social policy, international economic policy and defense policy. Prerequisites: ECO 1311 and PLSC 1320. Recommended: ECO 1312 and either PLSC 1340 or PLSC 1380.
1322. 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.
1323. 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.
1324. 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.
1325. 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.
1326. 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.
1327. 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.
1328. 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.
1329. Media and Politics. Examines how the media influence the American institutional governing process and citizen engagement in democratic practices such as acquisition of political knowledge and political decision-making.
3333 (PP 3310). Environmental Policy. Overview of governmental environmental policies designed to provide a foundation for future application and study in the growing environmental field.
1330. 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.
1331. Judicial Process. Examines the role played by courts in the American system of government. 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.
1332. 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.

## 4320. Special Studies in American Government and Politics.

4321. 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.
4322 (CFA 3326). 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.
4323 (CFA 3334). The Politics of Change in America, 1930-2000. Focuses on American politics and society from 1930 to the present. Examines how America has changed, explains why changes occur and assesses the consequences of these changes.
4322. Political Dynamics. Use of political parties in formulating political opinions, pressure groups, propaganda, measurement of mass opinions and political leadership.
4323. 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.
4324. 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.
4325. 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.
4326. Seminar: American Government and Politics. An overview of the central questions in the study of American government and politics.
4327. 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.
4328. Politics and Film. This course will use films as a vehicle for understanding politics, leadership and the political process in the United States. The class involves substantial reading and writing by students.
4329. Government and Business. Analysis of the roles of business in American policies and the impacts of political and governmental decisions on business activity.
4330. 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.
4331. Policy, Politics and the Budget. Examines the federal budget's historical evolution and contemporary significance. Topics include 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.
4332. 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.
4333. 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.
4334. Civil Rights. Examines changes wrought in the American system of governance by the addition of the Fourteenth Amendment, particularly its Equal Protection Clause, and the ways the Supreme Court has interpreted and applied it over time. Topics include racial discrimination, sex discrimination and equality in the political process.
4335. 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.
4336. 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.

## Comparative Politics

1340. Introduction to Comparative Politics. Analyzes and contrasts different patterns of national political development in Western, Marxist-Leninist and Third World countries. Examines political dilemmas confronting each type of system.
1341. 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, and extraparliamentary oppositions.
1342. 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.
3342 (CF 3388). 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.
1343. Governments and Politics of the Middle East. A survey of modern Middle East governments and politics. Topics include the historical, ideological and economic and social influences on their domestic and foreign policies, analysis of emerging political forms, and modernization problems.
1344. Governments and Politics of Japan. A study of political institutions, foreign policies and international relations, and the economic and social problems of Japan.
1345. Governments and Politics of Africa. The politics of Black Africa in an international context, emphasizing the problems of race, nationalism and economic development.
1346. Governments and Politics of Latin America. The structure, functions and operations of governments in Latin American countries with emphasis on political practices and institutions.
1347. 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.
1348. Chinese Politics. Chinese contributions to Marxist-Leninist theory; analysis of Chinese institutions and policy making, with emphasis on recent political developments.
1349. The Political Economy of the Welfare State. Focuses on the origins, evolution and management of industrial democracy in Europe and America. Emphasizes the interconnections between political and economic challenges inherent in policy making, and the economic implications of public policy.
1350. Government and Politics of Russia. Examines attempts to reform the former Soviet Union since 1985. Analyzes, in particular, 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.

3359 (CFA 3359). 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.

## 4340. Special Studies in Comparative Government and Politics.

4341 (CFA 3304). 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.
4342. Why Nations Revolt. Provides an introduction to revolutions by surveying the major theories that have been developed to explain the occurrence of revolutions. Various revolutions will be examined as case studies, including the French, Russian, Nazi and Chinese revolutions. In addition, at least one peasant revolution in the Third World will be covered.
4348. Seminar: Comparative Government and Politics. An overview of the central questions in the study of comparative government and politics.
4353. Governments and Politics of East Asia. Analysis of various aspects of social change and modernization and their effects on mass and elite political behavior and political processes in selected countries of East Asia.
4354. 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.
4355 (CFA 3355). 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.
4356. 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.
4358. 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.

## Political Theory

1360. Introduction to Political Theory. An introduction to political theory through an examination of classical and modern approaches to the study of politics. Addresses questions concerning how we get knowledge about politics and what we do with that knowledge.
1361. 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.
1362. Modern Political Thought. Main currents of political thought in their historical setting from the 17th century to the present.
1363. Twentieth-Century Political Thought. Analysis of the political implications of selected responses to the problems of modern mass society.
1364. 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.
1365. 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.
1366. 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.
1367. Special Studies in Political Theory.
1368. 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.
1369. Medieval Political Philosophy. Introduces students to 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."
1370. Religion and Politics. 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.
1371. Seminar: Political Theory and Philosophy. An overview of the central questions in the study of political theory and philosophy.
1372. 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.
1373. 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.
1374. Research Design and Data Analysis in Political Science. Focuses on the "art" and "science" of designing and conducting empirical research in political science. The topics covered include research design, measurement, data analysis and hypothesis testing.

## International Relations

1380. 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.
1381. Russia Under Putin. A study of contemporary Russia. The goal is to prepare a multifaceted assessment of the superpower that is and was Russia. How will it develop, politically, economically and militarily? The course is part of the SMU-in-Copenhagen program.
3381 (CFA 3381). 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.
1382. 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.
1383. The American Foreign Policy Process. A survey of the contemporary content and the conduct of American foreign policy.
3387 (CF 3303). 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.
3389 (CF 3389). 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?
1384. 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.

## 4380. Special Studies in International Relations.

4381. National Security Policy. The historical background and development of national security policy in the United States. Emphasizes war powers and defense policy: the constitutional framework, precedents, and presidential-congressional authority; and Cold War and post-Cold War national security strategies and defense policy issues.
4382. The Politics of Military Force. An examination of uses of U.S. military force as a political instrument and an attempt to judge its effectiveness as a tool of American foreign policy since the end of World War II.
4383. 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.
4384. 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.
4385. Issues of U.S.-East Asia Relations. Analysis of politics of trade imbalance, regional collective security, technology transfer and other problems of bilateral and multilateral relations between the United States and East Asian countries.
4386. Seminar: International Government and Politics. An overview of the central questions in the study of international government and politics.
4387. 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.
4388. 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.

## Special Undergraduate Offerings

Opportunities for independent study and research are available to majors in political science. Students must have departmental approval prior to registering for these courses. Prerequisites are stated for each independent study course below. Such courses may not be counted toward departmental distribution requirements, and no more than two such courses may be counted toward overall major or minor requirements.
4102, 4202, 4302. 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.
4301, 4401, 4402, 4403, 4404. 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.
4304. 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.
4306. 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.
4307. 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.
4343. Nationalities and Minorities in Europe. A study of minority issues in Europe. The Balkans, the Baltics, the Basques: why are they fighting? In modern Europe, minority issues are constantly debated and acted upon, both by majorities and minorities. The course is part of the SMU-in-Copenhagen program.
4363. Religion and Politics in the Western Tradition (CFA 3363). 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.
5341. 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.
5383. 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. The course is part of the SMU-in-Copenhagen program.

## PSYCHOLOGY

www.smu.edu/psychology/<br>Professor Ernest Jouriles, Department Chair

Professors: Alan Brown, George Holden; Associate Professors: Robert Hampson, Renee McDonald, Thomas Ritz, David Rosenfield, Jasper Smits; Assistant Professors: Austin Baldwin, Georita Frierson, Amy Pinkham, Katherine Presnell, Alicia Meuret, Lorelei Simpson; Lecturers: Michael Crow, Susan Hornstein, Chris Logan.

## Requirements for the Bachelor of Arts Degree in Psychology

Prior to declaring a psychologymajor, the following nine hours must be completed with a combined average of 2.0 or better with no individual grade less than a $C$-:

PSYC 1300 Introduction to Psychology
PSYC 3382 Research Methods in Psychology
STAT 2331 Introduction to Statistical Methods or STAT 2301 Statistics for Modern
Business Decisions
Five courses chosen from the following (15 hours):
PSYC 3332 Developmental Psychology
PSYC 3341 Social Psychology
PSYC 3380 Health Psychology
PSYC 3383 Sensation and Perception
PSYC 5354 Personality
PSYC 5355 Abnormal Psychology
PSYC 5384 Psychology of Learning
PSYC 5385 Biological Psychology
PSYC 5388 Memory and Cognition
PSYC 5390 History of Psychology

## Twelve additional hours at the $\mathbf{3 0 0 0}$ level or above.

Total number of hours: 36
Practicum, individual research, and independent study courses (4161, 4172, 4261, $4272,4361,4372,5100,5200$ and 5300) may be taken only on a pass-fail basis. Such courses will not count toward the major.

Requirements for the Minor in Psychology
PSYC 1300 (Introduction to Psychology) must be successfully completed before declaring a psychology minor. The minor requires three PSYC courses chosen from the following: 3332 (Developmental Psychology), 3341 (Social Psychology); 3380 (Health Psychology), 3382 (Research Methods in Psychology), 3383 (Sensation and Perception), 5354 (Personality), 5355 (Abnormal Psychology), 5384 (Psychology of Learning), 5385 (Physiological Psychology), 5388 (Memory and Cognition) and 5390 (History of Psychology).

The student must also complete two elective courses in psychology (six hours) at the 3000 level or higher, excluding independent research, human relations seminar, and practicum.

## The Courses (PSYC)

1300. 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).
1301. Developmental Psychology. A survey of the processes and variables that influence the development of the child, adolescent and young adult. Emphasis is on research in such areas as perceptual, cognitive, language and social/emotional development.
1302. Social Psychology. Effect of social conditions on individual behavior; includes topics such as attitude change, conformity, attraction, aggression and small-group behavior.
1303. Psychology of Women. A study of the origin and development of supposed sex differences and their psychological consequences. Emphasis on which sex differences are supported by research and which are not. Also covers the social and personal conflicts encountered by women today, particularly in the business world.
1304. 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. Prerequisite: PSYC 3382.
1305. Health Psychology. An overview of psychological factors affecting the body. Topics include emotion, stress, disease of the immune and cardiovascular systems, eating disorders and aging.
1306. 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.
1307. Sensation and Perception. Characteristics of external stimuli, physiology of receptor mechanisms, and information processing. Emphasis on vision and hearing with some coverage of other sensory modalities.
4161, 4261, 4361. Individual Research in Psychology. Supervised individual empirical research and/or library research on selected problems. The proposed research must be submitted to and approved by the instructor before admission. Pass/fail only.
4172, 4272, 4372. Human Relations Seminar/Practicum. An intensive study of interpersonal helping relationships based upon psychological theories and research findings. Focuses on supervised personal involvement with others as a helper. Pass/fail only.

## For Undergraduate and Graduate Students

5100, 5200, 5300. Advanced Individual Research in Psychology. Supervised individual empirical research and/or library research on selected problems. The proposed research must be submitted to and approved by the instructor before admission. Pass/fail only. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5333. Domestic Violence and Children. Overview of research and theory on domestic violence and its effects on children. Applied component involves working with children in a domestic violence shelter. Prerequisites: PSYC 1300, 3382 and STAT 2301, and permission of instructor.
5334. Psychological Disorders of Children. A study of the nature and causes of abnormal behavior in childhood. Includes theories, case studies and therapeutic approaches; emphasis is on understanding the relationship between normal and abnormal behavior. Prerequisites: Sophomore standing, six hours PSYC including 1300, 3332, 3382 and STAT 2331 or STAT 2301.
5336. Cognitive Development. A survey of the psychological literature concerned with the child's development of cognitive skills, structures and processes. Prerequisites: PSYC 1300, 3332, 3382 and STAT 2331 or STAT 2301.
5337. Social and Personality Development. An examination of theories of development of personality, with emphasis on those aspects that affect the individual's interaction in a social world. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5338. Psychology of the Family. An in-depth exploration of current research and theories dealing with psychodynamics of family life, developmental nature of the family, and family pathology. Prerequisites: Six term hours in psychology, including PSYC 1300, 3382 and STAT 2331 or 2301; or permission of instructor.
5341. Research Design in Psychology. Provides a background in the tactics of research design. Focuses on nonstatistical issues; unobtrusive measures, reactivity, causal relationships, experimental and quasi-experimental design, internal and external validity. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5343. Organizational Psychology. Psychological principles applied to organizations, both business and volunteer, emphasizing a systems approach and including selection and assignment of personnel, leadership, motivation, communication, groups and an overview of organizational developments. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5351. Social Perception. Surveys social perception and cognition, including topics such as person perception, nonverbal communication, emotional expression, accuracy and stereotyping. Ecological, evolutionary and cognitive theoretical approaches to social knowledge acquisition are considered. Prerequisites: PSYC 1300, 3341, 3382 and STAT 2331 or 2301; or permission of instructor.
5354. Personality. An examination of theories that attempt to explain the underlying bases of personality and the causes of individual differences. Emphasis is placed on the normal personality, but the causes of abnormal personality development, as outlined by each theory, are discussed as well. Prerequisites: Sophomore standing and six hours of psychology, including PSYC 1300, 3382 and STAT 2331 or 2301.
5355. Abnormal Psychology. An examination of the causes, correlates, consequences and treatment of abnormal behavior and mental states. Emphasis placed on findings from empirical research. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5356. Introduction to Clinical Psychology. A survey of the important issues and subfields of clinical psychology from the viewpoint of the scientist-practitioner model. Research, assessment, diagnosis and theories in the area of psychotherapy are covered. Primarily designed for students contemplating graduate school in clinical psychology or related fields. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301; or permission of instructor.
5359. Death and Dying. An intensive study of topics related to mortality including sociocultural attitudes, funeral practices, loss and mourning, suicide, death across the lifespan, legal and ethical issues, and spiritual aspects of death. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.

5361, 5362, 5363. Special Topics in Psychology. Designed to cover topics that may have temporary or limited interest. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5371. Psychological Testing. Statistics and theories underlying the construction of psychological tests and inventories; emphasis upon concepts of reliability, validity and other procedures for utilizing and evaluating psychological tests. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5382. Advanced Experimental Psychology. Topics include descriptive and inferential statistics, experimental design, correlational design and quasi-experimental design. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5383. Behavioral Medicine. Biopsychosocial bases of problems in physical health ranging from acute illness to chronic diseases and addictive disorders. Emphasis is on psychological assessment and treatment of these conditions. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301; or permission of instructor.
5384. Psychology of Learning. A survey of the general principles, concepts and current developments in the empirical analysis of learning. Topics include conditioning modes of addiction, learned helplessness and the contribution of evolution to the expression of behavior change. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5385. Biological Psychology. A survey of the neural bases of behavior. Primary emphasis will be given to mammalian brain structure and function and their relationships to psychological and behavioral processes. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5386. Behavioral Action of Drugs. Principles of drugs and behavior. Classification and chemical effects of behaviorally active drugs. Influences of environmental, response and task variables, as well as evaluation and treatment of addiction. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5387. Psychology of Motivation. A study of current theories of motivation, with attention to the methods used in studying motivation and the effects of motivation on selected behaviors in human beings and animals. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5388. Memory and Cognition. A study of how information is encoded, stored and retrieved in adults. Topics may include attentional processes, verbal learning, memory, comprehension and problem solving. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5390. History of Psychology. Covers the most important movements and individuals contributing to the development of modern psychology. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.
5392. Comparative Cognition. Comparative cognition studies the higher mental abilities (e.g., learning, remembering, problem solving, language) of humans and animals. These abilities are examined from cognitive, learning, developmental and evolutionary viewpoints. Prerequisites: PSYC 1300, 3382 and STAT 2331 or 2301.

## PUBLIC POLICY

www.smu.edu/dedman/majors/publicpolicy<br>Professor Dennis Ippolito (Political Science), 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.

Major Requirements. The B.A. degree in public policy requires a total of 39 hours. The degree consists of two components:

1. Twenty-four 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 (ECO) and six hours in political science (PLSC) or public policy (PP).
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 of Importance. Students must receive at least a $C$ - in all classes counting toward the major.

List of fields and acceptable courses (additional prerequisites not contained in the core are listed in parentheses):
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 (Prerequisite: ECO 3302)
ECO 5361 Natural Resources and Energy Economics (Prerequisite: ECO 3302)
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 4333 Policy, Politics and the Budget
Law and Social Policy
ECO 4351 Labor Economics
ECO 5337 Urban Economics
ECO 5353 Law and Economics
ECO 5357 Economics of Human Resources
PLSC 3321 Congress and the Legislative Process
PLSC 3330 Law, Politics and the Supreme Court
PLSC 3335 Judicial Process
PLSC 3370 Women and Politics
PLSC 4321 Basic Issues in American Democracy
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 (Prerequisite: ECO 3302)
ECO 5360 Economic Development: Macroeconomic Perspectives (Prerequisite: ECO 3302)
PLSC 3340 Western European Politics
PLSC 3345 Governments and Politics of the Middle East
PLSC 3346 Governments and Politics of Japan
PLSC 3348 Governments and Politics of Latin America

PLSC 3358 Government and Politics of Russia<br>PLSC 3383 The American Foreign Policy Process<br>PLSC 3389 International Political Economy<br>PLSC 4356 Latin American Political Economy<br>PLSC 4381 National Security Policy<br>PLSC 4384 The American-Russian Relationship<br>PLSC 4386 Issues of U.S.-East Asia Relations<br>PLSC 4391 NAFTA and Free Trade in the Americas<br>Quantitative Methods<br>ECO 5341 Strategic Behavior<br>ECO 5350 Introductory Econometrics<br>ECO 5370 Cost-Benefit Analysis<br>ECO 5375 Economic and Business Forecasting

The Courses (PP)
3310. Environmental Policy. Overview of governmental environmental policies designed to provide a foundation for future application and study in the growing environmental field.

## RELIGIOUS STUDIES

## www.smu.edu/dedman/religen.html Professor Mark Chancey, Department Chair

Professors: Charles Curran, Robin Lovin; Associate Professors: William Barnard, Mark Chancey, Richard Cogley, Carl Johan Elverskog, Serge Frolov, John Lamoreaux; Assistant Professors: Jill DeTemple, Steven Lindquist.

Degree Program. 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, 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 twelve term hours in either French or German.

Major Requirements. Thirty term hours in the department. Twenty-four must be completed in courses numbered above 3000 and must include RELI 3306 or 3307 and 3319 or 3326 .

Departmental Distinction. A religious studies major with minimum overall G.P.A. of 3.0 and a 3.5 G.P.A. 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 Requirements. 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 above 3000 and including one course chosen from RELI 3306, 3307, 3319 or 3326.

## The Courses (RELI)

1301. 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.
1302. Introduction to Eastern Religions. An introductory historical overview of the major religious traditions of Asia. The course will explore developments in religious and cultural trends expressed in South Asia (Hinduism, Buddhism, Jainism and Sikhism) and in East Asia (Confucianism, Taoism and Shinto).
1303. 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.
1304. 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.
1305. 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.

3302 (PHIL 3302). 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.
3304. Introduction to 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.
3305 (CF 3331). Religion as Story. An interpretation of stories as modes of religious discernment as well as means of religious communication, with special attention to selected narrative forms such as myth, fairy tale, novel and autobiography.
3306. Introduction to the Hindu Tradition. An exploration of the major attitudes and institutions that define the Hindu tradition, with attention to ideology, social organization and ritual in light of both historical development and contemporary practice.
3307. Introduction to 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.
3308. 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.
3309 (CF 3361). 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.
3310 (SOCI 3320). The Social-Scientific Study of Religion. An 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.
3314. Studies in 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.
3315. 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.
3316 (CFA 3306). Religion and Science. An exploration of how religion and science understand such topics as the origins and destiny of the universe and the evolution of life.

3317 (CF 3357). Human Meaning and Value in Personal Life. An exploration of the two positive marks of a productive life - love and work - and the two threats to an abundant life - suffering and death.

3318 (CF 3316). 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.
3319. Introduction to the Hebrew Bible. An introduction to the Old Testament and to the religion and history of ancient Israel. Special emphasis will be given to the ancient Near Eastern roots of biblical religion and to the modern interpretation of biblical myth, epic and prophecy.
3320. Introduction to Classical Judaism. An introduction to the study of religion through examination of Judaism. The course will look at central Jewish religious ideas and how they developed within the rabbinic and medieval periods. Special attention will be given to conflicts and controversies, such as Judaism's rejection of early Christianity; heretical movements within medieval Judaism; and Jewish attitudes toward other religions.
3321 (CF 3332). 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.
3324. The Jewish Experience in America. An examination of Jewish life in America, including history, literature, cultural expressions and religious beliefs from the seventeenth century to the present.
3326. Introduction to the New Testament. An introduction to the writings of the New Testament, the formative events, and the persons who played leading roles in the origin of Christianity.
3329. Introduction to Islam. An examination of the history, doctrines and rituals of the Muslim community, including Islam in both the past and the present and in its global context.
3330. The 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.
3331. Renewal of Roman Catholicism at the Second Vatican Council. The main section of the course will concentrate on a study of the more significant documents of the Second Vatican Council (1962-1965). An introductory part will consider the background prior to the Second Vatican Council and the changes that helped bring it about. A concluding part will deal with the more significant developments in Roman Catholicism in the last 30 years.
3333. 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.
3334. Conservatism and Liberalism in American 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.
3335. Religious Sects and Cults in America. An examination of new religious movements that have originated in America (such as Mormonism, Seventh-Day Adventism, Scientology, Christian Science and the Nation of Islam) or have been transplanted here from abroad (e.g., Hasidic Judaism, Theosophy, the Unification Church, the Hare Krishna movement and Baha'i).
3336. African-American Religious History. An examination of the major movements, figures and critical issues in African-American religious history. The focus is on the United States, although West African, Caribbean and South American materials are included. Special attention is given to slave religion, the civil rights movement and Black criticism of Christianity.

3337 (CF 3356). Christianity and American Public Life. Course objectives are: 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.
3338 (CFA 3338). Christ as Cultural Hero. An exploration of the impact of Jesus on the history of Western culture, not only in religion and philosophy, but also in the fine arts, literature and politics.
3339 (CFA 3339). 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.
3340. 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.
3349. Early Christianity. Major developments in the history of Christianity from 100-600. Emphasis is placed on institutional and ideological developments.
3350. 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.

3352 (CF 3346). Love and Death in Ancient Mythology. 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.

3353 (CFB 3353). Borderlands: Latino/Latina Religions in the United States. An introduction to Latino/Latina religions and religious practices in the United States, with a special emphasis on social constructions of the "borderland."

3358 (CFA 3322). The Psychology of Religion. An investigation of the biological and psychological underpinnings of religious belief, behavior and experience, as well as the psychological and biological consequences of religion.
3359. Nordic Mythology. The religion and worldview of the pre-Christian Scandinavians is reflected in the mythology preserved in medieval texts and poems from the Viking Age (800-1050). The course is based on readings of these primary texts. The Icelandic Sagas further provide a glimpse into the culture and values of the Vikings. (SMU-inCopenhagen)
3360. The History of Judaism. An overview of both the historical development of the Jewish tradition and its central laws, religious practices and theology.
3362. 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 encounters today.
3364. 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.
3365 (CF 3339). Understanding the 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.
3366 (ANTH 3366). Magic, Myth and Religion Across Cultures. A cross-cultural and comparative exploration of religion, ritual, magic and supernatural belief systems among peoples of the world. Examines how religion permeates other aspects of society and culture.
3367. The Religious Life of China and Japan. An introduction to the history, thought and religious practices of Taoism, Confucianism, Shinto and Mahayana Buddhism.
3368 (CF 3368). 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.
3370. 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.
3371 (CFA 3307). 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.
3372. 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.
3374. 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.
3375 (CF 3343). Wives, Mothers, Lovers, Queens: Expressions of the Feminine Divine in World Religions and Cultures. 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.
3376 (CF 3344). Constructions of Gender, Sexuality and the Family in South Asian Religions. A comprehensive historical overview of gender issues as they are represented in the great textual traditions of South Asia. To make these classical texts more relevant, readings in recent anthropological studies of religion will also be included to enable the student to trace recurring gender themes, images and symbols.
3377 (CF 3399). 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.
3378. Religions of China. A historical survey of the religious cultures of China from the ancient Shang dynasty through the contemporary period.
3380. 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.
3382. Mysticism, East and West. 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.

3384 (CFB 3384). Hinduism and Colonial Encounters. A critical study of the history of colonialism in India and its impact on social, religious and political discourse.
3385. Philosophies of India. An examination of some of the major traditions of Indian systematic philosophy. Attention to the analysis of consciousness, perception, language and the problems of validation.
4198, 4199. Independent Study.
4298, 4299. Independent Study.
4352. Jesus and the Gospels. An examination of canonical and non-canonical Christian Gospels, with special attention to methods of gospel research and to the study of the historical Jesus.
4354. The Prophets of the 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.
4356. The Bible and Ethics. An examination of the ways in which Christians have appealed to scripture in ethical debates, with special attention to classic ethical approaches, specific ethical issues and methodological problems.
4371. 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.
4381. Internship in Religious Studies. 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.
4198, 4199, 4298, 4299, 4398, 4399, 4498, 4499. Independent Study.
4388, 4389. Special Topics in Religious Studies. A detailed investigation of a topic chosen by the instructor. Topics vary.
4396, 4397. Directed Reading and Research. Special topics to be selected by the student in consultation with the department. Open to seniors upon departmental approval.
4398, 4399. Independent Study.

## SOCIOLOGY

www.smu.edu/sociology
Professor Linda Brewster Stearns, Chair
Professor: Anthony Cortese; Associate Professor Richard Hawkins; Assistant Professors: Dalia Abdel-Hady, Matthew R. Keller, Anne E. Lincoln, Sheri Locklear Kunovich; Lecturers: Debra Branch, Michael Cruz, Adrian Tan; Adjunct Lecturer: Karen de Olivares.

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, demography, public administration, policy analysis, gerontology, education, social work and market research.

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.

Requirements for the B.A. Degree. This major requires a minimum of 33 term hours, 18 of which must be at the advanced level. The four required courses include either SOCI 2300 or $2310,3311,3312$ and either SOCI 4313 or 4314 . Of the remaining 21 credit hours, six hours must be at the 4000 level. Students should take either SOCI 2300 or 2310 and either 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 foreign language are recommended.

Requirements for the B.S. Degree. The B.S. degree is a more specialized program than the B.A. 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 either SOCI 2300 or 2310, 3311, 3312, 4313 and 4314. Of the remaining 21 credit hours, nine hours must be at the 4000 level. Students should take either SOCI 2300 or 2310 and either 3311 or 3312 before taking a 4000level course. STAT 1301 or 2331 may be counted as one of the courses within the sociology major. Twelve term hours of foreign language are recommended.

The Department Distinction Program. 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 semester, 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.

Requirements for Minor in Sociology. Students majoring in other departments may obtain a minor in sociology by completing either 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)

2300. Social Problems. Selected problems of modern urban life analyzed with an emphasis on American values, the nature of community, and the manifest and latent functions of proposed solutions to social problems.
2301. Introduction to Sociology. The perspective and basic content of sociology, emphasizing the ways in which values and other beliefs influence social behavior.
2302. Markets and Culture. A general introduction to economic sociology, examining the effects of culture and social relations on shaping production, distribution and consumption in domestic and global markets.
3301 (ANTH 3301, CFB 3301). 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 exploration of biomedicine, and ethical dilemmas associated with medical technologies and global disparities In health. Meets Human Diversity corequirement.
3305 (CFA 3310, ETST 2301). 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 within a global context. Meets Human Diversity corequirement.
2303. Qualitative Research Methods. Course provides an overview of commonly used methodologies in sociology, with a focus on qualitative methods. Topics include the relationship between theory and qualitative methods, an inductive versus deductive approach, data collection, data analysis and presentation of findings. Prerequisite: Either SOCI 2300 or 2310.
2304. Survey Research Methods and Data Analysis. Course provides an overview of social survey design and collection of quantitative survey data. Topics include questionnaire design, field implementation, statistical analysis of data and presentation of findings. Lab sessions will investigate sociological data sets. Prerequisite: Either SOCI 2300 or 2310.
3320 (RELI 3310). 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.
2305. Person vs. Society. Social-psychological examination of causes and consequences of conformity and loss of individuality; emphasis on strategies for countering pressures to conform and for achieving personal autonomy.
2306. Global Society. Provides students with a sociological orientation to the contemporary world viewed as an evolving network of nation-states. Focusing on the global interdependence of countries, the position of societies in the world system will be related to their internal patterns of social stratification.
2307. Media Ethics and Gender. Provides a broad historical and contemporary background to the study of media, ethics, and gender images - both in the U.S. and abroad.
2308. Marriage and Family. Husband-wife and parent-child relations in the United States; traditions and alternatives.
2309. Family Conflict. Domestic violence, conflict over child custody in divorce, incest and child abuse, neglect and failure to support are topics in the changing family in America. Intergenerational issues and problems are also discussed.
2310. 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.
2311. Crime and Delinquency. Extent of the problem, causal theories, prevention and public policy.
3368 (ANTH 3368). 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. Meets Human Diversity corequirement.
2312. Minority-Dominant Relations. The nature, origins, and consequences of relationships between unequal groups; U.S. and other societies compared.
2313. Sociology of Gender. Roles of men and women in American Society; analysis of the acquisition, content and consequences of sex roles; social movements and implications for social change.
2314. Chicanos in the Southwest. Contemporary Chicano life and culture in the Southwest; effects of racism and rapid urbanization.
2315. Organizations and Their Environments. Explores the theories and relationships between organizations and environment. Applies these theories to the analysis of real world organization activities. Prerequisite: SOCI 2377.
3383 (CF 3385). Race, Culture and Social Policy in the Southwest. This interdisciplinary seminar introduces students to conceptualizing social problems. Focus is on the distinctive conditions defined and treated as social problems in the American Southwest. Meets Human Diversity corequirement.
4193, 4293, 4393. Individual Research. Prerequisites: Either SOCI 2300 or SOCI 2310 and either SOCI 3311 or 3312 and one 3000 -level course.
2316. The Sociological Tradition. Introduction to ideas and theories of 19th- and early 20thcentury sociologists. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2317. Contemporary Sociological Theory. Recent trends in sociological theory and research. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2318. Immigration and Population Issues. Causes and consequences of population growth and change in the United States and the world. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2319. Social Movements and Collective Behavior. Nature, causes and consequences of crowds, riots, fads, public opinion, social movements and revolution. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2320. Sociology of Culture. This course provides an overview of the sociological study of culture and focuses on the ways language, artifacts, ideas, identities and narratives construct social reality. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2321. Political Sociology. Political movements, the impact of politics on other institutions in America, and issues of power and control are discussed. Global issues of economics and political power are included. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2322. Gangs in the United States: Developing Historical, Social and Theoretical Understandings of a Modern Problem. An examination of the history, development and structures of gangs in the U.S., which incorporates explanatory theories, policy and models for prevention, intervention and suppression of gang activity. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2323. The Administration of Justice. Law enforcement and criminal court systems; the ideal of justice and public policy. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2324. Correctional Systems. The history of punishment, adjustment to incarceration, and comparison of prisons for men and women. Constitutional issues of criminal punishment are discussed. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2325. Deviant Behavior. Causes and consequences of deviant behavior; evaluation of leading theories. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2326. Wealth and Consumption. This course 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: Either SOCI 2300 or 2310 , and either SOCI 3311 or 3312.
2327. Class, Race and Gender Inequalities. Unequal distribution of power, prestige and opportunity within society; causes and consequences. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.
2328. Social Change. Review of major social change theories emphasizing: technology, modernization, social power, impact of change on individuals and institutions. Also examines possible solutions to resulting problems. Seminar format. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312 .
2329. 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: SOCI 2377 and 3377.
2330. Markets and Culture Internship. By arrangement with faculty sponsor and program adviser. Eligible students will perform an analysis of a particular markets and culture problem at the interning firm or organization. The project will be approved by the student, the faculty sponsor, the program adviser, director and the interning firm or organization prior to term registration. In addition, the student must complete a 15 - to 20-page paper under the supervision of the faculty sponsor and give an oral presentation to the faculty sponsor and program adviser. Prerequisites: 3.0 G.P.A. in markets and culture major and 3.0 average in SOCI 2377 and SOCI 3377.
2331. Individual Research for Distinction. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312 , and one 3000 -level course, and permission of director of undergraduate studies.
2332. Sociological Internship. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312, and permission of director of undergraduate studies.
2333. Special Topics: Sociology Seminar. Seminar on selected sociological areas. May be repeated for credit if topics differ. Prerequisites: Either SOCI 2300 or 2310, and either SOCI 3311 or 3312.

## STATISTICAL SCIENCE

www.smu.edu/statistics
Professor Wayne Woodward, Department Chair
Professors: Ronald Butler, Richard Gunst, William Schucany, Lynne Stokes; Associate Professors: Ian Harris, Monnie McGee, Hon Keung Ng, Sherry Wang; Assistant Professor: Jing Cao; Emeritus Professors: Narayan Bhat, Henry Gray, Chandrakant Kapadia, Campbell Read.

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.

Requirements for the B.S. Degree. The Bachelor of Science in Statistical Science prepares students for advanced studies in statistical science, such as graduate work in the field or in a related discipline.

## Requirements for the Bachelor of Science in Statistical Sciences <br> (42 hours)

MATH 1337, 1338, 2339
STAT 4340 or 5340, 5371, 5372, 4399
Electives - Twenty-one hours selected from the following, including at least 9 advanced hours in STAT

STAT 1301 or 2301 or 2331 or ITOM 2305 (no more than one), 3312, 3370, 3380, 4385, 5377
MATH 2343, 3353 (highly recommended)
EMIS 3360, 5361, 5369
ECON 5350, 5375, 5385
or other advanced courses
Requirements for the Minor. 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.

```
STAT 1301, 2301 or 2331 or ITOM 2305 (no more than three hours).
STAT 3312, 3370, 3380, 4385, 5377; PSYC 3382 (at least six hours)
STAT 5371, }5372\mathrm{ (6 hours)
```


## The Courses (STAT)

1301. 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.
1302. 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. Prerequisite: GEC Math Fundamentals or equivalent.
1303. Introduction to Statistical Methods. An introduction to statistics for behavioral, biological and social scientists. Topics include descriptive statistics, probability and inferential statistics including hypothesis testing, and contingency tables. Prerequisite: GEC Math Fundamentals or equivalent.
1304. 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.
1305. Survey Sampling. Principles of Planning and Conducting Surveys. Simple random sampling; stratified, systematic, subsampling; means, variances, confidence limits; finite population correction; margin of error and sample-size determination. Prerequisite: STAT 2301 or 2331 , or equivalent.
1306. 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.
4340 (CSE 4340, EMIS 4340). 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.
1307. 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.
1308. Statistical Science in Practice. Practical experience on projects dealing with the collection, analysis and interpretation of data. Three to four major projects, one of the student's design. Case studies from a variety of disciplines. Prerequisite: Statistical Science major or minor with senior class standing.

## For Undergraduate and Graduate Students

These courses do not carry graduate credit for students in the M.S. program or in the Ph.D. program in statistical science.
5110 and 5310. 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.
5340 (EMIS 5370). 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.
5344 (EMIS 5364). 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: MILSTD 105, MIL-STD 414, Dodge-Romig plans, continuous sampling plans, etc. Prerequisite: STAT 4340 or STAT 5340.
5371. Experimental Statistics I. A non-calculus development of the fundamental procedures of applied experimental statistics, including tests of hypotheses and interval estimation for the normal, binomial, chi-square and other distributions, and nonparametric tests. Prerequisite: Junior standing or permission of instructor.
5372. Experimental Statistics II. Analysis of variance, completely randomized design, randomized complete block designs-nested classifications, factorials; analysis of covariance, simple and multiple linear regressions, and correlation. Prerequisite: STAT 5371.
5377. 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.

## WOMEN'S AND GENDER STUDIES

Associate Professor Beth Newman, Director
Lecturer: Josephine Caldwell-Ryan.
The Women's and Gender Studies Program gives students the intellectual tools to explore a wide variety of disciplines and life experiences through the lens of gender - that is, through the meanings that societies attach to our being female or male. Women's studies analyzes the traditionally overlooked intellectual, artistic, political and social contributions of women. Gender studies extends the methods of women's studies to a broader range of issues, including the social and cultural meanings of masculinity and the relationships between gender and sexuality. Through participation in women's and gender studies courses, SMU students, both male and female, are exposed to new ways of thinking about traditional academic
disciplines as well as matters of personal identity. Because it is interdisciplinary, a minor in women's and gender studies effectively complements a variety of majors and minors, especially those in the humanities, social sciences and fine arts.

Requirements for the Minor. Students must take a minimum of 15 term 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, Meadows, and Perkins. (Courses marked "subject to approval" are "topics" and "problems" courses that earn credit towards the minor only when offered under specific pre-approved titles.)

## The Courses (WGST)

2308. Revisions: Woman as Thinker, Artist and Citizen. Designed to discover how an emphasis on the particular experiences of women can enhance and complicate traditionally conceived areas of scholarship and critical endeavor. Also explores areas of women's experience traditionally undervalued, such as friendship, sexuality, motherhood and old age.
2309. 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.
2310. 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.
2311. Gender: Images and Perspectives. An interdisciplinary examination of the ways femininity and masculinity have been represented in the past and the present, with attention to what is constant and what changes.
2312. 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.
3347 (FL 3363). 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.
3370 (ENGL 3364). 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.
3381 (ARHS 4371). 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.
2313. 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, 4209. Independent Studies. A supervised practicum and/or directed readings on specific problems or themes under faculty guidance. Approval of coordinator is required.
2314. Women Studies Internship. Offers students experience with organizations serving women or addressing women's and gender issues, as well as with varied potential careers or volunteer opportunities in the community.
2315. Independent Studies. A supervised practicum and/or directed readings on special problems or themes formulated by the student with faculty guidance and the approval of the director of Women's Studies.
6300 (TC 8375). Advanced Feminist Theory. Explores feminist theories that seek to explain women's subordination historically and cross-culturally, examines gender as a principle of social organization, and addresses the linkages among gender, ethnicity and class from the vantage of multiple disciplines.
[^11]PLSC 4339 Women and the Law
PSYC 3350 Psychology of Women
RELI 3375 Wives, Mothers, Lovers, Queens: Expressions of the Feminine Divine in World Religions and Cultures
RELI 3376 Constructions of Gender, Sexuality and the Family in South Asian Religions
SOCI 3351 Marriage and the Family
SOCI 3371 Sociology of Gender
SOCI 4373 Race, Gender and Inequality
ST 8375 Feminist and Womanist Theologies (instructor approval)
THEA 4383 Gender and Performance
WO 8308 Women and Worship (instructor approval)

# Annette Caldwell Simmons School of Education and Human Development 

The Annette Caldwell Simmons School of Education and Human Development comprises research institutes, undergraduate and graduate programs, and community service centers that concern the areas of professional education, dispute resolution, counseling, applied physiology, wellness, liberal studies and lifelong learning. The mission of the school is to integrate theory, research and practice of education and human development; promote academic rigor and interdisciplinary study; educate students for initial certification and professional practice; and nurture collaboration across the academic community.

Undergraduate programs include a minor in education and a proposed major in Applied Physiology and Sports Management that is scheduled to begin in Fall 2009 contingent on accreditation approval. The school offers one doctoral program, eight Master's degrees, and a number of graduate certification programs. Its academic departments include Teaching and Learning, Educational Policy and Leadership, Dispute Resolution and Counseling, Applied Physiology and Wellness, and Lifelong Learning. The professional education programs fall under the auspices of the Department of Teaching and Learning and represent SMU's commitment to the professional development of educators through innovative and research-based undergraduate, graduate and continuing education programs. The undergraduate curriculum prepares students for initial teacher certification. Graduate programs focus on research, literacy and language acquisition, teaching and learning, giftedness, math, science and technology. A doctoral degree, Master's degrees and graduate-level certifications are offered. 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 EC-12 schools. The department's research efforts are driven in large part by two institutes that are charged with the empirical study of education - the Institute for Reading Research and the Gifted Students Institute. One of the most productive literacy research centers in the nation, the Institute for Reading Research performs research concerning reading and reading disabilities, language acquisition, and teaching and learning. The Gifted Students Institute was founded on the premise that "giftedness" is a resource that should be nurtured for the benefit of all.

The Department of Dispute Resolution and Counseling offers a Master of Science in Counseling, a Master of Arts 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, a Mediation Clinic and a Center for Family Counseling.

The Department of Lifelong Learning promotes personal enrichment and achievement of potential through a broad interdisciplinary curriculum. Its credit and noncredit offerings broaden students' perspectives, insights and understandings of the world by exposing them to the ideas and events that constitute the human experience. At the heart of the Lifelong Learning programs - which include the Master of Liberal Studies, Professional Development Programs, Informal Courses and Nondegree Credit Studies - is the belief that people can continue to grow both personally and professionally throughout their lives.

The Department of Applied Physiology and Wellness offers the Choices for Living courses, two of which must be completed in order to earn a baccalaureate degree. Wellness courses reflect the University's philosophy that a well-rounded
education should enhance the physical and mental well-being of the student. Beginning in Fall 2009, the department will also offer a Bachelor's degree in Applied Physiology and Sports Management, contingent on approval from the Southern Association of Colleges and Schools (SACS), the organization charged with approving new degree programs at accredited institutions in southern states. Once the degree has been approved, detailed information will be available on the program's website: smu.edu/APSM.

# DEPARTMENT OF TEACHING AND LEARNING 

Associate Professor Jill H. Allor, Department Chair
Professor: Patricia Mathes; Associate Professors: Deborah Diffily, JoAnn Lan, William Pulte, J. Kyle Roberts, Ken Springer; Assistant Professors: Caroline Kethley, Hector Rivera, Paige Ware; Senior Lecturers: Lee Alvoid, Kathy Hargrove, Barbara Morganfield; Lecturers: Abigail Bartoshesky, Laurie Campbell, Gail Hartin, Nancy Montgomery, Janis Sayers.

Home to undergraduate, post-baccalaureate 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., a Master of Education (M.Ed.), a Master of Education with Certification (M.Ed.), a Master in Bilingual Education (M.B.E.), or a Master of Music in Music Education (M.M.), as well as other credentials in areas such as gifted education, reading, mathematics, science, technology, bilingual education, English as a Second Language and learning therapy.

## Undergraduate Teacher Certification Gail Hartin, Director

The Office for Teacher Certification offers courses that lead to teaching certification at the elementary and secondary levels. Undergraduate students pursue an approved academic major in Dedman College, Meadows School of the Arts, Cox School of Business or Lyle School of Engineering while seeking Texas teacher certification through the Office for Teacher Certification in Early Childhood-Grade 6 (EC-6), Middle School (grades 4-8), or High School (grades 8-12). Music education students work toward an all-level (grades EC-12) certificate. Those who have already earned a Bachelor's degree may also obtain teacher certification credentials through the post-baccalaureate program, which essentially mirrors the undergraduate program. Post-baccalaureate students seeking certification for grades 4-8 or 8-12 must have 24 hours of coursework in the subject they plan to teach, with at least 12 of the 24 hours being upper-division courses.

Each student in a certification program has an education faculty adviser who directs his/her program of study. The education faculty 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 coursework and six hours of student teaching/internship experience in all three certification programs: Early Childhood-Grade 6 (EC-6), Middle School (Grades 4-8) and High School (Grades $8-12$ ). (See the list of courses below.) Students who complete the 24 credit hours of course work required for teacher certification preparation can declare a minor in elementary teaching or secondary teaching.

Requirements for Admission to Teacher Education Programs. Undergraduate students apply for formal admission to the program, submitting a transcript, essay, recommendation, character and fitness affidavit, and appropriate THEA or other test scores. Students must complete at least 45 hours of academic work with a G.P.A. of at least 2.5 in order to be considered for admission. Applicants also interview with members of the faculty. Students may register for up to seven hours of EDU coursework before formally applying for admission to the program. EDU 2350 (Educational Psychology) is a prerequisite for undergraduates enrolling in the certification program. Students complete the Personal Character and Professional Fitness Statement when they apply. Applications for admission to Teacher Education may be obtained from the departmental office in 417 Clements Hall.

Required Courses. All of the courses in the program of study are based on the Texas standards for beginning teachers. The classroom-based coursework can be completed in two regular terms, such as fall and spring. Professors model learning experiences that are considered best practice 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. The teacher education program includes extensive field experience to help students prepare for careers in teaching. A personal/criminal background check may be required prior to field experience and admission to student teaching. The student progresses from observational activities in classrooms to teaching and learning practice sessions with individual students and small groups in early field experiences. Finally, the student assumes responsibility for an entire classroom in a carefully managed student teaching experience. SMU students receive mentoring from faculty 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 full-time for 14 weeks in an assigned classroom with a master teacher in the Dallas Independent School District. During this student-teaching term, the six-term-hour student-teaching experience is regarded as "full-time" enrollment status at SMU for insurance purposes. Students receiving financial aid should meet with financial aid counselors well 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 among the factors considered. Students must have a 3.0 G.P.A. in all education courses before beginning student teaching.

Recommendation for Certification. Before the Office for Teacher Certification will recommend a student for certification, all requirements - 24 hours of coursework, six hours of a satisfactory student teaching or internship experience, and passing scores on two TExES (Texas Examinations of Educator Standards) - must be fulfilled. For Early Childhood-Grade 6, the two TExES tests include the Pedagogy and Professional Responsibilities (EC-6) test and the Early Childhood-Grade

6 Generalist test. Students preparing for teaching in secondary schools must pass the Pedagogy and Professional Responsibilities TExES test for Grades 4-8 or Grades 8-12 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 Preparation Seminar. The State Board of Educator Certification (SBEC) requires that persons seeking teacher certification take and pass the state-mandated TExES tests in the desired area(s) of certification. The SMU Office for Teacher Certification requires all students to take and satisfactorily complete the SMU TExES Preparation Seminar. In the rare instance where a student does not pass the TExES test, a faculty mentor may be assigned to help develop an individual plan of supplemental study to complement a retake of the TExES Preparation Seminar.

## EDUCATION COURSES

## Early Childhood-Grade 6 Courses

EDU 2350. Educational Psychology. Application of psychological research and theory in educational settings. Topics include the learning process, individual differences among learners, motivation, the assessment of academic abilities, and successful classroom practice. (Prerequisite for all undergraduates.)
EDU 5121. Field Experience I. Field experiences coordinated with Early Childhood-Grade 6 courses. Class meets on a school campus. (Usually taken in first term of program.)
EDU 5122. Field Experience II. Field experiences coordinated with Early Childhood-Grade 6 courses. Class meets on a school campus. (Usually taken midway through program.)
EDU 5123. Field Experience III. Field experiences coordinated with Early Childhood-Grade 6 courses. Class meets on a school campus. (Usually taken in term prior to student teaching.)

EDU 5318. Formative and Summative Assessment. Explanation and practice of formal and informal assessment strategies and how assessment outcomes should inform instruction and be shared with families.

EDU 5327. Integrating Teaching and Learning. Review of the nature and design of educational activities: theory, research and practice of lesson planning for active learning that meets the needs of individual students.

EDU 5331. Content Area Studies for Elementary School. 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 5349. Learning Environment and Professionalism. Examination of the 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. Teaching Mathematics in Elementary Schools. Evaluation of mathematics learning materials and teaching methods focusing on knowledge and skills required for EC through 6th-grade students.
EDU 5357. Emergent Literacy. Examination of principles of literacy learning in young children and predictable stages of oral language, writing and reading development.
EDU 5358. Conventional Literacy. Introduction of theories, practices and materials for teaching reading/writing in elementary schools.
EDU 5363/5364. Student Teaching. Requires a 14-week assignment in an elementary school that has a diverse student population; a weekly seminar meets on campus. (Six hours of credit.)
EDU 5385/5386. Internship I and II. Students serve as teacher of record in Early ChildhoodGrade 6. (Six hours credit, two terms of supervision.)

## Middle (Grades 4-8) and High School (Grades 8-12) Courses and Certification Areas

EDU 2350. Educational Psychology. Application of psychological research and theory in educational settings. Topics include the learning process, individual differences among learners, motivation, the assessment of academic abilities, and successful classroom practice. (Prerequisite for all undergraduates.)
EDU 5124. Field experience I. Beginning field experiences coordinated with MS/HS courses. Class meets on a school campus. (Usually taken in first term of program.)
EDU 5125. Field Experience II. Intermediate field experiences coordinated with MS/HS courses. Class meets on a school campus. (Usually taken midway in program.)
EDU 5126. Field Experience III. Advanced field experiences coordinated with MS/HS courses. Class meets on a school campus. (Usually taken term prior to student teaching.)
EDU 5318. Formative and Summative Assessment. Explanation and practice of formal and informal assessment strategies and how assessment outcomes should inform instruction and be shared with families.
EDU 5327. Integrating Teaching and Learning. Review of the nature and design of educational activities: theory, research and practice of lesson planning for active learning that meets the needs of individual students.
EDU 5335. Adolescent Development and Cognition. Focus on adolescent growth and development from an educational perspective. Emphasis is placed on the cognitive basis of changes in learning, motivation, academic performance, self-identity, morality and social relationships that take place during adolescence.
EDU 5348. Introduction to Diverse Learners. Study of diversity, multicultural concepts and inclusion, and exploration of issues, policies and professional practice relevant to teaching in urban schools.
EDU 5349. Learning Environment and Professionalism. Examination of the 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 5367. Creating Successful Classrooms. Examination of current research promoting student-centered teaching and constructivist practices, including a variety of effective teaching and learning practices.
EDU 5371. Content Area Methods. Identification of teaching strategies specific to content areas and levels of certification; examination of current research promoting literacy instruction, such as ways to integrate reading, writing and oral language.
EDU 5373/5374. Student Teaching. Requires a 14 -week assignment in a middle/high school that has a diverse student population; a weekly seminar meets on campus. (Six hours of credit.)
EDU 5375/5376. Internship I and II. Students are required to serve as teacher of record in any of grades 4 through 12. (Six hours credit, two terms of supervision.)

## Elective Education Courses

 (Do not meet state requirements for teacher certification)EDU 1110. Oracle. Oracle is a one-term, one-credit-hour course that counts as a University free elective. Designed to improve reading and learning efficiency, Oracle is directed to first-year through graduate students who want to acquire advanced reading and learning techniques. Its content is developed from the educational theories and techniques on which both learning and teaching are based.
EDU 1305. Public Speaking and Communication. This basic course acquaints students with principles of successful public speaking and provides activities that lead to the development of good speaking, listening and organizational skills.

EDU 2101. Leadership Practicum. 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.

EDU 2102. Leadership Practicum. One-hour credit for a minimum of 15 clock hours practicum either on campus or in the community. Prerequisite: Must have completed EDU 2101.
EDU 2308. Career Development Theory and Practice. 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.
EDU 2355. Literacy and Society (Elementary and Secondary Sections). 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 term, students tutor either local elementary or secondary school students and complete related assignments. All literacy classes require field experiences in local schools.
EDU 3301. The Art and Science of Parenting. An examination of the literature pertaining to parenting. Students consider how parental beliefs, attitudes and expectations affect the manner in which parents interact with their children.
EDU 4300. Foundations of Teaching English to Speakers of Other Languages. Development and analysis of 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 5310. Civic Leadership. Individual and community transformation, resulting from civic leadership, will be examined in the classroom and experientially though a required community-service component occurring outside the classroom.
EDU 5343 (CCPA 5301). Leadership Theories and Practices. Examination of the theories and skills necessary for the development of effective leadership. Includes opportunities for evaluating leaders and leadership behavior in a variety of contexts.

## Additional Information

For further information regarding SMU's teacher preparation opportunities, contact the Office of Teacher Education, Southern Methodist University, 417 Clements, P.O. Box 750455, Dallas, TX 75275-0455; 214-768-2346; or visit www.smu. edu/teacher_education.

## THE INSTITUTE FOR READING RESEARCH

## Director Patricia G. Mathes, Texas Instruments Endowed Chair of Reading Research and Professor of Education

Established in 2002, the Institute for Reading Research supports researchers within the school and from across the SMU campus who are conducting and disseminating cutting-edge research related to reading and reading disabilities, language acquisition, and learning. The institute provides resources such as budget management and accounting support, database building, data processing, data analysis services, graphic artistry and technical writing. Researchers affiliated with the institute have been very successful in obtaining external funding and provide leadership on a local and national level through the publication of research manuscripts, curricula and coursework packages and through the delivery of staff development workshops. Current institute research focuses on:

- Determining the reading potential of students with moderate or mild levels of intellectual disability.
- Scaling-up scientifically proven reading interventions for effective use in public schools, including supporting teachers as they implement new innovations. A major outcome of this research has been the creation and validation of the use of technology to provide ongoing coaching to teachers.
- Examining the efficacy of various models for teaching English language learners (ELLs) who are native Spanish speakers to read and speak in English. A thrust of this research is to examine the possibilities of developing fully bilingual, biliterate individuals, without compromising English development.
- Developing and validating continuous progress monitoring assessment tools using computer-adaptive testing technology to pinpoint each child's individual performance ability and track growth across an academic year.
The institute provides leadership training to future educators, researchers and statisticians through applied experiences in the execution of large-scale field-based research. It also is committed to the delivery of programs and activities that serve the reading enhancement needs of the community at large.


## GIFTED STUDENTS INSTITUTE

## Associate Dean and Senior Lecturer Kathy Hargrove, Director

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 comprises one-day sessions 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 also developed and administers the school's Gifted Education graduate study for educators. In addition, the institute serves pre-college gifted students through the Talented and Gifted (TAG) and College Experience programs.

## DEPARTMENT OF APPLIED PHYSIOLOGY AND WELLNESS

## Associate Professor Peter Gifford, Chair

Associate Professors: Peter Gifford, Lynn Romejko Jacobs, Peter Weyand; Lecturers: Birdie Barr, David Bertrand, Piotr Chelstowski, Brian Fennig, Donna Gober, Anne Weil, Vicki Wood; Specialists: Randy Diercoff, Ted Gellert, Mandy Golman, Gloria Hook, Rhonda Trietsch, Arthur Zwolski.

The Department of Applied Physiology and Wellness offers the required Choices for Living courses that address the elements of "wellness," and it proposes to offer a Bachelor's degree in applied physiology and sports management that will begin in Fall 2009. The Choices for Living courses address the seven elements of wellness: social, physical, environmental, occupational, intellectual, emotional and spiritual wellness. The courses reflect the University's philosophy that a wellrounded education enhances a student's physical and mental well-being. The Department of Applied Physiology and Wellness aims to provide leadership and facilities for helping students become more aware of the comprehensive nature of wellness; to provide techniques to help students respond positively to any imbalances in their lifestyle; to familiarize students with campus wellness facilities, equipment and services; to promote a lifetime of physical fitness; to promote the learning of a lifetime physical activity; and to 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 per term can be accessed at www.smu.edu/registrar/.

## Choices I Classes

Designed to be taken during a student's first year, CHOICES I classes (WELL 1101) are part of the General Education Curriculum and, therefore, are required for graduation. Called Concepts of Wellness, the classes introduce students to a
broad range of personal experiences with the seven elements of wellness that the Choices for Living program addresses. Interaction occurs in a relaxed, small-group environment that features lectures, discussions, personal assessments and other action-oriented activities. Registrants are also expected to complete approximately four hours of out-of-class experiences under the guidance of their instructor.
WELL 1101 Choices I: Concepts of Wellness

## CHOICES II Classes

Designed to be taken during a student's second year, a CHOICES II class is also a requirement for graduation. Students can choose from a variety of physical activity courses offered each semester. They then learn the skills, rules and competition in a fun and nurturing environment. Each course's objective is to encourage student participation in the activity for a lifetime. A special fee is charged to help defray the extra cost involved in some CHOICES II classes: Fencing (\$90); Golf (\$150); Scuba (\$175); Mountain Sports (Taos Campus \$475); Beginning Marathon Training (\$75); Rock Climbing (\$50); and Spinning (\$10).
WELL 2109 Bench Aerobics
WELL 2110 Jogging
WELL 2111 Weight Training
WELL 2112 Weight Training for Women
WELL 2113 Fitness Activities
WELL 2114 Walking
WELL 2115 Beginning Triathlon
WELL 2116 Beginning Marathon Training
WELL 2117 Spinning
WELL 2118 Group Fitness
WELL 2119 Pilates
WELL 2122 Rock Climbing
WELL 2129 Golf
WELL 2131 Mountain Sports
WELL 2132 Racquetball
WELL 2135 Table Tennis
WELL 2136 Tennis
WELL 2139 Fly-Fishing
WELL 2140 Badminton
WELL 2141 Swimming
WELL 2142 Ballroom and Folk Dance
WELL 2144 Scuba Diving
WELL 2145 Beginning Swimming
WELL 2146 Lifeguard Training Today
WELL 2147 Power Yoga
WELL 2148 Aikido
WELL 2149 Karate
WELL 2150 Judo
WELL 2151 Self-Defense
WELL 2153 Fencing
WELL 2161 Basketball
WELL 2170 Volunteer Activities
WELL 2190-2191 Wellness Practicum
WELL 3144 Advanced Scuba

## Applied Physiology and Sports Management smu.edu/APSM

Beginning in Fall 2009, a Bachelor of Science degree in Applied Physiology and Sports Management will be available, contingent on approval from the Southern Association of Colleges and Schools (SACS), the organization charged with approving new degree programs at accredited institutions in southern states. Once the degree has been approved, the degree requirements, admission standards, and curriculum will be published on the program's website: smu.edu/APSM.

# THE DIAGNOSTIC CENTER FOR DYSLEXIA AND RELATED DISORDERS 

smu.edu/reading
The Learning Therapy program administers the Diagnostic Center for Dyslexia and Related Disorders, which was established in response to a community need for services that evaluate individuals for learning disorders related to reading acquisition and comprehension. Dyslexia is involved in most disorders of this type, which can also include developmental spelling disability, developmental auditory imperception, dysgraphia and dysphasia. The center is dedicated to providing comprehensive initial and follow-up evaluation services and appropriate medical, psychological and educational referrals and recommendations to 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) 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. Again, the center provides clients with appropriate recommendations and assistance in securing accommodations.

## THE CENTER FOR ACADEMIC PROGRESS AND SUCCESS (CAPS)

## smu.edu/CAPS

The Center for Academic Progress and Success (CAPS) offers tutoring services for school-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 Reading Research. Tutoring sessions are individualized, providing one-on-one instruction that is explicit, intensive and specifically designed to address learning differences and disabilities in children.

## MEDIATION CLINIC

smu.edu/MediationClinic
Mediation Services are available to parties involved in a dispute. Alumni and current students of the Dispute Resolution Program who have completed at least 200 training hours serve as volunteer mediators.

Parties may use SMU Mediation Services either before or after a lawsuit is filed. Parties may contact SMU directly to arrange a mediation, or if a lawsuit has been filed, a judge may order mediation and appoint SMU Mediation Services. Parties
have an equal say in the mediation process and the settlement terms. The mediator has no authority to impose a settlement, and 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 communicate clearly and appropriately. Most mediated settlements are completed in one meeting, saving time and expense. Legal or other representation is permitted in the mediation but is not required. An agreement reached in mediation can be binding to both parties. If no agreement is reached, the lawsuit continues or is filed. However, the mediation process is strictly confidential and settlement discussions cannot be used as evidence in any future court proceeding. Both parties pay a minimal fee.

## CENTER FOR FAMILY COUNSELING

## 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.

## THE CENTER FOR CHILD AND COMMUNITY DEVELOPMENT <br> 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.

## LIFELONG LEARNING PROGRAMS

Informal Courses. These courses of varying lengths address different cultural, scholarly, personal, and professional topics. Additional information is available at www.smu.edu/informal.

Creative Writing Workshops. Creative writing instructors, noted authors and publishers lead noncredit writing workshops. Selected participants are invited to submit manuscripts for review by New York literary agents, editors and publishing houses. Additional information is available at www.creativewriting.smu.edu.

International Languages. Noncredit language-conversation courses typically include Spanish, French, Italian, German, Arabic, Russian, Mandarin Chinese and Japanese. Additional information is available at www.smu.edu/informal.

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

Certificate Program in Financial Planning. SMU offers a certification in this fast-growing professional field. Additional information is available at www.smu. edu/cpfp.

College Experience (offered through the Gifted Students Institute) allows a small and carefully-chosen group of highly motivated and academically able high school students to get a head start on college and a taste of campus life through SMU credit opportunities available during the summer; www.smu.edu/ce.

Talented and Gifted (TAG) (offered through the Gifted Students Institute) provides intellectual challenges and cultural and social learning experiences to academically accelerated students completing the seventh, eighth, or ninth grade. TAG is a summer opportunity that offers both credit and noncredit courses; www.smu. edu/tag.

Academic Enhancement offers a variety of workshops for students ages 5 through 18. Workshop topics include study skills, reading, test preparation, math, science, vocabulary and writing. Additional information is available at www.smu.edu/read.

Summer Youth Program offers one- and two-week special-interest enrichment workshops throughout the summer in the areas of technology, computers, multimedia, writing, art, math, science, literature, gaming, the Internet, study skills, leadership and social skills. Additional information is available at www.smu.edu/ SummerYouth.

# Cox School of Business <br> General Information 

## VISION STATEMENT

The mission of the Edwin L. Cox School of Business is to improve its academic programs and reputation as a top-tier business school by providing a high-quality business education to its 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.

## GENERAL INFORMATION

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 85 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 from the University. At this point, the School of Commerce became the School of Business Administration and the new Bachelor of Business Administration degree (B.B.A.) 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 (M.B.A.) program. At that time, students were granted an M.B.A. after successfully completing 30 hours of course work and a thesis. 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; a Professional M.B.A. (P.M.B.A.) and an Executive M.B.A. (E.M.B.A.); Master of Science degrees in Accounting, Management and Entrepreneurship; a Master of Arts/Master of Business Administration (M.A./M.B.A.); a Juris Doctor/Master of Business Administration (J.D./M.B.A.) as well as 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 Business Associates Program for B.B.A. students. These two boards involve more than 220 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, and for years the Fincher Building housed all activities in the Cox School. In 1987, two more 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 (BIC), which combines many of the features of a traditional university library with the latest in online databases, search tools and presentation facilities.

Through the BIC, Cox School students, faculty and staff have access to the latest business periodicals, instantaneous market information and news retrieval services. In addition, the BIC offers personal computers, printers and scanners for students to use for presentations and papers.

In 2005, the Cox School opened the James M. Collins Executive Education Center, the region's premier resource 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 Programs Office, along with the Norman E. Brinker Institute for Restaurant and Hospitality Management, the Southwestern Graduate School of Banking and the KPMG Institute for Corporate Governance.

CENTERS AND INSTITUTES<br>\section*{The Edwin L. Cox B.B.A. Leadership Institute and Business Leadership Center} Paula Hill Strasser, Director

The Edwin L. Cox B.B.A. Leadership Institute (BLI) and Business Leadership Center (BLC) are committed to helping students achieve professional success by becoming more effective communicators and leaders. Established in 1991, the BLC offers M.B.A. students more than 60 seminars taught by business practitioners from Fortune 500 companies, medium-sized businesses and entrepreneurial ventures. In addition to presenting seminars on traditional topics such as strategic communication, leading with integrity and conflict resolution, the BLC offers individualized training in several areas, including advanced presentation techniques and business writing.

The BLI offers courses that employ a variety of instructional techniques to impart key communication and leadership concepts and skills and expose B.B.A. students to the real world of business. Techniques include lecture, class discussion, self-assessments, small-group projects, role-play simulations, corporate visits and guest speakers from the corporate and nonprofit arenas.

## Executive Education <br> Frank R. Lloyd, Associate Dean

SMU Cox Executive Education is the region's premier resource for advanced leadership and management training. Executive Education offers numerous openenrollment certificate programs covering such topics as management, leadership, marketing, accounting and finance, energy and professional effectiveness. Programs last from as little as a few hours to several weeks or months.

Executive Education also offers custom programs, designed to address companies' unique business challenges. Through close collaboration among corporate clients, Cox faculty and Executive Education staff, the school develops customized programs that help companies achieve their goals and positive return on investment.

Executive Education also offers the Summer Business Institute (SBI), a fourweek business certificate for nonbusiness major juniors, seniors or recent graduates. SBI provides a solid foundation in business basics, including marketing, accounting, finance, management and leadership. The SBI Certificate provides a valuable credential that gives students and young professionals a leg up in today's competitive job market.

## The Center for Marketing Management Studies <br> Daniel J. Howard, Director

The Center for Marketing Management Studies was created to serve 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 Dallas-area business people with the latest in marketing thought and practice. This series of sessions is held on Monday nights throughout the school year.

## The Caruth Institute for Entrepreneurship Jerry F. White, Director

Since its founding more than three decades ago, 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 more than 18 custom-designed courses to give students the skills and knowledge necessary to launch and manage successful entrepreneurial ventures. Courses cover a range of topics, including starting a business, venture financing and law of financial transactions for entrepreneurs.

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 Cox M.B.A. Venture Fund, the Southwest Venture Forum and the Dallas 100TM 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 and Real Estate Department Chair

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 the federal income taxation of housing and real estate development, real estate investment performance in pension fund portfolios, database management and valuation in urban property tax jurisdictions. 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 Folsom Institute for Development and Land Use Policy.

## The Maguire Energy Institute <br> 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 Maguire, chairman and president 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 <br> Edward J. Fox, Director and Marketing Professor

The JCPenney Center for Retail Excellence was created with a generous gift from the JCPenney Company to promote, develop and integrate retail education and practice. Today, the center is a leading source of academic expertise on consumer shopping behavior and the effects of retailer activities on shopping behavior.

## American Airlines Center for Labor Relations and Conflict Resolution Robin L. Pinkley, Director and Management and Organization Professor

The American Airlines Center for Labor Relations and Conflict Resolution teaches students to successfully resolve disputes, negotiate salaries and resolve critical business situations. Courses and research focus on partnering (aligning the interests of both sides), proactive negotiating and adding value to negotiations to improve outcomes. Ongoing research explores the newest and most effective techniques in negotiation.

## KPMG Institute for Corporate Governance Wayne Shaw, Director and Accounting Professor

Made possible by an alliance with KPMG, the KPMG Institute for Corporate Governance focuses on the importance of corporate structure and communication channels in business organizations. Through close working relationships with many companies, the institute develops multidisciplinary case studies and courses that explore corporate governance and ethical decision making, preparing students to understand the choices they make and how those choices impact the market's perception of a firm and its future.

## The EnCap Investments and LCM Group Alternative Asset Management Center Brian R. Bruce, Director

Made possible by gifts from EnCap Investments and LCM Group, The EnCap Investments and 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 at the graduate level. The courses also prepare students for the Chartered Alternative Investment Analyst (CAIA) professional designation.

## Admission

For detailed information regarding Southern Methodist University's admission requirements, regulations and procedures, see the Admission section of this catalog.

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 B.B.A. or Minor in Business Administration programs. Students in the Minor in Business program may enroll only in the classes listed in this minor's curriculum (see Minor Requirements section).

- The B.B.A. (Bachelor of Business Administration) offers eight academic majors within business. Admission is available to entering SMU students through the B.B.A. Scholars 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 for this minor are a subset of the B.B.A. core courses and are generally offered throughout the academic year. Admission to this program 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 taught only during the summer and are open to all non-Cox SMU students.
- All B.B.A. students are required to have a laptop computer for use in the classroom.


## ADMISSION OF SMU STUDENTS TO A BUSINESS MAJOR / B.B.A. DEGREE PROGRAM

Admission to the Cox undergraduate program may be made by current SMU students via the admission requirements below, or at the time a student is admitted to SMU via the B.B.A. Scholars Program (see Applying for Admission as a FirstYear Applicant).
Regular admission to any B.B.A. major requires:

1. Good standing ( 2.0 minimum SMU G.P.A.), and
2. Completion of a minimum of 42 hours, and
3. A minimum G.P.A. of 3.300 in the business subset:

ENGL 1301 (or ENGL 2305) or ENGL 1305
ENGL 1302 (or ENGL 2306)
ECO 1311
ECO 1312
MATH 1309 (or MATH 1337)
ACCT 2301
ITOM 2305 or STAT 2301 (or STAT 2331, EMIS 4340, or EMIS 5370)
Please note that:

- Once a student enters SMU, all remaining subset courses must be completed in residence at SMU.
- With the exception of courses completed under the SMU first-year grade-repeat policy (See Grades for Repeated Courses), the subset G.P.A. is calculated using the first graded attempt of these courses, even if the course was later repeated.
- The subset G.P.A. for students who have AP or IB credit is based on the remaining graded subset courses.
- Students must have passing grades in all subset courses before entering the Cox School.
- Current University grading policy, as summarized under Academic Forgiveness (see Academic Forgiveness Section) 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 G.P.A.


## Admission via the Extended Subset

Students who do not achieve a 3.300 G.P.A. in the business subset may add the first graded attempt of ACCT 2302 to the original subset. Students who achieve a minimum 3.300 G.P.A. on this extended subset will be admitted to the Cox B.B.A. degree program. Once a student enters SMU, ACCT 2302 must be completed in residence at SMU.

## Applying for Admission as a First-Year Applicant

First year applicants submit an application for admission to the SMU Office of Enrollment Services and follow the University requirements for admission (page 17). Applicants who are admitted to SMU and who indicate business as their primary academic interest on the application for admission are automatically reviewed for admission to Cox as a B.B.A. Scholar (See Cox B.B.A. Scholars Program).

Admission to the Cox B.B.A. Scholars Program is by invitation only. First year students invited to join the program must accept their invitation no later than May 1 prior to SMU matriculation in the following fall. Students who accept admission to the Cox B.B.A. Scholars Program are preselected for admission to the academic programs in the Cox School of Business and may enter Cox during their first year at SMU.

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. Students normally enter Cox in January of their sophomore year; students who enter later 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, and
2. Completion of a minimum of 42 hours of transferable college credit, and
3. Minimum cumulative academic G.P.A. of 2.5 , and
4. A minimum G.P.A. of 3.300 in the business subset:

ENGL 1301
ENGL 1302
ECO 1311
ECO 1312
MATH 1309 or MATH 1337
ACCT 2301
ITOM 2305 or STAT 2301 or STAT 2331 or EMIS 4340 or EMIS 5370

## Please note that:

- The subset G.P.A. 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 (page 26) 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 G.P.A.
- The subset G.P.A. for students who have AP or IB credit is based on the other (graded) subset courses.
- Students must have passing grades in all subset courses before entering the Cox School.
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 to pursue a nonbusiness major.


## Transfer Admission via the Extended Subset

Students who do not achieve a 3.300 G.P.A. in the business subset may add the first graded attempt of ACCT 2302 to the original subset. Students who achieve a minimum 3.300 G.P.A. on this extended subset will be admitted to the Cox B.B.A. degree program. Once a student enters SMU, ACCT 2302 must be completed in residence at SMU.

## ADMISSION TO MINORS

SMU students who are NOT seeking a major in the Cox School may select from two different 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 generally 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 taught only during the summer and are open to all non-Cox SMU students.

## 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 (see Minor Requirements section). Students in this minor must meet the same admission requirements as students in the Cox B.B.A. program outlined above, and will be enrolled in the same sections of business courses as business majors.

## Minor in Business (Summer Program)

The Minor in Business is offered only in the summer and 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 G.P.A.-based admission requirements, and offers courses that are designed to provide a general overview of business topics to complement a variety of academic interests. Current SMU students may pursue this minor by enrolling in the appropriate courses and completing a minor declaration form with their current academic adviser.

## 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 Office 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 Office 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 degree 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 degree credit. The Cox School will grant a maximum of three credit hours per course for transferred Introductory Accounting.

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.

## 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 Office in 252 Maguire Building 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 in residence. Exceptions to this policy require concurrent approval of the Associate Dean for Undergraduate Studies, the appropriate department chair, and the B.B.A. Director of Advising and Student Records.

Regardless of the number of acceptable transfer hours, at least 60 hours of the total 122 baccalaureate hours must be completed in residence at SMU. Of the 51 or more required business hours, a minimum of 30 must be completed in residence in the Cox School.

Detailed information regarding enrollment procedures, orientation, student file number, name changes, address changes, transcript service, classification of students, changes of school, policies for adding and dropping courses and for auditing classes, enrollment for no credit, class attendance, withdrawal from the University, final examinations, term-hour loads, grading policies and grade reports is included in the University Enrollment and Academic Records section of this catalog.

## 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 (B.B.A.) degree upon successful completion of the following requirements:

ADMISSION
Admission to the Cox School of Business (see Admission, above).

## GRADE REQUIREMENTS

An overall G.P.A. of at least 2.0 on all SMU work attempted, all SMU business course work attempted, and all business course work attempted within a student's declared major.

## MINIMUM HOURS AND RESIDENCY

A minimum of 122 term hours of approved credits (see Curriculum, below). Of the 122 minimum required term credit hours, at least 60 hours must be completed in residence at SMU. Business majors are limited to one major within the Cox School. A minimum of 30 business hours must be completed in residence at Cox. The minimum number of business credit hours that a student must take, and the maximum number of business credit hours that a student is permitted to take, are based on the student's major. The maximum limit 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 residency requirements. (Students are allowed to exceed the maximum limit if necessary to meet residency requirements.)

| Major | Minimum Number <br> of Business Credit Hours | Maximum Number <br> of Business Credit Hours |
| :--- | :---: | :---: |
| Accounting | 54 | 60 |
| Finance | 57 | 63 |
| Financial Consulting | 57 | 63 |
| Marketing | 52 | 58 |
| All other business majors | 51 | 57 |

## 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 (252 Maguire) before the final term of course work. Consult the University Calendar for graduate 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).

## MINOR REQUIREMENTS

The Minor in Business Administration requires:

- Admission to the Cox School through the same admission process as admission to the business majors.
- A minimum 2.0 business and 2.0 business minor G.P.A.
- Completion of the 21 hours specified for the minor and all related pre-requisite courses (see Curriculum, next).

Matriculated students in this minor must complete all hours toward the Minor in Business Administration in residence at SMU. Students who transfer courses for this minor prior to SMU matriculation must still complete 21 hours in business at SMU, and will need additional business courses beyond the 21 hours specified for the minor to meet the residency requirement.

The Minor in Business requires:

- A minimum 2.0 business and 2.0 business minor G.P.A.
- Completion of the 21 hours required for the minor (see Curriculum, below) with grades of C - or better in all minor coursework
- Minor courses will be accepted in transfer prior to matriculation, but once a student has entered SMU all remaining minor courses and a minimum of nine hours of business coursework must be completed in residence.
- NOTE: With the exception of Personal Finance, Markets and Freedom and Business Process and Decisions, no courses offered for the summer Minor in Business program may be taken by B.B.A. Majors or Minors in Business Administration. FINA 3311 (Markets and Freedom), FINA 3312 (Personal Finance), and ITOM 3310 (Business Process and Decisions) may be taken as free (non-business) electives by B.B.A. majors and students enrolled in the Minor in Business Administration.


## CURRICULUM

The requirements summarized below must be satisfied to earn the Bachelor of Business Administration Degree. A core of required 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, calculus, English and economics should be completed in the student's first year; accounting, managerial statistics 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 one of the Cox academic advisers. Coordination with the B.B.A. Career Services Office is highly advantageous for students who want to maximize major selection, course selection and their future careers. 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 the possibility of enrolling in a course with 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 Office, 252 Maguire Building. Transcripts of the student's official record should be requested from the Office of the Registrar.

## 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 adviser and the advisee assume equal responsibility. Cox academic advisers are available in 252 Maguire Building 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 Services and the Business Information Center (BIC). After the initial orientation, students are required to visit with a B.B.A. adviser every term until graduation.

Students are not assigned to a specific adviser. Many students prefer to meet with the same adviser; it is the student's choice when his or her appointment is scheduled to either express a preference for a particular adviser or schedule with whomever is next available.

Students must bring a current copy (no more than 24 hours old) of their electronic degree progress report (eDPR) to their advising appointments. This computerized degree plan should be carefully examined, as it is the student's responsibility to help assure the eDPR's accuracy. After meeting with an adviser, students register, swap, and drop on ACCESS.smu. The Director of B.B.A. Advising and Student Records will add students 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.

## CAREER COUNSELING

In conjunction with the University's Hegi Family Career Development Center, the office of Undergraduate (B.B.A.) Career Services focuses on providing exposure to various careers and helping students learn lifelong, career decision-making and job search skills. In addition to individual appointments, each term a number of special events and workshops are offered to B.B.A.s such as: career fairs, business dining etiquette, resume and interviewing tips, networking skills, internships and job search resources.

The primary focus is to help students early in their college education to identify and explore careers in relation to their own values, interests, personality and skills. The goal is to help students have more direction regarding their career interests, and therefore, better manage selecting a major and activities, and pursuing internships and full-time positions.

Career-related experience, often referred to as "internships," is encouraged and considered a key component of the undergraduate experience at Cox. SMU's location in Dallas allows students to pursue both part-time internships during the academic year and part- and/or full-time internships during the summer worldwide.

Students are encouraged to make an appointment with a career counselor the term they are accepted to Cox. Since meeting with a career counselor is not required, taking the initiative to do so early is up to the student and also encouraged by faculty and staff. The three counselors available exclusively to Cox B.B.A.s are conveniently located in Maguire 254.

## BUSINESS ASSOCIATES PROGRAM

The Business Associates Program (BAP) is a corporate mentoring experience that pairs business undergraduates one-on-one with executives in the Dallas-area business community. The program enhances a student's collegiate experience by providing firsthand insights into the business world while teaching the value of effective networking.

Eligibility for the 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. Students are eligible to participate during their junior and senior years.

## HONORS PROGRAM

The Cox B.B.A. Honors Program is designed to enable outstanding business students to participate in an enhanced curriculum that challenges their intellectual abilities and sharpens their professional skills. A smaller class size promotes greater interaction between students and professors which, in turn, leads to a more meaningful educational experience. The Cox School offers honors sections of the following business courses:

| Sophomore level courses | ACCT 2301 | ACCT 2302 |
| :--- | :--- | :--- |
|  | ITOM 2305 | ITOM 2308 |
| Junior level courses | FINA 3320 | ITOM 3306 |
|  | MKTG 3340 | MNO 3370 |
| Senior level courses | STRA 5370 | Senior Seminars |

The sophomore sections of honors business courses are available to declared Business and Pre-Business students who have a minimum 3.6 cumulative G.P.A. Students who have a 3.6 cumulative SMU, all-college G.P.A., and Business School G.P.A. by the spring of their sophomore year and have been officially admitted to the Cox School are eligible to enroll in Cox Honors classes (except senior practicums). Those in the program who achieve a 3.6 G.P.A. in a minimum of four honors courses (three of which must be at the junior/senior level) and a 3.6 cumulative SMU G.P.A. will receive an honors notation ("Honors in Business") on the transcript and diploma. The Cox Honors distinction is separate from the cum laude distinctions awarded at graduation.

See the Course Descriptions section for further information about the courses.

## BUSINESS SCHOLARS PROGRAM

The Business 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. Business Scholars are encouraged to participate in honors-level business courses to enhance their educational experience in the Business School.

## BUSINESS ADMINISTRATION REQUIREMENTS

All candidates for the Bachelor of Business Administration degree must satisfy the following requirements:
General Education Curriculum: 41 hours
Please see the General Education Curriculum section of this catalog for information on this requirement.
Business Core requirements Credit Hours

ACCT 2301, 2302 Fundamentals of Accounting I and II 6
ITOM 2305 Managerial Statistics 3
or STAT $\mathbf{2 3 0 1}$ or $\mathbf{2 3 3 1}$ or EMIS $\mathbf{4 3 4 0}$ or $\mathbf{5 3 7 0}$
ITOM 2308 Information Systems for Management 3
BLI 3302 Business Communications and Leader Development 3
FINA 3320 Financial Management 3
BL 3335 Introduction to Legal Environment and Ethics 3
ITOM 3306 Operations Management 3
MKTG 3340 Fundamentals of Marketing 3
MNO $\mathbf{3 3 7 0}$ Management of Organizations 3
STRA 5370 Strategic Management in a Global Economy 3
or CISB 5397 Entrepreneurship - Starting A Business
Business Hours (towards major)
18-24
TOTAL Business Hours $\quad$ 51-57
Non-Business Electives $\quad$ 24-30
TOTAL DEGREE HOURS 122
The applicable requirements for each Cox major are those in effect during the academic year in which the student is officially admitted to the Cox B.B.A. Program. The Cox School offers the following majors:

## Major in General Business

To earn the Bachelor of Business Administration degree with a major in General Business, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

| Credit Hours |
| :--- |
| Business Electives (any combination of Cox departments) |
| Major in Accounting |

## Major in Financial Consulting

To earn the Bachelor of Business Administration 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 |
| :---: | :---: |
| 1. Accounting core: | 9 |
| ACCT 3311 Intermediate Accounting I |  |
| ACCT 3312 Intermediate Accounting II |  |
| ACCT 4315 Federal Income Tax |  |
| 2. Finance core:* | 9 |
| FINA 4325 Advanced Financial Management |  |
| FINA 4326 Investment Analysis and Portfolio Management |  |
| FINA 4329 International Finance |  |
| 3. Required Accounting and/or Finance electives: | 6 |
| ACCT 4306 Accounting Controls |  |
| ACCT 4311 Cost Accounting I |  |
| ACCT 4307 Business Modeling with Spreadsheets |  |
| ACCT 5317 Studies In Accounting Theory |  |
| ACCT 5321 Financial Statement Analysis |  |
| FINA 3330 Money and Capital Markets |  |
| FINA 4327 Speculative Markets |  |
| FINA 4328 Management of Financial Institutions |  |
| FINA 4355 Doing Business in a Globalized World |  |
| FINA 5331 Advanced Concepts in Financial Management |  |
| FINA 5332 Honors Practicum in Portfolio Management |  |
| FINA 5340 Alternative Assets 1 |  |
| FINA 5341 Alternative Assets 2 |  |
| NOTE: Transfer students entering in Fall 2009 or Fall 2010 fol major requirements of the 2008-2009 catalog. | cial Consulting |

## Major in Marketing

To earn the Bachelor of Business Administration degree with a major in Marketing, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

Sixteen credithours in Marketing, beyond the three-hour core requirement of MKTG 3340 or ADV 3362, and three hours of electives, to be composed of the following:

|  | Credit Hours |
| :--- | :---: |
| 1. Ten-hour Marketing core:* | 10 |
| MKTG 3342 Marketing Research |  |
| MKTG 3343 Consumer Behavior |  |
| MKTG 5341 Marketing Management |  |
| MKTG 5150 Marketing Internship |  |
| 2. Six Marketing elective hours selected from the following: |  |
| MKTG 3344 Integrated Communication Advertising Management |  |
| MKTG 3345 Sales and Distribution Management |  |
| MKTG 3346 Retailing |  |
| MKTG 3348 International Marketing |  |
| MKTG 3349 Product and Brand Management |  |
| MKTG 4341 Marketing Implementation and Control |  |
| MKTG 4345 Sports Marketing |  |
| MKTG 5345 Honors Marketing Practicum | 3 |
| 3. Three business elective hours |  |
| *Must be taken in residence. |  |

## Major in Management

To earn the Bachelor of Business Administration degree with a major in Management, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

Twelve credit hours in Management (MNO) and Strategy (STRA) beyond the six hour core requirements of MNO 3370 and STRA 5370 (may be substituted by CISB 5397), and six hours of electives, to be composed of the following:

|  | Credit Hours |
| :--- | :---: |
| 1. Six credit hours of MNO classes:* | 6 |
| MNO $\mathbf{3 3 7 1}$ Human Resources |  |
| MNO 4371 Leadership and Culture | 6 |
| 2. Six credit hours from the following classes* |  |
| MNO $\mathbf{3 3 7 3}$ Negotiations |  |
| MNO $\mathbf{3 3 7 5}$ Corporate Social Responsibility and Ethical Leadership |  |
| MNO 4340 Employee Benefits |  |
| MNO 4362 Project Management |  |
| CISB $\mathbf{3 3 8 0}$ Business Decision Making |  |
| CISB 3382 Foundations of Entrepreneurship |  |
| CISB 5397 Entrepreneurship (if "senior core" is completed with STRA 5370) |  |
| STRA 5370 Strategic Management in a Global Economy (if "senior core" is completed |  |
| with CISB 5397) | 6 |

## Major in Risk Management and Insurance

To earn the Bachelor of Business Administration degree with a major in Risk Management and Insurance, students must comply with the core B.B.A. degree requirements and satisfy the following additional requirements:

|  | Credit Hours |
| :--- | :---: |
| 1. Six credit hours of required RMI courses: | 6 |
| RMI 3360 Principles of Risk and Insurance |  |
| RMI 4360 Insurance and Corporate Risk Management | 6 |
| 2. Six credit hours from the following classes: |  |
| RMI 4335 Insurance Company Operations |  |
| RMI 4340 Employee Benefits |  |
| FINA 4326 Investment Analysis and Portfolio Management |  |
| FINA 4327 Speculative Markets |  |
| MNO 3373 Negotiations |  |
| MKTG 3345 Sales and Distribution Management |  |
| 3. Six elective hours from the following courses if not taken to satisfy 2. above: |  |
| RMI 4335 Insurance Company Operations |  |
| RMI 4340 Employee Benefits |  |
| FINA 4326 Investment Analysis and Portfolio Management |  |
| FINA 4327 Speculative Markets |  |
| MNO 3371 Human Resource Management |  |
| MNO 3373 Negotiations |  |
| MKTG 3345 Sales and Distribution Management |  |
| RE 3381 Real Estate Fundamentals |  |
| ITOM 4306 Business Process Management |  |
| ITOM 4307 Business Modeling |  |
| RMI 5325 Internship (with Instructor's Approval) |  |

## Major in Real Estate Finance

To earn the Bachelor of Business Administration 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 |
| :--- | :---: |
| 1. Twelve hours of Real Estate core:* | 12 |
| RE 3381 Real Estate Fundamentals |  |
| RE 4338 Real Estate Law |  |
| RE 4382 Real Estate Markets and Valuation |  |
| RE 4389 Real Estate Finance |  |
| 2. Six elective hours are required. These course choices are suggested: | 6 |
| FINA 3330 Money and Capital Markets |  |
| FINA 4325 Advanced Financial Management |  |
| FINA 4326 Investment Analysis and Portfolio Management |  |
| ACCT/ITOM 4307 Business Modeling with Spreadsheets |  |
| FINA 4327 Speculative Markets |  |
| FINA 4328 Management of Financial Institutions |  |
| FINA 4329 International Finance |  |
| FINA 5331 Advanced Concepts in Financial Management |  |
| FINA 5332 Practicum in Portfolio Management |  |
| RMI 3360 Principles of Risk and Insurance |  |

## 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 (no more than three hours in one term) 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 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 a second baccalaureate degree in a major outside of business. Students interested in a double major should contact the Undergraduate Office in the Cox School in 252 Maguire Building and the appropriate representative of the dean of the school in which the second degree will be earned.
B.B.A. students are encouraged to complete a minor in other schools on campus, including Dedman College, Meadows School of the Arts and the Lyle School of Engineering.

## MINOR IN BUSINESS ADMINISTRATION REQUIREMENTS

Undergraduates with majors outside the Cox School may complete a minor in business administration.

## Admission Requirements

See Admission of SMU Students to a Business Major / B.B.A. Degree Program in the admission section of this catalog.

## Course Requirements

Matriculated students must complete all hours toward the minor in business administration in residence. Transfer students must complete 21 hours in business at SMU. The following seven courses (21 hours) are required for the Minor in Business Administration:

- ACCT 2301
- ACCT 2302
- FINA 3320
- ITOM 2308
- ITOM 3306
- MKTG 3340 (or ADV 3362)
- MNO 3370


## Grading

Regular grading standards will be used. None of the 21 hours may be completed pass/fail for a minor in business. A minimum 2.0 G.P.A. on all business courses attempted is required for satisfactory completion of the minor in business administration.

## MINOR IN BUSINESS REQUIREMENTS

Undergraduates with majors outside the Cox School may complete a minor in business. This summer-only minor is an open-enrollment program for all non-Cox SMU students. It has no grade-based admission requirements.

## Course Requirements

Students must complete all hours toward the minor in business in residence at SMU (or a minimum of nine hours for transfer students). These courses are offered in summer only.

With the exception of ITOM 3310 (Business Processes and Decisions), FINA 3311 (Markets and Freedom) and FINA 3312 (Personal Finance), 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 business administration minors may take Personal Finance and Markets and Freedom as free electives; these courses will not count as business hours toward any B.B.A. degree.

The following courses ( 18 hours) are required for the minor in business:

- ACCT 2310 Accounting Concepts (or ACCT 2301)
- FINA 3310 Finance Concepts
- MNO 3310 Management Concepts
- MKTG 3310 Marketing Concepts (or ADV 3362)
- FINA 3311 Markets and Freedom

One elective (three hours) from the following courses is required:

- ITOM 3310 Business Processes and Decisions
- FINA 3312 Personal Finance


## Grading

Regular grading standards will be used. None of the courses may be completed pass/fail. A minimum 2.0 G.P.A. on all business courses attempted is required for satisfactory completion of the Minor in Business.

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 at a particular time.

## DEPARTMENTS OF INSTRUCTION

Courses are listed under the following:
Accounting; Business Administration; Business Leadership Institute; Caruth Institute of Entrepreneurship; Finance; Information Technology and Operations Management; Marketing; Management and Organizations; Real Estate, Law and Risk Management; and Strategy and Entrepreneurship.

There have been some course changes and new courses added. Students should use caution in selecting courses to avoid repetition of courses previously taken.

Accounting (ACCT)<br>Professor Joseph Magliolo, Department Chair

Professors: Hemang A. Desai, Wayne H. Shaw; Associate Professors: Nilabhra Bhattacharya, J. Douglas Hanna, Michael F. van Breda; Assistant Professors: Zining Li, Mina J. Pizzini, Ramgopal Venkataraman, Wendy M. Wilson, Jeff Jiewei Yu; Senior Lecturers: Barry J. Bryan, Susan M. Riffe, Gregory A. Sommers.
See requirements to major in Accounting in the Programs of Study section.
B.B.A. degree-seeking students should take ACCT 2301 and 2302 during their sophomore year. Matriculated students must take these courses in residence.
2301. Fundamentals of Accounting I. Theory and practice of measuring and interpreting financial data for business units. Covers basic concepts, principles and procedures. Prerequisites: MATH 1309 or 1337, ECO 1311, 1312; or for Markets and Culture majors ECO 3355 and SOCI 2377.
2302. Fundamentals of Accounting II. Extension of Fundamentals of Accounting I. Uses of accounting information in making business decisions. Prerequisite: ACCT 2301.
2310. Accounting Concepts. This course is a broad introduction to financial, cost, and managerial accounting concepts and practices. The financial section of the course stresses the understanding of financial statements as contrasted to the preparation of these documents. The cost section of the course covers what is meant by product cost including estimating overhead and the underlying assumptions. The course concludes with an introduction to 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.
3311. Intermediate Accounting I. Theory and techniques for construction of corporate financial reports for use by stockholders, creditors and other analysts. Prerequisite: ACCT 2302.
3312. Intermediate Accounting II. Continuation of Intermediate Accounting I. Prerequisite: ACCT 3311.
3391 (CFB 3375, MNO 3375). Ethics in Accounting. Develops students' ability to identify and evaluate ethical issues related to accounting and business management in a corporate environment. The cross listing of CFB 3375 and MNO 3375 is subject to the same rules that restrict credit for all other CF, CFA, and CFB courses that are cross-listed with departmental courses (see General Education Rules 9 and 10). In addition, students who take either CFB 3375 or MNO 3375 (formerly OBBP 3375) may not take ACCT 3391, nor may students taking ACCT 3391 take either of the other two courses for credit. Note: Students seeking accounting certification should note that ACCT 3391 is a gateway course for eligibility to take the CPA examination. Corequisite: Accounting majors with senior standing or ACCT 5325.
4300. Special Topics in International Accounting. Offered through SMU International Programs. Junior standing required.

4306 (ITOM 4306). Accounting Controls (Spring only). This course teaches students how to document, analyze and design internal controls by focusing on business processes - how work gets done in organizations. These processes are the key drivers of value and competitive advantage. Organizations are, therefore, very interested in streamlining and controlling them to ensure that effectiveness and efficiency objectives are being met, that the generation of financial information is accurate and reliable, and that risks are managed. Prerequisites: ACCT 2301, ACCT 2302 and ITOM 2308.
4307 (ITOM 4307). Business Modeling with Spreadsheets. Study of uses and limitations of microcomputers in the financial planning and control process of the firm. Analyzes cases and problem situations using microcomputer software. Emphasis on financial analysis, budgeting, forecasting, capital expenditure analysis. Primarily lecture/discussion with some use of case studies and projects. Prerequisites: ACCT 2302, ITOM 2308 and FINA 3320.
4311. Cost Accounting (Fall only). Study of 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.
4315. Federal Income Tax I (Spring only). A conceptual basis and structure for the determination of income taxes. Tax research methods are used in preparing tax returns, solving problems and planning business decisions. Prerequisite: ACCT 2302.
5314. Accounting Systems/Auditing: Concepts, Design and Analysis (Fall only). Deals with the understanding, development and analysis of financial and management accounting systems. Presents fundamental concepts and applies them to contemporary issues. Management internal control functions serve as a central theme for evaluation and analysis. Furthermore, the behavioral characteristics and mechanics of accounting fraud are presented. Prerequisite: ACCT 3311.
5317. Studies in Accounting Theory I (Spring only). Study of selected topics and current issues in the area of accounting theory. Prerequisite: ACCT 3312 or permission of instructor.
5318, 5319. Independent Studies in Accounting.
5321. Practicum in Financial Statement Analysis (Honors, Fall only). An honors course that examines the role of financial statement analysis in the evaluation of the firm and the prediction of its future condition. Topics include fundamental analysis, the use of accounting numbers in the credit market, the use of accounting numbers in the stock market, and the use of accounting numbers for corporate restructuring decisions. Prerequisites: ACCT 3311, FINA 3320, ITOM 2305 (or STAT 2301 or STAT 2331), and permission of instructor.
5325, 5326. Accounting Internships. Three hours for each class. Prerequisites: Senior standing, departmental approval.

Business Administration (BA)
3300, 3301. Special Topics in International Business. Offered through SMU International Programs. Prerequisite: Junior standing.
4101. Executive Speaker Series. Prerequisite: Junior standing. (One academic credit hour.) 4111, 4112, 4113. Business Internship. Instructor approval only. (Pass/fail only.)
4315. European Union (EU) Seminar. Offered through SMU International Programs and available spring only for full-year students. Prerequisite: Junior standing.
5180, 5280, 5380, 5381. Independent Studies in Business Administration.

## B.B.A. Leadership Institute (BLI)

The mission of the Edwin L. Cox B.B.A. Leadership Institute (BLI) is to help students achieve professional success by becoming more effective communicators and leaders. Toward that end, the BLI seeks to:

1. Improve students' writing, interpersonal and presentation skills as well as their ability to plan and manage projects in a team setting.
2. Increase students' understanding of the vital role communications, integrity, ethics and trust play in running a successful business.
3. Enhance students' appreciation for the contemporary issues and topics that impact businesses on a daily basis, including corporate structure, global competition, legislation/regulation and diversity.
The BLI employs a variety of instructional techniques to impart key concepts and skills and expose students to the real world of business. Techniques include lecture, class discussion, self-assessments, small-group projects, role-play simulations, corporate visits and guest speakers from the corporate and non-profit arenas.
4. Special Topics in Business Administration: B.B.A. Scholars Seminar (One credit hour, pass/fail grading option). Provides an introduction to various business topics including an overview of business disciplines and careers in business. Restricted to B.B.A. Scholars in fall of their first year. (Counts as free elective only.)
5. Contemporary Business Topics. Leading in business today requires thinking creatively, building relationships based on trust, and giving persuasive presentations to a range of audiences. Through interactive lectures, assessments, taped presentations, individual coaching, case studies and interviewing successful leaders, students will develop the skills, understanding and style necessary to lead. The course culminates with a corporate capstone project and team presentation.
6. Business Communications and Leader Development. This course is designed to help students achieve professional success by developing effective communication and leadership skills. The course offers a variety of instructional techniques, including lectures, class discussions, self-assessments, guest speakers, small group interaction/projects and simulations. Students are evaluated individually on presentations, writing, tests/quizzes, and assignments. Student teams are evaluated on a range of exercises, including research projects, analysis, and presentations. Students will not get credit for BLI 3302 if they have taken BLI 2304, 3301, or 3303.
7. Business Communications. Effective business communication requires employees to understand how and when to use communication channels within their companies while considering the impact that globalization and diversity will have on their efforts. By working on a functional team in a simulated business setting, students will learn how to plan and execute various business communications in the context of increasing cultural diversity and global market expansion. Specific activities include interviewing local executives, developing and giving team presentations, and honing business letter writing skills for different situations.

## Finance (FINA)

## Professor William Maxwell, Department Chair

Professors: Andrew H. Chen, Darius P. Miller, Albert W. Niemi, James L. Smith, Rex W. Thompson, Michel R. Vetsuypens; Associate Professors: Chun H. Lam, Kumar Venkataraman; Assistant Professors: Amar Gande, Swaminathan Kalpathy, Qin Lei, Natalia I. Reisel, Johan Sulaeman; Visiting Assistant Professor: Anchada Aida Charoenrook; Senior Lecturers: Brian R. Bruce, Michael L. Davis; Lecturer: Charles B. Ruscher.
See requirements to major in Finance in the Programs of Study section.
3300. Special Topics in International Finance. Offered through SMU International Programs. Prerequisite: Junior standing.
3310. Finance Concepts. This course provides a solid foundation in key financial concepts and tools for managerial decision making. Participants develop their ability to analyze, decide and communicate based on financial data and concepts, skills that will prove invaluable throughout their careers. Topics include: (1) risk-return relationship in financial management, (2) basic valuation models of financial securities, and (3) decision rules used to value and choose between corporate projects. Students who have already taken FINA 3320 will not receive credit for FINA 3310.
3311. Markets and Freedom. This course includes discussion of 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 a free elective for B.B.A. majors if they have not taken FINA 4355. Students will not receive credit for both.
3312. Personal Finance. In this course students will touch on the components of 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. Course content will include hands-on case work. Elective for Business minor. B.B.A. majors can take course for free elective credit only.
3320. 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: ENGL 1301 and 1302, MATH 1309 or 1337, ECO 1311, 1312; ACCT 2301; and EMIS 4340 or 5370, or ITOM 2305 or STAT 2301/2331. Students may not receive credit for this course and ECO 4368. Economics courses will not fulfill B.B.A. requirements.
3330. 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. Students may not receive credit for this course and ECO 3355.
4325. 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, in a combined lecture-case format. Prerequisite: FINA 3320.
4326. Investment Analysis and Portfolio Management. Evaluation of the interactive effects of economic, industry, company and market considerations on the risk and return of individual assets. Analysis of the interrelationships of risky assets when combined in portfolios; asset pricing theory and implications. Prerequisite: FINA 3320. Students may not receive credit for this course and ECO 4378.
4327. Speculative Markets (Fall only). Introduction to analysis of speculative securities such as options and futures. Evaluates underlying theories explaining speculative markets in which such securities are traded. Discusses strategies such as hedging and arbitrage. Prerequisite: FINA 3320.
4328. Management of Financial Institutions (Spring only). Management of assets, liabilities and capital accounts of financial institutions in general and commercial banks in particular. Emphasis on an understanding of the interrelationship among profitability, liquidity and capital adequacy. Uses simulations and/or cases to illustrate the concepts. Prerequisite: FINA 3330.
4329. International Finance. Analyzes the effects on financial transactions of dealing in foreign markets. Considers international financial markets and such issues as interest rate differences between countries and spot and forward transactions in foreign currencies. Major emphasis is given to the impact of international operations for the corporate financial manager. Prerequisites: FINA 4325 and 4326.
4355. 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 both FINA 3311 and 4355. Prerequisite: FINA 3320.

## 5325, 5326. Independent Studies in Finance.

5331. Advanced Concepts in Financial Management (Spring only). Selected advanced topics in corporate finance such as cost of capital, efficient markets, acquisitions, cash management and applications of options concepts. Combined lecture-case format. Prerequisite: FINA 4325 or permission of instructor.
5132/5232/5332. Practicum in Portfolio Management (Honors Section, One Hour Fall and Two Hour Spring). Offers practical experience in investments through management of the Ann Rife Cox Investment Fund. Economic and industry analysis and the determination of their effect on investment decisions. Money and capital market forecasts; selection of individual securities; development of a portfolio strategy. Prerequisite: Application process required. FINA 4326 and minimum 3.5 G.P.A. are highly recommended.
5332. Alternative Assets 1. This course 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, convergence arbitrage) and performance measurement of hedge funds. The course also discusses operational issues, such as implementation costs, leverage and the mechanics of security lending. Prerequisite: Application process required.
5333. Alternative Assets 2. This course examines techniques for alternative asset portfolio management and security selection. The course discusses these topics from the perspective of a professional portfolio manager. Students will learn tools and techniques for valuing individual securities (including fundamental and quantitative methods) and popular approaches to security selection, such as growth versus value. The emphasis will be on contemporary real-world applications. Instructional methods include cases, in-class discussion, and out-of-class assignments. Prerequisites: FINA 5340 and an application process are required.

## Information Systems (ITOM) Professor John H. Semple, Department Chair

Professors: Amit Basu, Bezalel Gavish, Marion G. Sobol; Associate Professor: Ulrike Schultze; Assistant Professors: Aydin Alptekinoglu, Sreekumar R. Bhaskaran, Karthik Ramachandran; Senior Lecturers: Ellen Parker Allen, James C. Collins, Jr., Amy V. Puelz. See requirements to major in Information Systems in the Programs of Study section.
B.B.A. degree-seeking students should take ITOM 2305 (or STAT 2301 or STAT 2331) and 2308 during their sophomore year.
2305. Managerial Statistics. Introductory course consisting of probability and descriptive statistics, regression analysis, decision making under uncertainty, and use of data in decision making. (STAT 2301, STAT 2331, EMIS 4340 and 5370 are alternates for this course.) Open only to pre-business and business students.
2308. Information Systems for Management. Covers the business use of information technologies (IT). Databases, networks and software applications are studied as business resources, and the social and ethical influences of IT on individuals, firms and society are examined. Coursework includes problem solving with information technology and case assignments involving information systems. Prerequisite: ITOM 2305 or STAT 2301 or STAT 2331 or EMIS 4340 or 5370. Will satisfy IT requirement for business majors.
3306. Operations Management. An introduction to quantitative models and concepts used for problem solving in business. Topics include inventory management, linear programming, decision analysis and forecasting. This course is taught through lectures, readings and cases. Prerequisites: MATH 1309 or 1337, ECO 1311 and 1312, ACCT 2301, and STAT 2301 or STAT 2331 or ITOM 2305 or EMIS 4340 or 5370, ITOM 2308.
4305. Business Decisions and Processes. This course will focus on five business processes that operate in most organizations: 1) sales (order fulfillment), 2) billing and cash receipts, 3) purchasing, 4) accounts payable, and 5) project management. For each of these processes students will learn which departments (functional areas) and actors are involved, what the steps and key internal controls are, what information needs to be collected and managed (documents, databases), and how information technology typically supports the process.

Students will also learn how to use spreadsheet models to address decision problems relevant to such processes. Business minor elective. B.B.A. majors and Business Administration minors will receive free elective credit for this course.
4306. (ACCT 4306) Business Process Management. This course teaches students how to document, analyze and design internal controls by focusing on business processes - how work gets done in organizations. These processes are the key drivers of value and competitive advantage. Organizations are, therefore, very interested in streamlining and controlling them to ensure that effectiveness and efficiency objectives are being met, that the generation of financial information is accurate and reliable and that risks are managed. Prerequisites: ACCT 2301, ACCT 2302 and ITOM 2308.
4307. (ACCT 4307) Business Modeling with Spreadsheets. Study of uses and limitations of microcomputers in the financial planning and control process of the firm. Analyzes cases and problem situations using microcomputer software. Emphasis on financial analysis, budgeting, forecasting and capital expenditure analysis. Primarily lecture/discussion with some use of case studies and projects. Prerequisites: ACCT 2302, ITOM 2308 and FINA 3320.

## Management and Organizations (MNO)

 Associate Professor Don VandeWalle, Department ChairProfessors: Robin L. Pinkley, Miguel A. Quinones; Associate Professors: Mel Fugate, Ellen F. Jackofsky; Assistant Professors: Jay Carson, Peter A. Heslin, Maribeth Kuenzi, Robert W. Rasberry.
See requirements to major in Management in the Programs of Study section.
3300 and 3301. Special Topics in International Management I and II. Offered through SMU International Programs. Prerequisite: Junior standing.
3310. Management Concepts. This class provides a broad survey of key issues, theories and practices that underpin how organizations function, evolve and perform. Using a variety of readings, we will examine such major topics as motivation, job design, organizational theory, leadership, organizational culture, competitive strategy and competitive advantage. B.B.A. majors and Business Administration minors who have already taken MNO 3370 will not receive credit for this course.
3370. Management of Organizations. A survey course to facilitate understanding of the key importance of management functions and principles in modern organizations. The course introduces students to the planning, organizing, leading and controlling functions, with a focus on understanding principles that lead to managerial effectiveness at the individual, group and organizational levels. Critical thinking skills and development of self-awareness are a focus throughout the course. Prerequisites: ENGL 1301 and 1302, MATH 1309 or 1337; ECO 1311, 1312; ACCT 2301; and EMIS 4340 or 5370 or ITOM 2305 or STAT 2301 or STAT 2331.
3371. Human Resources. This course examines how organizations execute their business strategy by effectively managing their people. The focus is on learning procedures and practices for developing human resource strategy and the alignment of job descriptions, recruitment, interviewing, training and development. Emphasis is on the practical application of human resource tools that are needed to be a successful manager of talent in both traditional business and in entrepreneurial roles. Prerequisite: MNO 3370.
3373. Negotiations. This course examines theories and processes of negotiation as practiced in a variety of settings. The focus is on the understanding of negotiation strategies and methods of conflict resolution in the context of competitive situations. The prominent teaching methods are simulations, role playing and case studies. Prerequisite: MNO 3370.
3375. Corporate Social Responsibility and Ethical Leadership. This course studies ethical dilemmas managers face. Topics include giving voice to one's values; organizational responsibilities to employees, customers, shareholders and the community; conflicts of interest, product liability and whistle blowing. The mode of delivery is case study, class discussion, video analysis and written and oral presentations.

NOTE: The cross listing of CFB 3375 and MNO 3375 is subject to the same rules that restrict credit for all other CF, CFA and CFB courses that are cross-listed with departmental courses (see General Education Rules 9 and 10). In addition, students who take either CFB 3375 or MNO 3375 may not take ACCT 3391, nor may students taking ACCT 3391 take either of the other two courses for credit. Students seeking accounting certification should note that ACCT 3391 is a gateway course for eligibility to take the CPA examination. Prerequisite: MNO 3370.
MNO 4340. Employee Benefits. The structure of employee benefits is a strategic decision for employers and an important financial planning element for employees. An overview of typical employee benefits is covered along with how these benefits integrate with Social Security. Course content includes a discussion of qualified and non-qualified plans that are of current importance to employers and employees. To gain practical experience, students will examine details of benefit offerings that are part of actual job offers to SMU students. Prerequisite: MNO 3370.
4361. Project Management. Projects are a fundamental means of getting things done in business today. Project management is a set of practices and interpersonal skills designed to successfully accomplish business results that are delivered on time, on budget and meet quality standards. Project management is a skill that is in high demand across industries and organizational structures because it is becoming the preferred process to achieve successful results. Topics covered include defining the project goals, developing a plan to achieve the goals, execution of the plan and progress evaluation. Interpersonal skills include communication, collaboration and team management. Prerequisite: MNO 3370.
4371. Leadership and Culture. The course is designed to enhance effectiveness and success as an outstanding leader. Important theories of motivation, leadership, interpersonal relationships, teamwork and organizational culture are studied and applied to making leadership decisions. Prerequisite: MNO 3370 (OR, for non-Cox students, approval of the Cox B.B.A. Advising Office, junior standing and two courses in psychology or sociology may be substituted for the prerequisite).
4378. Independent Studies in Management. Research in this area will consider contemporary issues - theoretical, ethical, methodological, social, etc. - that are currently of interest to management. Prerequisites: MNO 3370 and permission of full-time faculty.

## Marketing (MKTG)

Associate Professor Raj Sethuraman, Department Chair
Professors: Thomas E. Barry, William R. Dillon, Daniel J. Howard, Roger A. Kerin, Zannie G. Voss; Associate Professors: Richard A. Briesch, Edward J. Fox, Tasadduq Shervani, Jacquelyn S. Thomas, Glenn Voss; Assistant Professors: Joonwook Park, T. Andrew Poehlman, Priyali Rajagopal; Senior Lecturers: Charles A. Besio, Sonja C. Corbin, Judy H. Foxman.

See requirements to major in Marketing in Programs of Study section.
3300. Special Topics in International Marketing. Offered through SMU International Programs. Prerequisite: Junior standing.
3310. Marketing Concepts. Students learn the basic principles of consumer marketing and the role of each element of the marketing mix. Emphasis is placed on creating a familiarity with the marketing strategy and planning processes and viewing marketing within a societal context. Learning takes place through lectures, case studies and small group activities and discussions during which students develop answers to marketing problems and opportunities. B.B.A. Majors and Business Administration minors who have already completed MKTG 3340 will not receive credit for this course.
3340. Fundamentals of Marketing. Examines three major areas: 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: ENGL 1301 and 1302, MATH 1309 or 1337; ECO 1311, 1312; ACCT 2301 and ITOM 2305 or STAT 2301 or 2311 or EMIS 4340 or 5370.
3342. Marketing Research. Nature and role of information in the decision-making process; identification and discussion of the elements and relationships that constitute the research process; planning and conducting a research project; the role and nature of a marketing information system. Prerequisite: MKTG 3340.
3343. Consumer Behavior. Helps students understand the motivation and behavior of buyers and consumers. Consumer behavior within a marketing framework will be discussed and will be related to the task of marketing management. Prerequisite: MKTG 3340.
3344. Integrated Communication Advertising Management. Provides an opportunity for students to explore key marketing communication concepts and management issues through the study of message strategy, advertising, sales promotion, direct marketing and media planning. Prerequisite: MKTG 3340.
3345. Sales and Distribution Management. A multidisciplinary approach to the study of sales and sales force management. The topic areas of major concern focus on the total sales process, e.g., selection, training, motivation and compensation of personnel, sales forecasting, sales territory management, and analyses. The basic objectives are to provide the student with a fundamental understanding of the elements of the sales process, and to provide the student with a management perspective to plan, organize and direct a sales force. Prerequisite: MKTG 3340.
3346. Retailing. A study of retailing, focusing on the environment of retailing management, retail strategy, merchandise management, sales promotion and customer services, and expense and productivity management. Prerequisite: MKTG 3340.
3347. Services Marketing. Investigates the institutions that facilitate the transfer of title of a good as it moves from producer to ultimate consumer. Prerequisite: MKTG 3340.
3348. International Marketing. Focuses on the analysis of environmental variables in the foreign market context. Prerequisite: MKTG 3340.
3349. 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. Studies the fundamentals of pricing the product and the formulation of price policies, including their legal aspects. Prerequisite: MKTG 3340.
4341. Marketing Implementation and Control. Uses the case analysis method to examine strategy, tactics and decision making regarding the implementation and control of marketing problems. Prerequisite: MKTG 3340.
4345. Sports Marketing. An exploration of sports marketing from two perspectives: the marketing of sports and marketing through sports. Focuses on key issues including fan segmentation, branding, licensing and sponsorship. Prerequisite: MKTG 3340.
5150. Marketing Internship. This course requires students to work in a professional capacity in a marketing-oriented position within a company. The company providing the internship, and the job responsibilities of students, are subject to approval. To obtain credit, the internship must involve a minimum of 100 hours of work. Course also involves additional academic requirements as determined by the internship adviser.
5341. Marketing Management (Spring only). The objectives are to (1) provide the student with a fundamental understanding of the marketing strategy planning process within the firm and (2) develop the 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. Prerequisites: Senior standing and MKTG 3342.
5342, 5343. Independent Studies in Marketing.
5345. Honors Marketing Practicum (Spring). Gives students an opportunity to apply marketing concepts and theories learned in the classroom to a real-life business situation. Groups will be responsible for researching, designing and presenting a comprehensive integrated marketing promotions plan to a Dallas business. Prerequisite: By application.

Real Estate, Risk Management and Business Law (RE)<br>Professor William B. Brueggeman, Department Chair<br>Associate Professor: Robert Puelz; Senior Lecturers: Barbara W. Kincaid, Catherine Weber.

See requirements to major in Real Estate Finance in the Programs of Study section.
3381. Real Estate Fundamentals. An introduction to all phases of real estate and the foundation for other courses in real estate. Prerequisite: ACCT 2302; Corequisite: FINA 3320.
4338. Real Estate Law (Spring only). A survey of real estate law with particular attention given to real estate transactions, financing, syndication and land use regulation. Prerequisites: BL 3335 and RE 3381.
4382. Real Estate Markets and Valuation (Fall only). The principles and techniques of estimating the value of residential and income-producing properties. Also considers the economic base, structure and distribution of land use in urban areas. Prerequisites: RE 3381 and FINA 3320. With permission of 4382 instructor, 3381 and 4382 may be taken concurrently.
4389. Real Estate Finance (Spring only). Development of technical competence necessary to structure real estate transactions. Computation of periodic payments, amortization schedules and true borrowing costs. Examination of the secondary mortgage market. Application of techniques for structuring real estate transactions (e.g., sale-leaseback, joint ventures, syndications, etc.). Prerequisites: RE 3381, RE 4382 and FINA 3320. (Students cannot receive credit for RE 4381 and RE 4389).
5193, 5293, 5393. Independent Studies in Real Estate. Number of credit hours per course may range from one to three hours. Prerequisite: Permission of instructor.

## Business Law (BL)

3335. Introduction to Legal Environment and Ethics. An environmental course that emphasizes the nature, formation and application of law with a macro view. Public law and regulation of business is emphasized. Prerequisites: ENGL 1301 and 1302, MATH 1309 or 1337, ECO 1311 and 1312, ACCT 2301, ITOM 2305 or STAT 2301 or STAT 2331 or EMIS 4340 or 5370.
3336. Advanced Business Law. Includes the law of real property, commercial paper, creditors' rights and secured transactions, agency and employment, partnerships and corporations. Prerequisite: BL 3335.

## Risk Management and Insurance Area (RMI)

3360. Principles of Risk Management and Insurance. This course focuses on the principles of risk and the role of insurance in handling risk. Topics range from conventional insurance markets to Lloyds of London. Also includes an overview of commercial risks and insurance choices of business owners. The principles of insurance economics are reinforced with practical applications to automobile insurance, renters insurance, life insurance and health insurance.
3361. Insurance Company Operations. The course explores issues surrounding the operation of an insurance company by looking at underwriting strategy, the choice of distribution system, reinsurance arrangements, investments and claims. Students will participate in an insurance game that simulates a competitive market. Decisions will involve insurance company operations such as price, portfolio mix, underwriting strategy. Prerequisite: RMI 3360.
4340 (MNO 4340). Employee Benefits. The structure of employee benefits is a strategic decision for employers and an important financial planning element for employees. An overview of typical employee benefits is covered along with how these benefits integrate with Social Security. Course content includes a discussion of qualified and non-qualified plans that are of current importance to employers and employees. To gain practical experience, students will examine details of benefit offerings that are part of actual job offers to SMU students. Prerequisite: RMI 3360.
3362. Insurance and Corporate Risk Management. This course 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 business forms. Practice meets theory during the class through a series of interactions with corporate risk managers representing a variety of industry sectors and perspectives. Other topics include risk management, enterprise risk management, the role of the commercial insurance market and how market changes affect decision-making. Prerequisite: RMI 3360.

Strategy and Entrepreneurship (STRA) Professor Gordon Walker, Department Chair

Professor: Maria A. Minniti; Associate Professors: David Carroll Croson, David T. Lei; Assistant Professor: Qi Zhou; Visiting Assistant Professor: Panayiota Konstantina Kiousis; Scholar-in-Residence: Dwight R. Lee.
5370. 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, EMIS 4340 or 5370 or ITOM 2305 or STAT 2301 or 2331, FINA 3320, MKTG 3340, MNO 3370, ITOM 3306.
5371. Advanced Strategic Management (Spring only). Seeks to extend the theories and practices introduced in STRA 5370 and to broaden the understanding of strategic problems found in modern corporations. Topics may vary. Prerequisite: STRA 5370.
5378/79. Independent Studies in Strategy. Projects will focus on contemporary issues in strategy research. Prerequisites: STRA 5370 and permission of full-time faculty.

## The Caruth Institute (CISB) (An Entrepreneurship Center)

Jerry White, Director

3380. Business Decision Making. This course analyzes theories and practices of decision making in a variety of business settings with the aim of helping students make better business decisions. Specifically, it focuses on understanding the processes through which individuals and firms make decisions (and mistakes) in uncertain situations. Particular emphasis is put on how to process information effectively, when to use rules of thumb and how to detect biased judgments. The course emphasizes simulations and in-class experiments. Prerequisites: ECO 1311 and 1312, STAT 2301 or 2331 or ITOM 2305 or EMIS 4340 or 5370, calculus.
3381. Foundations of Entrepreneurship. Students learn to recognize and evaluate entrepreneurial opportunities in a variety of settings. The emphasis is on entrepreneurship as a manageable process that can be applied in many organizational settings. We will identify the many ways in which entrepreneurship manifests itself and discuss the characteristics and implications of social entrepreneurship, high-tech entrepreneurship, corporate entrepreneurship, public sector entrepreneurship, family businesses, and other contexts. This course is restricted to business majors.
3382. 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: Senior standing.
3383. Entrepreneurship (Starting a Business). This course helps students understand how to plan and start a new business or expand an existing owner-managed or family-owned business. Topics covered include the personal characteristics of successful entrepreneurs, identifying the window of opportunity for launching a new venture, determining if a new business will be profitable, profit and cash flow forecasts, sources of information, forecasting sales, the importance of relevant experience, finding financing, and the business plan. Prerequisites: FINA 3320, MKTG 3340, MNO 3370, ITOM 3306.
3384. Independent Studies in Entrepreneurship.

# 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 course work 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 Algur H. Meadows Award for Excellence in the Arts. Recipients of the award spend several days in residence at Meadows in personal interaction with students. They have included playwright Edward Albee, filmmaker Ingmar Bergman, dancer and choreographer Martha Graham, television producer and journalist Don Hewitt, actress Angela Lansbury, artist Jacob Lawrence, musician and composer Wynton Marsalis, playwright Arthur Miller, soprano Leontyne Price, cellist and conductor Mstislav Rostropovich, composer and lyricist Stephen Sondheim and dancer and choreographer Paul Taylor. The Meadows School also offers one of the nation's finest university complexes for instruction, performance and exhibition in art, art history, arts administration, communications, dance, 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, 3681-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.

## MEADOWS SCHOOL OF THE ARTS <br> AND THE LIBERAL ARTS EDUCATION

All first-year undergraduates spend at least one year in Dedman College before transferring officially to Meadows. Students are assigned an academic adviser in Dedman College 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 transferring into Meadows, normally in the sophomore year, students continue to combine courses in the major with general education requirements. Meadows considers the General Education Curriculum to be an important part of the education of its students.

## 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 Administration
Cinema-Television

Corporate Communication and Public Affairs
Dance
Journalism
Music
Theatre

## Programs of Study

Bachelor of Arts
Advertising
Art History
Cinema-Television
Corporate Communication and Public Affairs
Interdisciplinary Studies in the Arts
Journalism
Music
Bachelor of Fine Arts
Art
Dance Performance
Theatre

## Bachelor of Music

Music Composition
Music Education (includes Texas teacher certification)
Music Performance
Music Therapy (includes registration by the National Association for Music Therapy)

## 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
Cinema-Television Studies
Corporate Communication and
Public Affairs

Dance Performance
Journalism
Music
Photography
Corporate Communication and Public Affairs

Various divisions in Meadows School of the Arts have special admissions criteria, such as auditions, portfolio reviews and specified course work. 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 Office of Enrollment Services, P.O. Box 750181, Dallas TX 75275-0181. The application deadline for first-year students entering for the fall term is November 1 for early action, January 15 for regular decision and merit scholarships, and November 1 for the spring term. For transfer students, the application deadline is June 1 for the fall term and November 1 for the spring term. (See the University Admission section in the front of this catalog.)

## Admission as an SMU Inter-School Transfer Student

First-year premajor 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 Undergraduate 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 G.P.A. of 2.0. Students in various divisions also must receive formal recognition for suitable scholarly or creative ability, and talent in the performing arts. Art students must submit a portfolio online for admission to study for the B.F.A. or B.A. degree. Based upon that portfolio and review of transcript courses, they will be accepted for degree status. In some cases, students may be required to take introductory course work and resubmit a portfolio for further study toward the degree. Art history students are strongly encouraged to contact the chair of the Art History Division for a conference. Advertising, Cinema/Television, Journalism, and Corporate Communication and Public Affairs (CCPA) students must successfully complete the prerequisite subset of courses with the appropriate G.P.A. to be admitted to their degree programs. Advertising students must additionally complete a written on-site application to the program. CCPA students must also complete a portfolio project; the selection process is competitive and limited to the top 25 students per calendar year.

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

Transfer students applying for admission to Meadows School of the Arts by transfer from another accredited educational institution should request a transfer application from the Office of Enrollment Services. Transfer applicants who have completed 30 transferable hours with a G.P.A. of 2.7 or better are often successful in gaining admission to the University. Once admitted, a transfer student must be prepared to earn 60 hours of credit in residence at SMU.

Transfer credit is not given for correspondence courses or for work completed at a non-accredited 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

Students should contact the Division of Enrollment Services - Admissions 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. Music, dance 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. See "Readmission of Students" in the University Admission section for more details.

## 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. For more information, see the Student Financial Aid section or contact the Division of Enrollment Services - Financial Aid.

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, portfolio 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, write to the Director of Financial Aid and Scholarships, Meadows School of the Arts, Southern Methodist University, P.O. Box 750356, Dallas TX 75275-0356.

To receive primary consideration for all SMU merit scholarships and other aid, students should comply with the following schedule:

## By January 15

- Complete SMU Application for Admission
- Submit Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov and the CSS Profile at www.collegeboard.com.


## 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 Undergraduate 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 the requirements for general education and the major, candidates for graduation must also fulfill the following requirements:

1. Credits:
a. A minimum total of 122 term credit hours ( 125 for art majors, 123 for dance and theatre majors, and 124 to 133 for music majors seeking the Bachelor of Music).
b. Each student with a major in Meadows School of the Arts will complete, as a cocurricular requirement, three term credit hours of course work within Meadows but outside the division in which he or she is a major.
2. Grades:
a. A minimum cumulative G.P.A. of 2.0 on all attempted SMU work and a minimum 2.0 G.P.A. in the major area of study.
b. A maximum of 12 term credit hours with a grade of P at the student's election.
3. Residency:
a. A minimum total of 60 term credit hours in residence.
b. A maximum of 15 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 course work counting toward a major must be taken for a letter grade, except for those courses that are routinely designated pass/fail. To change majors or to declare a second major, students must process appropriate forms in the Undergraduate Academic Services Office.

## General Education Requirements

The general education requirements of the University must be met by all undergraduate students, regardless of degree program or major. All courses used to meet general education requirements must be taken for a letter grade. Questions concerning general education requirements may be directed to the Undergraduate 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 that is equivalent to SMU work will be included in the calculation
of the G.P.A. For students who have transferred to SMU or who have transferred course work following matriculation at SMU, two grade-point averages will be calculated: that for all work attempted, and that for work completed 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 to students who are within six hours of completing graduation requirements and are enrolled to complete the required work during the summer following graduation activities. Students who meet the above requirements may petition to participate in commencement activities.

## Interdisciplinary Course Offerings (MSA)

1010, 1110. 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 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.
1315. Mass Media and Technology. An overview of technology as it applies to mass media in America, emphasizing the access of information via the Internet. Topics include the expanding nature of technology, legal aspects and the effects of technology on society.
1350. The Arts in Their Cultural Context: The City of the Imagination. Introduces students to how 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.
2051, 2151, 3351 and 2052, 2152, 3352. 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, 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. This is a two-semester sequence. Students must take MSA 2051 or 3351 in order to enroll in either MSA 2052 or 3352 . Completion of MSA 2052 or 3352 will make students eligible to apply for a competitive paid fellowship in the following year. Minimum 3.0 G.P.A. and instructor consent required.
2301. Mass Media and Society. A survey of all print and broadcast media - their backgrounds as well as their current status as industries. Ethics, law, effects of mass media, international communication, advertising and public relations also are treated.
2305. Meadows Video Production. 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.
3310. 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.

3321 Video Dance Workshop. Provides an opportunity for Meadows Dance and CinemaTelevision 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. Students will be encouraged to submit the piece into student dance film festivals. Instructor approval required.
5005, 5101, 5102, 5103, 5104. Workshop: Microcomputers in the Arts.
5105, 5205, 5305. Directed Study.
5301. Microcomputer Applications in the Arts. An in-depth survey of available courseware and utilities programs in the arts, including sound and graphics application. Introduction to structured BASIC programming for arts application.
5302. Developing Computer-Based Instructional Materials for the Arts. A course designed to provide students with skill in hierarchical, structure program design in BASIC computer language, including sound and graphics routines. Explores pedagogical approaches, using the computer, appropriate to the student's arts discipline.

# Programs of Study in Meadows 

ADVERTISING<br>Temerlin Advertising Institute for Education and Research<br>Professor Patricia Alvey, Distinguished Chair and Director<br>Professors: Alice Kendrick, CarrieLaFerle; Associate Professor: Steven Edwards; Assistant Professors: Glenn Griffin, Yeo Jung Kim, Kartik Pashupati; Lecturers: Mark Allen, David Hadeler; Adjunct Lecturers: Nathan Huey, Christopher Owens.

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. It enjoys a strong relationship with the industry, as it is situated in a top media and advertising market - the Dallas/Fort Worth Metroplex. DFW is the nation's seventh largest television and media market and the headquarters for major advertising agencies, national and global corporations, large U.S. media corporations, public relations firms and film production companies. This location affords access to professionals of the highest caliber who serve as class clients, guest lecturers, executives-inresidence, adjunct faculty and internship sponsors. Students have access to highprofile internships at national and global agencies as well as client and media corporations. All students admitted to the institute work toward a Bachelor of Arts (B.A.) degree in advertising. In addition, students may wish to focus their elective studies to form a media emphasis or they may apply, after their first term at the institute, for admission into the creative program.

## 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 $\mathbf{3 0}$ hours in good academic standing 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 G.P.A. of 3.0: STAT 1301, ENGL 1301, ENGL 1302 and ADV 2374. (STAT 2301 or STAT 2331 may replace STAT 1301. No other exceptions will be granted.) Students transferring from other universities must have completed equivalent courses and obtained the equivalent cumulative G.P.A. 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 once each fall, spring and summer term prior to the preregistration period. Students who are not admitted during an application process may re-apply during the next application period.

## Program of Study <br> B.A. Degree 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 to form a media emphasis, or they may apply for admission into
the creative program if they wish to become advertising writers or art directors. Attendance is required on the first day of classes or a student may be dropped from the class.

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, advertising literacy, media planning, marketing principles of advertising and advertising campaigns. In addition, advertising majors are required to complete eight hours of foreign 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 top 10 U.S. advertising market, many students participate in internships for course credit. Thirty-six hours of advertising and communication courses are required for a major in advertising.

|  | Credit Hours |
| :--- | :---: |
| General Education Curriculum | 41 |
| Advertising Course Requirements (beyond General Education): | 24 |
| ADV 2374 Survey of Advertising |  |
| ADV 2375 Advertising Ethics |  |
| ADV 3351 Advertising Literacy |  |
| ADV 3362 Marketing Principles of Advertising or |  |
| MKTG 3340 Fundamentals of Marketing |  |
| ADV 3376 Advertising Media |  |
| ADV 3385 Introduction to Creativity |  |
| ADV 3393 Advertising Research |  |
| ADV 4399 Advertising Campaigns |  |
| General Advertising Electives (Choose one): |  |
| ADV 4317 Consumer Behavior |  |
| ADV 4318 Interactive Advertising |  |
| ADV 4374 International Advertising |  |
| ADV 4375 Contemporary Advertising Issues |  |
| ADV 4381 Advertising Sales Management |  |
| ADV 4382 Integrated Marketing Communication |  |
| ADV 5301, 5302, 5303, 5304 Topics in Advertising |  |
| ADV 4125, 4225, 4325 Advertising Internship |  |
| Specialized Advertising Electives (Choose one): |  |
| ADV 4362 Advertising Account Management |  |
| ADV 4376 Advanced Advertising Media |  |
| ADV 4393 Advertising Account Planning |  |
| Communication Electives: |  |
| Communication Electives include any advertising, journalism, |  |
| cinema-television or corporate communication course. |  |
| For a list of suggested communication electives please consult the |  |
| "TAI Student Handbook," available online: temerlin.smu.edu |  |
| Foreign Language (Two terms of the same language): |  |
| Statistics (STAT 1301, STAT 2301 or STAT 2331) |  |
| Meadows Elective: |  |
| Meadows Electives include any art, art history, dance, theatre or |  |
| Music course. For a list of suggested Meadows Electives please consult |  |
| the "TAI Student Handbook," available online: temerlin.smu.edu |  |
| Tond Major or Minor Choice |  |

## Media Emphasis

Working in conjunction with their academic advisers, students may opt to focus their studies on the media buying, planning and selling process. In addition to the required advertising courses, students selecting this course of study would also take the following: ADV 4318 (Interactive Advertising), ADV 4325 (Advertising Internship in a media-related position), ADV 4376 (Advanced Advertising Media) and ADV 4381 (Advertising Sales Management).

## 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 experience each student receives in creative courses and helps ensure that the quality of work produced by our students is of the highest caliber and competitive by industry standards.

Creative program applications are collected at the end of every fall, spring and summer term. Most students' first opportunity to apply is near the end of their ADV 3385 (Introduction to Creativity) course. Any student who is 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 will 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 (Introduction to Creativity) 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.

| Credit Hours |
| :--- |
| General Education Curriculum |
| Advertising Course Requirements (beyond General Education Curriculum): |
| ADV 2374 Survey of Advertising |
| ADV 2375 Advertising Ethics |
| ADV 3351 Advertising Literacy |
| ADV 3362 Marketing Principles of Advertising or |
| MKTG 3340 Fundamentals of Marketing |
| ADV 3376 Advertising Media |
| ADV 3385 Introduction to Creativity |
| ADV 3390 Creative Production (Concurrent enrollment in ADV 3395 required.) |
| ADV 3393 Advertising Research |
| ADV 3395 Concepting (Concurrent enrollment in ADV 3390 required.) |
| ADV 4385 Portfolio |
| ADV 4399 Advertising Campaigns |
| Communication/Meadows (Advertising Creative) Electives (Choose two): |
| ADV 4354 Copywriting Seminar or ADV 4355 Art Direction Seminar |
| ADV 4395 Advanced Portfolio |
| Communication electives include any advertising, journalism, |
| cinema-television, or corporate communication and public affairs |
| courses. Meadows electives include any art, art history, dance, |
| theatre or music course. For a list of suggested Meadows electives |
| please consult the "TAI Student Handbook," available online: |
| temerlin.smu.edu. Creative program students are strongly encouraged to |
| take either ADV 4354 or 4355 and ADV 4395 to satisfy communication |
| elective (three credits) and Meadows elective (three credits). |
| Foreign Language (Two terms of the same language) |
| Statistics (STAT 1301, STAT 2301 or STAT 2331) |
| Second Major or Minor Choice |
| Total Hours |

## Minor in Advertising

Admission to the minor is contingent upon available space. In addition, for students wishing to pursue a minor in advertising, admission is a two-part process. See "Admission Requirements" section. 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.

|  | Credit Hours |
| :--- | :---: |
| Advertising Course Requirements | 15 |
| ADV 2374 Survey of Advertising |  |
| ADV 2375 Advertising Ethics |  |
| ADV 3351 Advertising Literacy |  |
| ADV 3385 Introduction to Creativity |  |
| ADV 3362 Marketing Principles of Advertising |  |
| $\quad$ (or MKTG 3340 Fundamentals of Marketing) | 9 |
| Elective Requirements (Choose three): |  |
| ANTH 3346 Culture and Diversity in American Life |  |
| ARHS 1303 Introduction to Western Art I: Prehistoric through Medieval |  |
| ARHS 1304 Introduction to Western Art II: Renaissance through Modern |  |
| ENGL 2311 Poetry |  |

ENGL 2314 Doing Things With Poems
HIST 3364 Consumer Culture in the United States, 1700-1990
PSYC 3341 Social Psychology
Total Hours

## The Courses (ADV)

2374. Survey of Advertising. Introductory course for majors and non-majors; surveys the field of advertising and studies håow 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.
2375. 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.
2376. Advertising Literacy. Students are introduced to the history, current news and developing trends of the advertising industry. This includes exploration into the effects of worldchanging events on advertising strategy, historical perspectives from industry leaders and the metamorphosis of advertising agencies including mergers and international conglomerates. Prerequisite: ADV 2374. Restricted to advertising majors and minors.
2377. 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. Prerequisite: ADV 2374. Restricted to advertising majors and minors.
2378. 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.
2379. 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 the creative program. Prerequisite: ADV 2374. Restricted to advertising majors and minors
2380. Creative Production. 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. Prerequisites: ADV 2374 and 3385. Concurrent enrollment in ADV 3395 required. Restricted to advertising majors. Departmental consent required.
2381. 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. Prerequisite: ADV 2374. Restricted to advertising majors.
2382. Concepting. A workshop for developing ideation skills and helping students selfidentify 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 term's end. Prerequisites: ADV 2374 and 3385. Concurrent enrollment in ADV 3390 required. Restricted to advertising majors. Departmental consent required.

4125, 4225, 4325. Advertising 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, 3351, 3362 or MKTG 3340, 3376, 3385, 3393 and junior or senior standing. Restricted to advertising majors. Departmental consent required.
4196 (CTV 4101). TV Ad Concepting. Working in small groups, students create advertising concepts and develop them into viable 30-or 60-second television commercials for an assigned client. Students enrolled in this course are expected to take ADV 4297 the following semester. May be repeated for credit in subsequent years. Prerequisites: ADV 2374, ADV 3385 and ADV 3395. Instructor consent required.
4297 (CTV 4201). TV Ad Production. Students plan, shoot and post-produce television commercials based on concepts created in ADV/CTV 4196 for ultimate exhibition and/or submission to national competitions. May be repeated for credit in subsequent years. Prerequisites: ADV 4196 (completed during the same academic year), ADV 2374, 3385 and 3395. Instructor consent required.
4300. Advertising Seminar. Students experience an intensive study of advertising, usually via a series of seminars at leading advertising agencies, corporations and mass media outlets. Students will have the opportunity to interact with senior advertising executives on a one-to-one basis in order to understand advertising's role in society and as a business and artistic function. Prerequisites: ADV 2374, 3351, 3362 or MKTG 3340, 3376, 3385 and 3393. Departmental consent required.
4317. 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. Restricted to advertising majors.
4318. Interactive Advertising. This course focuses on the concepts, technologies and skills necessary in designing, developing and maintaining various forms of interactive advertising. This course will cover creative aspects of several interactive media such as Web sites, banner ads and rich media. Students will learn how to use software applications to accomplish design tasks. Prerequisite: ADV 2374. Restricted to advertising majors.
4354. Copywriting Seminar. An intensive exploration of the writer's craft across a variety of literary genres. Students will 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 and 3390. Restricted to advertising majors. Departmental consent required.
4355. Art Direction Seminar. Building upon the prerequisite course in Creative Production (ADV 3390), students apply the fundamentals of advertising layout and design with the goal of preparing material for professional use. This course is intended for creative program majors choosing art direction careers. Prerequisites: ADV 2374, 3385 and 3390. Restricted to advertising majors. Departmental consent required.
4362. Advertising Account Management. This course will enable students to understand what makes advertising agency account managers, or account executives, successful. The personal and performance qualities that characterize successful account managers will be examined. Course work will include assigned reading, problem-solving exercises, lectures and discussions of advertising industry situations. Prerequisites: ADV 2374 and 3362 or MKTG 3340. Restricted to advertising majors.
4374. 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. Prerequisites: ADV 2374, 2375, 3351 and 3362 or MKTG 3340. Restricted to advertising majors.
4375. Contemporary Advertising Issues. Focuses on topics that are important to presentday advertising. Emphasis might vary from term to term in topic areas including, but not limited to, creative, media, research, management, international and mass communications theory and culture. Prerequisites: ADV 2374, 3351, 3376, 3393 and senior standing. Restricted to advertising majors.
4376. Advanced Advertising Media. Applies concepts learned in ADV 3376 (Advertising Media) to more sophisticated applications of media planning and buying. Particular emphasis will be placed upon the role of technology in media decision-making. Students will plan, execute and verify media purchases to maximize the client's dollars and to justify allocations across and within media choices. Prerequisites: ADV 2374 and 3376. Restricted to advertising majors.
4381. Advertising Sales Management. Focuses on the role of the media in the advertising mix and those who sell media time and space. Examines the establishment of rate cards, sales forecasting, budgeting, building client lists, reading circulation and listenership/ viewership data, understanding discounting procedures and perfecting negotiations and presentation skills. Prerequisites: ADV 2374, 3351, 3362 or MKTG 3340, 3376, 3393 and senior standing. Restricted to advertising majors.
4382. Integrated Marketing Communication. This course introduces students to 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. In addition to advertising, students will learn to formulate strategies and use tools in the fields of sales promotion, public relations, direct marketing, interactive and mobile media, viral marketing and other evolving elements of the marketing communication mix. Students will gain an understanding of planning and implementing integrated marketing communication plans from the perspective of advertising agencies and businesses as well as nonprofit organizations. Prerequisites: ADV 2374, 2375, 3351, 3362 or MKTG 3340 and 3393. Restricted to advertising majors.
4385. Portfolio. A workshop course devoted to the continued development and professionallevel 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-term critique. Prerequisites: ADV 2374, 3385, 3390 and 3395 . Restricted to advertising majors. Departmental consent required.
4393. Advertising Account Planning. The research-based and consumer-centered approach to strategic development of advertising known as account planning is the focus of this course. Students will review both qualitative and quantitative research practices used in advertising, as well as the planning techniques used by account planners. Course activities will include 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 and 3393. Restricted to advertising majors.
4395. Advanced Portfolio. Building on the Portfolio (ADV 4385) course, 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-term critique. Prerequisites: ADV 2374, 3385, 3390, 3395 and 4385. Restricted to advertising majors. Departmental consent required.
4399. Advertising Campaigns. Integrating the major advertising principles, students develop and present an advertising campaign, including research, strategy, creative execution, a media plan and presentation of the campaign to a client. Prerequisites: ADV 2374, 3351, 3362 or MKTG 3340, 3376, 3385 and 3393. Additional prerequisites for creative program students: ADV 3390 and 3395. Restricted to advertising majors.
5110, 5210, 5310. 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. Prerequisites: Junior standing. Restricted to advertising majors. Instructor and departmental consent required.
5113. Professional Development. This course is designed to guide graduating seniors from the classroom to the work force and will encompass all aspects of the job search. It will include resume and cover letter development, interview practice, networking through a "sphere of influence" and sourcing positions in the field of advertising. Prerequisites: Junior standing. Restricted to advertising majors.
5301, 5302, 5303, 5304. Topics in Advertising. Focuses on special topics in advertising. Examples might be an off-campus class to study the New York, Chicago, or international advertising communities, or an on-campus seminar studying current advertising issues, or a comparison of U.S. advertising with that of other countries. Prerequisites: ADV 2374. Restricted to advertising majors.

ART<br>Professor James Sullivan, Division Chair<br>Professors: Barnaby Fitzgerald, Bill Komodore, Laurence Scholder. Mary Vernon; Associate Professors: Debora Hunter, Noah Simblist, Philip Van Keuren (Director, Pollock Gallery); Assistant Professor: Carola Dreidemie; Senior Lecturer: Charles DeBus.

The Division of Art offers professional education in studio art leading to the B.A., B.F.A. and M.F.A. degrees within a traditional liberal arts environment. Knowledge, awareness and performance are at the center of this education. The commitment to producing liberally educated, well-rounded graduates with a strong professional focus is at the heart of the mission of the Meadows School. Believing in a rich mixture of tradition and innovation, the Division of Art seeks to develop students' analytical abilities and a critical consciousness of the nature and power of images.

This mixture will help students produce significant works of art that speak to contemporary issues. At the core of the mixture is substantial studio instruction in the fundamental areas of the making of art, supported by critical and historical studies. Drawing serves as the basic visual language binding the various disciplines. By encouraging technical and imaginative abilities that are both unmechanical and enthusiastic, the Division of Art hopes to engender an artistic and intellectual flexibility that will serve a range of professional goals in the visual arts. Such flexibility of thought is essential for artists to meet the challenges of the rapidly changing visual and cultural life.

When students graduate, they will be prepared to continue as professional artists, to be capable of visually testing differences, questioning distinctions and presenting conclusions. Their work should reflect an individual voice. In the spirit of their liberal education, they should continue earnestly and sincerely to question, appreciate and respect the creative endeavors of all people. For more information, visit www.meadows.smu.edu/art.

## Instructional Facilities

The tree-lined SMU campus offers a beautiful setting for learning. Unlike many universities in major cities, SMU guarantees housing for all four years of undergraduate study and also provides graduate accommodations if desired. 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 and three-
dimensional imaging. 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 include the Pollock Gallery - the art exhibition space of the Division of Art located in HughesTrigg Student Center. The Pollock Gallery provides students, faculty, staff and the surrounding community with opportunities to experience a wide and thoughtprovoking 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) 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 this program internationally significant artists are brought to campus each month during the year to teach, lecture and conduct 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 course work as well as independent and directed study each summer, including plein-air painting, an interdisciplinary studio workshop, sculpture, photography and printmaking. 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 six internationally significant museums (The Dallas Museum of Art, SMU's newly designed Meadows Museum, and the Nasher Sculpture Center in Dallas, and the Kimbell Museum, Museum of Modern Art, and Amon Carter Museum in Fort Worth), contemporary exhibition spaces (The MAC, Arlington Museum), and a strong commercial gallery system.

## Admission and Financial Aid

Students wishing to pursue the B.A. or B.F.A. degrees must submit a portfolio for admission to the degree program and the first-year Foundations course leading to the major. After completion of the first term of Foundations study (or six hours of basics for the B.A.), students may then make a final portfolio submission to either degree program. All students submitting portfolios and admitted to the first-year Foundations are considered for artistic scholarships based on merit as they enter the University. The deadline for incoming portfolios to be reviewed for scholarship is February 15 of every year for scholarships beginning in the fall term and December 1 for early admission candidates. Portfolios must be submitted through the SlideRoom digital portfolio system (smu.slideroom.com) for full consideration. A portfolio guide to help the student in preparing the portfolio of images is available through the Division of Art office and on the division website. In addition, each fall the Division of Art hosts a portfolio day for prospective students when faculty critique and discuss student work in an open review.

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, 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 towards the degree. To receive an award for artistic merit, students must submit either a FAFSA form or waiver, and a CSS profile.

## Programs of Study Undergraduate Degree Programs

The Division of Art offers two undergraduate degrees, the B.F.A. in Studio Art and the B.A. in Art - and minors in Studio Art and Photography. Students must apply for admission by portfolio to the B.F.A. or B.A. degrees after the completion of one or two terms of Foundation study.

## The B.F.A. Degree 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 seven broad areas of media and conceptual approach - painting, drawing, sculpture, printmaking, photography, ceramics and intermedia. Within this structure the faculty encourages cross-disciplinary interaction, which the curriculum is designed to facilitate. First-year students intending to major in art should take Foundations: Drawing and Design in the fall and spring terms as the beginning of their B.F.A. studies. To earn a B.F.A. ( 125 hours), the student is required to take a minimum of 66 hours in the Division of Art and 9-12 hours in the Division of Art History. All majors in art are strongly encouraged to enroll in May term or summer term study of art at SMU-in-Taos in Fort Burgwin, New Mexico, in the May or summer after declaring the major.

Because the total number of hours required to satisfy the General Education requirements and the major requirements exceeds 122 term hours, students in the B.F.A. degree program of the Division of Art are exempt from three (3) hours of Perspectives and an additional three (3) hours taken from either Perspectives or Cultural Formations.

|  | Credit |
| :---: | :---: |
| General Education Curriculum (GEC) | 35 |
| The B.F.A. Curriculum is divided into eight stages or areas: |  |
| 1. Foundations: Drawing/Design (for art majors only) |  |
| ASAG 1300, 1304 (Foundations I and II), (must be taken concurrently) | (6) |
| ASAG 1601 (Foundations III) | (6) |
| Students may apply for admission to the B.F.A. major, by portfolio, after completion of Foundations I and II or Foundations III (10 classroom hours per week). |  |
| 2. Departmental Distribution: Four courses | (12) |
| ASDR 2300 Introduction to Studio Drawing (required) plus |  |
| Three courses at the 2000-level from the following areas: |  |
| Ceramics Photography (1300 level) |  |
| Intermedia Printmaking |  |
| Painting Sculpture |  |
| 3. Major Concentration, including Junior Independent Tutorial (24 hour |  |
| The concentration should be chosen by the 6th term of study. |  |
| Courses for the supporting studies must be approved by the |  |
| division adviser or the student's primary area adviser. |  |
| Primary Studies: Five courses | (15) |

Five courses in a single subject area at the 3000-level or above, including Junior Tutorial (ASXX 4315) in the primary area (usually taken in the 7th term)
Choose from ceramics, drawing, intermedia, painting, photography, printmaking, or sculpture
Supporting Studies: Three Courses
Three courses that support the student's primary studies: one may be at the 2000-level, two should be at the 3000-level or above. These may be within the Division of Art or from another division or school, provided they support the studio production of the student's primary studies. (i.e.: not art history, history or critical studies)
4. ASAG 3381 Critical Issues
A seminar addressing theoretical and critical issues in art.
It should be taken in the fall of the junior year, or 6th term of studies.
5. ASAG 4300 or 4301 Senior Seminar
Usually offered in the spring, a continuing study of theoretical and critical issues in the arts as well as topics relevant to the professional life of artists. Taken in the final term of study.
6. ASAG 5315 B.F.A. Thesis Project in Art
Includes the B.F.A. Qualifying Exhibition.
7. Departmental Electives in Art
8. Art History and New York Colloquium
Introductory Surveys: Take two courses (six hours) chosen from among: ARHS 1303, 1304, 1305, 1306, 1308.
Contemporary art history (20th or 21st Century) or New York Colloquium.
One additional course in art history at the 3000-level or above (may include the New York Colloquium if not taken in contemporary above)
Total Term Credit Hours, Art Studies (studio plus history) 78

## 9. Meadows Elective/Corequirement 3

10. Free Electives $\quad 9$
Total Hours

## B.A. Degree 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 theoretical and analytical basis for making art. Students may choose from seven broad media areas within the division: painting, drawing, sculpture, printmaking, photography, ceramics and intermedia.

Students may choose the B.A. degree in Art upon the completion of six of the 12 hours of Foundations studies, adding one 1300-level course in art to complete their Foundations. Alternatively, they may begin the B.A. degree by taking ASDR 1300 (Introduction to Studio - Drawing), ASSC 1300 (Introduction to Studio Sculpture), and one other 1300-level course in art. The degree program requires foreign language, art history, a concentration in a single visual art discipline, the common educational experience and 24 hours of electives. A minor in the humanities or sciences is recommended for satisfying the electives requirement.

|  | Credit Hours |
| :---: | :---: |
| General Education Curriculum: | 41 |
| Art Courses: (36 hours) |  |
| Basic Studies: (either nine hours ASAG 1300/1304 |  |
| (Foundations I and II plus one additional 1300 or ASDR 1300 and |  |
| ASSC 1300 plus one other art division $\mathbf{1 3 0 0}$ of the student's choice.) | 9 |
| Distribution: | 15 |
| ASDR 2300 (required) plus 4 courses at the 2000-level from the following areas: |  |
| Ceramics Photography (1300 level) |  |
| Intermedia Printmaking |  |
| Painting Sculpture |  |
| Concentration: | 12 |
| In a single area, all at 3000, 4000, and 5000 levels. |  |
| Art History: | 12 |
| Six hours of survey-level, plus three hours of contemporary art and three hour of art history electives at the upper division level. |  |
| Foreign Language: | 6 |
| Electives: | 24 |
| (Students are strongly advised to minor in the humanities or sciences.) |  |

## B.F.A./M.I.T. track in Digital Game Development

The Guildhall at SMU provides an in-depth certificate/Master's-level degree program tailored to students who wish to become actively involved in the Game Development industry as game designers or programmers. In conjunction with the Guildhall, the Division of Art offers a B.F.A. degree in Studio Art that coordinates with the Art Creation and Level Design tracks in Game Development in the master's 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 M.I.T. (Master of Interactive Technology) at the Guildhall.

## The BFA/MIT program is designed to:

1. Give students significant studio art training as the basis for graduate study in art creation and level design at the Guildhall at SMU.
2. Provide an undergraduate study structure for high school students interested in art creation for digital gaming with a clear curriculum to prepare them for specialized graduate study.
3. Develop the visual, tactile and conceptual capabilities, historical understanding and theoretical basis common to the BFA curriculum and necessary for successful work within digital gaming and simulation.
The student who participates in this program spends $31 / 2$ years at the Meadows School and his/her last semester at the Guildhall taking the first two sets of Guildhall courses, completing the B.F.A. and beginning the M.I.T. The student is completely immersed in the Guildhall program during this period. With one additional year at the Guildhall, completing the remaining four sets of their courses, the student will complete the Master's of Interactive Technology degree. A student who successfully completes the B.F.A./M.I.T. in Game Development will be able to obtain a Bachelor of Fine Arts and Master's degree within a five-year period.

## Minor in Art

The minor in art is designed to give a coherent structure to a brief but serious investigation of studio art. Through a series of courses that become increasingly
more challenging as the student progresses, the student 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 directed studio curriculum.

Requirement: 18 term hours, distributed as follows:

|  | Credit Hours |
| :--- | :---: |
| Foundation requirement | 6 |
| ASDR 1300 |  |
| ASSC 1300, or ASCE 1300 | 9 |
| Introductory Art |  |
| (any three of the following at the 1300 or 2300 level, leading |  |
| toward work at the 3300 level in at least one discipline) |  |
| ASCE $\mathbf{2 3 0 0}$ Ceramics |  |
| ASPT 1300 or $\mathbf{2 3 0 0}$ Introduction to Studio - Painting I or II |  |
| ASDR $\mathbf{2 3 0 0}$ Introduction to Studio - Drawing II |  |
| ASPH 1300 Basics of Photography |  |
| ASSC 2300 Introduction to Studio - Sculpture II |  |
| ASPR 2320 or 2321 Printmaking - Beginning and Printmaking - |  |
| Beginning Woodcut |  |
| One additional course at the 3300 level |  |
| Total Hours |  |

## 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 offered by the Photography Program, which is part of the Division of Art, integrate the technical aspects of the medium with the aesthetic concerns traditional to the fine arts. 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.

Requirement: 18 term hours, distributed as follows:

|  | Credit Hours |
| :--- | :---: |
| 1. ASPH 1300 Basics of Photography | 3 |
| 2. Two of the three following courses: | 6 |
| ASPH 2300 Black and White Photography |  |
| ASPH 2302 Color Photography |  |
| ASPH 2304 Digital Tools | 3 |
| ARHS 3367 History of Photography or approved substitution | 6 |
| 3. Six hours additional coursework in ASPH at the 3000 level or above | $\mathbf{6}$ |
| Total Hours | $\mathbf{1 8}$ |

## The Courses

Studio courses generally require six hours per week of in-class exercises and critical discussion. Students should enroll with a firm commitment to regular attendance and should expect out-of-class work of four to six hours per week, per class, in addition to in-class studio exercises.

## Departmental Codes and Course Fees

In enrolling for courses in art, it is necessary that the course number be preceded by the appropriate subject code prefix in order for credit to be properly recorded. All courses at the 2300 level and above have prerequisite course work 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 term hour, which will be collected by the cashier at the time of enrollment.

## Art, General Studio (ASAG)

Foundations: Drawing and Design. A year-long foundations course for art majors or for those students seeking an intensive study of the visual arts, which explores contemporary assumptions and practice regarding the making of art while significantly addressing its tradition. The foundations curriculum consists of a two-term sequence of courses, designed to give the student intensive training in studio practice, exposure to a range of materials and methods and an introduction to the theoretical issues of contemporary studio art. Students develop technical knowledge, adding to it discipline and the development of the intellectual, theorizing and risk-taking aspects of art that must grow at an equal pace with studio practice in order to su5stain their lives as artists. (Note: This is a two-term sequence. Students must enroll for fall term first (ASAG 1300, 1304), followed by ASAG 1601 (spring term). Ten class hours per week. Prerequisite: Art major or pre-major, or departmental permission. Each term is team-taught.

## Fall

ASAG 1300 Foundations I: Introduction to Studio Practice
ASAG 1304 Foundations II: Introduction to Materials
NOTE: Must be taken concurrently; no exceptions
Spring
ASAG 1601 Foundations III
1300. Foundations I: Introduction to Studio Practice (Fall term only). For students seeking an intensive study of the visual arts, course focuses on the development of ideas within the studio, primarily through drawing, but also through parallel investigation of three-dimensional work and other media. Students will take an idea through a sequence of specific assignments and projects, examine it in multiple ways to articulate its connections and visual and imaginative possibilities, as well as question the assumptions under which artists work. By moving from drawing to sculpture to design in two or three dimensions, and exploring diverse media, the students and faculty stretch their conceptions of art's way of working. Note: Must be taken concurrently with ASAG 1304.
1304. Foundations II: Introduction to Materials. This class is an integral part of the first term foundations course for art majors or for those students seeking an intensive study of the visual arts. Topics include theory and design in two and three dimensions. Prerequisite: Must be taken concurrently with ASAG 1300.
1601. Foundations III: (Spring term). The continuation of Foundations I and II, with more intensive investigation of the specific media and ideas in studio art, usually through investigations of two to three areas of practice under individual faculty members. Topics will vary term to term. Ten class hours/week. Prerequisites: ASAG 1300 and 1304.
$\mathbf{3 3 1 0}, \mathbf{4 3 1 0}, \mathbf{5 3 1 0}$. 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.
3315, 4315, 5315. Special Studies in Art. Intermediate to advanced research in a variety of areas that support studio practice including contemporary developments in criticism and theory, approaches to media, social and community context, or specific geographic or cultural contexts, through focused seminar discussion, research and studio projects, or travel-based study. May be counted towards the Junior Seminar with approval of adviser and chair.

3320, 3620. International and Cross-Cultural Study in Studio Art. Introduces artists to studio, performance, critical and historical study within an international or cross-cultural context. This is done through field, workshop or independent studies, either within or as an alternative to traditional study-abroad programs. This course supports both short-term and extended studies of a particular national or regional culture based in workshops or apprenticeships with local artists, study of objects and traditions within their cultural environment, or more formal study within a local institution, with an emphasis on the relationship between artistic practice and geo-cultural context. Prerequisite: Permission of instructor.
3340, 4340. Gallery Practicum. A hands-on course in gallery techniques: installation, lighting, publications, gallery management, protection and transportation of works of art, working with curators, planning, design, and analysis of the aesthetics of exhibitions. Taught in a professional gallery setting, the course requires an extensive commitment of time. Prerequisite: 15 credit hours in art or permission of instructor.
3350, 5350. Art Colloquium - New York. Involves intensive analysis, discussion and writing concerning works of art in museum collections and exhibitions, and in alternative exhibition spaces. The class topics studied will deal with the philosophical as well as the practical in order to define and understand the nature of the art our society produces and values. The colloquium meets in New York City for a period of two weeks in January. Prerequisite: Permission of instructor.
3381. Critical Issues. (Spring term only.) A seminar for art majors in their second or third year of studies, this course will investigate topics in current critical theory in the arts as well as the historical context for their development. Readings will be taken from modern philosophy and literary criticism as well as art theory and criticism.
4300, 4301. Senior Seminar in Art. (Fall term only.) For senior art majors. Discussion and exploration of issues facing artists today, including theoretical discussion as well as topics relevant to professional life in the visual arts.
5001. B.F.A. Qualifying Exhibition. Participation in the qualifying exhibition is required for all candidates for the degree of B.F.A. in Art.
$\mathbf{5 1 0 0} \mathbf{5 2 0 0}, \mathbf{5 3 0 0}$. 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 one, two or three credit hours for internships of five, 10 or 15 hours per week respectively, under the supervision of individual faculty who will supervise and evaluate the internship. Must be approved by departmental chair.
5315. B.F.A. Thesis Project/B.F.A. Qualifying Exhibition. Directed studio project that synthesizes work in the concentration for the B.F.A. Qualifying Exhibition. Taken in the final term of study. Prerequisite: Departmental permission.

## Ceramics (ASCE)

1300. Ceramics - Introduction to Studio I. This studio class in intended for non-majors and is an introduction to and exploration of the expressive characteristics of clay through the investigation of various hand-building and wheel-thrown techniques. Traditional as well as contemporary approaches to the material will be explored. Studio work will involve claymaking, kiln loading, and other processes associated with both low-fire (earthenware) and high-fire (stoneware) ceramics. Emphasis will be on the analysis of sculptural and utilitarian form, control of the material, and critical judgment.
1301. Ceramics - Introduction to Studio II. An introduction to and exploration of the expressive characteristics of clay through the investigation of various hand-building and wheel-thrown techniques. Traditional as well as contemporary approaches to the material will be explored. Studio work will involve clay-making, kiln loading and other processes associated with both low-fire (earthenware) and high-fire (stoneware) ceramics. Emphasis will be on the analysis of sculptural and utilitarian form, control of the material, and critical judgment. Prerequisite: ASAG 1300 and 1304, or ASSC 1300, or permission from instructor.

3300, 3301. Intermediate Ceramics. A more involved investigation of hand-building/ wheel-thrown processes with emphasis on researching form and surface relationships. Studio work involves developing clay bodies, surfaces (slips, engobes and glazes), and further study of kiln operation and design. Prerequisites: ASCE 2300, or permission from instructor.

4300, 4301. Advanced Ceramics. Advanced problems in sculptural and wheel-thrown forms. Emphasis on developing a personal point of view regarding material, process and idea. Prerequisites: ASCE 3300 or 3301, or permission from instructor.
4315. Junior Independent Tutorial in Ceramics. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).

5100, 5101, 5200, 5201, 5302, 5303. Directed Studies in Ceramics.
5300,5301. Ceramics. Advanced problems for the senior student. Prerequisite: ASCE 4300 or 4301 , or permission of instructor.
5310. Special Topics in Ceramics. To be announced by the Division of Art. Prerequisites: ASCE 2300 or 3300 ; or permission of instructor.

## Intermedia (ASDS, ASIM)

Courses in intermedia include cross-disciplinary studio courses, including those in design, digital media, hybrid media and other courses that involve cross-media or cross-disciplinary studies. Courses fall under the subject designation ASDS or ASIM, and may be applied, as appropriate and with the approval of the division adviser, to different concentrations within the studio art major.
ASDS 1300. Introduction to Studio - Design I. Lectures and studio exercises familiarize the novice with the functions of visual elements, methods of idea-generation and the selection and organization of elements into two-dimensional compositions.
ASDS 2302. Collage and Assemblage. Beginning level. Examines the influence of culture on perception by using the media of collage and assemblage, which are inexpensive and require no professional skills or techniques, and leave the student free to concentrate on understanding. Both traditional materials and digital means are explored through lectures and studio work.
ASDS 3302. Collage and Assemblage. Intermediate level. Prerequisite: ASDS 2302 or permission of instructor.
ASDS 4302. Collage and Assemblage. Advanced level. Prerequisite: ASDS 3302 or permission of instructor.
ASDS 5300. Design and the Visual Image. This course re-examines fundamental design assumptions and principles. Intended for advanced art majors and prospective design instructors, the course combines studio work in picture construction with reading in the classic literature of design and visual perception. Prerequisite: 24 credit hours in art or permission of instructor.
ASDS 5301. 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.

## ASDS 5302. Design-Directed Studies.

ASIM 1300. Introduction to Digital Media. An introduction to digital media as the basis of studio practice. Students will gain full proficiency using Photoshop and good working experience with other applications for two-dimensional imaging, animation and video. Includes an overview of New Media Art practices within the past 50 years. Prerequisite: Foundations or two courses at the 1300 level.

ASIM 2310. Introduction to Digital Media. A general introduction to digital media as the basis of studio practice. Explores multiple applications in two-dimensional imaging, computer
modeling and animation, video, sound and other approaches to working within digital media. Prerequisites: Foundations I and II or ASDR 1300 plus ASCE 1300, ASPH 1300, ASPT 1300 , or ASSC 1300, or permission of instructor.
ASIM 2315, 3315. Video Art. Studio class for the creation of video art. guided projects with a focus on different elements of video: time, repetition, collage, rhythm, etc. Class will cover professional editing on Final Cut Pro and advanced compositing techniques using Combustion (a post-production special-effects software). Historical and contemporary examples of video art will be screened and discussed in class. This class is for students interested in incorporating video into their studio explorations. Students will be required to attain technical proficiency and develop individual ideas and personal concepts within each video project. Prerequisite: ASIM 1300 or permission of the instructor.
ASIM 2320, 3320. Art and Code. Software as a medium for communication and expression. A studio class that will use Processing for the creation of art through writing of computer code. Still digital drawing and large format printing, utilizing photographs and images in Processing, generating animations, creation of interactive pieces within the computer, 3D animations and other applications to physical computing in art will be investigated. Open to students from all Meadows disciplines. Prerequisite: ASIM 1300 Digital Media, or permission of the instructor.

ASIM 3310, 4310, 5310. Digital Media Workshop. An intensive study of digital media designed to further integrate digital media into studio practice. Topics include two-dimensional imaging (Photoshop and related programs), three-dimensional imaging, including CAD applications, video, animation and installation. Focus is on developing independent work, group collaboration and analytical study. Depending on topic and work completed, study may be applied to different media concentrations. Prerequisite: 15 credit hours in art or permission of instructor.
ASIM 4305, 5305. Video and Image for Performance / Real Time Visual Manipulation. A studio class utilizing MAX/MSP Jitter, a flexible and exciting tool for visual artists and performance art. Students will learn live-image processing and generation and real-time manipulation of imagery in combination with music or other data inputs. They also will generate closed videos and effects. This class is especially appropriate for students who are interested in performance or in collaborating with musicians, dancers, voice artists, actors, etc. Open to students from all Meadows disciplines. Prerequisite: ASIM 2315 or 3315, or advanced standing in student's major with instructor permission.
ASIM 4315. Junior Independent Tutorial in Intermedia. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).
ASIM 4320, 5320. Physical Computing. Students use advanced processing tools to experiment and generate interactive pieces, art robots, and art that responds to stimuli. This studio class is designed to get students off their computers and onto real space. For students interested in installation, sculpture, performance, robotics, electronics in art, etc. Open to students from all Meadows disciplines. Prerequisite: ASIM 2320 Art and Code, or permission of the instructor.
ASIM 5302, 5303. Intermedia-Directed Studies.

## Drawing (ASDR)

1300. Introduction to Studio - Drawing. Drawing from life and from objects, as well as interior and landscape, and supplemented by outside assignments. Emphasis on perspective, materials, analysis of form and critical judgment.
1301. Drawing in Italy. This course will introduce 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-Rome.
2140, 2340. Scientific Field Illustration. Intended primarily for scientists as a supplemental lab; students are to be concurrently registered in an appropriate science course, such as field
biology or archaeology. Basic drawing skills, such as the use of line, proportion, light and shade, and the rendering of volume, will be taught. An introduction to watercolor and its usefulness in the field will also be covered. Prerequisite: Concurrent enrollment with field science course 2340, plus ASDR 1300, or equivalent.
1302. Introduction to Studio - Drawing II. For students who have completed Foundations or Beginning Drawing. Intensive study of the materials and processes of drawing and qualities of vision, using subjects from life as well as abstract composition. Extensive studio and outside work required. Prerequisite: ASDR 1300 or Foundations, or permission of instructor.
1303. Material Studies. An interdisciplinary course that considers the relationship between materiality, time and drawing, using both constructed and found materials. Topics to be investigated include: time, movement and repetitive action, work that documents the process of making, the relationship between digital and material form, and formats of installation and documentation. Prerequisite: ASDR 1300 or ASSC 1300, Foundations, or permission of instructor.
3300, 3301. Drawing, Intermediate Level. Designed to increase the student's command of technique and to further develop vision and individual approaches to drawing. Prerequisite: ASDR 2300.
4300, 4301. Drawing. Advanced drawing with emphasis on independent development. Prerequisite: ASDR 3300, 3301, or permission of instructor.
1304. Junior Independent Tutorial in Drawing. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).
5300, 5301. Drawing, Advanced. Prerequisites: ASDR 4300 or 4301 or permission of instructor.
5100, 5101, 5200, 5201, 5302, 5303. Directed Studies in Drawing.

## Painting (ASPT)

1300. Introduction to Studio - Painting. A first course in painting from life, objects and landscape, supplemented by outside assignments. Emphasis is on materials, color relationships and critical judgment.
1301. Introduction to Studio - Painting II. For students completing Foundations or painting and drawing at the 1300 level, includes instruction in the use of materials and approaches to representation, with special emphasis on color and composition. Prerequisite: ASPT 1300, or Foundations.
3300, 3301. Intermediate Painting. Intermediate level course designed to increase the student's command of technique and to develop vision and sense of style. Prerequisite: ASPT 2300.
1302. Studio Workshop: Color and Meaning. An advanced painting workshop for students who have completed ASPT 1300 and 2300, and who are ready to work on problems with some independence. Theoretical works on color will be discussed and employed, but the central concern will be the development of color relationships within each student's work. Prerequisite: ASPT 2300.
1303. Painting in Taos. An intermediate study of painting in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisites: ASPT 2300, or permission of instructor.
1304. Painting in Rome. A study of painting among the monuments and landscapes of central Italy. Offered at SMU-in-Rome. Prerequisite: ASPT 2300 or permission of instructor.
4300, 4301. Painting. Continuation of ASPT 3300, 3301, with emphasis on individual development. Prerequisites: ASPT 3300 or 3301.
1305. Painting in Taos. An advanced study of painting in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisites: ASPT 3300 or 3301 or 3306, or permission of instructor.
1306. Junior Independent Tutorial in Painting. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).
5100, 5101, 5102, 5200, 5201, 5302, 5303, 5304. Directed Studies in Painting.
5300, 5301. Advanced Painting. Advanced problems for the senior student. Prerequisite: ASPT 4300 or 4301, or permission of instructor.
1307. Studio Workshop: Color and Meaning. An advanced painting workshop for students who have completed ASPT 1300 and ASPT 2300, and who are ready to work on problems with some independence. Theoretical works on color will be discussed and employed, but the central concern of our work will be the development of color relationships within each student's work.
1308. Painting in Taos. An advanced study of painting in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisites: ASPT 4300 or 4301 or permission of instructor.

## Photography (ASPH)

1300. Basics of Photography. Thorough exploration of camera operation. Elements of visual design (such as space, composition, color and light) are explored through the medium of photography. Emphasis is placed upon the creative use of aperture, shutter speed, framing techniques and exposure selection. Students supply their own digital single-lens reflex or advanced digital point-and-shoot cameras. Assignments submitted digitally. Written examination. No darkroom or computer lab.
1301. Photography in Taos. An exploration of digital camera operation in the physical and cultural environment of the Fort Burgwin Research Center. Students provide their own digital single-lens reflex or advanced point-and-shoot cameras.
1302. Black-and-White Photography. Exploration of the creative possibilities of photographic materials in the darkroom. Special attention given to black and white film development, and negative enlarging as well as a variety of manipulative techniques. Prerequisite: ASPH 1300 or permission of instructor.
1303. Color Photography. Exploration of the aesthetic issues and technical concerns of color photography, particularly the use of Adobe Photoshop to produce fine-quality inkjet prints. Students supply their own digital single-lens reflex cameras. Prerequisite: ASPH 1300 or 1306 or permission of instructor.
1304. Digital Tools. Exploration of the aesthetic issues and technical concerns specific to digital photography. Students work with film or digital cameras, film and flatbed scanners, large-format printing, Adobe Photoshop, text and collage techniques. Prerequisite: ASPH 1300 or 1306 or permission of instructor.
1305. Photography in Taos. A study of photography in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisite: ASPH 1300 or 1306, or permission of instructor.
1306. Black-and-White Photography II. Continuation of ASPH 2300, with emphasis on the zone system, film manipulations and printing and matting techniques. Includes possibility of working in medium to large formats, zone system and bi-filter printing. Prerequisite: ASPH 2300, or permission of instructor.
1307. Color Photography II. Continued exploration of the aesthetics of color photography and fine quality inkjet printing. Opportunities for large-format printing. Prerequisite: ASPH 2302 or permission of instructor.
1308. Digital Tools II. Continued exploration of the aesthetic issues and technical concerns specific to digital photography. Students work with film or digital cameras, film and flatbed scanners, large-format printing, Adobe Photoshop, text and collage techniques. Prerequisite: ASPH 2304 or permission of instructor.
1309. Photography in Taos. An intermediate study of photography in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisite: ASPH 2300, 2302, 2304 or 2306, or permission of instructor.
1310. Large-Format Photography. Students will be introduced to the special capacities of large format black-and-white photography. Film exposure and development based upon the theory and practice of the zone system. Further refinement of printmaking techniques, including contrast control through the use of bifilters, toning for archival quality, and the creation of an edition of silver gelatin prints. Prerequisites: ASPH 2300 or permission of instructor.
4300, 4301, 5300, 5301. Special Topics in Photography. Alternative processes, documentary, advanced digital, landscape, portraiture, portfolio development, photograph as book, and other topics to be announced. Prerequisites: ASPH 2300, 2302, 2304 or permission of instructor (for 4300, 4301); ASPH 3300, 3001 or 3302 or permission of instructor (for 5300, 5301).

4306, 5306. Photography in Taos. An advanced study of photography in the physical and cultural environment of the Fort Burgwin Research Center. Prerequisites: ASPH 3300, 3302 or 3306 (for 4306) ASPH 4300, 4301 or 4306 (for 5306), or permission of instructor.
4315. Junior Independent Tutorial in Photography. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Permission of instructor.
5100, 5101, 5200, 5201, 5302, 5303, 5304. Directed Studies in Photography. Prerequisite: Permission of instructor.

## Printmaking (ASPR)

2320. Printmaking - Beginning. Introduction to the process of intaglio printing, etching, engraving, dry point and aquatint. Prerequisite: ASDR 1300 or Foundations.
2321. Printmaking - Beginning Woodcut. Introduction to the process of relief printing. Prerequisite: ASDR 1300 or Foundations.
3300, 3301, 4300, 4301, 5300, 5301. Printmaking Workshop. Further exploration of the possibilities of intaglio printing at the intermediate and advanced level. The ambience of the workshop, with no rigid structure, encourages the freedom to experiment in all directions (emotionally and intellectually, as well as 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 2320 (for 3300 or 3301), ASPR 3300 or 3301 (for 4300 or 4301 ), ASPR 4300 or 4301 (for 5300 or 5301), or permission of instructor.
2322. Junior Independent Tutorial in Printmaking. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).
5100, 5101, 5200, 5201, 5302, 5303. Directed Studies in Printmaking. Prerequisite: Permission of instructor.

## Sculpture (ASSC)

1300. Introduction to Studio Sculpture I. An introduction to working in three dimensions in a variety of media, including clay, wood, and metal. Historical as well as contemporary approaches to sculpture will be examined to achieve an understanding of how to manipulate form, space, and expressive content in three dimensions.
1301. Introduction to Studio Sculpture II. Intended for students who have some prior experience in sculpture or Foundations, this is an intensive introduction to the language of sculpture in a number of media. Emphasis is on sustained investigation using a number of perspectives, and on gaining confidence with and understanding of the tools, materials, and concepts of sculpture. Critical discussion, analysis of contemporary and historical work, and concentrated studio practice will be emphasized. Prerequisite: ASSC 1300, Foundations or ASDS 1300.
1302. Material Studies. An interdisciplinary course that considers the relationship between materiality, time and drawing, using both constructed and found materials. Topics to be investigated include: time, movement and repetitive action, work that documents the process of making, the relationship between digital and material form, and formats of installation and documentation. Prerequisite: ASDR 1300 or ASSC 1300, Foundations, or permission of instructor.
3300, 3301. Sculpture-Intermediate. Intermediate problems in sculpture, including analysis of form, theory, and technical processes. Emphasis on development of individual investigation and conceptual understanding of sculptural issues. Prerequisite: ASSC 2300 or permission of instructor.
3310, 4310, 5310. Material and Form. An intensive investigation of material processes (specifically construction, metal casting, and subtractive techniques) and the ramifications of material choice and method in the formal and stylistic development of sculptural work. Both the traditional development and contemporary practice of each process will be explored. This is an intensive class, with a requirement of six hours of studio work outside scheduled meeting times. Prerequisite: ASSC 2300 (for 3310), ASSC 3300 or 3301 (for 4310), or ASSC 4300 or 4301 (for 5310), or permission of instructor.
3320, 4320, 5320. Body and Object. The body has been the preeminent subject in the history of sculpture, represented in all traditions as a focus of belief and identity. Recent sculpture has seen a resurgence of interest in work both of and about the body, asserting its centrality while at the same time attacking many of the social and psychological assumptions attendant to its history. This course will take a dual approach to the sculptural study of the body and figure: in class, work will focus on careful observation and direct study of the model, working up to life-sized study in clay and plaster. Out of class, students will consider, through independent projects, the question of the body as a metaphoric subject, creating work "about" the figure without literal reference to it. The aim is to try to address the body both through its objective structure and its social and psychological meanings, and to discover how these issues are conveyed through sculpture. This is an intensive class, with a requirement of six hours of studio work outside scheduled meeting times. Prerequisites: ASSC 2300 (for 3320), ASSC 3300 or 3301 (for 4320), ASSC 4300 or 4301 (for 5320), or permission of instructor.
3340, 4340, 5340. Shelter and Place. An intensive investigation into architectural forms and natural environments in order to question what it is to dwell, how we achieve a sense of place, and how natural forms and events can influence and be influenced by structures. Collaborative work, drawing, analytical study of sites and environments, and construction. Paradigm examples are drawn from historical and contemporary building and sculpture. This is an intensive class, with a requirement of six hours of studio work outside scheduled meeting times. Prerequisite: ASSC 2300 (for 3340), ASSC 3300 or 3301 (for 4340), ASSC 4300 or 4301 (for 5340), or permission of instructor.
4300, 4301, 5300, 5301. Sculpture-Advanced. Advanced problems in sculpture, including analysis of form, theory, and technical processes. Prerequisite: ASSC 3300 or 3301 (for 4300 or 4301), ASSC 4300 or 4301 (for 5300 or 5301), or permission of instructor.
1303. Junior Independent Tutorial in Sculpture. Directed individual investigation leading to a sustained body of work within the student's concentration. Taken during the spring term and leading to the Junior Exhibitions. May not be repeated unless due to a failing grade. Prerequisite: Junior standing, with permission of instructor (or tutor).
5100, 5101, 5200, 5201, 5302, 5303. Directed Studies in Sculpture.

## ART HISTORY

## Associate Professor Janis Bergman-Carton, Department Chair

University Distinguished Professor: P. Greg Warden; Professors: Karl Kilinski II, Randall C. Griffin; Associate Professors: Adam Herring, Pamela Patton, Lisa Pon; Assistant Professor: Amy Buono; Instructor: Eric Stryker; Adjunct Professor: Eric White; Adjunct Associate Professor: Mark Roglán.

## Program of Study <br> B.A. in Art History

The B.A. degree in Art History helps students negotiate a world saturated with images. It challenges them to confront critically the issues posed by the visual culture that mediates our 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.
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 B.A. in Art History


Many art history majors use elective hours to complete minors in advertising, anthropology, chemistry (for conservation), classical studies, foreign languages, history, international business, international studies and psychology in order to maximize their opportunities in obtaining rewarding careers.

## Honors Program

An art history major with a G.P.A. of 3.5 or higher may graduate with honors by applying in the junior year to receive a degree "with departmental distinction." During the senior year, candidates for distinction will pursue an individual research project under the direction of a particular faculty member while enrolled in ARHS 4301. The project generally derives from one of the 4000 -level Art History seminars and culminates in a 35 - to 45 -page thesis. Students must successfully present and defend their research before a committee of at least three faculty by the final week of the spring semester.

## 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 and so to broaden their appreciation of the cultural content of artistic form. As a discipline especially 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. It is also a rewarding minor for students who wish to combine business or engineering with a study of the humanities.

Requirements: 18 credit hours in art history with a maximum of three 1000-level courses.
NOTE: Only classes passed with a grade of $C$ - or better will count for credit toward the minor.

## Art History Courses (ARHS) Introductory Courses

1303. 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.
1304. 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.
1305. Introduction to Asian Art. A survey of the major monuments of China and Japan including paintings, ceramics, sculpture, bronzes and some minor arts. Some material from India is also included, especially for the beginnings of Buddhism.
1306. 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.
1307. World Art Traditions: A Survey. A survey of the visual arts (painting, sculpture, architecture, ceramics) of Asia, the Pacific World, Africa and the native New World peoples.
1308. Epic of Latin America. Examines art, society and culture in Latin America, 14501950. 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, Revolution, Reform and Modernism; Umbanda, Santeria and Vodou; Native American and Gendered Identities. An introductory survey intended for undergraduates 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.
1309. Image and Imagination: Myth and Narrative in Classical Art. An introduction to the ways and means Greek and Roman mythology is presented to the viewer through the medium of classical art. The interrelationships between poet and painter, author and artist are explored through the common medium of myth. Changing approaches to narrative in each medium and in different periods of classical antiquity are of prime importance as the student becomes familiar with the particulars of the narratives, applications and interpretations of the Greek and Roman sagas focusing on the gods and heroes of the classical past.
1310. Sport and Spectacle in the Ancient Mediterranean. Integrates the social and cultural functions of sport and spectacle in the ancient Mediterranean from the Bronze Age to late antiquity. Lectures and discussions focus on the institutions of sport and spectacle in ancient Greece, Etruria and Rome as evidenced by architecture, art, material culture and historical sources.
1311. Picturing the American West. This class will examine the ways the American West has been depicted over time in photography, painting, film and fiction, from Lewis and Clark to Clint Eastwood.
1312. Medieval Messages: Symbol and Storytelling in Medieval Art. Designed to introduce nonmajors to the many questions surrounding the making, meaning and interpretation of images in medieval art. Emphasis is placed 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.
1313. Nineteenth Century European Art. Major art movements of the 19th century from Gothic Revival, Neoclassicism, Romanticism and Realism to Impressionism, Post-Impressionism and Symbolism, with emphasis on parallel developments in politics, philosophy, literature, music and dance. (Also SMU-in-Copenhagen)
1314. Twentieth Century Art: Sources and Styles of Modern Art. Major art movements of the 20th century from Art Nouveau, Fauvism, Expressionism, Cubism and Futurism, the Bauhaus, and Surrealism to the contemporary, with emphasis on parallel developments in politics, philosophy, literature, music and dance. (Also SMU-in-Copenhagen)
1315. Introduction to Visual Culture. Designed to help students develop the skills necessary to negotiate the visual culture in which we 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.

## Ancient Art

3303. Archaeological Field Methods of Italy. Archaeological field experience in classical archaeology in Italy. Students will be introduced to the principles of archaeological field method through lectures and field experience. Lectures on Etruscan history, art and culture also will be provided.
3304. Mummies, Myths and Monuments of Ancient Egypt: Art and Expression of Eternal Egypt. Mummies, magic, pyramids and pharaohs provide the focus for a survey of the exotic world of the ancient Egyptians as seen through their brilliantly preserved art and architecture along the banks of the Nile. Egyptian artistic developments from Pre-Dynastic times through the New Kingdom are followed in the context of their political and cultural backgrounds.
3305. Art and Society in Late Antiquity, 300-700. This class studies the complex artistic, religious and cultural transformations that occurred in the territory of the Roman Empire from the time of Constantine to the rise of Islam. Lectures will focus on the era's artistic and architectural creations; readings will include selections from its major primary documents.
3311 (CLAS 3311). 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.
3306. Etruscan and Roman Art. A survey of the art, architecture and material culture of Etruscan and Roman Italy from about 800 BC to the advent of Christianity. Begins with the Etruscans and their neighbors in Iron Age Italy, and ends with Roman art in the age of Constantine. Special emphasis is placed on the interpretation of art within the historical, social and cultural context of ancient Italy.
3307. The Etruscans and Iron Age Italy. The art and architecture of early Italy, including Etruscan art, early Roman art and "Italic" art will be studied with respect to the cultural context and environment.
3308. The Art and Architecture of Ancient Pompeii. A survey of the history, monuments and society of Campania from the Iron Age to AD 79 as reconstructed from the excavations of Pompeii, Herculaneum and neighboring sites. The influence of the Pompeian discoveries on 18th- and 19th-century art will also be discussed.
3309. 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.
3310. Art in Rome. A broad survey that explores the wide range of art works from four major periods in Rome: Ancient, Medieval, Renaissance and Baroque. Art historical methodologies will be stressed in looking at painting, sculpture and architecture. On-site lectures will be given. (SMU-in-Rome)
3311. Ancient Painting. A study of the painter's art in the Egyptian, Greek, Etruscan and Roman eras encompassing murals, mosaics and ceramics. Iconographical and stylistic developments are given equal consideration.
3318 (CF 3392). Currents in Classical Civilization. Interdisciplinary study of the art, literature and history of the ancient Greek and Roman worlds, including ideals of democracy, individualism, immortality, heroism, justice, sexuality, nature, etc.
3312. Art of the Roman Empire. The art and architecture of Imperial Rome will be studied in relation to the complex artistic traditions of the Roman provinces. The monuments and art of all the provinces of the Roman Empire are surveyed, dealing with the problem of Roman interaction with alien cultures and styles.
3313. Archaeological Field Methods of Italy. Archaeological field experience in classical archaeology in Italy (SMU-in-Rome).

## Medieval Art

3320. Medieval Art. An introduction to the art of Byzantium, Islam and the medieval West through 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.
3321. Age of the Crusades. Looks at the art of the various Christian cultures that were swept into the Crusades - especially the northern European, Italian, Byzantine and Armenian - and examines both the changes and the interchanges that characterize the period between 1096 and 1291.
3322. 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.
3323. Romanesque Art and Architecture. Surveys the flowering of art and architecture that appeared throughout Western Europe at the threshold of the new millennium. Emphasis will be placed on issues of cultural exchange and conflict, the intensification of national identities, the role of spirituality, and the changing conception of the individual during the 11th and 12 th centuries.
3324. Art and Cultures of Medieval Spain. Considers the art and architecture of the Iberian Peninsula within its highly diverse cultural context. Hispano-Roman, Visigothic,

Romanesque, Gothic, Jewish and Islamic examples will be highlighted. Classroom lectures will be supplemented by direct study of works in the Meadows Museum.
3325. The Gothic Cathedral. 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.
3328. Byzantine Art. The art of the Byzantine Empire from the end of Iconoclasm through the 14th century, examining both 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.
3329. Paris Art and Architecture I. Interweaves 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. Takes advantage of its Paris location to visit important monuments, buildings and features of urban design. (SMU-in-Paris)

## Renaissance and Baroque Art

3330. 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. The work of artists and architects such as Bramante, Sangallo, Raphael, Michelangelo, Vasari, Bernini, Borromini, Tintoretto, Caravaggio, Guarini and others will be considered.
3331. 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.
3332. Sixteenth-Century Italian Art. Issues to be considered 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.
3333. Art and Architecture in Italy. A survey of major monuments in painting, sculpture and architecture through classroom lectures and visits to the actual sites. (SMU-in-Rome)
3334. Renaissance and Baroque Art in Northern Europe. A survey of major artists and monuments in France, Germany and the Low Countries from 1400 to 1700.
3335. 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 figure of the period.
3336. The Baroque from a Northern Perspective. The world of Rembrandt, Rubens, Leyster, Vermeer, Van Dyck, De la Tour, Le Brun, Jones and Wren is explored in this course 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, 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 will seek the underlying whys for this absorbing period.
3337. Baroque Art in Italy, Spain and the New World. A survey of artistic currents in Southern Europe and the Americas during the 17th century, this course concentrates on the achievements of such artistic giants as Bernini, Caravaggio, Artemisia Gentileschi, Murillo and Velázquez, studying the artistic controversies they ignited and placing them in the context of major social movements. Also looks at the work of artists who are less well-known and traces the development of Baroque styles in Central and South America.
3338. 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,

Velázquez, Ribera, Murillo and Goya. Lectures will be supplemented by direct study of Spanish paintings and prints in the Meadows Museum.
3344. 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. (SMU-inSpain)
3346. 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. (SMU-in-Paris)
3347. Eighteenth-Century European Art and Theatre: Staging Revolution. Considers intersections between the visual arts and the theater in Western Europe between 1770 and 1850. In addition to the obvious genres of the actor portrait and the costume piece, students will examine the impact of changing theories of acting, gesture, set design and lighting on Neoclassical, Romantic and Realist art. The case studies around which the class is organized will include the work of Canova, David, Delacroix, Fuseli, Goya, Millais, Reynolds, VigeeLebrun and Watteau.
3348. Eighteenth-Century Art. A study of European visual culture, 1700-1800, in its many contexts. Topics to be considered include art and the public sphere; the rise of museums, exhibitions, criticism and theory; shifts in patronage and artistic practice; connections between commerce, industry and the arts; questions of identity; stylistic revivals and innovations; explorations of the past; and encounters with cultures outside Europe.
3349. 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. 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.
3399 (CFB 3399). 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.

## Modern Art

3350. Modern Art and Media Culture 1789-1870. This class examines the emergence of a public sphere and a culture of looking in the 19 th century. European visual art will be discussed in relation to the rise of museum and gallery culture, journalistic illustration, the department store display window, photography and the panorama.
3351. History of Modern Sculpture. A survey of the development of modern European and American sculpture from the late 19th century to the present. Also attempts to relate stylistic changes in sculpture to major trends in other mediums of expression and to art theory and criticism.
3352. Impressionism, Symbolism and the Deviant Body: Making a Difference. Examines Impressionist, Symbolist, and Surrealist art in relation to the emergence of the modern metropolis and the concept of modernity in Europe from 1870-1940. The discourse of deviance and degeneration that emerged in the context of 19th-century racial theory, criminology and medical science will form the framework for discussion. (Also SMU-in-Paris)
3353. Impressionism in Context. Focuses on an in-depth study of the evolution of the Impressionist group with special emphasis on the historical and cultural dimensions of its work. Among the topics investigated are the changing conceptions of modernism and modernity, diverse representations of "City" and "Country," and the role and status of the artist in society. (SMU-in-Paris)
3354. Modern and Contemporary Art of the Arab World: Responses to Political Strife. Historically, the Middle East is considered in the U.S. to be a region plagued with violence. Recent events such as the U.S.-led invasion of Iraq, continuing strife in the West Bank and Gaza strip, and the 2006 war between Israel and Lebanon further entrenched this image of the region. This course approaches this understanding of the Arab world from a different perspective: that of art. It explores how artists in the region have responded to political conflict through a variety of media including painting, installation, performance and video.
3355. History of Photography II: 1940 to 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-mémoire, amateur pursuit and social practice. This course examines photographic images and image-makers in relation to the social historical contexts in which they are produced, as well as the evolution of photographic technologies. The idea of the "photographic image" as it appears in and is transformed through television, video, film, conceptual art and new media will also be evaluated.
3356. 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, Mies van der Rohe.
3357. Women in the Visual Arts: Both Sides of the Easel. Offers an in-depth study of women in the visual arts in Europe and the Americas. Though introductory lectures will examine the historical exclusion of women from the canon, most of the class will look at images produced by and of women from 1850 to the present. Topics include feminist challenges to the history of art; abstraction and the female nude; the use of one's "self" as material for art; and feminist filmmaking.
3358. Modern Painters in Spain. Deals with 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 Miró), and also emphasizes actual trends in painting. Special attention is given to integrating program activities into the syllabus, such as the study of Gaudi's architecture. (SMU-in-Spain)
3359. Picturing Children: European Art 1848-1916. Examines modern European art through the lens of changing history and perception of childhood. Looks at proliferation of images of children in relation to the impact of photography, early psychology, and children's book trade.
3360. History and Theory of Prints. We are surrounded by printed things: newspapers, postage stamps, maps, works of art. This course offers a chance to be more attentive to how prints are made and how they can function, while providing an overview of the history of printmaking. Surveys established and emerging printmakers and major printmaking techniques from the 15 th through 21st centuries. Considers fundamental issues regarding originality/copying, uniqueness/multiplicity, display and collecting as raised by the medium of print. First-hand experience of prints, through looking assignments and visits to local collections as well as in-class exercises, is a vital part of this course.
3361. History of Photography I: Origins to 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. It also examines photography on the battlefield and in prisons, the emergence of documentary photography and the role that medium played in shaping consumer culture. The course will also examine the emergence of art photography, from Victorian peasant imagery to Precisionist portrayals of skyscrapers in the 1930s.
3362. Contemporary Art and Architecture, 1945-1965. A survey of American and European art and architecture from World War II to 1965. Within this chronological survey, broader themes of nationalism, race and gender will be discussed.
3363. Contemporary Art and Architecture, 1965-Present. A survey of American and European art and architecture from 1965 to the present. Within this chronological survey, broader themes of nationalism, race and gender will be discussed.
3364. Why We Go To Auschwitz: Art, Trauma and Memory. This course examines how societal memory of the Holocaust is shaped by visual media and public spaces of remembrance
like museums, memorials and artistic monuments. It begins by exploring 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, however, is the preoccupation with the Holocaust in the last two decades by a "second generation," artists and intellectuals born after World War II whose knowledge of Shoah derives from its representation in books, photographs and film.

## British and American Art

3370. British Architecture. Developments, architects and buildings in Great Britain from the late Middle Ages through the middle of the 19th century, emphasizing Smythson, Wren, Hawksmoor, Adam, Soane and Pugin.
3371. American Art and Architecture to 1865. A survey of American painting, sculpture and architecture from the Colonial period through the Civil War.
3372. American Art and Architecture, 1865-1945. A survey of American painting, sculpture and architecture from the Civil War through World War II.
3373. Arts of the American Southwest. An overview of the visual culture of the region, defined as Texas, New Mexico, Colorado, Arizona and California. Focuses on the region's cultural landscape, its past and present identity as art colony, art subject and art center. Looks at works produced by indigenous inhabitants, later arrivals, and visitors; at cross-cultural connections and disconnections; at the roles played by the arts and tourism in the region's development; and at the validity of regionalism as a category of investigation.

## World Art

3359. Topics in Art History: International Studies. Specific topics for investigation will be chosen by the instructor.
3360. Special Studies in Art History. Specific topics for investigation will be chosen by the instructor.
3361. Colonial Brazil. With new technologies of shipbuilding, navigation and cartography, the Portuguese Empire established or enhanced contact with cultures across the globe in the wake of the discoveries of 1492 . This course will take Brazil as its case study for understanding Lusophone art production, set within the context of the larger Portuguese Atlantic world. It will explore the history of colonial Brazilian art and architecture from the arrival of Europeans in 1500 to the foundation of Brazil's first art academy in the 1820s. Topics include Brazil's complex tapestry of intercultural relations among Amerindians, Africans and Europeans.
3362. 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.
3377 (CF 3375). 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; art in the secular life of towns and haciendas of colonial and post-colonial New Mexico. Emphasizes field trips to galleries, collections and historical sites of northern Mexico. (SMU-in-Taos)
3363. 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.
3364. Native American Art: The Southwestern Traditions. Surveys, through field trip and lecture-discussion, two major traditions, Native American and Hispanic, which flourish in the American Southwest.
3365. American Indian and Eskimo Art. The ritual and everyday objects of the native inhabitants of North America, and the architecture of the Mound Builders and the Southwestern Indians.
3366. Arts of the Ancient Andean Tradition: Chavín to Inca. A survey of the major arts produced between ca. 1200 BC and AD 1530 by the indigenous peoples of modern western South America with greatest emphasis on the many successive art-producing cultures of Peru.
3367. The Ancient Maya: Art and History. Presents an introduction to the art and history of the Maya of Central America. 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.
3368. 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 native elite in Mexico's early colonial period.
3369. Traditional Arts of Africa. A survey of the art produced in traditional African societies with special emphasis on the sculpture of West and Central Africa.
3392 (CFA 3313). Islamic Art and Architecture: The Creation of a New Art. Treats issues significant to the creation and expansion of Islamic art from the 7th to the 15th century. Topics include 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.
3370. Art and Architecture of Japan. Survey of religious and secular arts from prehistoric times through the Edo period. Field trips to Kyoto and Nara. (Also SMU-in-Japan)
3371. Art and Architecture of India. Designed to introduce the student to the major artistic expressions of India from the Indus Valley civilization through the time of the Mughals.
3372. Art and Architecture of China. Focuses on important monuments in China ranging from 2000 BC to the present day, in a variety of media: cast bronze, stone, sculpture, painting on silk and paper, porcelain and wooden architecture, among others. Selected objects and sites will illuminate the concept of "monument" from differing perspectives of technology, aesthetics, labor, religion, ethnicity and politics. Also discussed are comparisons to analogous monuments outside China, and visits to collections of Chinese art in Dallas-Fort Worth. (Also SMU-in-China)
3373. 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 also be considered.

## Undergraduate Seminars: Primarily for Majors

4300 (CFA 3300). 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 will encompass philosophical, anthropological, archaeological, materialist, cultural-historical and art-historical perspectives on line and cultural signification in the visual arts.
4304. The City as Place. Given to us by ancient Roman reality and myth, the distinction between the city as a physical place, the urbs, and the city as an idea, the orbis, created a long-standing link between territory and ritual, locale and law, nation and citizen, and homeland and world. The class will 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 it is a living entity. In time, the period of study will span 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 and Modernism. The class will consist of city and museum tours, lecture, readings, discussion and short essays. (SMU-in-Rome)
4310. Seminar in Ancient Art. Specific topics for investigation will be chosen by the instructor.
4315. Seminar on Northern Renaissance Art. Specific topics for investigation will be chosen by the instructor.
4320. Seminar in Medieval Art. Specific topics for investigation will be chosen by the instructor.
4321. 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 our 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 .
4324. Art History and the Work of Art. This undergraduate seminar investigates the many means by which art historians and others have grappled with the questions surrounding all works of art, including material and ethical concerns, traditional art historical methods, and newer theoretical and interdisciplinary approaches. Based in the Meadows Museum, the course will use objects in the collection to bring to life the challenges inherent in the study of any work of art.
4330. Seminar in Early Modern Art. Specific topics for investigation will be chosen by the instructor.
4331. Seminar on Spanish Art. Specific topics for investigation will be chosen by the instructor.
4332. 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 BC. The course is team-taught by senior faculty in the Divisions of Art History and Theatre.
4344. 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. As the course is set both intellectually and physically in Paris, students will visit monuments and museums to encourage them to make immediate connections between what they read and what they see. (SMU-in-Paris)
4349. Seminar in Contemporary Art. Specific topics for investigation will be chosen by the instructor.
4350. Seminar in Modern Art. Specific topics for investigation will be chosen by the instructor.
4351. European 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.
4352. Paris and London: Industrial Capitalism and the City. Offers a cultural history of Paris and London between 1850 and 1920. In addition to a discussion of the architectural and social transformation of the cities into modern metropolises will be a look at responses to those transformations in the visual arts, music and literature. While lectures will emphasize the architecture, sculpture and photography of the period, they also will address subjects ranging from the operas of Offenbach to the novels of Flaubert to the world expositions of 1867 and 1889.
4371 (CF 3381 and WGST 3381). Modern Myth-Making: Studies in the Manipulation of Imagery. The quest for enduring cultural heroes and the projection of changing social messages as reflected in art from past epochs to modern times. Examples traced range from politician to musician, from the fine arts to television. Student reports on individual topics.
4386 (CFB 3386). Patrons and Collectors. A social history of art from the point of view of its consumers. Examines art patronage and collecting from antiquity to the present, with emphasis on the modern period.

4101, 4201, 4301. Undergraduate Majors Directed Studies and Tutorials. 4111, 4211, 4311 Undergraduate Museum Internships.

# CINEMA-TELEVISION 

Rachel Lyon, Chair

Professor: Rick Worland; Associate Professors: Carolyn Macartney, David Sedman, Pamela Elder, Sean Griffin, Kevin Heffernan; Assistant Professors: Mark Kerins, Derek Kompare; Senior Lecturer: Kelli Herd.

Students pursue a Cinema-Television curriculum that provides a well-rounded program of technical, scholarly and aesthetic training in the fields of film, television and emerging media. The degree requires 48 credit hours, designed to prepare students for careers in professional film/television/new media production and/or writing, and to develop their creative abilities in the art form. A wide variety of courses in cinema and television history, theory and criticism provide a basic and necessary knowledge of these media as art forms and as vibrant social and cultural institutions. Courses in single-camera production, multiple-camera production and production specialization offer experience in writing, shooting, directing and editing film and video projects. In addition, students are required to pursue cocurricular elective courses in the creation and study of the traditional fine arts in Meadows. Students are also encouraged to take an internship in the professional sector in order to gain practical experience in the field and establish professional contacts. Finally, students complete a capstone course (creative, business or history/criticism) as preparation for a career in the media industries or further graduate studies.

## Instructional Facilities

The Division of Cinema-Television is located in the Umphrey Lee Center, which houses faculty offices, classrooms, audio, video and film production, and media support areas. These include nonlinear video editing labs, graphics labs, storage and equipment checkout, digital audio editing rooms, a recording studio, an audio mixing suite, viewing rooms, a seminar room, and production classrooms. Two additional screening classrooms equipped for film, video and DVD projection are located in the Greer Garson Theatre, and a shooting stage is located in McFarlin Auditorium.

## Admission and Degree Requirements

To be admitted to the major in cinema-television, a student must complete the following courses with a cumulative 3.0 G.P.A.: ENGL 1301 and 1302, an approved liberal arts course, CTV 1301 (Film and Media Aesthetics), and CTV 1302 (Media and Culture). Students transferring from other universities must have completed equivalent courses and obtained the equivalent G.P.A. 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 in order to receive their degree: CTV 1304 (Basic Video and Audio Production), CTV 2351 (International Film History) and CTV 2354 (Basic Screenwriting).

## Internships

Upon attaining upperclass status, 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 CTV major, must have taken CTV 1304 and must obtain permission of the chair.

## 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.

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.

## B.A. Degree in Cinema-Television

|  | Credit Hours |
| :--- | :---: |
| Common Core Requirements | 18 |
| CTV 1301 Film and Media Aesthetics |  |
| CTV 1302 Media and Culture |  |
| CTV 1304 Basic Video and Audio Production |  |
| CTV 2351 International Film History |  |
| CTV 2354 Basic Screenwriting |  |
| CTV 4353 Film and Media Theory | 6 |
| History Requirements |  |
| CTV 2352 American Film History |  |
| CTV 2353 American Broadcast History | 3 |
| Industry Requirements |  |
| Choose one course from: |  |
| CTV 3328 Media Management |  |
| CTV 3330 Media Sales |  |
| CTV 3335 Film Exhibition and Distribution |  |
| CTV 4399 Global Media Systems |  |
| Production Requirements |  |

Courses must be spread across at least two of the three intermediate-level cognate areas (single-camera, multiple-camera, specialization). The nine hours may be either: a) all within the intermediate-level, or b) six hours of interme-diate-level and three hours of advanced level. In order to enroll in any advanced production course, students must have enrolled and passed two intermediate courses

```
Intermediate Cognate Areas:
Single-camera production:
    CTV3301 16mm Production
    CTV3390 Topics in Single-Camera Production
Multiple-camera production:
    CTV3302 Multi-Camera Field Production
    CTV3303 Multi-Camera Studio Production
    CTV3392 Topics in Multi-Camera Production
Specialization:
    CTV 3306 Documentary and Reality Production
    CTV 3307 Audio Recording
    CTV 3308 Editing
    CTV 3350 Advanced Screenwriting
    CTV 3391 Special Topics in Specialization
```

CTV 3394 Audio Post-Production
CTV $4101 / 4201$ TV/Advertising Concepting/Production
CTV 4304 New Media Platforms
Advanced Courses:
CTV 4308 Advanced Post-Production
CTV 4316 Producers Seminar
CTV 4356 Narrative Production
CTV 4357 Lighting for the Camera
CTV 4358 Directing the Screen Actor
CTV 4370 Advanced High Def. Production
CTV 4401 Television Series Development
CTV 4402 Television Production Process
Capstone Requirement (enrollment is contingent upon completing
all above requirements)
Choose one course from:
CTV 5311 Advanced Production Workshop
CTV 5312 Media Career Preparation(
CTV 5313 Senior Producing Project
CTV 5314 Thesis
Cinema-TV Electives
Meadows elective/corequirement (in Meadows - outside CTV)
Total term credit hours:

## Minor in Cinema-Television Studies

The minor in cinema-television studies offers students the opportunity to study the historical and critical background of mass media and broaden their understanding and appreciation of cinema, television and new media as art forms and industries. Courses offered in the minor may be applied as required courses in the major.

Requirements: 18 credit hours, distributed as follows:
CTV 1301 Film and Media Aesthetics
CTV 1302 Media and Culture
CTV 2351 International Film History
Three additional courses (nine hours) selected from any film/history criticism/ industry offering. The following courses may be repeated once for minor elective credit, provided the course material/topic is completely different each time.

```
CTV 2332 American Popular Film/Television
CTV 3300 Film/Television Genres
CTV 3310 Screen Artists
CTV 3359 National Cinemas
```


## The Courses

1301. Film and Media Aesthetics. 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.
1302. Media and Culture. Survey 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.
1303. Basic Video and Audio Production. Practical training in the fundamentals of video and audio production techniques through lecture, hands-on exercises and individual and group projects. Required of all majors. Prerequisite: CTV 1301 or instructor consent.
1304. 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.
1305. American Popular Film/Television. An in-depth examination of specific aspects of the American popular cinema and television, 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.
1306. 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.
1307. International Film History. Provides an overview of the development of the cinema as a technology, as an art form, as an industry and as a social institution beginning with the origins of the medium and tracing its major movements and configurations up to the present.
1308. 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.
1309. American Broadcast History. Focuses on the history of American television and radio with an emphasis on the industrial and sociocultural aspects of the medium's development. Issues of race, gender, class, genre, sexuality and national identity will be studied in the context of significant television shows of the past and present.
1310. Basic Screenwriting. Teaches the basic skills required for both fiction and nonfiction screenwriting, and includes such topics as research methods, script preparation, differences in script formats, verbal-to-visual style, and the uses of music, effects, pacing and rhythm.
1311. The Black Experience in Cinema-TV. Students will incorporate readings, screenings, lectures and discussion to examine how the motion picture and television industry presented both unfeeling caricatures and accurate self-expressions of black culture from 1895 to the present, how negative stereotypes and idealized challenges to those stereotypes were represented in film and TV, how black artists were included and excluded in the creation of modern mass media and how cultural representation in the media affects our perceptions of racial issues.

2362 (CFA 3362). Diversity and American Film: 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.
2364. History of Cinema-TV Comedy. Survey of the development of comedy in 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.
3300. Film/TV Genres. 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.
3301. 16mm Production. Practice and study of technical and aesthetic concerns specific to shooting 16 mm film. Covers the basics of pre-production, production and post-production. Each student makes their own non-sync 16mm film. Prerequisite: CTV 1304
3302. Multi-Camera Field Production. Basic principles and practices of electronic multiplecamera field production and editing techniques. Students rotate through various exercises to become familiar with many facets of field production by producing, directing and editing entertainment programming. Prerequisite: CTV 1304.
3303. Multi-Camera Studio Production. Basic principles and practices of electronic multiple-camera studio production. Students rotate through the various studio positions in a series of production exercises. Prerequisite: CTV 1304.
3306. Documentary and Reality Production. Advanced-level course in documentary and reality production, including conception and practical study. Individually and in groups, students will develop, write, shoot and edit nonfiction productions in video formats. Prerequisite: CTV 1304.
3307. Audio Recording. Survey of the theory, equipment and practice of audio recording for audiovisual media. Prerequisite: CTV 1304.
3308. Editing. Practical course on the art and craft of editing through short projects, close study of films, discussion and critique sessions. Avid software covered in detail. Prerequisite: CTV 1304.
3310. Screen Artists. 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.
3311, 3312. Great Directors. Critical and historical review of the world's great directors and their works.
3315. History of Documentary Film/TV. An overview of the development of the documentary mode in cinema and television, offering a survey of the nonfiction film and video provided by newsreels, training films, propaganda movies, wartime documentaries and "reality" TV.
3328. Media Management. Explores the relationship between the theory and practice of broadcast and cable management, with emphasis on the legal and economic constraints on these media outlets.
3330. Media Sales. Examines electronic media sales in the contemporary world. Goals are to combine strategic thinking with creative thought while keeping the target audience/client in mind.
3335. Film Exhibition and Distribution. 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.
3350. Advanced Screenwriting. Through weekly story conferences with the instructor, each student develops a complete feature-length screenplay ready for submission to a producer or agent. Prerequisite: CTV 2354.
3359. National Cinemas. Examines the social, economic, technological and aesthetic histories of cinema from various nations, as well as the concept of "national cinema." The specific nations under consideration will vary from term to term.
3361. Media Programming. Analysis of the development of program ideas and the research and strategies involved in programming media outlets.
3375 (CFA 3375). 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. Taken summer abroad.
3390. Topics in Single-Camera Production. Focuses on a specific topic pertinent to singlecamera production. Subjects vary from term to term.
3391. Topics in Specialization. Intensive study of a special topic or area of specialization.
3392. Topics in Multi-Camera Production. Focuses on a specific topic pertinent to multicamera production. Subjects vary from term to term.
3394. Audio Post-Production. Project-based course on post-production audio techniques for film and television, with an emphasis on the creative aspects of sound design. Includes in-depth training on Pro Tools software/hardware and other equipment. Prerequisite: CTV 3307 or MSA 3310.
3395, 3396, 3397, 3398. Topics in Cinema-Television. This course focuses on a specific topic pertinent to film or television study. Subjects vary from term to term and may include the areas of film/TV history, critical theory, the film/TV business, etc.
4101 (ADV 4196). TV Ad Concepting. Using a pre-selected client and working in small groups, students create advertising concepts and develop them into shootable 30-and 60 -second television commercials. Must be followed by enrollment in CTV 4201. May be repeated for credit in different years. Prerequisite: Instructor consent.
4201 (ADV 4297). TV Ad Production. Students plan, shoot, and complete television commercials based on concepts created in CTV 4101 for ultimate submission to a national
competition. May be repeated for credit in different years. Prerequisites: Instructor consent and CTV 4101 (must have been taken in the same school year).
4125, 4225, 4325. Internship. 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 hour of intern credit equates to 50 hours of work, two hours of credit equates to 100 hours of work and 150 hours of work per term is calculated as three credit hours. Internship credit is given on a pass/fail basis only. Prerequisites: Officially declared CTV major, CTV 1304, instructor consent, junior-senior standing.
4304. New Media Platforms. Explores contemporary new media content, production and multi-platform distribution modes. Students will research the aesthetics, culture and theories of multi-platform new media, including webisodes, mobisodes, blogs, games and podcasts and then collaboratively produce their own pieces for on-and off-line distribution. Prerequisite: CTV 1304.
4308. Advanced Post-Production. In-depth exploration of technical and creative aspects of post-production. Topics may include DVD design and authoring, color correction, video codes and formats, project file management, post-production scheduling and budgeting, digital intermediates, animation, titles and credits, surround sound, etc. Prerequisites: Must have passed at least two 3000 level production courses, including CTV 3308 (CTV 3394 highly recommended).
4316. 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.
4351. Mapping Modernism: Artistic Collaborations in Paris and Moscow. Investigates artistic Modernism, emphasizing fertile collaborations and exchanges in art, dance, theatre, music and film. Focuses on Paris, Moscow and St. Petersburg, 1895-1940.
4353. Film and Media Theory. Provides an overview of major theoretical writings on cinema, television and new media (including the work of theorists such as André Bazin, Sergei Eisenstein, Laura Mulvey and Christian Metz) and demonstrates the application of various analytical approaches to specific texts. Prerequisites: CTV 1301, 2351.
4356. Narrative Production. Introduction to sync sound production practices and equipment. Two in-class projects demonstrate and provide practical hands-on practice in professional crew organization techniques and gear. Additionally, each student conceives, shoots and completes her/his own short film. Scheduling, budgeting and other advanced production skills are covered. Prerequisites: Must have passed at least two 3000-level production courses.
4357. Lighting for the Camera. A study of lighting for the camera intended for those who already have a firm grasp on the basics of film or TV production. Examination and analysis of lighting in selected films and TV shows will be complemented by demonstration of lighting technique and intensive hands-on experience. Other topics relating to the art of cinematography will also be investigated. Prerequisites: Must have passed at least two 3000-level production courses.
4358. Directing the Screen Actor. Theoretical background and practical experience in directing performers for film and television productions. Blocking action, camera placement and movement, line deliveries, action scenes, hitting marks, props, costumes, lighting, makeup, dubbing, and the "Method" and other acting theories will be studied, discussed and practiced on videotape through a series of exercises.
4370. Advanced High-Definition Production. Comprehensive study of technical and creative issues specific to high-definition production, from conception to completed video. Prerequisite: CTV 4356.
4399. Global Media Systems. Interrelationship between broadcasting media in various areas of the world and the system of government under which they developed.
4401. Seminar in TV Series Development. Students develop, research, outline and submit drafts for production of a one-hour television drama. Experienced professional writers, story analysts and creative consultants participate as executive producers on this two-semester
project. A real-time practical study of group writing to acquire skills necessary for participation in the series television industry. Enrollment in CTV 4402 (TV Series Production Seminar) is not required. Admission limited. Prerequisite: CTV 2354.
4402. Seminar in TV Series Production. Continuation of CTV 4401 as students finalize the one-hour television drama script during pre-production. Experienced professional writers, producers and creative consultants assist students during auditions, crew hires, the production shoot and post production. Participation in CTV 4401 is not required. Prerequisite: CTV 1304.
5110, 5210, 5310. 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. Prerequisites: Junior standing and instructor consent.
5311. Advanced Production Workshop. Capstone production course. Each student works on a large project of her/his own design. Class sessions are divided between student project workshops and short lessons in areas of student/instructor interest. Prerequisites: Instructor consent and prior completion of all other production requirements.
5312. Media Career Preparation. Capstone production course. Students develop resumes and compile demo reels of their work. Critical forum facilitates fine-tuning of students' existing film/video projects. All students prepare press kits for film festival submission. Industry guest speakers and field trips to local facilities expose students to the extensive career opportunities available within the media industry. Prerequisites: Instructor consent and prior completion of all other production requirements.
5313. Senior Producing Project. Capstone industry course. Students will develop a concept that is 20 to 30 minutes in length and see their idea through production and post-production as well as develop a plan for marketing and distribution. Prerequisites: Instructor consent and prior completion of all other industry and production requirements.
5314. Thesis. Capstone history/criticism course. Prerequisites: Instructor consent and prior completion of all other history/criticism requirements.

# CORPORATE COMMUNICATION AND PUBLIC AFFAIRS 

Professor Mark McPhail, Chair

Professors: Rita Kirk, Ben Voth; Assistant Professors: Maria Dixon, Owen Lynch, Christopher Salinas, Daniel Schill; Senior Lecturer: Nina Flournoy; Lecturer: Christina Baily-Byers; Adjunct Lecturers: Cecilia Norwood, Kelly Reddell.

The Corporate Communication and Public Affairs (CCPA) program is accredited through the American Communication Association. The division offers students a foundational understanding of the theories, methods and history of communication, its relationship to liberal education and its disciplinary and professional applications. Corporate Communication and Public Affairs educates academics and professionals skilled in research, critical thinking, writing and advocacy who apply intellectual rigor and integrity to communication theory and practice.

Students seeking an undergraduate degree in corporate communication and public affairs receive a broad background in the liberal arts, followed by a major curriculum that prepares them for graduate and professional studies and/or to work in agencies, corporations, nonprofit organizations, cultural and educational institutions, associations and government. The CCPA 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. The CCPA program
emphasizes critical thinking, problem solving, research and writing.
In addition to major coursework in the division, corporate communication and public affairs 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. No more than 36 percent of a student's total hours of study (SMU and transfer credit hours) may be in any combination of communication courses including CCPA-designated coursework. CCPA students must work closely with their academic adviser to ensure compliance with these standards. Students seeking to double major or minor in another communicationrelated field may need to complete more than the minimum 122 total hours required for graduation. In close consultation with their faculty adviser, students design a course of study to match their goals after graduation.

Students are encouraged to participate in service-learning opportunities and make important career connections through supervised internships with Dallasarea businesses.

For more information about the Corporate Communication and Public Affairs degree program, please visit www.meadows.smu.edu/ccpa.

## Admission

In addition to those requirements of the University and of the Meadows School of the Arts, undergraduate students planning to major or minor in Corporate Communication and Public Affairs must complete: ENGL 1301 and 1302, one math course chosen from: STAT 1301, STAT 2301, STAT 2331, MATH 1303, MATH 1304, MATH 1309 or MATH 1337; and twelve hours of CCPA core coursework (CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375). Students must earn a grade of $C$ or better in each of these seven core courses before a major or minor may be declared. A minimum G.P.A. of 3.0 is required in these 21 hours of core coursework before a student may apply to the CCPA major or minor. A core course may not be repeated in order to meet requirements to declare CCPA as a major or minor.

Admission to the major is highly competitive and major selection will be based on 1) subset and core requirement standings, 2) submission and review of a portfolio which includes a letter of application, assignments from the four core courses and an anticipated plan of study, and 3) recommendations of faculty. Portfolio review will occur once a year at the end of the spring term. Portfolio development will be included in CCPA 3375.

## 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.

CCPA coursework may not be double-counted toward the requirements for another major or minor. Students must earn a grade of $C$ or better for coursework toward their major or minor CCPA degree requirements. Students may not repeat CCPA coursework.

Absence on the first day of class will result in administrative withdrawal from the course.

Students majoring in CCPA also must take eight hours of a foreign language and an approved ethics course as part of their degree requirements.

## Scholarships

Communication honors scholarships are awarded each year to outstanding students who intend to major in CCPA majors The Douglas Bauer Incentive Scholarship is a competitive scholarship available to CCPA majors through an annual application process.

## CCPA Honors Program

Students may apply for admission to the CCPA honors track after completion of 45 hours with a 3.5 overall G.P.A. or better. To graduate "with distinction," students must take six hours of honors-designated CCPA courses and CCPA 4375 (Honors Thesis in Communication Theory). Students accepted to the CCPA honors track must maintain a 3.5 or higher overall G.P.A. in all SMU coursework to graduate with the honors distinction. The top 10 percent of each class is eligible for faculty nomination into Kappa Tau Alpha, the national communication honorary society.

## Programs of Study

 Bachelor of Arts in Corporate Communication and Public Affairs(NOTE: No coursework may be double-counted for either a major or minor in CCPA.) Attendance is required on the first day of classes or a student may be dropped from the class.


CCPA 3355 Introduction to Public Relations
CCPA 3360 Management Communication
CCPA 3365 Communication in Organizational Contexts
CCPA 3380 Communication in Civil Society Organizations
CCPA 3382 Strategic Communication: Presentations and Campaigns
CCPA 3385 Civil Society Advocacy and Campaigns
CCPA 3387 Philanthropy and Donor Communication
CCPA 4300 Seminar in Political Communication
CCPA 4327 Rational Discourse and Public Deliberation
CCPA 4328 Media Convergence
CCPA 4345 Rhetoric, Politics and the Mass Media
CCPA 4350 Public Opinion, the Press and Public Policy
CCPA 4375 Honors Thesis in Communication
CCPA 4385 Communication, Technology and Globalization
CCPA 4386 Financial Communication
CCPA 5305 Advanced Communication Field Research
CCPA XXXX Other approved CCPA course

## Meadows elective/corequirement:

6
At least three of these hours must be in a non-communication discipline.

## Minor and other electives

(minor to be determined with counsel of adviser) $\quad 28$

## Total

122

## Minor in Corporate Communication and Public Affairs

In order to minor in corporate communication and public affairs, 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.

| Minor Requirements: | Credit Ho |
| :--- | ---: |
| Core Requirements: |  |
| CCPA 2308 Strategic Communication |  |
| CCPA 2310 Rhetoric, Community and Public Deliberation |  |
| CCPA 2327 Communication Theory |  |
| CCPA 3375 Research |  |
| Upper Division Electives: |  |
| CCPA XXXX Upper-level CCPA elective |  |
| CCPA XXXX Upper-level CCPA elective |  |
| One approved course outside of the division |  |

    CCPA 2308 Strategic Communication
    CCPA 2310 Rhetoric, Community and Public Deliberation
    CCPA 2327 Communication Theory
    CCPA 3375 Research
    Upper Division Electives:
    CCPA XXXX Upper-level CCPA elective
    One approved course outside of the division
    
## The Courses (CCPA)

2308. Strategic Communication. This course introduces basic media writing skills used to produce materials 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 CCPA 2310 and CCPA 2327.
2309. 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.
2310. Communication Theory. This course introduces the foundational concepts, theories and approaches to the study and practice of human communication. It includes an historical overview and contemporary applications of prominent communication theories.
2311. 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. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2312. Crisis Management. This course examines different strategies and tactics organizations use before, during and after a crisis to communicate with internal and external audiences. Theoretical models are applied to specific types of organizational crises. Special emphasis is placed on the prevention/mitigation of crises, ethical decision making and the importance of emerging communication technologies in an organization's crisis response. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327, CCPA 3355 and CCPA 3375.
2313. Communication in Global Contexts. This course provides an international perspective to the study of corporate communication and public affairs. Emphasis on experiential study allows types of organizational crises. Special emphasis is placed on the role emerging communication technologies play in the organization's crisis response. Prerequisites: C or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2314. Ethnicity, Culture and Communication. This course explores the impact of culture on our understanding and practice of human communication in interpersonal, organizational and mass media contexts. Strong emphasis is placed on the role of globalization, gender, race and socio-economic dynamics as impediments and conduits of cross-cultural collaboration and interaction. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2315. Persuasion Theory and Practice. This course provides a survey of major theories that explain how to influence attitudes and behaviors through persuasion applications within a variety of contexts, including relationships, organizations, legal campaigns and the mass culture. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2316. 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 CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2317. 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. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2318. Introduction to Public Relations. This course introduces the basic theories, concepts and approaches to public relations. It includes a historical overview as well as discussions of the professional and ethical demands on practitioners. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2319. Management Communication. This course 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 CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2320. Communication in Organizational Contexts. This course explores the role of communication in key organizational processes in both corporate and nonprofit settings. Students will examine the multiple approaches to organizing and their implications for human communication. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2321. Research. This course teaches students how to conduct professional research. Students identify an organization or individual with an emerging communication need and then analyze secondary sources in order to create an original research project that addresses that need. Prerequisites: C or better in CCPA 2310 and CCPA 2327.
2322. Communication in Civil Society Organizations. This course 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 and volunteers, and external funding and philanthropic development. Prerequisites: C or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2323. Strategic Communication: Presentations and Campaigns. This experiential course teaches students to strategize, develop, research and write in-depth articles, newsletters, speeches, news releases and position papers. Prerequisite: Major or minor standing.
2324. Civil Society Advocacy and Campaigns. This course, which must be taken in conjunction with an internship at an approved nonprofit organization, combines classroom exploration with real-world writing as students complete 150 hours in a service learning environment. Students identify the unique "publics" of the nonprofit and create materials directed at specific goals such as the media, donors, volunteers, client base, board, foundations and corporations. Prerequisites: Major or minor standing, and CCPA 3380.
2325. Philanthropy and Donor Communication. This course is designed to introduce the fundamentals of philanthropy in the organizational process of the non-profit organization. The course will review historical, economic and political forces that formed and continue to influence the development and funding of non-profit organizations. Additionally, building on persuasion, interpersonal and organizational communication theory students will explore the unique communication of philanthropy, grant writing and donor relations. Prerequisites: Major or minor standing, CCPA 3365 and CCPA 3380.
2326. 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. Instructor approval is required. Prerequisite: Major or minor standing.
4302, 4303, 4304. 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. Instructor approval is required. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2327. 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. Instructor approval is required. Prerequisites: $C$ or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2328. 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 is required. Prerequisite: Major or minor standing.
2329. Competitive Mock Trial. This course provides students 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. Instructor approval is required. Prerequisite: Major or minor standing.
2330. 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, 2.75 overall G.P.A., 3.0 G.P.A. in CCPA coursework and permission of faculty adviser.
2331. 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 capital, supervised by a faculty member there. Prerequisites: C or better in CCPA 2308, CCPA 2310, CCPA 2327 and CCPA 3375.
2332. Rational Discourse and Public Deliberation. This course 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 a practical inquiry into the uses of debates on contemporary social issues. Prerequisite: Major or minor standing.
2333. Media Convergence. This course explores the intersection of mass communication technologies. Students examine the digital future of media and the impact of media convergence on business, politics and society. Prerequisite: Major or minor standing.
2334. Rhetoric, Politics and the Mass Media. This course 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 are examined. Prerequisite: Major or minor standing.
2335. Public Opinion, the Press and Public Policy. This course examines the interdependent relationships among media coverage, public opinion and public policy. Students consider the influence of press coverage on electoral and policy-making processes in which the public voice is presumed to impact democratic outcomes. Prerequisite: Major or minor standing.
2336. Honors Thesis in Communication. This course 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: Major or minor standing and honor standing.
2337. 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. Prerequisite: Major or minor standing.
2338. Financial Communication. This course familiarizes students with terms, principles and practices in financial communication as a component of integrated, strategic communication. Students examine techniques used in investor relations in addition to learning personal financial literacy and practices. Prerequisite: Major or minor standing.
2339. Strategic Communication Campaigns. This course demonstrates how strategic communication contributes to problem-solving in corporate and nonprofit settings. Students apply their skills toward practical challenges as they prepare and present complete plans for a corporate client. Prerequisites: Major standing and 90 or more hours of coursework.
$\mathbf{5 1 1 0}, \mathbf{5 2 1 0}, \mathbf{5 3 1 0}$. 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. Prerequisites: Junior standing. Major or minor standing. The student must secure written permission from the instructor and return a completed form to the Corporate Communication and Public Affairs office before the start of the term.
$5301,5302,5303,5304,5305,5306,5307,5308,5309$. Advanced Topics. These courses encourage students to examine the role of communication within contemporary issues and social problems. Topics vary by instructor. Prerequisite: Major or minor standing.

## DANCE

## Professor Myra Woodruff, Division Chair

Associate Professors: Shelley C. Berg, Danny Buraczeski, Patty Harrington Delaney, Leslie Peck; Lecturer: Andrew Parker; Visiting Assistant Professor: Lauren Thompson; Production Supervisor: Deborah Barr Truitt; Musicians: Dick Abrahamson, Jamal Mohamed, Mina Polevoy, Edward Lee Smith, Daniel J. Sullivan, Janeen Vestal; Coordinator: Heather Guthrie; Professor Emerita: Elizabeth A. Ferguson; Associate Professor Emeritus: Robert Beard

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 with Social Security number, a wallet-sized photograph, applicable recorded music and appropriate studio clothes and footwear. To confirm a campus audition, call the Dance Office at 214-768-2718. For information regarding admission procedures for the University, a national audition or financial aid, contact the Associate Dean's 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 Scholastic Aptitude Test and/or American College Test. 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.

## Program of Study <br> B.F.A. 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 38 are in studio training. The remaining 35 credit hours provide students with the opportunity to develop scholarly and creative abilities in dance and related areas of interest.

Students whose hours in the General Education Curriculum, the major requirements, and the major's supporting course requirements exceed a total of 122 will be exempt from three hours of Perspectives and an additional three hours of either Perspectives or Cultural Formations.

|  | Credit Hours |
| :--- | :---: |
| General Education Curriculum (GEC)* | 35 |
| Required Electives | 12 |
| Division of Dance: |  |
| Performance Technique | 32 |
| A minimum combined total of 32 credit hours is required in Ballet |  |
| (12), Modern Dance (12) and Jazz Dance (eight). These courses are |  |
| taken during the first two/three years of study. | 6 |
| Advanced Performance Technique |  |
| These hours must be at the 3000- or 4000-level of proficiency in at |  |
| least one major area of performance technique. |  |
| Ensemble Performance |  |
| A minimum of four terms of ensemble work is required for a grade |  |
| without credit. Enrollment will be processed by the administration |  |
| after casting is determined for each term. |  |
| Composition |  |
| Four terms of course work in dance composition are required begin- |  |
| ning in the sophomore year. |  |
| Theoretical and Applied Studies |  |
| Required course work consists ofDance Orientation, Dance Production |  |
| I and II, Introduction to Pilates, Music: The Art of Listening (MUHI |  |
| 1321), Musical Concepts, Dance Notation I, Dance History I and II, |  |
| and Kinesiology for Dance. |  |
| Dance Electives |  |
| These hours may be taken in Advanced Performance Technique, |  |
| Theoretical and Applied Studies, or Directed Studies. Electives taken |  |
| within the Meadows School may also be used to fulfill this requirement. |  |
| However, no single course may fulfill the Dance electives requirement |  |
| and the Meadows co-curricular requirement simultaneously. |  |
| Meadows Elective/Corequirement |  |
| The Meadows School requires three term credit hours of course work |  |
| within the Meadows School butoutside of theDivision of Dance. Dance |  |
| Electives may not be used to fulfill this requirement |  |
| Total credit hours of Wellness to be earned by: (1) one term of Wellness Choices I in the |  |
| term of Introduction to Pilates to be completed by the end of the sophomore year. |  |
| first ane |  |

## Regulations

The faculty expects dance majors to apply themselves scholastically and to assume responsibilities conscientiously. Students are required to maintain a minimum G.P.A. of 2.7 in dance courses to continue in the dance major. Grades lower than $C$ are not acceptable in any required dance course and will necessitate a repeat enrollment. 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 G.P.A. of 2.7 in dance courses and 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 for 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 weight control. 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.

## Dance Performance Minor

The minor in dance 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.

|  | Credit Hours |
| :--- | :---: |
| Select from the following: | 3 |
| DANC 2370 Movement as Social Text |  |
| DANC 2373 Dance History I: Court and Ballet |  |
| DANC 2374 Dance History II: Modernism | 6 |
| Select from the following: |  |
| DANC 1151 Dance Production I |  |
| MUH 1321 Music: The Art of Listening |  |
| DANC 1242 Musical Concepts |  |
| DANC 2107 World Rhythms I |  |
| DANC 2160 Introduction to Pilates |  |
| DANC 2241 Dance Composition I |  |
| DANC 2361 Dance Notation I |  |
| DANC 2370 Movement As Social Text |  |
| DANC 2373 Dance History I: Court and Ballet |  |
| DANC 2374 Dance History II: Modernism |  |

DANC 4260 Pilates
DANC 4363 Kinesiology for Dance
DANC 4366 Ballet Pedagogy
Select from the following: 9

DANC 1311-1314; 2311-2316; 3311-3318 Performance Technique, Ballet
DANC 1321-1324; 2321-2324; 3321-3324 Performance Technique, Modern Dance
DANC 1231-1234; 2231-2234; 3231-3234 Performance Technique, Jazz Dance
DANC 4003-4008; 4103-4108 Pas de Deux

## Total

18
The following dance courses are open to all students from any field of study. It should be noted that not all courses are offered in any given academic year.
1301,1302. Beginning Ballet. Introduction to the fundamentals of classical ballet. Not applicable to the dance major or minor.
1303, 1304. Beginning Modern Dance. Introduction to basic movement skills, experiences and concepts of modern dance. The course will explore the movements and ritual of the Afro-Brazilian Art of Capoeira. Not applicable to the dance major or minor
1305, 1306. Beginning Jazz Dance. Introduction to the fundamentals of jazz dance with emphasis on rhythm and theatrical style. Not applicable to the dance major or minor.
2107. World Rhythms I. Listening, analysis and performance of African, Latin American and other rhythms. Techniques of playing percussion will be explored. Opportunities will be provided for students to accompany dancers using authentic instruments.
2108. World Rhythms II. Continued listening, analysis and performance of African, Latin American and other rhythms. Techniques of playing percussion will be explored in greater depth with more emphasis on performance. Further opportunities for students to accompany dancers using authentic instruments. Prerequisite: DANC 2107 or instructor approval.
2301, 2302. Intermediate Ballet. Further exploration of classical ballet. Previous experience in the study of classical ballet is required. Not applicable to the dance major or minor.
2303, 2304. Intermediate Modern Dance. Further exploration of modern dance. Previous experience in the study of modern dance is required. Not applicable to the dance major or minor.
2305, 2306. Intermediate Jazz Dance. Further exploration of jazz styles. Previous experience in the study of jazz dance is required. Not applicable to the dance major or minor.
2345. Improvisation and Movement Studies. The development of individual movement skills through the exploration of images and elements from all of the arts, emphasizing the concepts of line, rhythm, mass and weight. Special attention will be placed on individual creative problem-solving through movement as it pertains to space, time and energy. Prerequisite: One year of dance technique and instructor approval.
2370. Movement as Social Text. Investigation of ways in which movement and dance have meaning in different cultural, social and historical contexts. Examples of dance in a crosscultural context, encompassing both Western and non-Western dance forms will be included. Emphasis will be placed on the nature of movement, its unique properties, the ways in which it conveys meaning, and its relationship to culture and society.
2371. Ballet Tradition. A historical perspective of classical ballet from the Renaissance to contemporary ballet. Emphasis is directed toward traditional developments, artistic changes and performance practices. Not applicable to the dance major or minor.
2372. Twentieth-Century Dance. The study of Western theatre dance from 1900 to the present. Attention is given to various contemporary forms and practices and to the history of dance for film and theatre. Not applicable to the dance major or minor.
3374. The Evolution of American Musical Theatre. This course examines the evolution of American musical theatre from its roots in minstrelsy, burlesque and vaudeville, to its adolescence in comic opera, operetta and musical comedy to its codification as musical theatre. 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 theatre and the last unit examines the figures of the 20th century who refined this integration both on Broadway and in Hollywood.
4370. Dance Criticism and Aesthetics. 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. Prerequisite: DANC 2371 or 2372 and instructor approval.

## Dance Courses for Dance Performance Majors (DANC)

The following dance courses are restricted to dance majors unless otherwise indicated. Dance minors must obtain departmental approval to enroll in these courses. Dance minors must qualify for performance technique classes by audition.

## Performance Technique

1311, 1312, 1313, 1314. Ballet I. Introduction to and development of the fundamentals of classical ballet and pointe technique. Inclusive of pointe class and men's class.
1321, 1322, 1323, 1324. Modern Dance I. Introduction to and development of the fundamentals of contemporary dance.
1231, 1232, 1233, 1234. 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.
2311, 2312, 2313, 2314, 2315, 2316. Ballet II. Continuing exploration of classical ballet technique on the intermediate level with an emphasis on more complex port de bras, adagio, tourner enchaînement and allegro batterie. Inclusive of pointe class and men's class. Admission by placement.
2321, 2322, 2323, 2324. 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.
2231, 2232, 2233, 2234. Jazz Dance II. Continuing development of jazz dance technique and styles with focus on dynamics, rhythm and directional changes. Classic jazz, blues and contemporary jazz styles will be explored. Admission by placement.

## Advanced Performance Technique

3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318. Ballet III. Continuing development of classical ballet technique on the advanced level with an emphasis on technical proficiency, musicality and movement dynamics. Admission by placement.
3215, 3216, 4215, 4216. Men's Ballet Technique. Emphasis on the virtuosity specific to the male dancer in the ballet idiom. The class objective is to strengthen and develop the dancer to his utmost potential. Includes variations. Admission by placement.
3217, 3218, 4217, 4218. Women's Pointe Technique. Emphasis on the virtuosity specific to the female dancer in the ballet idiom. The class objective is to strengthen and develop the dancer to her utmost potential. Includes variations. Admission by placement.
3321, 3322, 3323, 3324. 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. Introduction of repertory. Admission by placement.
3231, 3232, 3233, 3234. 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.

4211, 4212, 4213, 4214, 4215, 4216. Advanced Ballet Elective. Advanced ballet technique, offering a transition from dance study to professional-level work with an emphasis on technical proficiency, musical phrasing, stylistic variables and individual interpretation. Admission by instructor approval.
4221, 4222, 4223, 4224. Advanced Modern Elective. Advanced contemporary dance technique, offering a transition from dance study to professional-level work with an emphasis on technical proficiency, musical phrasing, stylistic nuances and individual interpretation. Admission by instructor approval.
4131, 4132, 4133, 4134. Advanced Jazz Elective. Thorough exploration of advanced techniques and styles of jazz dance. Emphasis on sophisticated presentation and performance, individual stylizations and characterizations. Strong focus on learning extended jazz choreographic sequences and repertory. Admission by instructor approval.
4210. Ballet - Immersive. Advanced ballet technique. May be taken as a stand-alone course to Ballet III. Prerequisites: Senior standing, placement in Ballet III and instructor approval.
4211. Ballet - Immersive II. Advanced ballet technique. May be taken as a stand-alone course to Ballet III. Prerequisites: Senior standing, placement in Ballet III and instructor approval.
4219. Ballet - Immersive III. Advanced ballet technique. May be taken as a stand-alone course to Ballet III. Prerequisites: Senior standing, placement in Ballet III and instructor approval.
4220. Modern Dance - Immersive. Advanced contemporary dance technique. May be taken as a stand-alone course to Modern Dance III. Prerequisites: Senior standing, and placement in Modern Dance III and instructor approval.
4226. Modern Dance - Immersive II. Advanced contemporary dance technique. May be taken as a stand-alone course to Modern Dance III. Prerequisites: Senior standing, placement in Modern Dance III and instructor approval.
4229. Modern Dance - Immersive III. Advanced contemporary dance technique. May be taken as a stand-alone course Modern Dance III Prerequisites: Senior standing, placement in Modern Dance III and instructor approval.

## Ensemble Performance

1080. Ensemble Performance I. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Required.
1081. 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.
1082. 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.
1083. 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.
1084. Ensemble Performance V. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Prerequisite: DANC 4080.
1085. Ensemble Performance VI. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Prerequisite: DANC 4081.
1086. Ensemble Performance VII. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Prerequisite: DANC 4082.
1087. Ensemble Performance VIII. Rehearsal and public performance of existing repertory and/or original works. By audition. Departmental approval and administrative enrollment. Prerequisite: DANC 4083.

## Composition

2241. Dance Composition I. Introduction to the fundamental elements of dance composition, including Laban-based movement vocabulary, dynamics, motivation, gesture, spatial concepts, elementary phrasing, abstraction and motif writing. Students participate in solo and small group studies with an emphasis on improvisation. Course includes visit to the Dallas Museum of Art. Required. Prerequisite: DANC 1242.
2242. 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 and DANC 2361 or instructor approval.
2243. 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 ${ }^{\mathrm{TM}}$ 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.
2244. Dance Composition IV. This course will focus on developing site-specific works, collaborating with musicians, service learning projects and the development of skills necessary for successful entry into the professional arena, such as resume writing, networking and auditioning. Required. Prerequisite: DANC 3243.

## Theoretical Studies

2370. Movement as Social Text. Investigation of ways in which movement and dance have meaning in different cultural, social and historical contexts. Examples of dance in a crosscultural context, encompassing both Western and non-Western dance forms will be included. Emphasis will be placed on the nature of movement, its unique properties, the ways in which it conveys meaning, and its relationship to culture and society. Open to all students.
2371. Dance History I: Court and 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.
2372. 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 2373 or instructor approval.
4190, 4290, 4390. Directed Studies. Supervised projects and/or research in theoretical studies, inclusive of community service projects. Arranged. Prerequisite: Instructor approval.
2373. 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.
4365, 4366. Ballet Pedagogy. Analysis of ballet techniques, comparing the vocabulary and methods of the Russian, Italian and French Schools. Emphasis on literal translation of French terminology, class structure, and varied approaches to teaching classical ballet.
2374. Dance Criticism and Aesthetics. 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. Open to all students. Prerequisite: DANC 2373 or 2374 and instructor approval.

## Applied Studies

1151. 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 main stage production, as well as load-in and strike of dance productions in other venues. Required of all first-year dance majors.
1152. 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.
1153. Musical Concepts. Basic analysis of music in terms of its form and structure, as related to dance composition and performance. Musical vocabulary, analysis of selected masterworks, and in-class performances are included. Required. Prerequisite: MUHI 1321 or instructor approval.
1154. World Rhythms I. Listening, analysis and performance of African, Latin American and other rhythms. Techniques of playing percussion will be explored. Opportunities will be provided for students to accompany dancers using authentic instruments.
1155. World Rhythms II. Continued listening, analysis and performance of African, Latin American and other rhythms. Techniques of playing percussion will be explored in greater depth with more emphasis on performance. Further opportunities for students to accompany dancers using authentic instruments. Prerequisite: DANC 2107 or instructor approval.
1156. Introduction to Pilates. A non-impact body conditioning method based on principles of abdominal and scapular stabilization. Introduction to the essential and intermediate mat work, which consists of non-weight bearing exercises. Designed to give the student an understanding of the principles and muscular emphasis behind the Pilates method. Proper alignment, full range of motion, and patterned breathing will be emphasized. Fulfills the General Education Curriculum (GEC) Choices II Wellness requirement for dance majors only. Required of all second year dance majors.
1157. Improvisation and Movement Studies. The development of individual movement skills through the exploration of images and elements from all of the arts, emphasizing the concepts of line, rhythm, mass and weight. Special attention will be placed on individual creative problem-solving through movement as it pertains to space, time and energy. Prerequisite: One year of dance technique and instructor approval. Open to all students.
1158. Dance Notation I. Introduction to Labanotation, with emphasis on reading dance notation of ballet, modern dance, jazz dance and multicultural dance forms. Introduction to LabanWriter, computer software for dance notation. Introduction to motif writing. Required. Prerequisite: DANC 1242 or instructor approval.
1159. Dance Notation II. Continuing studies in Labanotation, including reading dance scores and working with computer applications for choreography. Inclusion of projects in documentation as opportunity allows. Prerequisite: DANC 2361.
1160. Repertory and Performance I. Rehearsal and performance of world dances and major works of ballet and modern dance repertory, with discussion of the choreographic structure of the dances, to develop performance interpretation. Prerequisite: Instructor approval.
1161. Repertory and Performance II. Rehearsal and performance of world dances and additional works of ballet and modern dance repertory, with discussion of the choreographic structure of the dances, to develop performance interpretation. Prerequisite: DANC 2381 or instructor approval.
1162. Repertory and Performance III. Rehearsal and performance of master works of choreography, with emphasis on refinement of detail, clarity of phrasing, expression, musicality and versatility within a broad range of styles. Prerequisite: DANC 2382 or instructor approval.
1163. Repertory and Performance IV. Rehearsal and performance of additional master works of choreography, with emphasis on refinement of detail, clarity of phrasing, expression, musicality and versatility within a broad range of styles. Prerequisite: DANC 3381 or instructor approval.
4003, 4004, 4103, 4104. Pas de Deux I. 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.

4005, 4006, 4007, 4008, 4105, 4106, 4107, 4108. Pas de Deux II. Further exploration of the elements of partnering with an emphasis on more complex technical skills and stylistic versatility. Includes excerpts from classical repertory. Admission by invitation. Prerequisite: Instructor approval.
4045, 4145, 4245. Advanced Choreographic Projects. Individual directed studies in choreography with a culminating performance. Prerequisites: DANC 3244 and instructor approval.
4260. Pilates. A non-impact body conditioning method based on principles of abdominal and scapular stabilization. A continuation of DANC 2160, this course adds advanced mat work and Reformer exercises. Designed to give the student further understanding of the principles and muscular emphasis behind the Pilates method. Proper alignment, full range of motion, and patterned breathing will be emphasized. Prerequisite: DANC 2160 or instructor approval.

## INTERDISCIPLINARY STUDIES IN THE ARTS

## Program Director: Dr. Gregory Warden, Associate Dean for Academic Affairs

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 3.0 G.P.A. in the first 24 term hours taken in residence 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 the General Education Curriculum (GEC) 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. Prior to declaring the major, a number of steps must be completed. In order to initiate discussion of a specialized major, a student must submit a preliminary plan of study in the form a brief statement of goals and a course list made in consultation with appropriate faculty advisers.

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 committee approves the plan, it must then be submitted 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 course work.
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 grade point average in the courses required for the major exceeds or equals 3.5 and if the project is deemed excellent. The Associate Dean for Student Affairs will be responsible for verifying and certifying graduation requirements.

## JOURNALISM

## Tony Pederson, Belo Distinguished Chair of Journalism

Associate Professors: Craig Flournoy, Camille Kraeplin; Assistant Professor: Jake Batsell; Executive-in-Residence: Lucy L. Scott; Journalist-in-Residence and William J. O'Neil Chair in Business Journalism: Mark Vamos; Senior Lecturers: Carolyn Barta, Michele Houston, Jayne Suhler; Lecturer: Karen Thomas; Adjunct Professors: Robert Hart, Pam Harris.

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.

## Instructional Facilities

The Division of Journalism is located in the Umphrey Lee Center, which houses faculty and administrative offices, audio and video production, and media support areas, including a new digital newsroom. Over time this facility will be a place where journalism students can write, edit and produce their work across a digital network that will give them skills to work in print, broadcast and on the Internet.

The division also has basic video/audio modules, video logging rooms, off-line editing rooms, a nonlinear video editing lab, equipment storage and checkout, digital audio rooms, a teaching radio studio, a seminar room, classrooms, a graphics lab, an editing lab, viewing rooms, and production classrooms.

## 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 in the Division of Journalism must have completed ENGL 1301 (Introduction to College Writing) and ENGL 1302 (First-Year Seminar in Rhetoric: Contemporary Issues). The student must earn a minimum G.P.A. of $3.0(B)$ in both courses. Essay and grammar, spelling, and punctuation tests must be successfully completed before students are allowed to declare journalism as a major or minor. Students transferring from other universities must have completed equivalent courses and obtained the equivalent G.P.A. in those courses before they can be considered a major candidate in the Division of Journalism.

## 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 G.P.A. of 3.5 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 cultural formations and twelve 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, contact the Honors Program director, Division of Journalism, Meadows School of the Arts, 280 Umphrey Lee, Southern Methodist University, Dallas, TX 75275. 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 36 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 18 -hour traditional minor in business administration, or the new 18 -hour minor in business offered for non-Cox undergraduates, 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 the newsroom of a real-time Web site focusing on North Texas companies and the regional economy.

Admission to the program is subject to the approval of the O'Neil Program in Business Journalism chair. Students studying in the program will be advised by the O'Neil chair.

## 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 six credit hours of electives within the division. Internships and practica are taken on a pass/fail basis only.

## 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 obtain credit for courses such as Reporting I, Reporting II and Internship, as well as courses in other disciplines.

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 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.

## Program 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 36 credit hours within the division. A total of 80 credit hours must be taken outside the division. At least 65 of these hours must be in the arts and sciences. The only exceptions for the 65 hours in arts and sciences allowed are for those students with a second major or minor in a field not related to arts and sciences. A foreign language capability of eight credit hours or its equivalent is required, and students also must satisfy Meadows School of the Arts requirements with three credit hours outside the Meadows communication divisions. 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. Ideally any second major or minor would be outside communication.
NOTE: 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

|  | Credit Hour |
| :---: | :---: |
| General Education Curriculum | 41 |
| Journalism Core Curriculum (21 Hours): |  |
| CCJN 2302 Ethics of Convergent Media | 3 |
| CCJN 2303 Writing and Editing for Journalists | 3 |
| CCJN 2304 Basic Video and Audio Production | 3 |
| CCJN 2312 Reporting I | 3 |
| CCJN 2313 Reporting II | 3 |
| CCJN 2380 Digital Journalism | 3 |
| CCJN 4316 Communication Law | 3 |
| Skills Requirement: | 3 |
| All Journalism majors are required to take three credit hours of Journalism Skills courses. Students may choose any CCJN course from the list below: |  |
| CCJN 3357 Photojournalism |  |
| CCJN 3358 New Media News |  |
| CCJN 3360 Computer-Assisted Reporting |  |
| CCJN 3362 Magazine Writing |  |
| CCJN 3365 Investigative Reporting |  |
| CCJN 3382 Feature Writing |  |
| CCJN 3385 Broadcast I |  |
| CCJN 4310 Editorial/Opinion Writing |  |
| CCJN 4384 Broadcast II |  |
| CCJN 4385 Graphics and Design |  |
| CCJN 4388 Print Design and Editorial Decision-Making |  |
| CCJN 4390 Advanced Web Mastery |  |
| CCJN 5306 Topics in Journalism Practice |  |1General Education Curriculum3

CCJN 2303 Writing and Editing for Journalists3
CCJN 2312 Reporting I ..... 3
2313 Reporting II
3
CCJN 4316 Communication Law ..... 3All Journalism majors are required to take three credit hours of Jour-nalism Skills courses. Students may choose any CCJN course fromthe list below:CCJN 3357 PhotojournalismCCJN 3358 New Media NewsCCJN 3360 Computer-Assisted ReportingCCJN 3362 Magazine WritingCCJN 3365 Investigative ReportingCCJN 3382 Feature WritingCCJN 3385 Broadcast ICCJN 4310 Editorial/Opinion WritingCCJN 4384 Broadcast IICCJN 4385 Graphics and DesignCCJN 4388 Print Design and Editorial Decision-MakingCCJN 4390 Advanced Web MasteryCCJN 5306 Topics in Journalism Practice
Credit Hours
Topical Studies Requirement:3
All journalism majors are required to take three credit hours of jounalism topical studies courses. Students may choose any CCJN course from the list below:
CCJN 3325 Technology Reporting
CCJN 4300 Broadcast News Seminar
CCJN 4306 Business and Journalism
CCJN 4344 Sports Journalism
CCJN 4345 Media and Politics
CCJN 4387 Arts Beat
CCJN 4392 Journalism and Religion
CCJN 4395 Public Affairs Reporting
CCJN 4396 International Reporting
CCJN 5301 Topics in Journalism
CCJN 5302 Topics in Journalism
CCJN 5303 Topics in Journalism
CCJN 5304 Topics in Journalism
Critical Studies Requirement:
All journalism majors are required to take three credit hours of jounalism critical studies courses. Students may choose any CCJN course from the list below:
CCJN 3390 Literary Journalism
CCJN 3396 History of Journalism
CCJN 4331 Current Issues in the News
CCJN 4360 Women and Minorities in the Media
CCJN 4370 Law and Ethics in a High-Tech World
CCJN 4380 Objectivity and Bias
CCJN 4393 Civil Rights and the Media
CCJN 4394 Media Effects
CCJN 4397 Journalism in Latin America
CCJN 5305 Topics in Critical Studies
Journalism Electives (any Journalism course): 6
All journalism majors are required to take at least six credit hours of journalism electives. Students may choose any CCJN course.
Meadows Elective/Corequirement 3
Foreign Language 8
Second major or minor and free electives 34
Total
122

## 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: 24 term hours, distributed as follows:
CCJN 2302 Ethics of Convergent Media
CCJN 2303 Writing and Editing for Journalists
CCJN 2304 Basic Video and Audio Production
CCJN 2312 Reporting I
CCJN 2313 Reporting II
CCJN 2380 Digital Journalism
CCJN 4316 Communication Law
Three additional credit hours in any CCJN course.

## The Courses (CCJN)

2301. Mass Media and Society. A survey of all print and broadcast media - their backgrounds as well as their current status as industries. Ethics, law, effects of mass media, international communication, advertising and public relations are also treated.
2302. Ethics of Convergent Media. An exploration of the ethical issues that provide the foundation for all communication fields. These issues have become more complex as media and industries have converged. Topics include free speech, privacy, government regulation and censorship.
2303. Writing and Editing for Journalists. Introduction to the fundamentals of working journalism. Students review English grammar, become versed in the Associated Press writing style and develop critical thinking skills to evaluate the news. They also become acquainted with the basics of journalistic writing, including broadcast writing, and editing. Note: Students who pass the division's grammar, spelling and punctuation exam with an acceptable grade may test out of this course. They may replace it with another journalism course of their choice.
2304. 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. Convergence laboratory required. Prerequisite: CCJN 2303.
2305. Reporting I. The division's rigorous foundation writing and reporting course. Students gain critical skills needed to complete the major, including the fundamentals of gathering, documenting, organizing and writing news stories in an accurate, fair, clear and concise manner. Convergence laboratory required. Prerequisites: CCJN 2302, 2303.
2306. 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. Convergence laboratory required. Prerequisite: CCJN 2312.
2307. Digital Journalism. Students study the convergence of traditional media as they apply to new communication technologies and produce multimedia Web sites that incorporate photography, videography, audio and graphics. Convergence laboratory required. Prerequisites: CCJN 2304, 2312.
2308. 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 society, our culture and our way of life. Convergence laboratory required. Prerequisite: CCJN 2312.
2309. Photojournalism. Training in the techniques and execution of digital photojournalism including computer processing of images. Students produce digital photojournalism and have the opportunity to generate photographic images for the division's convergence Web site. Convergence laboratory required. Prerequisite: CCJN 2302, 2303.
2310. New Media News. Focuses on using new media presentation methods and design skills to produce new forms of communication for news outlets. Convergence laboratory required. Prerequisite: CCJN 2380.
2311. 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.
2312. Magazine Writing. This course will introduce students to the diverse world of magazines, and, through the reading of great magazine writing and the intensive practice of magazine reporting and writing, help prepare them for professional work in that world. Students will study and practice magazine feature writing, including profiles, narratives and analytical pieces. Prerequisites: CCJN 2313.
2313. 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. Convergence laboratory required. Prerequisite: CCJN 2313.
2314. Feature Writing. Emphasizes the conceptual and technical skills needed to develop one's own voice, bring a literary quality to one's journalism, and produce professional-level descriptive pieces and features for various media. Convergence laboratory required. Prerequisite: CCJN 2313.
2315. Broadcast I. Builds on skills learned in CCJN 2304 (Basic Video and Audio Production), with more emphasis on deadline-driven, original campus-based reporting and broadcast producing. Students will learn how to assign coverage, enterprise original story ideas, write cogent broadcast stories and turn them on deadline using video and/or set debriefs as well as Web components. Convergence laboratory required. Prerequisites: CCJN 2304, 2312.
2316. 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.
2317. 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.
4101-2. Journalism Practica. One credit hour for work at on-campus media positions. Maximum of two credit hours may be earned and counted toward degree requirements. See restrictions on allowable credit hours for practica and internships below. Offered on a pass/ fail basis only. Prerequisites: Junior standing and permission of instructor and adviser.
4125, 4225, 4325. Internships in Journalism. Internship credit for off-campus work in the field during the regular term or in the summer. Students will be limited to a total of three credit hours for internships and practica. These three hours will not count toward the six hours of required elective credit in the division. Offered on a pass/fail basis only. Prerequisites: Junior standing and permission of adviser.
2318. 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.
4302-5. Washington Term Directed Studies. Offers students an opportunity to study and practice journalism in the nation's capital.
2319. Business and Journalism. An intensive introduction to business, financial markets, and economics, combined with practice in reporting and writing about these complex topics. This course will give aspiring business journalists the tools to make business information understandable and accessible to news audiences. Prerequisite: CCJN 2313.
2320. 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. Convergence laboratory required. Prerequisite: CCJN 2313.
2321. Communication Law. Exploration of the historical and philosophical basis for freedom of expression. Practical applications of the law in such areas as libel, censorship, access, privacy, obscenity, copyright and government regulations affecting broadcasting, advertising and the press. Prerequisite: Sophomore standing.
2322. Washington Term Internship. Internship opportunities in the nation's capital.
2323. 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. Goal is to teach communication majors to become more creative problem-solvers as professionals, and more critical as media consumers. Prerequisite: Sophomore standing.
2324. 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.
2325. Media and Politics. Increased understanding of the political and elections process enables students to evaluate and practice political journalism. The course covers campaigns and governance and features analysis of media coverage and practical application. Prerequisite: CCJN 2312.
2326. 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.
2327. Law and Ethics in a High-Tech World. Encourages students to investigate the real and possible boundaries in cyberspace between open and closed systems of code, commerce, governance and education, while examining the relationship of law and ethics to each. Students will engage with a wide spectrum of Internet issues, including privacy, intellectual property, antitrust concerns, content control and electronic commerce. Prerequisite: Sophomore standing.
2328. 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.
2329. Broadcast II. Furthers foundation established in Broadcast I. Curriculum emphasizes deadline-driven, off-campus beat reporting and broadcast producing. Students will learn how to enterprise original off-campus story ideas, including investigative and long-form pieces. Convergence lab required. Prerequisites: CCJN 2313, 3385.
2330. 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. Convergence laboratory required. Prerequisite: CCJN 2312.
2331. Arts Beat. Students gain experience in a convergence class in reporting on arts and entertainment, writing reviews, etc. The course includes sessions with local critics and experts in various areas of arts and literature. Prerequisite: CCJN 2313.
2332. Print Design and Editorial Decision-Making. The fundamentals of newspaper layout and design, including an emphasis on news selection, decision making and publication trends. Convergence laboratory required. Prerequisite: CCJN 2312.
2333. Advanced Web Mastery. Builds on the online journalism skill sets of students and trains them to create dynamic online news packages to leverage the flexibility of the Internet in order to increase the public's understanding of news stories. Students will learn how to compose their own Web sites, how to use technology to assist in newsgathering and how to unleash their creativity in online presentation. Convergence laboratory required. Prerequisite: CCJN 2380.
2334. 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.
2335. Civil Rights and the Media. Prior to the 1950s, the mainstream press was one of the major obstacles to black progress. But during the Civil Rights Movement, the media became a primary force in helping blacks achieve equal rights. Course explores how and why this revolutionary change took place. Prerequisite: Sophomore standing.
2336. Media Effects. A critical study of how mediated messages influence behavior, attitudes and feelings within a society. The course will survey historical research efforts to examine effects on individuals, groups and institutions, as well as contemporary social critiques in the American mass media. Prerequisite: Sophomore standing.
2337. Public Affairs Reporting. Emphasis on skills required for the reporting of news emanating from governmental bodies or politics. Prerequisite: CCJN 2313.
2338. International Reporting. Prepares students to work as foreign correspondents by helping them understand international production processes. Students will 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.
2339. Journalism in Latin America. Provides students with an understanding of the practice of journalism in Latin America. Students will profile specific regions, examining the historical, political, economic, cultural, ethnic and even geographical differences, in order to better understand the issues that affect the struggle for the freedom of the press. Prerequisite: Sophomore standing.
5110, 5210, 5310. 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 in the Division of Journalism office before the start of the term during which the study is to be undertaken. Prerequisite: Junior standing and permission of instructor.
5301-4. Topics in Journalism. Designed to provide a study and discussion setting for an issue or topic of current interest in the journalism profession. The courses will be offered on an irregular basis, depending on the significance and timeliness of the topics to be studied.
2340. Topics in Critical Studies. Designed to provide a study and discussion setting for a critical media studies issue. The courses will be offered on an irregular basis depending on the significance and timeliness of the topics to be studied.
2341. Topics in Journalism Practice. Designed to provide an introduction to new, cutting edge areas of journalism practice. The courses will be offered on an irregular basis, depending on the significance and timeliness of the topics to be studied.
2342. Honors Thesis. Students research and write a thesis examining an aspect of or an issue in the field of journalism. This course is required for all students wanting to graduate with an honors degree in journalism.

## MUSIC <br> Robert Dodson, Director <br> Samuel Holland, Associate Director for Academic Affairs Alan Wagner, Assistant Director for Student Affairs


#### Abstract

Joel Estes Tate Professor of Piano: Joaquin Achucarro; Artist in Residence: Chee-Yun Kim; Professors: José Antonio Bowen, Nancy Cochran, 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: Andres Diaz, Pamela Elrod, Robert Frank, Kevin Hanlon, Carol Leone, David Mancini, Donna Mayer-Martin, Martin Sweidel; Assistant Professors: Sarah Allen, Chris Anderson, Hedy Law, Jesus Ramos-Kittrell, Julie Scott, Xi Wang; Senior Lecturer: Joan Heller; Lecturers: Roy Cherryhomes, Dale Dietert, Mark Feezell, Gary Foster, Hank Hammett, Matthew Kline, Catharine Lysinger, Jamal Mohamed, Kevin Salfen; Adjunct Professors: Emanuel Borok, Robert Guthrie, Gregory Hustis; Adjunct Associate Professors: Christopher Adkins, Thomas Booth, Kalman Cherry, Donald Fabian, Gary Foster, Paul Garner, Matthew Good, Erin Hannigan, Douglas Howard, John Kitzman, Jean Larson, Thomas Lederer, Wilfred Roberts, Ellen Rose, Barbara Sudweeks; Adjunct Assistant Professors: Deborah Baron, Alessio Bax, Kim Corbet, Susan Dederich-Pejovich, Haley Hoops, Diane Kitzman, Brian Merrill, Deborah Perkins, Timothy Seelig, Kara Kirkendoll Welch; Adjunct Lecturers: Barbara Bastable, John Bryant, Lucille Chung, Martha Gerhart, Kevin Gunter, Lynne Jackson, Drew Lang, Jon Lee, Akira Sato, Edward Smith, James Tran, Vi Wilson, Leonardo Zuno; Mustang Band Staff: Don Hopkins, Tommy Tucker; Accompanists: Wesley Beal, Tara Emerson; Vocal Coach: Jason Smith.


## Admission

In addition to meeting University admission criteria, entering undergraduate students intending to major in music must audition prior to matriculation. These auditions serve the purpose of determining the 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 Assistant Director for Student Affairs of the Division of Music. The Division of Music considers transfer credits and AP test results in decisions regarding advanced placement. 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 who do not intend to pursue an SMU degree program. Nondegree students are admitted through the Office of Nondegree Credit Studies and are eligible to register in day and evening classes for which they have satisfied prerequisites and received departmental approval. Admission as a non-degree-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 295-seat Bob Hope Theatre. The Jake and Nancy Hamon Arts Library houses an inspiring collection of over 110,000 books and scores, over 30,000 audio and video recordings, and over 100,000 items in special collections of research materials such as the Van Katwijk Music Collection.

Facilities available to music students include 45 individual practice rooms that were completely renovated by a gift from Jeanne R. Johnson in 2006.

The electronic keyboard laboratory, used for class instruction in piano, theory and improvisation, is equipped with Yamaha 88-key digital pianos, a MLC 100 Communications Center, computers at each station, and a variety of sequencers, tone modules and software applications.

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 Meadows Center for Instructional Technology in the Arts features some of the most current instructional software in music theory, analytical research, music printing, music therapy and music education.

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 and located in Caruth auditorium.

The Electronic Music Studio is a digital multitrack facility featuring the latest hardware and software on a Macintosh/ProTools-based platform. The studio is also equipped with a full range of MIDI equipment for synthesis, sampling, sequencing, signal processing, video post scoring, and recording (digital and analog).

## Act of Enrollment

By the act of enrolling in 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 pre-music major or transfer student must apply for upper division degree/major status. The Associate Director for Academic Affairs of the Division of Music reviews applications.

All full-time music majors are required to enroll for Recital Attendance (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 15 (minors 10) recitals 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) each term of residence. Wind and percussion students 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 shall present one solo performance in general recital, departmental recital or masterclass each term. Performance majors are required to perform at least one piece in public that represents each style period in which solo music was composed for the student's instrument (including voice). This is meant to encourage performance of contemporary works, including music written during the student's lifetime.

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 $W P$ (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 General Education Curriculum, free electives and course
work 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.

When the total number of hours required to satisfy the General Education requirements and the major requirements along with the major's supporting course requirements exceeds 122 term 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.

## Meadows Elective/Corequirement

The Meadows School requires three term credit hours of course work within the Meadows School, but outside the Division of Music. Music electives may not be used to fulfill this requirement. The Meadows elective/corequirement is indicated in parentheses in each program of study outlined below.

## Programs of Study Bachelor of Music in Performance

|  | Credit Hours |  |  |
| :--- | ---: | ---: | ---: |
|  | Orch Organ Piano | Voice |  |

MUAS 1020 (all performance majors -
1 enrollment fall term of first year)
MUAS 1010 (all performance majors - each semester in residence except fall first year)
MUTH 1129, 1130, 1229, 1230,
2129, 2130, 2229, $\mathbf{2 2 3 0} \quad 12 \quad 12 \quad 12 \quad 12$

MUTH 3350

| 3 | 3 | 3 | 3 |
| :--- | :--- | :--- | :--- |

MUTH elective at the $\mathbf{3 0 0 0}$ level or above
MUHI 1202, 3301, 3302
$3 \quad 3 \quad 3$
MUHI elective at the $\mathbf{4 0 0 0}$ level or above

| 8 | 8 | 8 | 8 |
| :--- | :--- | :--- | :--- |

PERB 1131, 1132, 2131, 2132 (or 1233, 1234)
Private Studies 3200

| 4 | 4 | 4 | 4 |
| :--- | :--- | :--- | :--- |

MURE 3101, 4201 (instrumental recitals)
1616
16
MURE 3001, 4101 (voice recitals)
MUCO 3208 (choral) or $\mathbf{3 2 0 9}$ (instrumental) $2 \quad 2 \quad 2$
PERE (Choral Ensemble) (each term of residence) 6
PERE (Large Ensemble) (Orch: each term of residence) $\quad 6 \quad 6 \quad 3$
PERE (Chamber Ensemble) $3 \begin{array}{llll} & 1 & 2\end{array}$
PERB 3116 (Contemporary Music Workshop) $\begin{array}{lllll}1 & 1 & 1 & 1\end{array}$
(vocalists may substitute MREP 5210)
For Orchestral:
MPED 4305 or 43083
(MPED 4303 is required for Guitar majors.)
MREP 5130 or $\mathbf{5 1 4 0}$ or $\mathbf{5 1 5 0}$ or $\mathbf{5 1 6 0}$ or $5170 \quad 2$
For Organ:
MPED 5114 1
MUAC 2101, $2102 \quad 2$
MUHI 4320, 5207 5
For Piano:
MREP 4114, 4115 2
MUAC 2101, 2102 2
MUAC 3100 3
MUPD 4125, 4126, 4396, $4397 \quad 8$
PERB 1001 (each semester course is offered)
PERB 1011, 1012

|  | Credit Hours |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Orch | Organ | Piano | Voice |
| For Voice: |  |  |  |  |
| $\quad$ Foreign Language (2 terms) |  |  |  | 8 |
| MPED 5216 |  |  | 2 |  |
| MPED 5217 or two additional terms of PERB 2117 |  |  |  | 2 |
| PERB 2117 or PERE 4150 (two terms) |  |  |  | 2 |
| PERB 2106, 2108, 2107, 2109 |  |  | 4 |  |
| VOIC 3015, 3116, 4017, 4118 | 11 | 10 | 5 | 2 |
| Music Electives | $(3)$ | $(3)$ | $(3)$ | $(3)$ |
| Meadows Elective/Corequirement | 35 | 35 | 35 | 35 |
| General Education Curriculum (GEC) | 9 | 9 | 9 | 9 |
| Free Electives | $\mathbf{1 2 4}$ | $\mathbf{1 2 4}$ | $\mathbf{1 2 5}$ | $\mathbf{1 2 5}$ |

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 and 5326 for MUPD 4125 and 4126.

## Bachelor of Music in Composition

| MUAS 1020 (1 enrollment fall term of first year) |  |
| :--- | ---: |
| MUAS 1010 (each semester in residence except fall of first year) |  |
| MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230 | 12 |
| MUTH 3110, 3350. 4300, 4310, 5360, 5370 | 16 |
| MUTH 1225, 1226, 2225, 2226, 3325, 3326, 4329, 4330 | 20 |
| MUHI 1202, 3301, 3302 | 8 |
| PERB 1131, 1132, 2131, 2132 (or 1233, 1234) | 4 |
| Private Studies 3200 or 3100 | 4 |
| MURE 4201 | 2 |
| MUCO 3208 (Choral) or 3209 (Instrumental) | 2 |
| PERE/PERB (Ensemble) | 8 |
| $\quad$ (Must include two terms of large ensemble |  |
| and two terms of Contemporary Music Workshop [PERB 3116]) | 5 |
| Music Electives | $(3)$ |
| Meadows Elective/Corequirement | 35 |
| General Education Curriculum (GEC) | 9 |
| Electives | $\mathbf{1 2 5}$ |

Each year students must present at least one performance of an original work on a general/studio recital or in another appropriate form or medium (i.e. a film score, incidental music, dance, electronic music installation, etc.).

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.

## Bachelor of Music in Music Therapy

Credit Hours
MUAS 1020 (one enrollment fall term of first year)
MUAS 1010 (each semester in residence except fall of first year)
MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 223012
MUHI 1202, 3301, 3302 8
PERB 1131, 1132, 2131, 2132 ( or 1233, 1234) 4
MUAS 3152, 3155,5110 3
PERB 1103 1
$\begin{array}{ll}\text { Private Studies } \mathbf{3 2 0 0} \text { or } 3100 & 10-12\end{array}$
MURE 3101 (optional) 0-1
MUCO 3208 (Choral) or 3209 (Instrumental) 2
PERE (Ensemble) and/or Contemporary Music Workshop (PERB) 4
MUTY 1120, 1320, 3211, 3212, 3213, 3214, 3141, 3142, 3143,
3144, 4340, 4341, 4144, 4145, 4141, $4142 \quad 26$
PSYC 3332, 3382, 5334,5355 12
PSYC choose from 3380, 3383, or 5388
Meadows Elective/Corequirement (3)
General Education Curriculum (GEC) 35
Specific GEC requirements:
Math - STAT 1301
Science - BIOL 1303
Perspectives - PSYC 1300
Electives
Total
Students with a concentration in voice, percussion or guitar must substitute music electives for the corresponding technique class.

Students completing this program of study will also earn a minor in Psychology.

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 G.P.A. of 2.5 and a 2.75 in all music therapy courses.

The B.M. 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.

## Bachelor of Music in Music Education (Teacher Certification*)

|  | Credit Hours |  |
| :---: | :---: | :---: |
|  | Instrumental | Vocal or Keyboard |
| MUAS 1020 (one enrollment fall term of first year) |  |  |
| MUAS 1010 (each semester in residence except fall of first year) |  |  |
| MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229. 2230 | 12 | 12 |
| MUTH 5330 | 3 | 3 |
| MUHI 1202, 3301, 3302 | 8 | 8 |
| PERB 1131, 1132, 2131, 2132 (or 1233, 1234) | 4 | 4 |
| Private Studies 3200 | 14 | 14 |
| MUCO 3208 \& 3210 (vocal), 3209 \& 3211 (instrumental) | 4 | 4 |
| PERE (Large Ensemble) (each term of residence) | 5 | 5 |
| PERE (Chamber Ensemble) | 1 | 1 |
| Keyboard concentrations may substitute one credit of MUAC 2101 or 2102 |  |  |
| Vocal concentrations may substitute one credit of Large Ensemble |  |  |
| PERB 3116 (Contemporary Music Workshop) | 1 | 1 |
| MUAS 2149, 3152, 5110 | 3 | 3 |
| Instrumental: 3146, 3147, 3148, 3149, 3150, 3151, 3155, 5154 (optional for strings) | 8 |  |
| Vocal or keyboard: 3146 or 3147, 3148 or 3149, 3150 or 3151, 4230, MPED 5216 (Keyboard may substitute MUAS 3155) |  | 7 |
| MUED 2250, 3330 | 5 | 5 |
| MUED 3331 (instrumental) or 3332 (vocal/keyboard) | 3 | 3 |
| PERB (Diction: Choose any two from the following: |  |  |
| 2106, 2108, 2107, 2109) |  | 2 |
| EDU 5335, 5349 | 6 | 6 |
| EDU 2350 or PSYC 2331 | 3 | 3 |
| Meadows Elective/Corequirement | (3) | (3) |
| General Education Curriculum (GEC) | 35 | 35 |
| Specific GEC Perspectives requirements: |  |  |
| THEA 3311 or 4373 |  |  |
| HIST 2311 or 2312 |  |  |
| Free Electives | 9 | 9 |
| Total | 124 | 125 |

## *Additional requirements for Teacher Certification:

EDU 5363, 5364, 5373, 5374
$6 \quad 6$
(Student Teaching: Select two with adviser approval)
Successful completion of the state TExES examination.
The senior major has three performance options: (1) to continue the study of the instrumental or vocal concentration, with one solo performance in general recital; (2) to divide study between the concentration and a secondary instrument or voice; or (3) to engage in the private study of one or more instruments or voice other than the concentration. Prior to student teaching certification, students must submit documentation of 45 observation hours in K-12 schools.

Student teaching, in addition to being subject to the eligibility requirements published by the School of Education, must be approved by the Music Education department, must follow successful completion of all methods (MUED) and techniques (MUAS) courses, and is considered a full-time endeavor, with no daytime course work or concurrent ensemble assignments.

## 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 9-17 additional credits (approximately one term), through wise use 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.

The state mandated "TExES" examination is usually taken during the term of student teaching and requires concurrent attendance in preparation seminars. Students are not eligible to apply for certification until completion of degree requirements, student teaching, and successful completion of the TExES.

## Bachelor of Arts in Music

| MUAS 1020 (1 enrollment fall term of first year) | Credit Hours |
| :--- | ---: |
| MUAS 1010 (each semester in residence except fall of first year) |  |
| MUTH 1129, 1130, 1229, 1230, 2129, 2130, 2229, 2230 | 12 |
| MUHI 1202, 3301, 3302 | 8 |
| MUTH at 3000 level or above $O R$ MUHI elective at 4000 level | 3 |
| PERB (Class Piano, according to proficiency) | $0-2$ |
| Private Studies 3200 or $\mathbf{3 1 0 0}$ (eight credits required/14 credits maximum) |  |
| $\quad$ (or Composition in combination with Private Studies) | 8 |
| PERE (Ensemble) | 4 |
| Music electives (may include senior project) $\dagger$ | $10-12$ |
| Meadows Elective/Corequirement | $(3)$ |
| General Education Curriculum (GEC) | 41 |
| Electives outside of music | 32 |
| Total | $\mathbf{1 2 0}$ |

$\dagger$ Of the 10 to 12 credits of music electives, at least three credits must be at the 3000-level or above in courses other than private lessons, ensembles techniques, or repertoire classes.

The B.A. degree is intended to serve students seeking to combine 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 course work to course work 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.

## Music Minor

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 and a theory/ aural skill assessment prior to enrollment in private lessons or the theory sequence. The ability to read music is required. Aural and Written Music Theory must be taken concurrently. In any given term, the private study fee will not be waived unless the student is enrolled for at least one other course (not including MUAS 1010)
required for the minor. The maximum number of credits for which the private study fee will be waived is four. Ensemble participation is encouraged.

Requirements for the minor in music ( 18 term hours):
MUTH 1129 and 1229 Aural Skills and Music Theory I
MUTH 1130 and 1230 Aural Skills and Music Theory II
MUHI 1202 Introduction to Music in World Societies
MUHI 3301 and 3302 Survey of Music History I and II
Private Study in instrument, voice or composition. Composition study, if approved, must be taken with an instrument or voice. (Four term credit hours, typically one per term)
MUAS 1010 Recital attendance for four terms (see the Division of Music Handbook for course requirements)

## Music Courses Open to All University Students

The following courses are open to all students from any field of study.

## Performance Classes (PERB) and Ensembles (PERE)

PERB 1103, 1104 Modern Acoustic Guitar
PERB 1203, 2203 Class Guitar
PERB 1205, 2205 Class Piano
PERB 1206, 2206 Class Voice
PERB 2113, 2114 Hand Drumming/Ethnic Percussion
PERE 1112 Mustang Marching Band
PERE 1113 Meadows Chorale
PERE 1114 Meadows Concert Choir
PERE 1115 Meadows Jazz Orchestra
PERE 1118 Meadows Symphony Orchestra
PERE 1119 Meadows Wind Ensemble
PERE 3120 Meadows World Music Ensemble
PERE 1176 Meadows Choral Union
PERE 3173 Meadows Percussion Ensemble

## Music Theory, History and Literature

MUHI 1321 Music: The Art of Listening
MUHI 2310 The Broadway Musical: Vaudeville to Phantom
MUHI 3339 Music for Contemporary Audiences
MUHI 3340 Jazz: Tradition and Transformation
MUHI 3341 Women and Music, "Like a Virgin": From Hildegard to Madonna
MUHI 4350 Music in World Cultures
MUTH 4310 Introduction to Electro-Acoustic Music

## Other Music Courses

MUAS 5320 Recording Technology

## Music Courses <br> Music Pedagogy (MPED)

4184, 4284, 4384. Directed Study - Pedagogy. Prerequisite: Permission of instructor.
4303. Guitar Pedagogy. Prepares guitarists for studio teaching. Offered spring term of even-numbered years.
4305. Introduction to Instrumental Pedagogy. Prepares instrumental private teachers for studio teaching. Fall term.
4308. String Pedagogy I. A survey of methods, materials and curriculum for teaching strings at the beginning level. Focuses on the philosophical, psychological and developmental bases of string study. Reviews and evaluates 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 Strings and MUAS 3147 Lower Strings, or permission of the instructor. Fall term.
4309. String Pedagogy II. A continuation of the skills and concepts developed in String Pedagogy I as well as an in-depth study of methods, materials and curriculum for teaching strings at the intermediate and advanced levels. Prerequisite: MPED 4308. Spring term.
5114. 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. Offered fall term of even-numbered years.
5216. Vocal Pedagogy I. A study of vocal techniques. includes 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.
5217. 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. Prerequisite: MPED 5216.

## Music Psychology (MPSY)

5340. 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)

4114, 4115. 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. Fall term.
5030,5130. Guitar Repertoire. Student performances of their solo repertoire and individual instruction in a master-class setting.
5040, 5140. Orchestral Repertoire - Woodwinds.
5050, 5150. Orchestral Repertoire - Brass.
5060, 5160. Orchestral Repertoire - Strings and Harp.
5070, 5170. Orchestral Repertoire - Percussion.
5209. Classical and Romantic Song Literature. An overview of song literature from the Classical and Romantic periods. Students will prepare repertoire for performance in class and make presentations on topics of specialized interest. Lectures will 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.
5210. Contemporary Song Literature. A survey of repertoire and performance practices of song literature from the 20th century. The course is designed to provide a general knowledge of the literature, to acquaint students with performance notational practices and to develop the musical skills necessary to perform this literature.

## Accompanying (MUAC)

2101. 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. Fall term.
2102. 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. Spring term.
2103. Practicum in Collaborative Performance. Practical application of collaborative performance skills through studio assignments and performance. Prerequisite: MUAC 2101 and 2102.

## Music Arts and Skills (MUAS)

1010. Recital Attendance. Required of all music majors each term in residence. First-year students attend MUAS 1020 in the fall term.
1011. Career Orientation. Required orientation for all first-year music majors. Provides valuable information about college life and professional opportunities in music. Fall term.
1012. 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.
1013. Upper String Techniques. Basic principles involved in playing and teaching violin and viola. Fall term.
1014. Lower String Techniques. Basic principles involved in playing and teaching cello and bass. Spring term.
1015. Single-Reed and Flute Techniques. Basic principles involved in playing and teaching single-reeds and flute. Fall term.
1016. Double-Reed Techniques. Basic principles involved in playing and teaching doublereed instruments. Spring term.
1017. Low-Brass Techniques. Basic principles involved in playing and teaching low brass. Fall term.
1018. High-Brass Techniques. Basic principles involved in playing and teaching trumpet and horn. Spring term.
1019. Percussion Techniques. Basic principles involved in playing and teaching percussion. Fall term.
1020. Vocal Techniques. Basic principles involved in singing and teaching voice. Spring term.
1021. General Music Practicum. Focus of this course is on crafting and teaching minilessons for peers in the college classroom as well as in area public school classrooms. Video camera is used extensively for accurate feedback. Fall term. Prerequisite: MUED 3330.
1022. Computers, Keyboards and MIDI for Musicians. Introductory concepts and functional skills in contemporary electronic music technology. Operation of tone generators, samplers, synthesizers. Digital sequencing and music notation software. Basic applications in composition, performance and pedagogy. Fall term.
1023. Piano Technology for Pianists. Basic skills to enable a pianist to solve problems and tune his or her own piano. Offered irregularly.
1024. Marching Band and Jazz Techniques. For music education majors, this course develops techniques for designing and teaching marching band shows, and methods and materials for teaching jazz. Resources will include state-of-the-art software and audio and video materials. The development of fundamental skills and improvisation on the jazz rhythm instruments will be required. Offered fall term of even-numbered years.
1025. 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.

## Conducting (MUCO)

3208. Fundamentals of Choral Conducting. Review of all basic beat patterns, subdivision, fermata problems and beat character. Introduction to left-hand usage, basic score reading. Emphasis on the psychophysical relationship between conductor and ensemble. Fall term. Prerequisite: MUTH 2130 and 2230.
3209. Fundamentals of Instrumental Conducting. Focus includes basic conducting technique, score reading, score analysis and general rehearsal procedures. Attention is given to rehearsal techniques in a laboratory setting. Fall term. Prerequisite: MUTH 2130 and 2230.
3210, 5210. Choral Conducting Practicum. Stresses development of rehearsal techniques in a laboratory setting. Students 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.
3210. Instrumental Conducting Practicum. Stresses development of rehearsal techniques in a laboratory setting. Students prepare and rehearse music in sectional and full ensemble settings to develop skills in error detection, rehearsal pacing, sequencing and ordering of music for optimal rehearsals. Concurrent enrollment with MUED 3331. Spring term. Prerequisite: MUCO 3209 or equivalent.
4184, 4284, 4384. Directed Studies in Conducting.
3211. 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)

2250. 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. Spring term.
2251. General Music Methods and Materials. An investigation of major approaches for teaching elementary general music. Includes public school classroom observations. Fall term.
2252. Band and Orchestra Music Education Methods, Literature and Materials. Covers materials for instruction, motivation, administration, class control and performance preparation. Concurrent enrollment with MUCO 3211. Spring term.
2253. 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, choice of music, rehearsal planning and management of nonmusical details. Includes public school observations. Spring term.
4194, 4294, 4394. Directed Studies in Music Education.
2254. Music Education Methods and Materials in the Church. The principles and practices of music education useful to church music professionals and others who may be interested in church work. Offered spring term of odd-numbered years.
5149, 5150, 5151, 5152, 5153, 5154. Workshop in Music Education. Offered irregularly.
2255. Wind Literature for the Secondary School. Survey of new and standard literature suitable for secondary school students. Music for instrumental solo, ensemble, band and orchestra will be examined. Fall term.
2256. Vocal and Choral Literature for the Secondary School. Survey of new and standard vocal solo, ensemble and choral literature suitable for the secondary school. Fall term.
2257. Computer Applications in 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.

## Music History (MUHI)

1202. Introduction to Music in World Societies. Offers an introduction to basic elements of music within the context of cultural traditions of world music. Students will study a wide range of musical traditions, including Western art music, jazz, African American gospel music, and the music 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 its roles in societies. Spring term.
1203. Music: The 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.
1204. The Broadway Musical: Vaudeville to Phantom. The explosion of American musical theater beginning in the 1890s, tracing the stars, the shows and their creators from vaudeville through Broadway and up to the works of Stephen Sondheim and Andrew Lloyd Webber.
1205. Survey of Music History I. A survey of 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. As time permits, this survey will be presented within the contexts of related arts and historical events. Course content will include listening, score analysis and practice in writing about music. Fall term. Prerequisite: MUHI 1202.
1206. Survey of Music History II. A survey of musical forms, styles, compositional procedures and performing practices from the late 18th century until the present day. As time permits, this survey will be presented within the contexts of related arts and historical events. Course content will include listening, score analysis and practice in writing about music. Spring term. Prerequisites: MUHI 1202 and MUHI 3301
1207. 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.
1208. 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/EuroAmerican origins through the various art and popular forms of the 20th century.
1209. Women and Music, "Like a Virgin": From Hildegard to Madonna. An introduction to the rich traditions of musical women and to the variety of roles women have played in both "art" music and popular music. Also introduces feminist and gender theories as related to the music of women and men.
4192, 4292, 4392. Directed Studies in Music History. Must be approved by department head.

## 4301. Research Project in Music History.

4302. Undergraduate Seminar in Music History. This course will provide advanced 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 term. Prerequisite: MUHI 3301 and 3302.
4303. Chamber Music of the 18th and 19th Centuries. An examination of chamber music literature from Haydn to Debussy and Ravel by means of analysis, recorded performances, open rehearsals and live concerts. Prerequisite: MUHI 3301, 3302 or written permission of department head.
4304. Organ History and Literature. A survey of music for the organ, Renaissance to contemporary. Required of organ majors and concentrations (undergraduate). Spring term.
4305. Survey of Vocal Literature. Covers Western secular art song. Representative literature from the Renaissance, Baroque, Classic and Romantic periods and the 20th century in terms of stylistic characteristics, text-music relationships and performance practices. Prerequisite: MUHI 3301, 3302 or written permission of department head.
4306. Women Composers and Performers in the 19th, 20th and 21st Centuries. Examines women musicians from the early 19th century to the present. Included are considerations of women's professional and private music education. Women's contributions in a wide variety of professional areas (performance, composition, education, scholarship) are examined within the changing social contexts of the two centuries. Class activities include a variety of types of readings (memoirs, journals, newspaper reviews), videos, recordings, scores and analyses, and live student performances. Prerequisite: MUHI 3301, 3302.
4307. Music, Musicians and Audiences in 19th-Century Paris. Explores music and musicians living and performing in Paris, the city considered to be Europe's glittering capital of the arts during the 19th century. Discussions of the political and social roles of music
following the Revolution (such as the establishment of the Paris Conservatory and the National Opera) will provide the foundation for a focus on the Parisian musical scene during the years 1830-1870. Class trips to events at 19th-century concert halls (Palais Garnier, Théatre Chatelet), modern halls performing 19th-century repertoire, churches (Madeleine, St. Sulpice), and café-cabarets. Offered fall term of odd-numbered years. (SMU-in-Paris.)
4308. Survey of Opera Literature. 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. The study of 19th-century opera will emphasize the many ways in which Romantic opera synthesized music, literature and art, as well as elements of politics and culture. The musical language and dramatic substance of selected works from 20th-century operatic repertoire will be investigated. Students will be expected to spend a significant amount of time viewing operas on video and laser disc, and in certain cases making comparative studies of productions. Prerequisite: MUHI 3301, 3302 or written permission of department head.
4309. Survey of Piano Literature. Historical and stylistic study of music for the piano. Prerequisite: MUHI 3301, 3302 or written permission of department head.
4310. Symphonic Literature. An examination of representative orchestral works from the late Baroque to the present day. Attention will be 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 3301, 3302 or written permission of department head.
4311. Guitar History and Literature. 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 is given to the evolution of the modern instrument and its repertoire. Offered spring term of odd-numbered years. Prerequisite: MUHI 3301, 3302 or written permission of department head.
4312. Music in World Cultures. Musical activities and principles selected from various geographical areas of the world. Emphasis is on non-Western materials, but significant cross-cultural encounters will also be studied. Offered irregularly.
4313. History of Musical Instruments. Study of musical instruments from the early Christian times to the 20th century. Attention is given to performance practices, treatises concerning construction and pedagogy, and the influences of the various instrumental families upon compositional procedures and forms. Offered irregularly.
4314. History of American Music. American music from colonial times to the present. Course includes an examination of compositional forms, procedures and techniques of selected composers. Prerequisite: MUHI 3301, 3302.
4315. 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: MUHI 3301, 3302 or permission of department head.
4316. Performance Practices in Early Music. Studies in the interpretation of Baroque music from a stylistic point of view. Offered spring term of even-numbered years.
4317. 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)

4125, 4126. Piano Pedagogy Practicum. Observation and supervised teaching experience; specific goals and projects are agreed upon for the term. Required for all piano majors.
4396. 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.
4397. 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.
5103, 5203. Creative Piano Teaching. Pedagogical projects designed to meet the needs of the piano teacher. Offered in conjunction with the National Piano Teachers Institute or the National Conference on Keyboard Pedagogy. Majors are limited to one credit.
5210. Class Piano Procedures. 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 evennumbered years.
5312. 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.

5325, 5326. Piano Pedagogy Internship I and 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.

Private Studies (MUPR)
The following numbers for private study apply to all instruments and voice.
3100. One-Credit Courses. 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.
3200. Two-Credit Courses. 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.
The following subject prefixes will be used to designate 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 | HARP | Harp | TROM | Trombone |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CELL | Cello | HARS | Harpsichord | TRPT | Trumpet |
| CLAR | Clarinet | OBOE | Oboe | TUBA | Tuba |
| DBBS | Double Bass | ORG | Organ | VLA | Viola |
| FLUT | Flute | PERC | Percussion | VIOL | Violin |
| FRHN | French Horn | PIAN | Piano | VOIC | Voice |
| GUIT | Guitar | SAX | Saxophone |  |  |

The prefix MUPR is used to designate private studies in an instrument or voice for a student who is neither a music major nor a music minor. An audition for acceptance into a department and written permission of the Director of the Division of Music are required and a private lesson fee will be applied to all MUPR enrollment.

Vocal coaching (for upper-division voice performance majors only) course numbers are: VOIC 3015, 3116, 4017, 4118. The instructor coaches the singer on interpretation, style and diction in art song, opera and oratorio.

## Recitals (MURE)

3001. Junior Recital for Voice Majors. Solo performance of approximately 30 minutes of music. Graded pass/fail by committee.
3002. Junior Recital. Solo performance of approximately 30 minutes of music. Graded pass/ fail by committee.
3003. Senior Recital for Voice Majors. Solo performance of approximately one hour of music. Graded pass/fail by committee.
3004. Senior Recital. Solo performance of approximately one hour of music. Graded pass/ fail by committee.

## Composition and Theory (MUTH)

1129, 1130. Aural Skills I and II. Beginning studies in solfeggio, melodic and harmonic dictation. Must be taken in sequence. Fall and spring terms. Corequisites: MUTH 1229, 1230.
1225, 1226. Composition. Individual study with the composition faculty and regularly scheduled seminars with faculty and visiting guests. Fall and spring terms. Prerequisite: First-year composition major or permission of instructor.
1229, 1230. Theory I and II. Rudiments (notation, clefs, key signatures, intervals, scales, modes), diatonic and chromatic harmony, figured bass, part-writing, analysis. Must be taken in sequence. Fall and spring terms. Corequisites: MUTH 1129, 1130.
2129, 2130. Aural Skills III and IV. Continuation of Aural Skills I and II. Solfeggio, melodic and harmonic dictation employing chromaticism, 20th-century materials. Must be taken in sequence. Fall and spring terms. Prerequisites: MUTH 1130, 1230. Corequisites: MUTH 2229, 2230.
2225, 2226. Composition. Individual study with the composition faculty and regularly scheduled seminars with faculty and visiting guests. Fall and spring terms. Prerequisite: Second-year composition major or permission of instructor.
2229, 2230. Theory III and IV. Continuation of Theory I and II covering the Romantic and 20th-century repertoires. Emphasis on traditional harmonization exercises, beginning studies in musical form, and introduction to current analytical methods. Must be taken in sequence. Fall and spring terms. Prerequisites: MUTH 1130, 1230. Corequisites: MUTH 2129, 2130.
3110. Keyboard Skills. Score reading in all clefs, sight reading, figured bass realization. Prerequisites: MUTH 2130, 2230.
3325, 3326. Composition. Individual study with the composition faculty and regularly scheduled seminars with faculty and visiting guests. Fall and spring terms. Prerequisite: Third-year composition major or permission of instructor.
3350. Form and Analysis. Study of musical form through examples from pre-tonal and tonal literatures. Prerequisites: MUTH 2130, 2230.
4184, 4284, 4384. Directed Studies in Music Theory. Prerequisite: Permission of instructor. 4190, 4290, 4390. Directed Studies in Music Composition. Prerequisite: Permission of instructor.
4300. Analysis of Contemporary Music. Detailed analysis of recent music written in a variety of styles and using diverse techniques. The course will also explore early 20th-century antecedents of more recent music. Analysis and discussion will be supported by readings from theoretical articles and composers' writings. Prerequisites: MUTH 2130 and 2230.
4310. Introduction to Electro-Acoustic Music. An introduction to the techniques, concepts and historical perspective of composing, performing and listening to electroacoustic music. Topics covered include acoustics, psychoacoustics, sound reproduction systems, tape techniques, analog and digital synthesis, and the history and literature of electronic music. Students have three hours of studio time each week to complete required projects. Fall term. Prerequisite: Permission of instructor.
4311. Advanced Electro-Acoustic Music. Continuation of the introductory course with an emphasis on mastery of the studio equipment and its application to compositional problems. Students will complete individual and group composition projects in the studio. Spring term. Prerequisite: MUTH 4310 or permission of instructor.
4329, 4330. Composition. Individual study with the composition faculty and regularly scheduled seminars with faculty and visiting guests. Fall and spring terms. Prerequisite: Fourth-year composition major or permission of instructor.
5330. 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. Fall term. Prerequisites: MUTH 2130, 2230.
5350. Advanced Musicianship. This course seeks to develop the student's musicianship skills beyond the level attained in the basic aural skills sequence of courses. Activities of the course include 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. Prerequisites: MUTH 2130, 2230 for undergraduates; graduate students must pass the theory placement exam or complete all review courses. Permission of instructor.
5360. Advanced Orchestration. More advanced techniques of orchestration are explored through a series of scoring projects for a variety of ensembles. Spring term. Prerequisites: MUTH 5330 or permission of instructor.
5370. 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)

1120. 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.
1121. 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. Required of all music therapy majors and open to others who may want information about the professional field of music therapy. Fall term.
3130, 3230, 3330. Directed Studies in Music Therapy: Medicine and Health.
1122. Developmental Music Therapy Practicum I. Supervised observation of and therapeutic experience with persons who exhibit developmentally delayed disorders. Fall term. Corequisite: MUTY 3211.
1123. Psychiatric Music Therapy Practicum II. Supervised observation of and therapeutic experience with persons who exhibit psychopathological disorders. Fall term. Corequisite: MUTY 3212.
1124. Medical Music Therapy Practicum III. Supervised observation and development of clinical skills with patients in medical settings. Spring term. Corequisite: MUTY 3213.
1125. Gerontological Music Therapy Practicum IV. Supervised observation and development of clinical skills with elderly clients. Spring term. Corequisite: MUTY 3214.
1126. 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.
1127. Psychiatric Music Therapy. A study of music therapy with persons with psychopathological disorders such as schizophrenia, depression and dementia. Fall term. Corequisite: MUTY 3142.
1128. Medical Music Therapy. A study of music therapy with the health impaired, such as burn patients, AIDS patients and obstetric patients. Spring term. Corequisite: MUTY 3143.
1129. Gerontological Music Therapy. A study of music therapy with elderly, gerontological clients. Spring term. Corequisite: MUTY 3144.
1130. Music Therapy Practicum V. Supervised clinical experience in the treatment and health maintenance of clients with clinical disorders.
1131. Music Therapy Practicum VI. Continued supervised clinical experience in the treatment and health maintenance of clients with clinical disorders.
1132. 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 four-month 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. Prerequisites: Before the internship, all course, clinical and preclinical work must be completed in the undergraduate music therapy degree or graduate equivalency program.
1133. Internship II. Second-term continuation of Internship I (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. Prerequisite: Concurrent registration in or completion of MUTY 4144.
1134. Music Psychology: Research, Methods and Materials. A study of research methods in music psychology, therapy and education, with emphasis on research designs, analysis and interpretation of research literature. Spring term.
1135. 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.
1136. Topics in Music Therapy. Exploration of current topics in music therapy, including research, theory, applications and approaches with various special needs populations.. Emphasis on contemporary areas of interest and importance. Summer term. Prerequisite: Permission of instructor.
1137. Seminar in Clinical Music Therapy. Focus on music therapy clinical applications and projects based on student interest, with emphasis on current trends in clinical practice and treatment techniques. May include clinical placement. Summer term. Prerequisite: Permission of instructor.

## Class Instruction for Performance (PERB) Harpsichord (PERB)

3115. Harpsichord: Early Music Workshop. Intensive study of harpsichord and continuous playing for advanced players (the complete harpsichord works of Rameau, chamber music with professional players of period instruments). Beginning harpsichord classes for those keyboard players who wish to explore the harpsichord, its techniques and repertoire. Summer term.
3116. Introduction to the Harpsichord. Designed to present 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. Offered spring term of even-numbered years.
3117. Studies in 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. Offered fall term of even-numbered years.

## Instrumental (PERB)

1103. Modern 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 and popular songs in music therapy, music education and recreational music settings. Fall term.
1104. Modern Acoustic Guitar II. Intermediate steel-string acoustic guitar skills with emphasis on enhanced flat-picking and finger-picking chords, strums, and additional leftand right-hand techniques for accompanying popular, jazz, blues, rock and world music-style songs in music therapy, music education, and recreational music settings. Spring term.
1105. Classic Guitar. Basics of reading music; technique; simple chord progressions as applied to popular music; performance of simple classic guitar pieces.
1106. Classic Guitar. Continued development of technical skills and performance repertoire. Prerequisite: PERB 1203 or equivalent proficiencies.
1107. 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. Fall term.
1108. 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 instructor consent.
1109. Introduction to Jazz Theory and Improvisation. Introduction to jazz improvisation through applied theory. Theoretical and practical experience in jazz improvisation using common jazz chord progressions and chord/scale relationships. Study of jazz recordings designed to explore and understand the link between chords, scales and melodies. Prerequisite: MUTH 1119/1229. Open to music majors, music minors or by consent of instructor.
3016, 3116. Contemporary Music Workshop. Exploration of contemporary music techniques, including improvisation for instrumentalists and vocalists in a workshop setting. Course work includes master classes on contemporary performance techniques and performance of contemporary chamber works in chamber music recitals, in general music recitals, and in workshop presentations.
1110. Master Class in Classic Guitar. Master classes, lectures, discussions and recitals. Summer term.
5011, 5111. Directed Studies in Music Performance. Enrollment for directed studies or approved internships in performance or pedagogy.

## Piano (PERB)

1001. 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.
1002. Piano Sight Reading I. A requirement for first-year, pre-music majors in piano performance. Techniques to improve music reading at the keyboard through supervised practice and reading of various keyboard literature. Fall term.
1003. Piano Sight Reading II. A requirement for first-year, pre-music majors in piano performance. Emphasis on reading skills that are useful in collaborative playing, including exposure to various types of scores and score preparation. Prerequisite: PERB 1011. Spring term.
1131, 1132, 2131, 2132. Class Piano. A four-term sequence required for non-keyboard music majors. Emphasis on sight-reading, technique, harmonization, transposition, improvisation and appropriate literature. Fall and spring terms. Corequisites: MUTH 1229, 1230, 2229, 2230; MUTH 1129, 1130, 2129, 2130. Open to music majors only.
1004. Beginning Class Piano. Designed for students with no previous piano study. Emphasis placed on the development of basic music reading and functional keyboard skills. Open to non-music majors only.
1233, 1234. Advanced Class Piano. A two-term sequence (for keyboard majors or advanced non-keyboard music majors). Emphasis on sight reading, harmonization, transposition, improvisation and technique. Fall and spring terms. Prerequisites: MUTH 1130, 1230.
1005. Elementary 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.
1006. 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. Fall term.
1007. 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. Spring term.

## Voice (PERB)

1206. 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.
1207. Class Voice. A course in singing techniques and interpretive skills, suitable for students with some singing experience but little formal training. Prerequisite: PERB 1206.
1208. 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.
1209. 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.
1210. 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.
1211. 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.
2017, 2117, 5017, 5117. Meadows Opera Workshop. Exploration of operatic styles, role study, basic acting techniques and dramatic analysis. Eligibility by audition for the annual main stage production. Meets concurrently with Meadows Opera Ensemble. Open to all undergraduate and graduate voice majors.
5101, 5201. Directed Studies in Voice.
1212. Advanced Acting for Voice Majors. Scene study, character development, preparing and researching repertoire, sets, props and costumes. Fall term. Not repeatable for credit. Prerequisites: Concurrent enrollment in VOIC, two terms of Opera Workshop or Opera Ensemble completed, and consent of applied teacher.

## Performance Ensembles (PERE) <br> Large Ensembles (PERE)

1012, 1112. Mustang Marching Band. Experience in preparation and performance of music for field performances. May be taken for large-ensemble credit by majors.
1013, 1113. Meadows Chorale. A select mixed ensemble open to all students by audition. Spring term participants in the ensemble will be required to attend an additional 50 -minute rehearsal weekly to prepare for a combined choral-orchestra concert.
1014, 1114. Concert Choir. A choral organization open to all students by audition. Non-music majors are encouraged to participate. Placement hearings will be held at the beginning of each term. Spring term participants in the ensemble will be required to attend an additional 50 -minute rehearsal weekly to prepare for a combined choral-orchestra concert.
1018, 1118. Meadows Symphony Orchestra. The Symphony is a large orchestra that performs major repertoire. Nonmajors who want an orchestral performance experience are invited to audition.
1019, 1119. 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 audition. The Wind Ensemble performs a wide variety of literature that encompasses both the symphonic band and wind orchestra idioms.
1076, 1176. Choral Union. A large mixed ensemble open to students, faculty, staff and the greater SMU community. Repertoire includes major works with orchestra. Does not satisfy the vocal or large-ensemble requirement for voice majors or concentrations. Prerequisite: Permission of instructor.

4050, 4150. Meadows Opera Ensemble. Musical preparation, rehearsal and performance of one-act operas, opera excerpts and/or a complete role. Eligibility, by audition, for the annual main stage production. Dramatic coaching and role study. Meets concurrently with Meadows Opera Workshop. Spring term participants in the ensemble will be required to attend an additional 50-minute rehearsal weekly to prepare for a combined choral-orchestra concert. For Senior Voice Performance and second year Master of Music Voice Performance majors only. Prerequisite: Two terms of Opera Workshop or equivalent previous experience.

## Chamber Ensembles (PERE)

1015, 1115. Meadows Jazz Orchestra. Rehearsal and performance of standard and original works for jazz ensembles. By audition.
3020, 3120. Meadows 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.
3030, 3130. Meadows Guitar Ensemble. Prerequisite: Guitar major or consent of instructor.
3073, 3173. Meadows Percussion Ensemble. Rehearsal and performance of standard percussion ensemble literature. By audition.
3070, 3170. Chamber Ensemble: Woodwinds, Brass, Percussion. Preparation and performance of repertoire for various ensembles of 3-9 mixed instruments, one to a part, without conductor.
3071, 3171. 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 or voice, without conductor.

3072, 3172. Chamber Ensemble: Strings. Preparation and performance of repertoire for various ensembles of 3-9 mixed instruments, one to a part, without conductor.

3074, 3174. Chamber Ensemble: Voice. Preparation and performance of chamber music repertoire that includes a solo singer with a small instrumental ensemble without conductor.

## THEATRE

Professor Cecil O'Neal, Chair
Professors: Rhonda Blair, Kevin Paul Hofeditz, William Lengfelder, Cecil O’Neal, Stan Wojewodski, Steve Woods; Associate Professors: Michael Connolly, Charles Helfert, Russell Parkman, Sara Romersberger, Gretchen Smith, Claudia Stephens; Assistant Professors: Leslie Brott, James Crawford, Jonathan Greenman, Ashley Smith; Lecturers: Brad Cassil, Marsha Grasselli, Giva Taylor; Adjunct Lecturers: Dawn Askew, Jason Biggs, Linda Blase, Steve Leary, Kathy Windrow.

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 course work 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 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.

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 Bachelor of Fine Arts degree in Theatre with a specialization in Theatre Studies, and the Bachelor of Fine Arts degree in Theatre with a specialization in Acting.

When the total number of hours required to satisfy the General Education requirements and the major requirements along with the major's supporting course requirements exceeds 122 term 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.

## 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 our 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 is 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 of Theatre, 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, critical studies or design.

|  | Credit Hours |
| :--- | :---: |
| General Education Curriculum | 35 |
| Division of Theatre |  |
| $\quad$ Dramatic Arts Today (THEA 1303, 1304) | 6 |
| Stage Makeup (THEA 2263) | 2 |
| Running/Construction Crews (THEA 2140, 2141, 2142) | 3 |
| Practicum (THEA 2240, 2241, 2242) | 6 |
| Acting I, II (THEA 2303, 2304) | 6 |


|  | Credit Hours |
| :--- | :---: |
| Voice for the Stage I, II (THEA 2305, 2306) | 6 |
| Movement I, II (THEA 2307, 2308) | 6 |
| Introduction to Stage Management (THEA 2361) | 3 |
| Acting III, IV (THEA 3303, 3304) | 6 |
| Text Analysis (THEA 2322) | 3 |
| Theatre and Drama History I, II (THEA 3381, 3382) | 6 |
| One 12-credit-hour emphasis chosen from: |  |
| $\quad$ Directing, Playwriting, Stage Management, Design or Critical Studies | 12 |
| Theatre Electives | 11 |
| Electives | 9 |
| Meadows Elective/Corequirement | 3 |
| Total | $\mathbf{1 2 3}$ |

## 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.

|  | Credit Hours |
| :--- | :---: |
| General Education Curriculum | 35 |
| Division of Theatre |  |
| Dramatic Arts Today (THEA 1303, 1304) | 6 |
| Stage Makeup (THEA 2263) | 2 |
| Running/Construction Crews (THEA 2140, 2141, 2142) | 3 |
| Practicum (THEA 2240, 2241, 2242) | 6 |
| Acting I, II (THEA 2303, 2304) | 6 |
| Voice for the Stage I, II (THEA 2305, 2306) | 6 |
| Movement I, II (THEA 2307, 2308) | 6 |
| Text Analysis (THEA 2322) | 3 |
| Introduction to Stage Management (THEA 2361) | 3 |
| Acting III, IV (THEA 3303, 3304) | 6 |
| Voice for the Stage III, IV (THEA 3205, 3206) | 4 |
| Movement III, IV (THEA 3207, 3208) | 4 |
| Theatre and Drama History I, II (THEA 3381, 3382) | 6 |
| Acting V, VI (THEA 4303, 4304) | 6 |
| Voice for the Stage V, VI (THEA 4105, 4106) | 2 |
| Movement V, VI (THEA 4207, 4208) | 4 |
| Business and Professional Aspects of the Theatre (THEA 4309) | 3 |
| Electives | 9 |
| Meadows Elective/Corequirement | 3 |
| Total | $\mathbf{1 2 3}$ |

## Bachelor of Fine Arts in Theatre with a Specialization in Design and Technology

The B.F.A. in Theatre with a specialization in Design and Technology is available with an emphasis on the environmental aspects of performance. Design and technology in scenery, costumes, lighting, properties, sound, stage management
and makeup are taught in a series of courses and special projects throughout the four-year curriculum. The flexibility built into the degree requirements allows the student and their advisers to develop individualized programs of study, taking advantage of the variety of offerings in the Meadows School of the Arts. Productions are prepared under the close personal advisement and participation of the production faculty and staff.

The design and technology B.F.A. degree option provides students with a thorough background in theatrical design, construction, related technology and stage management. The specific topics of study include drafting, stagecraft, costume construction, costume pattern drafting, millinery, tailoring, computer imaging, CAD, scenic painting, rendering and advanced technical theatre as well as design courses in costumes, lighting, scenery and sound.

| General Education Curriculum | 35 |
| :--- | ---: |
| Division of Theatre |  |
| Dramatic Arts Today (THEA 1303) | 3 |
| Running/Construction Crews (THEA 2140, 2141, 2142) | 3 |
| Practicum (THEA 2240, 2241, 2242) | 6 |
| Text Analysis (THEA 2322) | 3 |
| Theatre and Drama History (THEA 3381, 3382) | 6 |
| Select 55 term credit hours from the following: | 55 |
| THEA 3313 Introduction to Design for Theatre |  |
| THEA 2319 Fashion: History and Culture |  |
| THEA 3314 Lighting Design: Theatre, Film, TV |  |
| THEA 3316 Scene Design for Theatre, Film, TV |  |
| THEA 3318 Costume Design for Theatre, Film, TV |  |
| THEA 3321 Topics in Design 1: Lighting |  |
| THEA 3322 Topics in Design 2: Designer Relationship |  |
| THEA 3323 Topics in Design 3: Costume |  |
| THEA 3324 Topics in Design 4: Sound |  |
| THEA 2271, 2272, 2273, 2274 Technical Theatre Laboratory |  |
| THEA 2263 Stage Makeup |  |
| THEA 2371 Theatre Technology 1: Lighting Mechanics |  |
| THEA 2372 Theatre Technology 2: Costume Construction Techniques |  |
| THEA 2373 Theatre Technology 3: Stagecraft |  |
| THEA 2374 Theatre Technology 4: Introduction to Theatrical Sound |  |
| THEA 2361 Introduction to Stage Management |  |
| THEA 3361, 3362, 4361, 4362 Stage Management |  |
| THEA 4363 Production Management |  |
| THEA 4491, 4492 Special Project 1, 2 |  |
| THEA 4493, 4494 Summer Theatre Workshop |  |
| Meadows Electives |  |
| Electives |  |
| Total |  |

## Theatre Courses Open to All University Students (THEA)

The following classes are open to all students. Please note: There are no performance opportunities for nonmajors.
1380. Dramatic Arts: 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 ands analyzed.
2319. 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.
2321. Spectacle of Performance. Ever wonder how they do that? Spectacle is part of our life and culture. Students will learn to deconstruct spectacle and analyze its influence upon themselves and society at large. Go backstage to experience firsthand how effects are achieved. Students will be 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.
3311. 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.
3313. 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.
3314. 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.
3316. 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.
3318. 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.
3381, 3382. Theatre and Drama History I and II. An examination of key moments in the history of Western theatre. 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.
4373. Creative Dramatics. Creative problem-solving using the medium of improvisational theatre. Develops spontaneity and a sense of humor. Prerequisite: Permission of instructor.
4381, 4382, 4383, 4384. Studies in Theatre, Drama and Performance. An examination of selected topics in theatre, drama and performance. Texts, topics and critical approaches vary.
4385. Art and Theatre in Fifth-Century Athens. A senior-level, interdisciplinary seminar that examines cultural production through the media of art, architecture, dramaturgy, festival and theatre.

## Courses For Theatre Majors (THEA)

2101, 2201, 2301, 3101, 3201, 3301, 4101, 4201, 4301, 5301. Directed Study. Independent work with theatre faculty on a specific topic chosen by the student.
1303, 1304. 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.
2011, 2012. Production. Rehearsal and performance in a Division of Theatre production. Prerequisite: Permission of instructor.
2140. Lighting 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.
2141. Scenery 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.
2142. 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.
2240. 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.
2241. 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.
2242. 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.
2263. Stage Makeup. Instruction in basic makeup, wig and hair styling, and beard building.
2271, 2272, 2273, 2274. Technical Theatre Laboratory. Various workshops are structured to introduce students to a broad range of technical experience. The subject matter for these workshops may include: properties design and construction, audio design for performing arts, advanced electrics, and design and construction for film and television. Students are expected to provide appropriate materials as needed. May be repeated for up to eight term credit hours.
2303. Acting I. Exploration of the actor's imagination and the nature of acting, embracing training concepts of ease, honesty, sense memory and concentration.
2304. Acting II. 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.
2305, 2306. Voice for the Stage I and II. Connecting text/sound impulses to acting challenges. Also provides an introduction to breath and volume support and vocal exercises.
2307. Movement I. 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 Chíuan and the improvising of mime pieces.
2308. Movement II. Increases students' physical listening skills and practices these in unarmed stage combat. Skills taught include Tíui Shíuo, Chi Sao, foil fencing (left and right), French sabre, Kung-fu animals and conventions of unarmed stage combat. Prerequisite: THEA 2307.
2322. Text Analysis. Teaches skills necessary to read a play as an actor, director, playwright, designer and student of drama. Explores key styles and genres of dramatic literature.
2361. 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.
2371. Theatre Technology I: 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. May be repeated for up to six term credit hours.
2372. Theatre Technology II: Costume Construction Techniques. The course introduces students to basic costume patterning and construction methods. Students 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. May be repeated for up to six term credit hours.
2373. Theatre Technology III: 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. May be repeated for up to six term credit hours.
2374. Theatre Technology IV: 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. May be repeated for up to 6 term credit hours.
3011, 3012. Production. Rehearsal and performance in a Division of Theatre production. Prerequisite: Permission of instructor.
3205, 3206. Voice for the Stage III and IV. Experiences and exercises designed to free and develop the voice of the actor, explorations of speech sounds, text work. Alleviating physical barriers to sound production, beginning to discover a full vocal range of 2-3 octaves. Prerequisites: THEA 2305, 2306.
3207. Movement III. Teaches extension of energy and physical listening skills. Skills taught include quarterstaff, rapier and dagger, court sword and broad sword. Prerequisite: THEA 2308.
3208. Movement IV. 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.
3303. Acting III. 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.
3304. Acting IV. Continuation and extension of THEA 3303, consisting of special projects in characterization studies. Prerequisite: THEA 3303.
3321. 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, 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.
3322. Topics in Design II: 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.
3323. Topics in Design III: 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.
3324. Topics in Design IV: Sound. This course introduces 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 are introduced to, system layout, effects development, source researching and organization. The combined hands-on presentations and class assignments allow students to develop a working knowledge of the sound designer's responsibilities and skills. Students are expected to provide appropriate materials as needed.
3331. Playwriting I. Creative exploration in the development of performance scripts with emphasis on structural vocabularies of story, plot, character development and dramatic action.
3332. Playwriting II. Intermediate techniques of playwriting with emphasis on developing individual style and voice and writing one-act plays. Prerequisite: THEA 3331.
3341. Directing I. An introduction to the practices and methods of directing. Includes study in the work of major directorial innovators. Directing projects required.
3342. Directing II. An intermediate-level course extending the work of THEA 3341. Final projects include the staging of a one-act play. Prerequisite: THEA 3341.
3361, 3362. Stage Management I. Fuller explanation of the methods and techniques of theatrical stage management. Prerequisite: THEA 2361.
4011, 4012. Production. Rehearsal and performance in a Division of Theatre production. Prerequisite: Permission of instructor.
4105. Voice for the Stage V. 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.
4106. Voice for the Stage VI. 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.
4207. Movement V. An exploration of historical movement and dance including selected dances, movements and manners of the 16th through the 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.
4208. Movement VI. Physical self-study explored through mask work including Neutral Mask, the masks of the commedia dellíarte, 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.
4303, 4304. Acting V and VI. An actor's approach to classic texts through scene study, monologues and lecture/demonstration. Emphasis is on Shakespeare and his contemporaries.
4309. Business and Professional Aspects of the Theatre. A preparation for graduating actors that includes compiling résumés, photographs, use of cold readings, monologues and scene work with a variety of scripts for repertory or summer theatre casting.
4331. Playwriting III. Advanced work in the development of performance scripts for the stage with emphasis on full-length works. Prerequisite: THEA 3332.
4332. 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.
4341. Directing III. Advanced project studies in stage direction with emphasis on the interplay between director and other artistic collaborators (playwrights and/or designers). Prerequisite: THEA 3342.
4342. Directing IV. 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. Prerequisite: THEA 4341.
4351. Historical Cultures Within Theatrical Design. Using the elements of design, the course will focus on the exploration of political, social, economic and artistic influences of various artistic cultures in history, and how the designer uses this information to create a theatrical production, film or opera. Junior/senior-level course.
4361, 4362. Stage Management II. Fuller explanation of the methods and techniques of theatrical stage management. Prerequisite: THEA 3361, 3362.
4363. Production Management. This course introduces students to the role of the production manager for live entertainment. Budgeting, scheduling and the business aspects of the manager are discussed.
4491. Special Project I. 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-on leadership experience in either the design or technical area.
4492. Special Project II. 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.

4493, 4494. Summer Theatre Workshop. Students may engage in summer theatre work and gain credit toward degree completion. Approval of enrollment and credit for this class must be obtained from the chair of the Division of Theatre and program head. May be taken twice for up to six term credit hours.

5398, 5399. Production Research and Development. Script analysis, background research, and performance design for the actor, designer, director and dramaturg.

# Lyle School of Engineering General Information 

The Lyle School of Engineering 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 Lyle School of Engineering began one of the first cooperative education programs in the United States, a program that continues to put engineering students to work on real technical projects today.

Included in the Lyle School of Engineering curricula are programs in civil engineering, computer engineering, computer science, electrical engineering, environmental engineering, environmental science, mechanical engineering and management science. In 2000 the Lyle School of Engineering introduced Engineering and Beyond, a variety of programs designed to provide a generous mix 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.

Corporate support for the engineering 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 SMU Engineering is the home of the Research Center for Advanced Manufacturing (RCAM) and the NSF Industry/University Cooperative Research Center for Lasers and Plasmas for Advanced Manufacturing (CLAM). 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. CLAM addresses a number of research and development issues related to laser/plasmaaided manufacturing processes. The Dallas area's national prominence in high technology and research has been beneficial to the Lyle School of Engineering and its students.

## 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. This is known as the Fundamentals of Engineering Examination and 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:

Computer Science and Engineering (CSE)
Electrical Engineering (EE)
Engineering Management, Information and Systems (EMIS)
Environmental and Civil Engineering (ENCE)
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 (ENCE)
Computer Engineering (CSE)
Computer Science (CSE)
Electrical Engineering (EE)
Environmental Engineering (ENCE)
Environmental Science (ENCE)
Management Science (EMIS)
Mechanical Engineering (ME)
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.

Every effort has been made to include in this publication information that, at the time of preparation for printing, most accurately represents SMU within the context in which it was offered. The provisions of this publication are not, however, to be regarded as an irrevocable contract between the student and SMU. The University reserves the right to change or terminate, at any time and without prior notice, any provision or requirement including, but not limited to policies, procedures, charges, academic programs and distance-education courses.

More information on the Lyle School of Engineering and its programs is available at www.engr.smu.edu.

## 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 the course of their study. Students must have obtained junior level class status prior to participating in work experience. Students cannot simultaneously enroll in a fulltime load of course work and participate in a full-time work experience. A "fulltime" 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 will 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 (CSE 5050, EE 5050, EMIS 5050, ENCE 5050, ME 5050).

Upon conclusion of the work assignment, the student must submit a report outlining the activities and duties of the internship within two weeks of the end of the term or at the end of the internship, whichever comes first. 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 satisfactory "S" or unsatisfactory "U" to the Associate Dean for 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 history of the Lyle School of Engineering at SMU demonstrates a commitment to the concept of cooperative education. When the Lyle School of Engineering 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 (Co-op) 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 Lyle School of Engineering undergraduate students participated in Co-op. 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 Co-op 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 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. These are shown below:

| PLAN A | 5 Work Terms |  |  |
| :--- | :--- | :--- | :--- |
|  | 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 |  |


| PLAN B | 4 Work Terms |  |  |
| :--- | :--- | :--- | :--- |
|  | 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 Co-op Program should begin the application process two terms before their anticipated first work term. The application process includes attending a Co-op Orientation (preferably during the first year), receiving interview skills training, learning the job search process, and completing a computerized application. The Co-op Director guides students through each step of the process.

Each applicant receives quality advising from the Co-op 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 Cooperative Education Training 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 admission into the SMU Co-op Program. Transfer students must be admitted and accepted at SMU.

## When to Apply

Many students choose to begin the application process during the first term of their first year. This head start is especially beneficial for students planning to participate in Greek Rush 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/interviewing with companies.


## POLICIES OF THE COOPERATIVE ENGINEERING EDUCATION PROGRAM

Since 1925, SMU's Lyle School of Engineering has created and maintained numerous strong corporate relationships. Many factors contribute to these relationships, including the quality of the academics and research, the advancement of alumni, and SMU's close proximity to high-tech corporations. An SMU Co-op student directly benefits from these relationships.

However, the student bears an obligation to preserve these relationships for future students by following SMU's Lyle School of Engineering Co-op Program Undergraduate Student Agreement. The agreement balances the student's individual needs with the long-term goal of maintaining corporate relationships so that future SMU students will have as many opportunities as possible.

- Students must maintain good standing with SMU and their employer at all times.
- All Co-op Training Jobs must be approved in advance by the SMU Co-op Associate Director.
- Before each work term begins, each undergraduate Co-op student must enroll in the appropriate Co-op course for the term when they work.
- SMU charges no fees or tuition for these courses. Each course is graded as pass/fail by the Co-op Associate Director. The courses do not count toward graduation. The course numbers for each work term are, respectively, SS 1099, SS 2099, SS 3099, SS 4099, SS 5099 and SS 6099.
- Students enroll at SMU each term, including summers, once they begin the Co-op 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 Co-op employer during school terms.
- Co-op students complete all work terms with the same company.
- Once a student accepts a Co-op Training Job, the student may switch jobs within the sponsoring company with the approval of the company.
- Each Co-op student 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 Co-op student accepts responsibility for knowing and following all Co-op regulations of SMU and the participating employer.


## CO-OP CERTIFICATE

Co-op students who plan and complete all originally scheduled Co-op work terms in good standing with the University and the Co-op Office receive a Co-op Program Certificate to coincide with graduation.

For additional information, contact the Co-op Associate Director at 214-7683039 or by e-mail at smucoop@engr.smu.edu.

## Admission

For detailed information regarding Southern Methodist University's admission requirements, regulations and procedures, see the University Admission 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 214-7683041.

## 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.

The usual high-school preparation for entrance into SMU and study in engineering includes the following courses:

| English | 4 units |
| :--- | :--- |
| Mathematics | $4-5$ units |
| Physics, Chemistry, Biology | At least 3 units |
| Social Studies | 2 units |
| Foreign Language | 2 units |
| Computer Programming | 1 unit |

However, a minimum of 15 academic units is required for admission. The courses listed above, with the exception of foreign languages, are recommended but are not required.

Most recently, students admitted to SMU with the intention of majoring in engineering were the most competitive applicants. 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, as outlined above.
2. Rank in the upper third of his or her graduating high school class.
3. Have a minimum SAT composite of 1100 with at least a 600 math score. Equivalent ACT scores 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 2.0 or higher G.P.A. For admission into the civil engineering, computer engineering, electrical engineering, environmental engineering, or
mechanical engineering program, a 2.0 or higher G.P.A. is required in the following five courses: ENGL 1301, ENGL 1302 or equivalent, MATH 1337, MATH 1338 and PHYS 1303. For admission into either the computer science or management science program, a 2.0 or higher G.P.A. is required in the following six courses: ENGL 1301, ENGL 1302 or equivalent, MATH 1337, MATH 1338, CSE 1340 and CSE 1341. If a course is repeated, both grades will be used in computing the G.P.A.

## Admission by Transfer from Another Institution

An undergraduate at a junior college, college or university may apply for admission to 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 SMU's 60-term-hour residency 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 that the following standards of academic performance be met:

1. A passing grade must be received in every course in the prescribed curriculum.
2. An overall G.P.A. of 2.0 or better must be attained in all college and university courses.
3. An overall G.P.A. of 2.0 or better must be attained in all course work attempted at SMU for the degree.
4. An overall G.P.A. of 2.0 or better must be attained in all course work attempted for the degree in the major field of study.
5. A minimum of 122 term hours of credit, including $35-41$ hours in the General Education Curriculum and the requirements for a major in engineering or applied science.

## Residence Requirements

For graduation from the Lyle School of Engineering, 60 term credit hours must be earned in residence, 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 in residence. 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. Course work counting toward a major may not be taken pass/fail. Majors must be officially declared (or changed) through the Office of Undergraduate Studies.

## GENERAL EDUCATION PROGRAM

All SMU undergraduate students have a common college requirement that is designed to assure them of a broad liberal education regardless of how specialized their majors might be. This requirement is designed to help each student learn to reason and think for oneself; become skilled in communicating meaning and in understanding it; understand something about both the social and the natural worlds and one's own place and responsibilities in them; and understand and appreciate human culture and history in their various forms, including religion, philosophy and the arts.

The general education requirements for the Lyle School of Engineering program must follow the requirements of the University. See the General Education Curriculum section of this catalog for more information.

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 (Environmental Science)
Bachelor of Science (Management Science)
Bachelor of Arts (Computer Science)
Engineering work can be classified by function, regardless of the branch it is in, 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, although engineering curricula may be relatively uniform, their 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.

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, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700. 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 disciplines of environmental science and management science.

## DESCRIPTION OF COURSES

Courses offered in the Lyle School of Engineering are identified by a two-, threeor 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:

[^12]
# COMPUTER SCIENCE AND ENGINEERING 

Professor Sukumaran Nair, Chair

Professors: Margaret Dunham, David Matula, Sukumaran Nair, Stephen Szygenda, Mitchell Thornton; Associate Professors: James Dunham, Richard Helgason, Jeff Tian; Assistant Professors: Li Guo Huang, Fatih Kocan, Yuhang Wang; Visiting Assistant Professor: Michael Hahsler; Senior Lecturer: Frank Coyle; Lecturers: Donald Evans, Mark Fontenot; Adjunct Faculty: Jeffrey Alcantara, Abdelhalim Alsharqawi, William Bralick, Ann Broihier, Hakki Çankaya, Christian Christensen, Dennis Frailey, Prasad Golla, Bhanu Kapoor, Kamran Khan, Lun Li, Richmond G. Lewin, Babu Mani, Matt McBride; Lee McFearin, Freeman Moore, Padmaraj MV. Nair, Robert Oshana, John Pfister, Leonid Popokh, Mohamed Rayes, T. Brett Spell, Stephen Stepoway.

The Department of Computer Science and Engineering at SMU offers academic programs in computer engineering and computer science. Faculty specializations include computer architecture, knowledge engineering, software engineering, design and analysis of algorithms, parallel processing, database management, VLSI CAD 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 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:

For graduates with degrees in computer science:
a) An ability to apply knowledge of computing and mathematics to software design and computing problems
b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
c) An ability to design, implement and evaluate a computer-based system, process, component or program to meet desired needs
d) An 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) An 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) Recognition of the need for, and an ability to engage in continuing professional development and life-long learning
i) An 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) An ability to apply knowledge of mathematics, science and engineering to both software and hardware design problems
b) An ability to design and conduct experiments and to analyze and interpret data related to software and hardware design solutions
c) An 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) An ability to function on multi-disciplinary teams using current computer engineering tools and technologies
e) An 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) An 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) Recognition of the need for, and an ability to engage in life-long learning
j) Knowledge of contemporary issues in computer engineering
k) An 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

Bachelor of Science - Major in Computer Science (123/124* Term Credit Hours)
Bachelor of Science - Major in Computer Science with a Premedical Specialization
(129 Term Credit Hours)
Bachelor of Science in Computer Engineering (127 Term Credit Hours)
Bachelor of Arts - Major in Computer Science (122 Term Credit Hours)
(*the B.S. in Computer Science degree in the gaming track requires one additional hour of coursework)
The undergraduate program in computer engineering is accredited by the Engineering Accreditation Commission of ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700. 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 Bachelor of Arts in Music and Bachelor of Arts in Computer Science. Please 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 a $4+1$ 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, contact the Undergraduate Program Director.

## Teaching Certification

The teacher certification program requires 24 hours of course work and six hours of student teaching. Thus 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, please contact the CSE Department.

## Computer Facilities

Students in the Department of Computer Science and Engineering 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. Access to the network is also available via open-area labs containing PCs.

## Curriculum in Computer Science

Computers play an ever-increasing role in our 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 we 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 (CASE) tools and expert systems shells. Assembly languages and operating systems (such as UNIX) for micro-, mini- and mainframe computers 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.

The free electives in the Bachelor of Arts 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 three 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 Game Development track is provided in collaboration with the Guildhall of SMU.


[^13]
## Bachelor of Science with a Major in Computer Science Bioinformatics Track

## Curriculum Requirements:

| Area | Required Courses | Term Credit Hours |
| :--- | :--- | ---: |
| Liberal Studies: | ENGL 1301, 1302 | 6 |
|  | Perspectives | $9-12$ |
|  | Cultural Formations | $3-6$ |
| Mathematics: | MATH 1337, 1338, 3353 | 9 |
|  | CSE 2353 | 3 |
|  | CSE 3365, 4340* | 6 |
|  | (* Students may fulfill the 4340 requirement |  |
|  | by taking any one of CSE/STAT/EMIS 4340, |  |
|  | EMIS 5370, or STAT 5340) |  |
| Science: | PHYS 1105, 1106, 1303, 1304 | 8 |
|  | BIOL 1401, 3304 | 7 |
| Computer Science: | CHEM 1303/1113 | 4 |
|  | CSE 1341, 1342, 2240, 2341, 3381, 3342, 3345, | 41 |
| Bioinformatics track: | 3353, 3330, 4344, 4345, 4346, 4381, 5343, | 42 |
|  | CSE 5335, CSE 5331, BIOL 5305 | 12 |
| Engineering Leadership: | CSE 4360, EMIS 3308, ENCE 3302 |  |
| Wellness: | numbered 5000 or above as approved by adviser. | 9 |

## Bachelor of Science with a Major in Computer Science with Premedical Specialization

Curriculum Requirements:



## Minor in Computer Science

A student majoring in Computer Engineering may not minor in computer science.

## Requirements:

CSE 1341 Principles of Computer Science I
CSE 1342 Programming Concepts
CSE 2341 Principles of Computer Science II
CSE 2353 Discrete Computational Structures

## Elective Courses:

Any six hours of CSE courses numbered 3000 or above as approved by the Computer Science Minor adviser.

## 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.

1331. Introduction to Web Programming. Examines technologies and techniques for building three-tier Web-based applications. Topics include technologies for developing client-tier graphical user interfaces, server-tier technologies for processing client requests and data-tier database technologies for managing and storing both relational and XML data. Issues related to Web security will be studied throughout the course. All students will participate in teambased collaborative projects.
1340. 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.
1341. Principles Of Computer Science I. Introduction to the fundamental concepts of computer science and object-oriented design of reusable modules. The course covers basic object-oriented concepts of composition, inheritance, polymorphism and containers. First course for CS and CpE majors and minors.
1342. Programming Concepts. Introduction to the constructs provided in the $\mathrm{C} / \mathrm{C}++$ 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. Prerequisites: A grade of C - or better in CSE 1341 or equivalent, a grade of at least a 4 on the AP Computer Science exam or departmental consent.
2240. Assembly Language Programming and Machine Organization. Computer-related number systems, machine arithmetic, computer instruction set, low-level programming, addressing modes and internal data representation. Corequisite: A grade of C- or better in 1341.
2337. 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 the 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 or CpE majors or minors. Prerequisite: EMIS 1305 or ME 1305. Prerequisite/Corequisite: SOCI 2377.
2341. Principles of Computer Science II. Emphasizes the object-oriented implementation of data structures, including linked lists, stacks, queues, sets, and binary trees. The course covers object-oriented software engineering strategies and approaches to programming. Prerequisite: A grade of C- or better in CSE 1342 or equivalent.
2353. 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: A grade of C- or better in CSE 1341.
3330. Database Concepts. This course provides coverage of fundamental information management and database systems concepts including file and disk organization, information models and systems, data modeling, relational database design, physical implementation of database systems and query languages for accessing databases systems. As time permits, topics from information privacy and security, information storage and retrieval, data mining and multimedia information systems will be included. Prerequisite: A grade of C- or better in both CSE 2341 and CSE 2353.
3342. 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.
3345. 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.
3353. 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. Prerequisite: A grade of C- or better in both CSE 2341 and CSE 2353.
3358. Data Structures. Representation and organization of data for fast access and computation. Consideration of efficient algorithms for storing and retrieving information using lists, trees, hash tables, etc. Dynamic storage allocation/collection techniques. Fast sorting techniques. Abstract data types (ADT). Implementation of data structures. Prerequisites: A grade of C- or better in CSE 2341. CSE 2353 is strongly recommended. CSE 3358 should be taken the term immediately following CSE 2341.
3365 (MATH 3315). 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.
3381. Digital Logic Design. Boolean Functions. Logic gates. Memory elements. Synchronous and asynchronous circuits. Shift registers and computers. Logic and control. Corequisite: Weekly no-credit lab. Prerequisite: A grade of C- or better in CSE 2353 and CSE 2240.
4051. Gaming Design Project. This course requires students enrolled in HGAM 5391 to produce appropriate reports and other design documentation material resulting from their HGAM 5391 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 5391.
4340 (STAT 4340). 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.
4344. 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, e-mail and World Wide Web (www), introduction to distributed computing, mutual exclusion, linearizability, locks, multithreaded computing. Prerequisites: A grade of C- or better in CSE 2341.
4345. 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. Review of current software engineering literature. Student teams will design and implement small-scale software systems. Class presentations. The course contains a major design experience. Prerequisites: Senior standing and a grade of C- or better in CSE 2341.
4346. Software Engineering Design Project. Project course, with a major design component. Students participate in a multidisciplinary group project team. There will be topical discussions in relation to the project, which include software development life cycle, project team organization, project planning and scheduling, management, testing and validation methods, industrial standards and interfaces, and the importance of lifelong learning. The group project will provide the major design experience for students in the Computer Science program and the Software Engineering track of the Computer Engineering program. Prerequisites: A grade of C- or better in CSE 4345
4347. Networks Design Project. Project course, with a major design component. Students participate in a multidisciplinary group project team. There will be topical discussions in relation to the project, which include network protocols, layered communication architecture,
data communication, data link protocols, internetworking, routing, congestion control, industrial standards and interfaces, and the importance of lifelong learning. The group project will provide the major design experience for students in the Networks track of the Computer Engineering program. Prerequisites: A grade of C- or better in CSE 4344.
4360. Technical Entrepreneurship. Demonstrates the concepts involved in the management and evolution of rapidly growing technical endeavors. Students are expected to participate in active learning by doing, making mistakes and developing solutions, and observing mistakes and approaches made by the other teams. Prerequisites: Junior or senior standing or graduate student.
4381. 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.
4386. Hardware Design Project. Project course, with a major design component. Students participate in a multidisciplinary group project team. There will be topical discussions in relation to 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: C- or better in CSE 4381.
4(1-4)9(0-4). 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.
4(1-3)97. Research Experience for Undergraduates. This course provides research experience for Junior/Senior undergraduate students. Variable Credit from one to three hours is given for this course. Permission from the advising CSE faculty member is required before registration. Prerequisites: Junior/senior standing Computer Science or Computer Engineering major with G.P.A. over 3.0.

## 5050. Undergraduate Internship.

5111. Intellectual Property and Information Technology. This course 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 the Internet, software, databases and digital transmission technologies. The open source and creative commons alternatives for disseminating intellectual property are investigated. We examine the engineer's, scientist's, manager's, and creative artist's professional and ethical responsibilities and opportunities regarding intellectual property. We will also investigate the rapid change in types and uses of intellectual property spawned by computers, digital media, e-commerce and biotechnology.
5112. Fundamentals of Computer Science. A comprehensive foundation course covering the major aspects of computer science. The course will cover hardware and software fundamentals, operating systems concepts, data structures, discrete structures, algorithms and programming languages. The course will also address issues related to software engineering and object-oriented programming. This course is intended to prepare students without a computer science background for the Master's program in Software Engineering at SMU.
5113. Software Testing and Quality Assurance. The relationship of software testing to quality is examined 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, and defining test plans and strategies that map to system requirements. Testing principles, formal models of testing, performance monitoring and measurement also are examined. Prerequisite: It is strongly recommended that students have software engineering experience in industry. C- or better in all previous CSE courses and senior standing.
5114. Software Requirements. 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. nonfunctional requirements and the relationship of requirements to software testing. Prerequisite: C- or better in all previous CSE courses and senior standing.
5115. 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 previous CSE courses and senior standing.
5116. Artificial Intelligence. Introduction to 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: A grade of C- or better in both CSE 3342 and CSE 3353.
5117. 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.
5118. An Introduction to Data Mining and Related Topics. The purpose of this course is to introduce students to various data mining and related concepts. All material covered will be reinforced through hands-on implementation exercises. In this introductory course, a high level applied study of data mining techniques will be used. Prerequisite: A grade of C- or better in CSE 3330.
5119. Introduction to Bioinformatics. This course will give the students an up-to-date introduction to the field of bioinformatics. It will cover a wide variety of bioinformatics topics from a computer science perspective, including algorithms for DNA/protein sequence analysis, protein 3D structural alignment, gene expression microarray analysis, Single Nucleotide Polymorphism (SNP) microarray analysis, proteomics data analysis, proteinprotein interaction data analysis, pathway data analysis, and gene ontology. This course only assumes biology knowledge at the high school level. Some related biological background beyond high school will be included in the lectures. Prerequisites: C- or better in CSE 3353 or equivalent, or by permission of the instructor.
5120. 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. Specific 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. Prerequisite: A grade of C- or better in CSE 5343.
5121. Service-Oriented Computing. Service-oriented computing (SOC) 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.
5122. 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.
5123. 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: A grade of C- or better in CSE 3342 or permission of instructor.
5124. Operating Systems and System 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: A grade of C- or better in both CSE 2240 and CSE 3353.
5125. Computer Networks and Distributed Systems II. Introduction to network protocols, layered communication architecture, multimedia applications and protocols, Quality of Service (QoS), 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: A grade of C- or better in CSE 4344.
5126. Advanced Application Programming. The course will cover advanced programming techniques that span a range of programming languages and technologies. Topics include server-side application development, client GUI implementation, application frameworks, design patterns, model-based development and multi-threading. The specific programming language or languages covered may vary from semester to semester. Prerequisites: CSE 3345 or consent of instructor.
5127. Java Distributed Enterprise Computing. Familiarizes students with issues and techniques surrounding the building of distributed enterprise Java applications. Initial focus will be on exceptions, threads, streams and sockets in support of building Java-based web servers. Building on these basic constructs, the course will explore details of enterprise technology including Java Servlets, Java Server pages (JSP), database connectivity (JDBC), Enterprise Java Beans and J2EE for building tightly-coupled server components. Prerequisite: CSE 5345 or equivalent.
5128. 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 SML data; XSLT to transform XML; XML protocols for distributed computing and XML security initiatives. Students will come away with broad understanding of XML and the technical issues and tradeoffs among different alternatives for processing XML. Prerequisite: An understanding of objectoriented concepts; familiarity with Java and/or C++.
5129. Internetworking Protocols and Programming. Processing and Interprocess Communications (IPC), 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, internetworking over new networking technologies. Prerequisites: A grade of C- or better in both CSE 4344 and CSE 5343 and C programming.
5130. Data and Network Security. Covers conventional as well as state-of-the-art methods in achieving data and network security. Private key and public key encryption approaches will be discussed in detail with coverage on popular algorithms such as DES, Blowfish and RSA. In the network security area, the course will cover authentication protocols, IP security, Web security and system level security. Prerequisite: C- or better in CSE 4344.
5131. 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.
5356 (EE 5356). VLSI Design and Lab. Laboratory-oriented course for senior and Master'slevel graduate students will cover an overview of IC circuit design and fabrication process, basic design rule, and layout techniques. Emphasis will be on digital design. CMOS and NMOS technology will be covered. Each student must complete one or more design projects by the end of the first term. Prerequisites: EE 2181 (Grade of C- or better), EE 2381 (Grade of C- or better) and EE 3311.
5132. 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 application network layer, issues related to encryption, validation and authentication are handled programmatically rather that at the network level. Students will work with APIs for cryptography, digital signatures and third party certificate authorities. The course will also explore 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++.
5133. Introduction to 3D Animation. An introduction to computer graphics with an emphasis on the popular software package Maya. Includes focus on the user interface, creation of 3D geometry using polygonal techniques, materials and textures, kinematics, animation and camera and lighting techniques. This course explores the various aspects and fundamentals of computer graphics. Students should gain a core understanding of the workflow necessary to create 3D imagery. Assignments require students to combine a variety of techniques to become familiar with the computer animation production process. Prerequisite: Junior standing or higher. Course may not be used for credit in a graduate degree program in CSE without adviser's approval.
5376 (EETS 5301). 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.
5134. VLSI Algorithms. Introduction to 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. Additional focus on constraints for the design for field programmable gate arrays (FPGA's) throughout the course. Prerequisites: C- or better in CSE 3381 and C- or better in CSE 3353.
5135. Computer Architecture I. Introduces students to the state of the art in uniprocessor computer architecture. The focus is on the quantitative analysis and cost-performance tradeoffs in instruction-set, pipeline and memory design. Topics covered: quantitative analysis of performance and hardware costs, formal specification, instruction set design, pipeline, delayed branch, memory organization and advanced instruction-level parallelism. Prerequisite: A grade of C- or better in CSE 4381.
5136. Computer Graphics. Hardware and software components of computer graphics systems: display files, two-dimensional and three-dimensional transformations, clipping and windowing, perspective, hidden-line elimination and shaping, interactive graphics and applications. Prerequisite: A grade of C- or better in CSE 3353.
5137. Microprocessor Architecture and Interfacing. Emphasizes the design and interfacing of microprocessor computer systems. Topics covered: 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. Prerequisites: A grade of C- or better in CSE 3381 or a grade of C- or better in EE 3381.
5387 (EE 5387). 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 EE 2381.
$\mathbf{5 ( 1 - 4 ) 9 ( 0 - 4 ) . ~ S p e c i a l ~ T o p i c s . ~ I n d i v i d u a l ~ o r ~ g r o u p ~ s t u d y ~ o f ~ s e l e c t e d ~ t o p i c s ~ i n ~ c o m p u t e r ~ s c i - ~}$ ence. Variable credit from one to four term hours. Written permission of the supervising faculty member is required before registration.

## ELECTRICAL ENGINEERING

Associate Professor Marc P. Christensen, Chair

Professors: Jerome K. Butler, Delores M. Etter, Gary A. Evans, W. Milton Gosney, Alireza Khotanzad, Geoffrey Orsak, Panos E. Papamichalis, Behrouz Peikari; Associate Professors: Marc P. Christensen, Carlos E. Davila, Scott C. Douglas, James G. Dunham, Choon S. Lee, Sukumaran Nair, Dinesh Rajan, Mitchell A. Thornton; Assistant Professor: Ping Gui; Adjunct Professor: Richard Levine; Adjunct Associate Professors: Hossam Hímimy, Clark Kinnaird, Gordon Sohl; Adjunct Assistant Professors: Joseph Cleveland, Ahmed Hímimy, Shantanu Kangude, Nhut Nguyen; Emeritus Professors: Kenneth L. Ashley, Robert R. Fossum, Someshwar C. Gupta, Lorn L. Howard, Mandyam D. Srinath; Senior Lecturer: H. Charles Baker.

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 we 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:

Through quality instruction and scholarly research, 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:

- 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 an 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:

- 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 undergraduate program outcomes as related to the above educational objectives are as follows:

All graduates of the electrical engineering program are expected to have:
a) An ability to apply knowledge of mathematics, science and engineering
b) An ability to design and conduct experiments, as well as to analyze and interpret data
c) An 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) An ability to function on multidisciplinary teams
e) An ability to identify, formulate and solve engineering problems
f) An understanding of professional and ethical responsibility
g) An 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) A recognition of the need for, and an ability to engage in life-long learning
j) A knowledge of contemporary issues
k) An 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, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone (410) 347-7700.

The SMU 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 wave guides, 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, VLSI 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 super-conductor-semiconductor devices, ultrafast electronics and applications of 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 over 40 servers whose purposes include the following: file service, UNIX mail, Exchange mail, firewall, UNIX authentication, NT authentication, printer management, lab image download, classroomspecific software, X windows service, news, domain name service, computational resources and general use. This allows the 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 Engineering 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:
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 a T-Tech milling machine and a photolithic/chemical etching method is used to make more complex and large antennas. Fabricated antennas are characterized with an HP 5810B network analyzer. Workstations are available for antenna design and theoretical computation. Radiation characteristics are measured at the UTD (University of Texas at Dallas) - SMU Antenna Characterization Lab near the UTD campus.

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 measured with a Physical Acoustics apparatus consisting of a water tank, RF pulser/receiver and RF data acquisition system. Several PC's are also available for instrumentation control and data acquisition.

Digital Signal Processing Laboratory. Digital signal processors (DSPs) are programmable semiconductor devices that are used extensively in cellular telephones, high-density disk drives and high-speed modems. Courses in this laboratory focus on programming the Texas Instruments TMS320C55, a fixed-point processor, with emphasis on assembly language programming. Topics include implementation of FIR and IIR filters, the FFT and a real-time spectrum analyzer.

Networks Laboratory. This laboratory provides the opportunity to simulate and evaluate different network configurations from local area networks to the Internet. High-end PCs are configured with OPNET and mathematics software to model telecommunications networks and study their performance. The Networks Laboratory is used for instruction in conjunction with several networking courses offered in the department.

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 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 systemlevel 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.

High-speed Wireless Communications Laboratory. The laboratory provides a multitier network testbed for research purposes and also serves as a facility for conducting lab courses on wireless communications and networking. The infrastructure in the lab includes: a) GSM-based cellular network that provides wide
range connectivity at medium data rates, b) 802.11-based WLAN offering high data rates in an office environment, and c) Bluetooth networks that offers low cost, short range and low data rate connections. One of the research focus areas is on investigating total power efficiency of these heterogeneous networks.

Semiconductor Processing Clean Room. The 2,800 square-foot, class 10,000 clean room, 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, a scanning electron microscope, 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 plasmaenhanced chemical vapor deposition reactor, a diffusion-pumped four pocket e-beam evaporator, an ellipsometer, and a profilometer. Other equipment includes a boron-trichloride reactive ion etcher, a chemical-assisted ion-beam etcher, and an e-beam evaporator for dielectric deposition. The clean room is capable of processing silicon and compound semiconductors for microelectronic, photonic, nanotechnology devices.

Submicron Grating Laboratory. This laboratory is dedicated to holographic grating fabrication and has the capability of sub tenth-micron lines and spaces. Equipment 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, gratingoutcoupled and photonic crystal semiconductor lasers.

Photonic Devices Laboratory. This laboratory is dedicated to characterizing the optical and electrical properties of photonic devices. Equipment includes 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. 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 optomechanical 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 compliment of optical and opto-mechanical components and mounting devices. In addition, the laboratory has extensive data acquisition and analysis equipment, including a 1394 (Firewire) capable image capture and processing workstation, specifically designed
to evaluate the electrical and optical characteristics of smart pixel devices and FSOI 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. The areas available include the following:

Biomedical Specialization
Computer Engineering Specialization
Engineering Leadership Specialization
Mathematics Dual Degree Specialization
Physics Dual Degree Specialization

## Bachelor of Science in Electrical Engineering

The electrical engineering curriculum is administered by the Department of Electrical Engineering.

The term credit hours within this curriculum are distributed as follows:

| Term Credit Hours |  |  |
| :---: | :---: | :---: |
| College Requirements: | ENGL 1301, 1302, Perspectives including |  |
|  | ECO 1311, Cultural Formations, and Wellness | 23 |
| Mathematics: | MATH 1337, 1338, 2339, 2343 and a three-hour elective course at the 3000 or above level | 15 |
| Science: | CHEM 1303; PHYS 1303, PHYS 1304, PHYS 1105 or PHYS 1106; and a three-hour elective in physics (PHYS 3305, PHYS 3344 or PHYS 3374) or |  |
|  | CHEM 1304 | 13 |
| Computer Science: | CSE 1341 and 1342 | 6 |
| Engineering Leadership: | One of EMIS 3308, ENCE 3302, EMIS 3309 or CSE 4360 | 3 |
| Engineering Elective: | One of ME 2310, 2320, 2331, 2342, CSE 2341, 2353, EMIS 2360, or any 5000 level EE course approved by the student's adviser | 3 |
| Core Electrical |  |  |
| Engineering: | EE 1322, 1382, 2122, 2170, 2181, 2322, 2350, 2370, 2381 and 3360 | 24 |
| Junior Electrical |  |  |
| Engineering Courses: | EE 3122, 3181, 3322, 3381, 3311, 3330 and 3372 | 17 |
| Advanced Electrical |  |  |
| Engineering Electives: |  | 15 |
| Electrical Engineering |  |  |
| Senior Design Sequence: | EE 4311 and 4312 | 6 |
| Minimum total hours required |  | 125 |

Three hours of advanced electrical engineering electives must be selected in each of the three areas listed below:

EE 5360, 5362, 5370, 5371, 5372, 5373, 5374, 5375; and 5376
EE 5356, 5357, 5381, 5385 and 5387;
EE 5310, 5312, 5314, 5321, 5330, 5332 and 5333.
The remaining six hours of advanced electrical engineering electives may be chosen from any of the above three areas or advanced (5000-level) CSE courses offered by the CSE Department with the approval of the student's adviser. Please note that 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 this is desired. This should be done as soon as possible; however, for many students, it is a process that continues from term to term as the individual becomes better acquainted with the discipline of electrical engineering and with the choices available.

Specializations are offered in five important areas: premedical or biomedical engineering, computer engineering, a dual degree in physics, a dual degree In mathematics and engineering leadership. Each student may select one of these specializations or may personalize his or her degree by a particular choice of advanced major electives.

## 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.

The term credit hours within this curriculum are distributed as follows:
Term Credit Hours

| Term Credit Hours |  |  |
| :---: | :---: | :---: |
| College Requirements: | ENGL 1301, 1302, Perspectives including |  |
|  | ECO 1311, Cultural Formations, and Wellness | 23 |
| Mathematics: | MATH 1337, 1338, 2339, 2343 and a three-hour elective course at the 3000 level or above | 15 |
| Science: | BIOL 1401, 1402, 3304 and 3350; CHEM 1303, $1304,1113,1114,3117,3118,3371$ and 3372 ; and PHYS 1105, 1106, 1303 and 1304 | 38 |
| Computer Science: | CSE 1341 or CSE 1342 | 3 |
| Core Electrical |  |  |
| Engineering: | EE 1322, 1382, 2122, 2170, 2181, 2322, 2350, 2370, 2381, 3181, 3360, 3372 and 3381 | 31 |
| Junior Electrical |  |  |
| Engineering: | Two courses from EE 3311, EE 3122/3322 or EE 3330 | 6 |
| Advanced Electrical |  |  |
| Engineering Elective: | Any EE 5000 level course approved by the student's adviser | 3 |
| Biomedical Engineering: | EE 5340 and 5345 | 6 |
| Electrical Engineering |  |  |
| Senior Design Sequence: | EE 4311, 4312 | 6 |
| Minimum total hours requid | uired | 131 |

## Bachelor of Science in Electrical Engineering (Computer Engineering Specialization)

The Department of Electrical Engineering offers a B.S.E.E. degree with a computer engineering specialization, which brings together aspects of electrical engineering and computer science with the aim of developing state-of-the-art digital computer systems. Students in the Computer Engineering specialization receive training in a variety of areas ranging from C programming, assembly language and data structures, to logic design, microprocessor interfacing and computer architecture.

The term credit hours within this curriculum are distributed as follows:
Term Credit Hours

| College Requirements: | ENGL 1301, 1302, Perspectives including |  |
| :---: | :---: | :---: |
|  | ECO 1311, Cultural Formations, and Wellness | 23 |
| Mathematics: | MATH 1337, 1338, 2339, 2343 and one of |  |
|  | MATH 3315/CSE 3365, MATH 3337 or 3353 | 15 |
| Science: | CHEM 1303, PHYS 1303, PHYS 1304, and |  |
|  | PHYS 1105 or PHYS 1106 plus one three-hour elective chosen from CHEM 1304, PHYS 3305, PHYS 3344 and PHYS 3374 | 13 |
| Computer Science: | CSE 1341, 1342, 2341, 2353 and 3353 | 15 |
| Core Electrical | EE 1322, 1382, 2122, 2170, 2181, 2322, 2350, |  |
| Engineering: | 2370, 2381 and 3360 | 24 |
| Junior Electrical |  |  |
| Engineering Courses: | EE 3122, 3181, 3311, 3322, 3330, 3372 and 3381 | 17 |
| Advanced Electrical |  |  |
| Engineering Electives: | EE 5381, 5385 and two of EE 5357, EE 5387 |  |
|  | or CSE 5343 | 12 |
| Senior Design Sequence: | EE 4311 and 4312 | 6 |
| Minimum total hours req | ired | 125 |

## Bachelor of Science in Electrical Engineering (Engineering Leadership Specialization)

This specialization prepares graduates to be highly-educated engineers with the appropriate interdisciplinary knowledge to assume important management and leadership positions and to become technical entrepreneurs in a globally competitive world.

The term credit hours within this curriculum are distributed as follows:

|  | Term Credit Ho |  |
| :--- | :--- | ---: |
| College Requirements: | ENGL 1301, 1302, Perspectives including |  |
| Mathematics: | ECO 1311, Cultural Formations, and Wellness <br> MATH 1337, 1338, 2339, 2343 and a three-hour <br> elective course at the 3000 or above level | 23 |
| Science: | CHEM 1303; PHYS 1303, PHYS 1304 and <br> PHYS 1105 or PHYS 1106; and one three-hour <br> elective chosen from CHEM 1304, PHYS 3305, | 15 |
|  | PHYS 3344 or PHYS 3374 | 13 |
| Computer Science: | CSE 1341 and 1342 |  |


| Core Electrical | EE 1322, 1382, 2122, 2170, 2181, 2322, 2350, 2370, |
| :--- | :--- | ---: |
| Engineering: | 2381 and 3360 |$\quad 24$

Three hours of advanced electrical engineering electives must be selected in each of the three areas listed below:

EE 5360, 5362, 5370, 5371, 5372, 5373, 5374, 5375; and 5376
EE 5356, 5357, 5381, 5385 and 5387;
EE 5310, 5312, 5314, 5321, 5330, 5332 and 5333.

## 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 Bachelor of Science in Electrical Engineering (B.S.E.E.) degree and a Bachelor of Science (B.S.) degree with major in Mathematics. The term credit hours within this curriculum are distributed as follows:


## 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 Bachelor of Science in Electrical Engineering (B.S.E.E.) degree and a Bachelor of Science (B.S.) degree with a major in Physics.

The term credit hours within this curriculum are distributed as follows:


## Minor in Electrical Engineering

For information on a minor in electrical engineering, the student should consult the department. A total of 18 TCH in electrical engineering courses is necessary to meet the following requirements:

## Requirements

EE 2322 Electronic Circuits I
EE 3322 Electronic Circuits II
ee 2350 Circuit Analysis I
EE 2370 Design and Analysis of Signals and Systems

## Elective Courses

Six TCH of electrical engineering courses at the 3000 level or above

## The Courses (EE)

The third digit in a course number designator is representative of the subject area represented by 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 EETS XXOX Telecommunications

1301. 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 television. Meets the Science/Technology laboratory course requirement of the General Education Curriculum. The course is designed for non-technical students who want to be more knowledgeable. (Not open to EE majors.)
1302. Survey of Electrical and Electronic Devices. This course offers beginning electrical engineering students an introduction to contemporary electrical and electronic devices including transformers, alternators, generators, motors, relays, loudspeakers, vacuum tubes, transistors, light-emitting diodes, photodetectors and integrated circuits. Students learn how these devices are used in contemporary products. They also will 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 would be helpful.
1303. 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.
1304. 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. Prerequisite: EE 2350 (Grade of C- or better). Concurrent registration in EE 2322.
1305. 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, continuous-time 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. Concurrent registration in EE 2370.
1306. EE 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 a Digi-Designer kit and integrated circuits. Corequisite: Concurrent registration in EE 2381.
1307. 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.
1308. 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. Concurrent registration in PHYS 1304 and MATH 2343.
1309. 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 audio signals. Prerequisites: EE 2350 (Grade of C- or better) and MATH 2343. Concurrent registration in EE 2170.
1310. Digital Computer Logic. Digital computers and information; combinational logic circuits; combinational logic design; sequential circuits including finite-state machines; registers and counters; memory and programmed logic design. Design and simulation of digital computer logic circuits are studied. Concurrent registration in EE 2181.

## 3(1-3)90. Junior Project.

3122. EE Laboratory: Electronic Circuits II. Experiments in analog electronic circuit design. Prerequisite: EE 2122 (Grade of C- or better) and EE 2322 (Grade of C- or better). Concurrent registration in EE 3322.
3123. EE Laboratory: Microprocessors. Fundamentals of microprocessor design and assembly-language programming. An introduction to the HCS12 Freescale processors, Codewarrior Assembler, microprocessor-based system design, assembly programming, and hardware interfacing. Prerequisite: EE 2181 (Grade of C- or better) and EE 2381 (Grade of C- or better). Concurrent registration in EE 3381.
3124. 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, lightemitting diodes, semiconductor lasers and other photonic devices. Additional lectures will discuss the basics of device processing which include photolithography, oxidation, diffusion, ion-implantation, metallization and etching. Laboratory reports describing the fabrication and testing of devices will account for a major portion of the course grade. Prerequisites: EE 2350 (Grade of C- or better) and CHEM 1303.
3125. 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, switchedcapacitor 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.
3126. 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 capacitance and inductance. Introduction to time-varying fields, plane waves and transmission lines. Prerequisites: EE 2350 (Grade of C- or better) and MATH 2339 or permission of the instructor.
3127. 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: EE 2370 (Grade of C- or better) and EE 2170 (Grade of C- or better).
3128. Introduction to Digital Signal Processing. This course is designed to give juniors a thorough understanding of techniques needed for the analysis of discrete-time signals. Topics include Fourier methods and Z-Transform techniques, discrete Fourier transform, fast Fourier transform and applications, and digital filters. Prerequisite: EE 2370 (Grade of C- or better) and EE 2170 (Grade of C- or better).
3129. Microprocessors. An introduction to microprocessors and microcomputers. The Freescale HCS12 processors are used to introduce architecture, software and interfacing concepts. Topics include number systems and arithmetic operations for computers, assembly language programming, microprocessor organization and operation, memory and I/O port interfacing, and microprocessor-based controller design. Students will write, assemble and execute microprocessor programs. Prerequisite: EE 2381 (Grade of C-or better). Concurrent registration in EE 3181.
4(1-3)90. Senior Project.
3130. Senior Design I. Areas covered in this course will be tailored to the student's area of specialization. The design project segment of this course involves choosing 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 will design, construct, and test a solution and submit a formal report to the faculty in charge of the project. Prerequisite: EE Senior standing.
3131. Senior Design II. Areas covered in this course will be tailored to the student's area of specialization. The design project selected in this course 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 will design, construct and test a solution and submit a formal report to the faculty in charge of the project. Prerequisite: EE 4311.

## 5050. Undergraduate Industrial Internship.

5(1-3)9(0-9). 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 one to three. The last digit ranges from zero to nine and represents courses with different topics.
5176. Network Simulation Lab. 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. Senior standing.
5310. Introduction to Semiconductors. A study of the basic principles in physics and chemistry of semiconductors that have direct applications on device operation and fabrication. 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 transistors, field-effect transistors and integrated circuits. The emphasis will be on obtaining the governing equations of device operation based on physical principles. Prerequisites: EE 3311 or equivalent, graduate standing or permission of the instructor.
5312. Semiconductor Processing Laboratory. This is a laboratory-oriented elective course for upper-level undergraduates and graduate students providing in depth coverage of processing of InP and GaAs compounds 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, ionimplantation, metalization 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. Prerequisites: EE3311 or equivalent, graduate standing or permission of the instructor. EE 5310 is recommended but not required.
5314. Introduction to Micromechanical Systems (MEMS) and Devices. 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 film technologies as they apply to MEMS. Prerequisite: EE 3311.
5321. 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.
5330. 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.
5332. 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.
5333. Antennas and Radiowave Propagation for Personal Communications. Concerned with three important aspects of telecommunications: fixed site antennas, radiowave propagation and small antennas proximate to the body. The topics include electromagnetics fundamentals; general definitions of antenna characteristics; electromagnetic theorems for antenna applications; various antennas for cellular communications including loop, dipole, and patch antennas; wave propagation characteristics as in earth-satellite communications, radio test sites, urban and suburban paths, and multipath propagation; and radio communication systems. Prerequisite: EE 3330.
5336. 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.
5340. Biomedical Instrumentation. Application of engineering principles to solving problems encountered in medicine and biomedical research. Topics include transducer principles, electrophysiology, and cardiopulmonary measurement systems. Prerequisite: EE 2122 (Grade of C- or better) and EE 2322 (Grade of C- or better).
5345. Medical Signal Analysis. A look at the analysis of discrete-time medical signals and images. Topics include the design 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.
5356 (CSE 5356). VLSI Design and Lab. Laboratory-oriented course for senior and Master'slevel graduate students will cover an overview of IC circuit design and fabrication process, basic design rule, and layout techniques. Emphasis will be on digital design. CMOS and NMOS technology will be covered. Each student must complete one or more design projects by the end of the first term. Prerequisites: EE 2181 (Grade of C- or better), EE 2381 (Grade of C- or better) and EE 3311.
5357. CAE Tools for Structured Digital Design. 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: EE 2181 (Grade of C- or better) and EE 2381 (Grade of C- or better).
5360. 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.
5362 (ME 5302). Linear Systems Analysis. State-space representation of continuous and
discrete-time systems, controllability, observability, and minimal representations; linearstate variable feedback, observers, and quadratic regulator theory. Prerequisite: EE 3372.
5370. 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 or equivalent.
5371. 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 impulseinvariant 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.
5372. Topics in Digital Signal Processing. This course is intended to provide 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.
5373. 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 TMS320C55, 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.
5374. 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.
5375. 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.
5376. Introduction to Communication Networks. 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. Prerequisite: Senior standing and concurrent registration in EE 5176.
5377. Wireless Communications and Lab. This course exposes students to a wide variety of real-world experiences in wireless communications. Basic concepts of channel coding, modulation and power control will be studied using specific examples from cellular and wireless LAN systems. Diversity and multiple access aspects of these systems will also be covered. Lab experiments include: i) Study of signaling modes and transmission schemes in GSM and characterizing the performance, ii) Understanding the basic anatomy of a voice call in GSM, iii) Data throughput student in IEEE 802.11 based wireless LANs and iv) Device discovery, topology management and data transfer in Bluetooth networks. Prerequisite: EE 3360 or equivalent.
5381. Digital Computer Design. Emphasizes design of digital systems and register transfer. Design conventions, addressing modes, interrupts, input-output, channel organization, highspeed 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. Prerequisite: EE 2181 (Grade of C- or better) and EE 2381 (Grade of C - or better). Junior standing.
5385. Microprocessors in Digital Design. Intended to help prepare the digital design engineer for utilization of microprocessors as programmable logic components in digital systems design. Topics include: fundamentals of both hardware and software engineering and their interrelationship with the microprocessor; capabilities and limitations of the Freescale 32 bit microprocessor family; use of hardware/software development systems; assembly language programming for Coldfire; input-output interfacing; and concepts involved in real-time applications. Also, features of similar processors will be covered. Each student will complete one or more laboratory projects by the end of the course. Prerequisites: EE 3181 (Grade of C- or better) and EE 3381 (Grade of C- or better).
5387 (CSE 5387). 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) in CSE 3381 (Grade of C- or better).

## Telecommunication Courses (EETS)

5301 (CSE 5376). 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. Prerequisite: Junior standing.
5302. Telecommunications Management and Regulation. The managerial sequel to EETS 5301 (Introduction to Telecommunications.) 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).
5303. Fiber Optic Telecommunications. Introductory course designed to familiarize students with practical concepts involved in optical fiber communications systems. Basic optical principles are reviewed. Dielectric slab-waveguides, fiber waveguides, and integrated optics devices are discussed. The major components of a fiber communications link, including optical sources, detectors, and fibers, are covered. Prerequisite: Junior standing.
5304. Internet Protocols. This course is an introductory course on 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 advance networking courses. The first part of the course covers networking technologies such as Local Area Networks, packet switching and ATM. The second part of this course examines the Internet protocol (IP) and TCP/UDP in depth. The last part of the course is an overview of important application protocols such as HTTP, client/server computing, SMTP, FTP and SNMP. Prerequisite: EETS 5301 (formerly EE 5301) or equivalent.

# ENGINEERING MANAGEMENT, INFORMATION AND SYSTEMS 

Associate Professor Richard S. Barr, Chair

[^14]The Department of Engineering Management, Information and Systems (EMIS) 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, telecommunications network design and management, supply-chain systems, systems engineering, logistics, quality control, reliability engineering, 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, the discipline of applying advanced analytical methods to help make better decisions.

## Curriculum in Management Science

Management science - also termed the Science of Better - is the discipline of applying advanced analytical methods to help make better decisions. Management science deals with the development of mathematically-based models for planning, managing, operating and decision-making. In our 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 scheduling of flights, routing of planes, assignment of pilots and crews to specific flights, and flight gate assignments as well as deciding the best number of planes to own and operate, which cities to fly to, which cities to use as major hubs, how to lay out an airport terminal, which overbooking policy should be used, where to refuel aircraft and other related issues. 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 both industry and government, and SMU's Management Science program prepares the technically-oriented student to excel in today's competitive business environment.

ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700, does not provide accreditation for the discipline of management science.


Note: All Management Science majors must receive a grade of at least $C$ - in all EMIS courses taken in fulfillment of the requirements for the major.

## Example Program

The following is a typical schedule of classes for a Management Science major and takes into account course prerequisites and standard terms that individual classes are offered. Alternative schedules are possible and can be designed in consultation with the EMIS undergraduate adviser.

First year:

| Fall | Spring |
| :--- | :--- |
| MATH 1337 | MATH 1338 |
| ENGL 1301 | ENGL 1302 |
| EMIS 1360 | ECO 1312 |
| ECO 1311 | CSE 1341 |
| Perspective | Natural Science (Group 1) |
| Wellness | Wellness |

## Second year:

| Fall | Spring |
| :--- | :--- |
| EMIS 2360 | ACCT 2301 |
| CSE 1342 | Science/Tech (Group 3) |
| Science/Tech (Group 2) | Math 3315 |
| Perspective | Perspective |
| MATH 3353 | Cultural Formations |
| Third year: |  |
| Fall | Spring |
| EMIS 3360 | EMIS 3309 |
| EMIS 3308 | ENCE 3302 |
| STAT 4340 | Cultural Formations |
| Perspective | Perspective |
| Science (Group 3) | Elective |
| Fourth year: |  |
| Fall | Spring |
| EMIS 5362 | EMIS 4395 |
| CSE 4360 | EMIS 53XX |
| MKTG 3340 | MNO 3370 |
| Elective | Elective |
| Elective | Elective |
|  | Minor in Management Science |

For information on a minor in Management Science, the student should consult the department. A total of 18 TCH in management and computer science courses is necessary to meet the following requirements:
EMIS 1360 Introduction to Management Science
EMIS 2360 Engineering Economy
EMIS 3360 Operations Research
EMIS 5362 Production Systems Engineering
CSE 1341 Introduction to Computing Concepts
Plus one (1) of the following:
EMIS 4340 Statistical Methods for Engineers and Applied Scientists
EMIS 5370 Probability and Statistics for Scientists and Engineers
EMIS 4395 Senior Design

## Dual Degree Programs and the 4+1 Program

Because of the flexibility of the curriculum, a 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, major in management science, plus 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 can be found on the EMIS Department web site: engr.smu.edu/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- andLinux-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.

## The Courses (EMIS)

1305. 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 two-hour laboratory sessions reinforce the concepts learned in lecture, including a survey of word processing, spreadsheet, database management, presentation and network software. Credit is not allowed for a computer science, computer engineering or management science major or minor. Credit is not allowed for both EMIS 1305 and EMIS 1307.
1306. Information Technology in Business. Today, computer literacy is essential to a career in any field, but nowhere is it more crucial than in the business field. This course focuses on the use of information technology in business. This course will explain the computer system, and the relationship of its parts to each other. It will define the terms used by technologists, and instill an appreciation for the effect of information technology on our lives and livelihood. The lab component of the course introduces the student to major productivity software packages, provides the fundamental knowledge that is a requirement for a business major, and allows the student to explore the benefits that technology can bring. No credit for EMIS major or minor. Credit is not allowed for both EMIS 1305 and 1307.
1307. Introduction to Management Science. Management science is the application of mathematical modeling and scientific principles to solve problems and improve life in society. This introductory class shows how to develop plans, manage operations and solve problems encountered in business and government today. Prerequisite: Knowledge of college-level algebra.
1308. 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 is not allowed for both EMIS 2360 and EMIS 8361.) Prerequisite: C- or better in MATH 1337. (Must enroll in lab.)
1309. 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.
1310. Engineering Management. Examines planning, financial analysis, organizational structures, management of the corporation (including its products, services and people), transfer of ideas to the marketplace, ethics and leadership skills. Prerequisite: Junior standing.
1311. Information Engineering and Global Perspectives. Examines global and information aspects of technology- and information-based companies. Prerequisite: Junior standing.
1312. Operations Research. A survey of models and methods of operations research. Deterministic and stochastic models in a variety of areas will be covered. (Credit is not allowed for both EMIS 3360 and EMIS 8360.) Prerequisite: EMIS 1360. (Must enroll in lab.)

4340 (STAT 4340). 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, estimations and simple tests of hypothesis. Prerequisite: C- or better in MATH 1338.

4(1-4)9(0-4). 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.
4395. Senior Design. A large project involving the design of a management system. Will include model building, data collection and analysis, and evaluation of alternatives. 3 TCH Design. Prerequisites: C- or better in EMIS 5362 and senior standing.

## 5050. Undergraduate Internship Program.

5300. 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.
5301. 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.
5302. Integrated Risk Management. An introduction to 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. Integrated risk management methods, procedures and tools will be examined.
5303. 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 or equivalent.
5304. 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.
5305. Systems Engineering Design. An introduction to system design of complex hardware and software systems. Specific 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 will center on the development of real-world examples.
5306. Systems Architecture Development. A design-based methodological approach to system architecture development using emerging and current enterprise architecture frameworks. Topics: structured analysis and object-oriented analysis and design approaches;
enterprise architecture frameworks, including the Zachman framework, FEAF, DoDAF, and ANSI/IEEE-1471; executable architecture model approaches as tools for system-level performance evaluation and trade-off analyses; case studies in enterprise architecture development; and the integration of architecture design processes into the larger engineering-of-systems environment. Prerequisite: EMIS 5301.
5307. Systems Engineering Planning and Management. This course provides a practical coverage of tasks, processes, methods and techniques to establish the process of systems engineering and its role in the planning and management of programs. The tasks and roles of program manager and systems engineer are unveiled for establishing program operations and communications framework. Techniques are presented for developing an integrated program/project plan by defining the role of the systems integrator and identifying useful tools for planning and managing systems integration of various sized projects. The student learns to prepare for and successfully complete key program milestone reviews by identifying essential material content and proving the design basis. The course leads the student through the systems development process by showing how to plan for and manage change by implementing methods for configuration, change and risk management. The program life cycle is concluded by planning the transition of systems engineering processes from development to production and field support. Prerequisite: EMIS 5301.
5308. Systems Engineering Leadership. This course 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. The course demonstrates how the elements of systems engineering, project management, process design and leadership integrate into an effective leadership system. Prerequisite: EMIS 5301.
5309. Systems Reliability Engineering. An 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. Specific topics include: 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.
5310. Human-Systems Integration (HSI). This course advances the understanding and application of cognitive-science principles, analysis-of-alternatives methods and engineeringbest 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.
5311. 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.
5312. Critical Infrastructure Protection/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 definitions and advantages of SE practices and fundamentals; system objectives that include the viewpoint of the customer, user and other stakeholders; the elements of the CI and their interdependencies; the impact transportation system disruptions; and systems risk analysis. Prerequisites: EMIS 5301 and EMIS 5303
5313. Enterprise Fundamentals. An overview of business fundamentals, spanning the range of all functional areas: management, marketing, operations, accounting, information systems, finance and legal studies. (Credit is not allowed for both EMIS 3308 and EMIS 5351.)
5314. 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.
5315. Information System Design Strategies. Surveys the fundamentals of software engineering and database management systems (DBMS) for information engineers. 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.
5316. Decision-Support Systems. Covers the development and implementation of a datacentric, decision-support system (DSS), the underlying technologies, and current applications and trends. Topics include: decision-making, DSS components, optimization models, expert systems, data mining and visualization, knowledge discovery and management, and executive information systems.
5317. 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.
5318. 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.
5319. Computer Simulation Techniques. An introduction to the design and analysis of discrete probabilistic systems using simulation. Emphasizes model construction and use of a simulation language. 1.5 TCH Design. Prerequisites: Programming ability, introduction to probability or statistics.
5320. Production Systems Engineering. This course applies the principles of engineering, or "design under constraint," to modern production systems. Topics include: production systems analysis and design considerations, systems design and optimization models and methods, pull- and push-based production systems, quality engineering, process improvement, plus techniques for engineering and managing systems with specific architectures: batch-oriented, continuous-flow, project, and just-in-time. Prerequisite: C-or better in EMIS 3360.

5364 (STAT 5344). Statistical Quality Control. An introduction to statistical quality-control methods that can be applied to meet the demand for ever-increasing levels of product and service quality. Basic methods and tools for analyzing, controlling and improving product and service quality are covered. Probabilistic and statistical techniques are applied to modeling and analysis of variability associated with product production and service processes. Topics include analysis of product design tolerances, six-sigma techniques, statistical analysis of process capability, statistical process control using control charts, quality improvement and acceptance sampling. Prerequisite: EMIS 4340 or 5370.
5365. 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.
5366. 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 4340 or 5370, and EMIS 3360 or 8360 (or equivalent).
5369. Reliability Engineering. An 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. 1 TCH Design. Prerequisite: C- or better in EMIS 4340 or 5370.
5370 (STAT 5340). Probability and Statistics for Scientists and Engineers. An introduction to fundamentals of probability and distribution theory, statistical techniques used by engineers and physical scientists. Examples of tests of significance, operating characteristic curves, tests of hypothesis for one or two parameters, estimation, analysis of variance, and the choice of a particular experimental procedure and sample size. Prerequisite: C- or better in MATH 2339 or equivalent. (Credit not allowed for both EMIS 5370 and STAT 4340.)
5377 (STAT 5377). Statistical Design and Analysis of Experiments. An 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 and corequisites: C- or better in EMIS 4340 and senior standing with a science or engineering major, or permission of instructor.
5(1-3)9(0-4). Special Topics. Individual or group study of selected topics in management science. Prerequisite: Permission of instructor.

## ENVIRONMENTAL AND CIVIL ENGINEERING

## Professor Bijan Mohraz, Interim Chair

Professor: Bijan Mohraz; Associate Professors: Paul Krueger (Mechanical Engineering), David A. Willis (Mechanical Engineering); Research Associate Professor: Alfredo Armendariz; Assistant Professors: Khaled Abdelghany, Usama El Shamy, Jim T. Yu; Senior Lecturer: Roger O. Dickey; Visiting Lecturer: Jong-Wha Bai; Adjunct Faculty: Arthur Beck, Mark K. Boyd, Gerald R. Carney, Robert R. Casagrande, Weiping Dai, Betsy del Monte, James Duke, Ted Dumas, John Easton, Carl Edlund, Fawzi Elghadamsi, Andrew Felder, Edward Forest (Retired Chair), Anwar Hirany, Louis Hosek, Ron Jackson, Timothy L. Jacobs, James E. Langford, Donald L. Legg, Shannon K. McCall, Paul Martin, Jennifer O’Brien, Jon D. Rauscher, Cecil Smith (Professor Emeritus), D. Blair Spitzberg, John Stanley, Bennett Stokes, Patricia A. Taylor, Ken Thomas, Philip K. Turner, Dan Wittliff, Scott Woodrow.

Undergraduate programs within the Department of Environmental and Civil 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 our students, so that students with interests in studying global climate change, protecting the quality of our 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, our students are paired with CEOs, business leaders, professional engineers, EPA directors or corporate attorneys in a mentoring program designed to propel students into promising careers.

Environmental and civil 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. Environmental and civil engineering entered the early 1900s as a single integrated discipline, 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.

## Environmental Engineering and Environmental Science Programs

Today, 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, is focusing on products fabricated from recycled and natural materials that are both competitive 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 Environmental and Civil 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 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.

## 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 in 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 to contribute 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 Environmental and Civil 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 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.

Degrees Offered
The Environmental and Civil Engineering Department offers undergraduate degrees as follows:

Bachelor of Science in Environmental Engineering
Bachelor of Science in Environmental Engineering and Bachelor of Science in Mathematics dual degrees
Bachelor of Science in Environmental Engineering with a Premedical Specialization
Bachelor of Science in Environmental Science
Bachelor of Science in Environmental Science with a Premedical Specialization
Bachelor of Science in Civil Engineering
Bachelor of Science in Civil Engineering and Bachelor of Science in Mathematics dual degrees
The undergraduate programs in environmental engineering and civil engineering are accredited by the Engineering Accreditation Commission of ABET, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012; telephone (410) 347-7700. ABET does not provide accreditation for the discipline of environmental science.

Both the environmental and civil engineering programs are designed to prepare students for the Fundamentals of Engineering (FE) Examination, the first step toward licensure as a Professional Engineer (P.E.). Engineering design is integrated throughout the environmental and civil engineering curricula, each culminating in a major design experience based on the knowledge and skills acquired in earlier course work. 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, interaction of design and construction professionals, professional licensing and the need for lifelong learning.

The B.S. degree in Environmental Science and the B.S. degree in Environmental Science with a Premedical Specialization are designed to meet the professional goals of students whose environmental interests are broader. These programs offer the student greater depth with respect to the sciences, and greater course flexibility with respect to electives.

## Departmental Facilities

Departmental offices and instructional and research laboratories are located in the new, state-of-the-art J. Lindsay Embrey Engineering Building. Environmental teaching and research laboratories include dedicated space for air quality and meteorology, industrial hygiene, environmental microbiology and water quality. The air quality/meteorology and water quality laboratories are capable of conducting sophisticated chemical analyses of air samples, and assessing the quality of water supplies and wastes and the effectiveness of water and waste treatment procedures. Major equipment includes several spectrophotometers including atomic absorption (AA), inductively coupled plasma (ICP) emission for low-level heavy metals analysis, and two Hewlett-Packard gas chromatographs (GC). Other equipment includes continuous ambient air monitoring equipment, 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. The air quality and meteorology laboratory includes state-of-the-art airflow, pressure, and volume measurement instrumentation. The industrial hygiene laboratory includes an inventory of the latest state-of-the-art 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.

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 include 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/hydrology laboratory equipment include a 5 -meter open channel flume with various accessories (e.g., undershot weir, rotary undershot gate, sharp and broad-crested weirs, etc.), a basic hydraulics bench for fundamental fluid mechanics experiments (e.g., hydrostatic pressure forces, Bernoulli's theorem, pipe friction losses, etc.), and a hydrology study system for hydrology experiments (e.g., simulating rainfall over watersheds and measuring resulting outflow hydrographs, groundwater flow profiles, etc.). The Geotechnical Engineering laboratory has a fully-automated multi-purpose 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 (CAD) laboratory with AutoCAD software, and a general-use computer laboratory for the department's students including personal computers, high-resolution color monitors and laser printers. Computers in both 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 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 Environmental Engineering

| Curriculum Requirements | Term Credit Hours |  |
| :---: | :---: | :---: |
| College Requirements: Mathematics and | Humanities, Social Sciences and SMU required courses | 23 |
|  |  |  |
| Statistics: | MATH 1337, 1338, 2339, 2343; STAT 4340 or 5340 | 15 |
| Sciences: | Biology: BIOL 1402 |  |
|  | Chemistry: CHEM 1113, 1114, 1303, 1304 |  |
|  | Earth Science: ENCE 1331 Meteorology |  |
|  | Physics: PHYS 1105, 1106, 1303, 1304 | 23 |
| Engineering Science and Design: Computer Science and Engineering: CSE 1340 or 1341 |  |  |
|  | Civil/Mechanical Engineering: ENCE 2310, 2331, 2342 | 12 |
| Environmental |  |  |
| Engineering and Design: | ENCE 1302, 2304, 2421, 3323, 3341, 3431, 3451, |  |
| Environmental Technical |  |  |
| Electives: |  |  |
| Engineering Leadership: | and 3309 | 9 |
| Minimum total hours required |  | 127 |
| Bachelor of Science in Environmental Engineering (Premedical Specialization) |  |  |
| Curriculum Requirements | Term Credit Hours |  |
| College Requirements: Mathematics and | Humanities, Social Sciences and SMU required courses | 23 |
| Statistics: | MATH 1337, 1338, 2339, 2343; STAT 4340 or 5340 | 15 |
| Sciences: | Biology: BIOL 1401, 1402, 3304, 3350 |  |
|  | Chemistry: CHEM 1113, 1114, 1303, 1304, 3117, 3118, 3371, 3372 |  |
|  | Earth Science: ENCE 1331 Meteorology |  |
|  | Physics: PHYS 1105, 1106, 1303, 1304 | 41 |
| Engineering Scienceand Design: |  |  |
| and Design: | Computer Science and Engineering: CSE 1340 or 1341 Civil/Mechanical Engineering: ENCE 2310, 2331, 2342 | 12 |
| Environmental |  |  |
| Engineering and Design: | ENCE 1302, 2304, 2421, 3323, 3341, 3431, 3451, 4380, 4381, 5354, 5372 | 36 |
| Environmental Technical |  |  |
| Electives: | Selected with adviser approval | 6 |
| Minimum total hours required |  | 133 |
| Bachelor of Science in Environmental Engineering and Bachelor of Science in Mathematics |  |  |
| Curriculum Requirements | Term Credit Hours |  |
| College Requirements: Mathematics and Statistics: | Humanities, Social Sciences and SMU required courses MATH 1337, 1338, 2339, 2343, 3315, 3337 and two advanced MATH electives selected with math adviser approval; STAT 4340 or 5340 | 23 |
|  |  |  |
|  |  | 27 |
| Sciences: |  |  |
|  | Biology: BIOL 1402 <br> Chemistry: CHEM 1113, 1114, 1303, 1304 |  |


|  | Earth Science: ENCE 1331 Meteorology Physics: PHYS 1105, 1106, 1303, 1304 | 23 |
| :---: | :---: | :---: |
| Engineering Science and Design: |  |  |
|  | Computer Science and Engineering: CSE 1340 or 1341 Civil/Mechanical Engineering: ENCE 2310, 2331, 2342 | 12 |
| Environmental |  |  |
| Engineering and Design: | ENCE 1302, 2304, 2421, 3323, 3341, 3431, 3451, 4380, 4381, 5317, 5354, 5372 | 39 |
| Advanced Environmental/ |  |  |
| Mathematics Electives: | Choose two from: ENCE 5331, 5332, 5334; ME 5336 | 6 |
| Minimum total hours required |  | 130 |
| Bachelor of Science in Environmental Science |  |  |
| Curriculum Requirements | Term Credit Hours |  |
| College Requirements: Mathematics and | Humanities, Social Sciences and SMU required courses | 29 |
| Statistics: | MATH 1337, 1338; STAT 4340 or 5340 | 9 |
| Sciences: | Biology: BIOL 1401, 1402 |  |
|  | Chemistry: CHEM 1113, 1114, 1303, 1304 |  |
|  | Earth Science: ENCE 1331, GEOL 1301 |  |
|  | Physics: PHYS 1105, 1106, 1303, 1304 | 30 |
| Engineering Science: | Computer Science and Engineering: CSE 1340 or 1341, or EMIS 1307 | 3 |
| Environmental |  |  |
| Engineering: | Core: ENCE 1302, 2304, 24213302 |  |
|  | Advanced: ENCE 3341, 3431, 3451, 5317 |  |
|  | Management (Choose any 4 of the following 7): |  |
|  | ENCE 5311, 5314, 5315, 5323, 5350, 5352, 5353 | 39 |
| Environmental Technical |  |  |
| Electives: | Selected with adviser approval | 6 |
| Technical and Engineering |  |  |
| Leadership Electives: | Free electives | 6 |
| Minimum total hours required |  | 122 |
| Bachelor of Science in Environmental Science (Premedical Specialization) |  |  |
| Curriculum Requirements |  | Term Credit Hours |
| College Requirements: Mathematics and | Humanities, Social Sciences and SMU required courses | 29 |
| Statistics: | MATH 1337, 1338; STAT 4340 or 5340 | 9 |
| Sciences: | Biology: BIOL 1401, 1402, 3304, 3350 |  |
|  | Chemistry: CHEM 1113, 1114, 1303, 1304, 3117, 3118, 3371, 3372 |  |
|  | Earth Science: ENCE 1331, GEOL 1301 |  |
|  | Physics: PHYS 1105, 1106, 1303, 1304 | 44 |
| Engineering Science: | Computer Science and Engineering: CSE 1340 or 1341 or EMIS 1307 | 3 |
| Environmental |  |  |
| Engineering: | Core: ENCE 1302, 2304, 2421, 3302 |  |
|  | Advanced: ENCE 3341, 3431, 3451 |  |
|  | Management (Choose any 4 of the following 7): |  |
|  | 5311, 5314, 5315, 5323, 5350, 5352, 5353 | 36 |



## Minor in Environmental Engineering

For approval of a minor in environmental engineering, the student should consult the Environmental and Civil Engineering Department. A minimum of 15 term credit hours in environmental engineering courses is required. One example of an approved set of courses that provides a broad introduction to environmental engineering is:

ENCE 2304 Introduction to Environmental Engineering and Science
ENCE 2421 Aquatic Chemistry
ENCE 3431 Fundamentals of Air Quality I
ence 4329 Design of Water and Wastewater Systems
ence 5354 Environmental Engineering Principles and Processes
Based on the student's interests and background, other sets of environmental engineering courses may be substituted with the approval of the Environmental and Civil Engineering Department.

## Minor in Civil Engineering

For approval of a minor in civil engineering, the student should consult the Environmental and Civil Engineering Department. A minimum of 15 term credit hours in civil engineering courses is required. One example of an approved set of courses, totaling 16 term credit hours, that provides an emphasis on structural analysis and design is:

ENCE 2310 Statics<br>ence 2340/2140 Mechanics of Deformable Bodies/Mechanics of Materials<br>Laboratory<br>ENCE 3350 Structural Analysis<br>ENCE 4350 Design of Steel Structures<br>ENCE 4385 Soil Mechanics and Foundations

Based on the student's interests and background, other sets of civil engineering courses may be substituted with the approval of the Environmental and Civil Engineering Department.

## The Courses (ENCE)

1301. 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.
1302. Introduction to Environmental and Civil Engineering. Students are introduced to the disciplines of environmental and civil engineering. Many of the hallmarks of modern society, including high-rise office buildings, increased lifespan, 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, many problems presently confronting developing nations, including housing supply, food production, air and water pollution, spread of disease, traffic congestion and flood control will be solved by environmental and civil engineers. The course emphasizes fundamental science, engineering and ecological principles and encourages the development of analytical and critical thinking skills with real-world problem solving.
1303. 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.
1304. Transportation Infrastructure. An overview and definitions of infrastructure elements with concentration on transportation. Principles of infrastructure planning and management. Congestion and performance measures. Relationship with economy, environment, safety, homeland security and technology.
1305. Mechanics of Materials Laboratory. Experiments in mechanics of deformable bodies, to complement ENCE 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: ENCE 2340.
1306. 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 ENCE 2342. One credit hour. Corequisite or Prerequisite: ENCE 2342.
1307. 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.
1308. 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.
1309. 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: ENCE 2310 or equivalent.
1310. 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, ENCE 2310, and MATH 2339.
1311. 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. Prerequisite: ENCE 2310.
1312. 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. Prerequisites: ENCE 2310, MATH 2339 and PHYS 1303. Corequisite or Prerequisite: MATH 2343.
1313. Aquatic Chemistry. Aspects of chemistry that are particularly valuable to the practice of environmental engineering are examined. A basic groundwork is provided for the quantitative analysis of water and wastewater systems. Fundamental methods of instrumental analysis are examined. Elements of thermodynamics, acid-base, redox, and colloidal chemistry are presented as appropriate. Laboratory sessions emphasize design, hands-on conduct of experimental procedures, and interpretation and statistical analysis of derived data. Prerequisite: CHEM 1303 and CHEM 1304.
1314. Engineering Communications. Both 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.
1315. 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, ground water 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: ENCE 2304. Corequisite or Prerequisite: ENCE 2342.
1316. Ground Water 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: ENCE 2342 and MATH 2343.
1317. 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: ENCE 2421 and MATH 2343.
1318. 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: ENCE 2304 and ENCE 2421.
1319. 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: ENCE 2340/ENCE 2140.
1320. 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 1402. Corequisite or Prerequisite: ENCE 5317 or equivalent.
1321. 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: ENCE 2304.
1322. 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, and PHYS 1303 or equivalent.
1323. Principles of 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.
1324. Design of Water and Wastewater Systems. Physical, chemical and biological concepts and processes that are specific to public water supplies and municipal wastewater management are covered. Fluid mechanics is reviewed followed by an introduction to 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. Prerequisites: CHEM 1303, and ENCE 2304 and ENCE 2342.
1325. Fundamentals of Air Quality II. Fundamental and advanced topics in air quality are covered, building upon ENCE 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. Prerequisites: ENCE 2331 or equivalent, and ENCE 3431.
1326. 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: ENCE 3350.
1327. 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: ENCE 3350.
1328. Environmental and Civil 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. Prerequisites: Senior standing and ENCE 3302.
1329. Environmental and Civil 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: ENCE 4380.
1330. 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: ENCE 2340.

## 5050. Undergraduate Internship.

5090. ENCE 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.
5091. Environmental and Hazardous Waste Law. 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.
5092. Risk Assessment and Health Effects. Introduction to toxicology as it relates to environmental and health effects of hazardous materials; toxicological methodology; risk management factors including legal aspects; human health and ecological risk assessment and risk communication; emergency response; computer databases.
5093. 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; oxidationreduction processes; environmental transformations of organic materials; introductory taxonomy; microbial growth and kinetics; energy transfer; microbial ecosystems.
5094. Environmental Regulations and Compliance. Practical knowledge of federal and state environmental permitting processes and procedures is provided. Regulatory requirements are reviewed with emphasis on the 40 CFR regulations for water, air and solid and hazardous waste. Air, water, storm water and waste permits are reviewed, as well as permits-by-rule. Also explored are the consequences of noncompliance with regulations by presenting enforcement options available to government agencies.
5095. 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.
5096. Environmental Organic Chemistry. This course will examine the fundamental processes that govern transformations 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.
5097. Physical and Chemical Waste Treatment. Waste minimization techniques and objectives are introduced. Chemical equilibrium and chemical reaction kinetics are thoroughly reviewed. 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.
5098. 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.
5099. 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.
5100. 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. Disaster 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 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.
5101. Optimization and Reliability for Infrastructure and Environmental Systems. This course introduces the concepts of engineering systems optimization, reliability and risk assessment, and applies them to civil and environmental engineering systems. Topics include 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 will include transportation networks, fleet assignment, supply chain management, environmental engineering systems, fluid transport and water reservoir operation and structural engineering systems. Advanced topics will include an introduction to chance-constrained optimization and basic decomposition approaches and their application to real-world problems. Prerequisite: Graduate standing or permission of instructor.
5102. Introduction to Sustainability. This course introduces the student to 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. Topics include air quality and energy supply, sustainable construction, water use, transit and other related areas of resource use and waste generation. Guest lecturers will provide a series of multiple viewpoints and areas of specific expertise. Prerequisite: Graduate standing or permission of instructor.
5103. Methods and Technology for Sustainability. This course covers technologies and methods using 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.
5104. 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.
5105. Air Pollution Management and Engineering. This course covers the science, engineering, public health, and economic aspects of air quality. Students will develop in-depth understanding and broad knowledge of the sources and properties of air pollutants, air quality management, transport of pollutants in the environment, regulations of air quality, and the operation and design of air pollution control systems. In addition, the class will review 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.
5106. Ground Water Hydrology and Contamination. Ground water hydrology; aquifer and well hydraulics; flow equations and models; implications for landfill design; sources and nature of ground water contaminants; monitoring and analysis; contaminant fate and transport; transport model for hazardous substances; ground water pollution control measures; containment and treatment; ground water quality management. Prerequisite: MATH 2343.
5107. Laboratory Methods in Environmental Engineering. This course provides students with hands-on, state-of-the-art experience with important experimental methods in environmental systems, evaluating the reliability and significance of parameter determinations. Covers instrumental and statistical methods used for characterization of water, air and soil quality. Introduction to treatability studies including reactor dynamics. The course format provides two hours of lecture and three hours of laboratory component. Prerequisite: ENCE 5313 or two terms of undergraduate chemistry.
5108. 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; ground water models; water-sediment, water-soil, and waterair interfaces; multiphase and integrated modeling approaches; case studies.
5109. 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 equipment. Prerequisites: ENCE 3431, ENCE 2342 or equivalent.
5110. Introduction to Solid Mechanics. Three-dimensional stress and strain, failure theories, introduction to two-dimensional elasticity, torsion of prismatic members, beams on elastic foundations, introduction to plates and shells, and energy methods. Prerequisites: ENCE 2340 and MATH 2343.
5111. Introduction to Environmental Management Systems. An in-depth introduction to environmental management systems (EMS). 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 14001 standard from the policy statement to the management review, and allows students to fully understand the Plan-Do-Check-Act approach of the system. Also introduces students to management system auditing, the requirements of a system auditor and the certification process.
5112. 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 relate to toxic substance exposure.
5113. 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: ENCE 5313.
5114. 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.
5115. 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, ENCE 2304 and ENCE 2342, and MATH 2343.
5116. 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: ENCE 3350.
5117. 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.
5118. Architectural and Structural Engineering. The basic principles of structural analysis and mechanics of deformable bodies are introduced. Structural systems and principles are presented with an emphasis on architectural design. Students will be provided with a conceptual introduction to structures emphasizing the integration of structural and architectural design. Case studies of buildings are presented and discussed. Prerequisites: ENCE 2310 and ENCE 2320.
5119. 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.
5120. 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.
5121. Introduction to Facilities Engineering Systems. The inter-relationships 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.
5122. 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.
5123. 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.
5124. Electrical, Mechanical and Piping Systems for Buildings. Mechanical and electrical systems for buildings are examined with emphasis on practical aspects of the subjects. Space planning and architectural considerations, including cost and environmental impact of the mechanical and electrical systems are presented. Prerequisites: Undergraduate introduction to electrical circuits, classical mechanics and fluid dynamics, or instructor's approval.
5125. 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.
5126. 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.
5127. 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 will learn how to draw lines, curvilinear lines, use blocks and external references, write text, create plot files, and many other commands necessary to produce engineering drawings as used to construct environmental, civil and structural engineering projects.
5128. Prestressed Concrete. Theory and application of prestressed concrete members, timedependent deflections and continuous prestressed beams. Prerequisites: ENCE 4350.
5129. 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 foundations systems. Prerequisite: ENCE 4350.
5130. 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. Prerequisites: ENCE 4350.
5131. Transportation Planning and Traffic Engineering. This course is concerned mainly with 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. Prerequisite: Basic principles of probability and statistics.
5132. Heating, Ventilating and Air Conditioning. Examines the science and practice of controlling environmental conditions through the use of thermal processes 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. Prerequisites: ENCE 2331, ENCE 2342 and ME 3332.
5133. Energy Management for Buildings. Procedures to select energy saving 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 are used to calculate energy consumption and compare energy features of proposed, audit-determined feasible changes to a building.
5134. 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: ENCE 4385.
5135. 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: ENCE 4385.
5136. Geotec dhnical 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: ENCE 5364 or approval of the instructor.

5(1-4)9(1-2). 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.

MECHANICAL ENGINEERING<br>Professor Volkan Otugen, Chair<br>Professor Radovan Kovacevic, Director, Research Center for Advanced Manufacturing

Professors: Yildirim Hürmüzlü, Radovan Kovacevic, José Lage, Bijan Mohraz, Volkan Otugen, Peter E. Raad, Wei Tong; Associate Professors: Paul Krueger, Charles M. Lovas, Edmond Richer, David Willis; Lecturers: Elena Borzova, Donald C. Price; Senior Lecturer: Dona T. Mularkey; Adjunct Faculty: Bogdan Antohe, Eric Cluff, Rajeev Dwivedi, Santos Garza, Wade Meaders, David Nowacki, Allen Tilley, Andy Weaver, Jim Webb; Emeritus Professors: Jack P. Holman, David B. Johnson, Paul F. Packman, Cecil H. Smith, Hal Watson Jr., Edmund Weynand.

Mechanical engineering is a very diverse, dynamic and exciting field. Because of the wide-ranging technical background attained, mechanical engineers have the highest potential for employment after graduation with exceptional mobility necessary for professional growth even during bear-market conditions. Mechanical engineers apply their creative knowledge to solve critical problems in several different areas, such as bio-engineering (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 foment 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 Norwick Center for Media and Instructional Technology. 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 Machines and Society and Information Technology and Society.

The program genuinely prepares students to be creative by providing a solid background in fundamentals of science and engineering without compromising the practical aspects of mechanical engineering. Essential entrepreneurial knowhow, 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 on the SMU Tau-Sigma Chapter of Pi-Tau-Sigma, the National Honorary Mechanical Engineering Fraternity.

The curriculum consists of two major areas, namely, Solid Mechanics and Thermal and Fluids, interlaced via practical mechanical engineering design throughout the curriculum. In the senior year, student teams are guided through a complete design project, all the way 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, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202-4012 - telephone: (410) 347-7700.

Our 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:

1. Will be innovative problem solvers and critical thinkers addressing technical and societal issues
2. Will embrace professional development and lifelong learning relevant to their careers
3. Will 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) An ability to apply knowledge of mathematics, science and engineering
b) An ability to design and conduct experiments, as well as analyze and interpret data
c) An 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) An ability to function on multi-disciplinary teams
e) An ability to identify, formulate and solve engineering problems
f) An understanding of professional and ethical responsibility
g) An 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) A recognition of the need for, and an ability to engage in life-long learning
j) A knowledge of contemporary issues
k) An ability to use the techniques, skills and modern engineering tools necessary for engineering practice

An outstanding cooperative education program (Co-op) is also available for our students. For further information on the Co-op Program, see Cooperative Education at the beginning of the Lyle School of Engineering section.

The Mechanical Engineering Department offers the following degrees:
Bachelor of Science in Mechanical Engineering
Bachelor of Mechanical Engineering with a Bachelor of Science in Math Dual Degree
Bachelor of Mechanical Engineering with a Bachelor of Science in Physics Dual Degree
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 a Manufacturing Specialization)
Bachelor of Science in Mechanical Engineering (with an Engineering Management and Entrepreneurship Specialization)
Master of Science in Mechanical Engineering
Master of Science in Manufacturing Systems Management
Master of Science in Packaging of Electronic and Optical Devices
Doctor of Philosophy in Mechanical Engineering
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.

Nano-Scale 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 laserassisted 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 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.

The 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 exploitation 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 (PHI) System.

Research Center for Advanced Manufacturing (RCAM). This 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, 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 is housed in the RCAM facility and collaborates with RCAM.

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.

## Instructional Laboratories

In support of the teaching and research endeavors of the department, several instructional laboratories are available. They include:

Information Technology Computer Laboratory. This 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, HVAC systems, convective cooling of electronics, heat exchangers and interferometric visualization. State-of-the-art systems support automatic control and data acquisition. Some of the current
equipment in this lab include a refrigeration training unit, heat transfer test unit with water boiler, air flow 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 Environmental and Civil Engineering include:
Hydraulics/Hydrology, Thermal and Fluids Laboratory
CAD Computer Laboratory
Structural and Mechanics of Materials Laboratory
Project construction area
Engineering Design Studio

## Curriculum in Mechanical Engineering

Mechanical Engineering offers the broadest curriculum in engineering, as evidenced by the wide range of 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 are:

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 provides 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. Because it takes energy to drive any apparatus and some of the energy always shows up as thermal energy, the thermal sciences interact with all other areas of study and can never be ignored in the design synthesis 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.

## Bachelor of Science in Mechanical Engineering Curriculum Notes

The minimum requirements for a Bachelor of Science in Mechanical Engineering degree are as follows:

Curriculum Requirements Term Credit Hours


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 in Mathematics

The Mechanical Engineering Department and the Mathematics Department offer a curriculum that enables a student to obtain both a Bachelor of Science in Mechanical Engineering and Bachelor of Science in Mathematics.

## Curriculum Notes

The minimum requirements for the dual degree of Bachelor of Science in Mechanical Engineering and Bachelor of Science in Mathematics are as follows:
Curriculum Requirements
Term Credit Hours

| General Education: | ENGL 1301, 1302, Perspectives and Cultural Formations courses. | 21 |
| :---: | :---: | :---: |
| Mathematics: | MATH 1337, 1338, 2339, 2343, 3315, 3337, STAT 4340 or equivalent CSE 1340 or 1341 plus two advanced electives as | 30 |
| Sciences: | PHYS 1303, 1304 and1105; CHEM 1303. | 10 |
| Mechanical Engineering: | $\begin{aligned} & \text { ME 1202, 1102, 2310, 2320, 2331, 2131, } \\ & 2340,2140,2342,2142,3332,3132,3340,3370 \text {, } \\ & 4338,4360,4160,4370,4380,4381 \text { and } 5322 . \end{aligned}$ | 50 |
| Advanced Major |  |  |
| Electives: | Must be selected from 3000 level or higher ME courses with the approval of the student's adviser. | 9 |
| Engineering Leadership: | Select two from EMIS 3308, EMIS 3309, ENCE 3302, or CSE 4360 | 6 |
| Wellness I and II: |  | 2 |
| Minimum total hours required |  | 128 |

## Bachelor of Science in Mechanical Engineering and Bachelor of Science in Physics

The Mechanical Engineering Department and the Physics Department offer a curriculum that enables a student to obtain both a Bachelor of Science in Mechanical Engineering and a Bachelor of Science in Physics.

## Curriculum Notes

The minimum requirements for the dual degrees of Bachelor of Science in Mechanical Engineering and Bachelor of Science in Physics are as follows:
Curriculum Requirements
Term Credit Hours
General Education: ENGL 1301, 1302, Perspectives and Cultural Formation courses.
Mathematics: $\quad$ MATH 1337, 1338, 2339, 2343, 3353; STAT 4340 or equivalent.18

Sciences: PHYS 1105, 1303, 1304, 3305, 3344, 3374, 4211, 4321, 4392, 5382, 5383 and two advanced physics electives; CHEM 1303 . 39
Mechanical Engineering: ME 1202, 1102, 1305, 2310, 2331, 2131, 2340, 2140, 2342, 2142, 3332, 3132, 3340, 3370, 4338, 4360, 4160, 4370, 4380, 4381 and 5322.50

Engineering Leadership: Select one from EMIS 3308, EMIS 3309,
ENCE 3302, or CSE 4360. ..... 3
Wellness I and II: ..... 2
Minimum total hours required ..... 133

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 (with a Minor in Business Administration)

The minimum requirements for a Bachelor of Science in Mechanical Engineering with a minor in Business Administration are as follows:


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.

Admission requirements of the Cox School of Business for the Minor in Business Administration must be satisfied.

## 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 three important areas, namely Premedical/Biomedical, Manufacturing, and Engineering Management and Entrepreneurship, Therefore, each student may select one of these three specializations or may personalize his or her degree by particular choices of advanced major electives.

## 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

The minimum requirements for a Bachelor of Science in Mechanical Engineering degree with Premedical/Biomedical Specialization are as follows:

| Curriculum Requirements | Term Credit Hours |  |
| :---: | :---: | :---: |
| General Education: | ENGL 1301, 1302, Perspectives and Cultural |  |
|  | Formations courses. | 21 |
| Mathematics and |  |  |
| Sciences: | MATH 1337, 1338, 2339, 2343, STAT 4340 or equivalent, BIOL 1401, 1402, 3304, 3350; |  |
|  | PHYS 1303, 1304, 1105, 1106, | 53 |
| Mechanical Engineering: | ME 1202, 1102, 1305, 2310, 2320, 2331, 2131, 2340, 2140, 2342, 2142, 3332, 3132, 3340, 3370, 4338, 4370, 4380, 4381 and 5322. | 49 |
| Advanced Major Elective: | ME 5332 or any 3000 level or higher ME course. | 3 |
| Engineering Leadership: | Select one from EMIS 3308, EMIS 3309, ENCE 3302, or CSE 4360. | 3 |
| Wellness I and II: |  | 2 |

Minimum total hours required 131

## Bachelor of Science in Mechanical Engineering (Manufacturing Specialization)

This specialization enables students to select four major electives related to manufacturing engineering and manufacturing systems management. For details of the program, the student should consult the department.

## Curriculum Notes

The minimum requirements for a Bachelor of Science in Mechanical Engineering degree with Manufacturing Specialization are as follows:
Curriculum Requirements
Term Credit Hours

| General Education: | ENGL 1301, 1302, Perspectives and Cultural |
| :--- | :--- |
|  | Formations Courses. |

Mathematics and MATH 1337, 1338, 2339, 2343 and STAT 4340 or
Sciences: equivalent. PHYS 1303, 1304, 1105 1304; CHEM 1303; two additional 3000 level or higher math or science courses with the approval of the student's adviser. 31
Mechanical Engineering: ME 1202, 1102, 1305, 2310, 2320, 2331, 2131, 2340, 2140, 2342, 2142, 3332, 3132, 3340, 3370, 4338, 4360, 4160, 4370, 4380, 4381 and 5322.53

Manufacturing Electives: Manufacturing electives must be approved by the student's adviser and must be selected from the following list:
ME 5350, 5351, 5355, 5356, 5357, 5358, 5368, 5372 and 5391.12

Engineering Leadership Select two from EMIS 3308, EMIS 3309,
ENCE 3302 or CSE 4360. ..... 6

Wellness I and II:

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 (Engineering Management and Entrepreneurship Specialization) 

The Mechanical Engineering Department offers a B.S.M.E. degree with an Engineering Management and Entrepreneurship Specialization. This program includes required courses in Engineering Management, Information Engineering and Global Perspectives, Technical Entrepreneurship and Technical Communications, while at the same time satisfying the requirements for an accredited degree in mechanical engineering.

## Curriculum Notes

The minimum requirements for a Bachelor of Science in Mechanical Engineering degree with a Management and Entrepreneurship specialization are as follows:


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 is required. For example, a choice of five of the following courses represents a minor that provides a broad introduction to mechanical engineering.

ME 1202 and 1102 Introduction to Engineering
ME 2310 Statics
ME 2320 Dynamics
ME 2331 Thermodynamics
ME 2340 Mechanics of Deformable Bodies
ME 2342 Fluid Mechanics
ME 3340 Engineering Materials
ME 3370 Manufacturing Processes
Based on the student's interests and background, other sets of mechanical engineering courses may be substituted with the approval of the department.

## The Courses (ME)

1102. Introduction to Engineering Lab. Companion laboratory to ME 1202; introduction to machine shop operations; mechanical measurements; basic research skills; the design process including group projects. Corequisite: ME 1202
1103. Introduction to Engineering. Introduction to mechanical engineering and the engineering profession; the design process; sketching; forces in structures and fluids; conservation laws and thermal systems; motion of machinery. Corequisite: ME 1102.
1104. Machines and Society. This course introduces mechanical engineering to nonengineering students. It covers the basic topics of mechanical engineering, the science and physics behind them, and how they are applied to the machines that create and support today's modern lifestyle. The lab provides a hands-on experience.
1105. 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.
1106. Information Technology and Society. A comprehensive survey of information technologies and the growing interconnectivity between them as currently utilized throughout society. Students will 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 will be discussed, including history, ethics, legal questions, use in producing and maintaining a competitive advantage, effects on society and associated costs and benefits.
1107. Thermodynamics Laboratory. One three-hour laboratory session per week. Basic thermal-property and power-device measurements to complement lecture material of ME 2331. Prerequisite or corequisite: ME 2331.
1108. Mechanics of Materials Laboratory. Experiments in mechanics of deformable bodies to complement ME 2340. Simple tension and compression 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: ME 2340.
1109. Fluid Mechanics Laboratory. One three-hour laboratory session per week. Experiments in fluid friction, Bernoulli's equation, pumps, boundary layers, and fluid dynamic drag to complement the lecture material of ME 2342. Corequisite: ME 2342.
1110. 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.
1111. 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 2310 or equivalent.
1112. 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: MATH 2339, CHEM 1303 and ME 2310.
1113. 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. Prerequisite: ME 2310.
1114. Fluid Mechanics. Fluid statics, fluid motion, systems and control volumes, basic laws, irrotational flow, similitude and dimensional analysis, incompressible viscous flow, and boundary layer theory. Corequisite: MATH 2343. Prerequisites: MATH 2339, ME 2310, PHYS 1303.
1115. 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.
1116. 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 2331 and ME 2342.
1117. Engineering Materials. A study of the fundamental factors influencing the structure and properties of structural materials, including metals, polymers and ceramic. Phase diagrams, heat treatment, metallography, mechanical behavior, atomic bonding and corrosion are covered. Prerequisite: CHEM 1303 or equivalent.
1118. 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 2331.
1119. 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: ME 2340/2140.
1120. Fluid Power Systems. Principles of operations, design criteria, and performance characteristics of fluid power systems components such as pumps, motors, valves and cylinders. Goals-oriented circuit design and analysis, industrial standards, circuit representation, and maintenance. Practical/demo lectures, a design project based on specialized software, industry speakers and site visits. Prerequisites: ME 2342 and ME 2320.
1121. Manufacturing Processes. This course presents a comprehensive, balanced and up-to-date coverage of the relevant fundamentals and real-world applications of manufacturing processes (casting, forming, machining, laser beam machining, electrical discharge machining, abrasive waterjet machining, etc.). Rapid prototyping and manufacturing is included in the course as well. The primary objective of this laboratory is to give students a working knowledge of manufacturing processing systems and their individual components. The laboratory work is divided into four major areas: traditional metal-cutting processes, nontraditional manufacturing processes, welding processes and rapid prototyping/manufacturing processes. Prerequisite: ME 3340.
3390 (CFA 3390). German Technoculture. Fundamentals of German contemporary culture within the context of technology and study abroad experience. Emphasis is placed on communication skills. Field trips are an integral part of the course.

## 4090. Senior Project.

4160. 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. Prerequisite or corequisite: ME 4360.
4161. Thermal Systems Design. Thermal systems designs are prepared, presented and critiqued. Associated problems of simulation, optimization and economics are solved. A thermal network analyzer is used to solve problems and design. Prerequisite: ME 3332.
4162. Structural Design. Study of strength, behavior and design of steel structures and reinforced concrete structures: members subjected to flexure, shear and axial loads. Prerequisite: ME 3350 .
4163. Ethical Decision-Making in Applied Science and Engineering 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.
4164. 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. Prerequisite: ME 5322 or equivalent.
4165. 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. Prerequisites: ME 2340 and ME 3370.
4166. 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. Prerequisite or corequisite: ME 3370 or senior standing.
4167. 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. Prerequisite or corequisite: ME 4370. Prerequisite: ME 4380 or senior standing.
4168. Undergraduate Internship. Components: Internship.

5302 (EE 5362). Linear Systems 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. Prerequisite: ME 4360 or instructor approval.
5314. Introduction to Microelectromechanical Systems and Devices (MEMS). This course develops the basics for microelectromechanical devices and systems (including microactuators, microsensors, and micromotors). Other topics include principles of operation, different micromachining techniques (surface and bulk micromachining), IC-derived microfabrication techniques and thin-film technologies as they apply to MEMS.
5319. 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 Prerequisites: ME 2340 and ME 3340.
5320. Intermediate Dynamics. This course emphasizes methods of formulation of kinematical, dynamical and motion-constraint equations for three dimensional, lumped-parameter, dynamical systems. Topics that will be discussed in detail include differentiation of vectors, kinematics, inertia properties, momentum and energy principles, Newton-Euler and Lagrange formulations of the equations of motion. Symbolic software will be used to reduce the time and effort required to derive the kinematical and dynamical equations. Practical examples using motion analysis CAD software augment the theoretical formulations. Prerequisite: ME 2320, MATH 2339, MATH 2343.
5321. Failure Analysis. 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 and causes of failure. Prerequisite: ME 3340.
5322. 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 2320 and MATH 2343 or equivalent.
5323. Introduction to Fracture Mechanics. This course focuses on linear elastic fracture mechanics, application of theory to design and evaluation of critical components, includingelastic 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. Prerequisite: ME 2340.
5324. Fatigue Theory and Design. A senior-graduate course that 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 and crack propagation. Emphasizes engineering design aspects of fatigue rather than theoretical mechanisms. Prerequisite: ME 3340.
5326. Vehicle Dynamics. Computer animation and simulation are used to model wheeled vehicles to predict performance, handling and ride. Topics include 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 are examined to determine oversteer and understeer characteristics, critical speeds and stability. Multi-degree-of-freedom ride models including tire and suspension compliance are also examined. Prerequisite: ME 2320 or consent of instructor.
5330. Heat Transfer. Application of the principles of conduction, convection and radiation heat transfer. Topics include steady and unsteady state, special configurations, numerical and analytical solutions and design. Prerequisite: ME 3332 or equivalent.
5331. Advanced Thermodynamics. This course examines the laws of thermodynamics, availability, irreversibility, real gases and mixtures, thermodynamic relations and generalized charts, combustion, chemical and phase equilibrium and computational combustion. Prerequisite: ME 2331.
5332. Heat Transfer in Biomedical Sciences. Review of the fundamentals of heat transfer in medicine and biology, including biothermal properties and thermal regulation processes. Topics include biomedical heat transfer processes with applications in tissue laser radiation, freezing and thawing of biological materials, cryosurgery and others. Prerequisites: ME 2342 and ME 3332 or consent of instructor.
5333. Transport Phenomena in Porous Media. This course examines fractals and their role in characterizing complex structures. Fundamental concepts of momentum, heat, and mass transport through heterogeneous (e.g., composites, porous) materials are reviewed. 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. Prerequisites: ME 2342 and ME 3332 or consent of instructor.

5336 (MATH 6336). Intermediate Fluid Dynamics. Review of fundamental concepts of undergraduate fluid mechanics and introduction to advanced fluid dynamics, including tensor notation, the Navier-Stokes equations, potential flow, vortex dynamics and the boundary layer approximation. Prerequisites: ME 2342 or equivalent, and MATH 3337 or equivalent.

## 5337. Introduction to Computational Fluid Dynamics: Fundamentals of Finite Difference

Methods. This course explores concepts of stability, convergence, accuracy and consistency. Includes applications to linear and nonlinear model partial differential equations. Other topics include curvilinear grid generation, Beam and Warming factored implicit technique and MacCormack techniques. Solution methods for the Reynolds equation of lubrication, the boundary layer equations and the Navier-Stokes equations are also reviewed. Prerequisites: ME 2342 (or equivalent) and MATH 2343 (or equivalent) or consent of instructor.
5340. Introduction to Solid Mechanics. Introduction to three-dimensional stress and strain, failure theories, two-dimensional elasticity, torsion of prismatic members, beams on elastic foundation, plates and shells and energy methods. Prerequisites: ME 2340 and MATH 2343.
5341. Structural Properties of Solids. 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 consent of instructor.
5342. Introduction to Thermal Management of Electronics. Introduction to thermal and mechanical design of electronic packaging to include fundamentals of fluid flow, heat transfer, modern cooling technologies and thermal management. Covers mechanical designs including stress and vibrations covered through industrial applications. Other topics include coupled thermal and mechanical problems, systems including selection of cooling methods and hardware important to good design. Classical methods are used to design equipment that operates in severe vibration environments. Prerequisite: ME 3332.
5343. Electronic Packaging Materials: Processes, Properties and Testing. Provides an overview of materials for electronic packaging. Examines solderability, microscopic processes and alloy selection. Looks at composites and ways to apply conducting polymer-matrix composites, metal films and vacuum processes. The importance of encapsulation,
temperature humidity bias testing, and temperature cycle testing will be covered. Measurement of properties of materials in electronic packaging, thermal properties, physical properties and manufacturing properties and materials selection will also be covered. Prerequisite: ME 3340.

ME 5348. 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. Prerequisites: ME 2342, 2142, 2340, 2140, 3332, 3132.
5350. Design for Manufacturability and Concurrent Engineering. The advantages of involving both manufacturing and engineering in the early design of products and processes effectively, and cost determination and assessment of processing alternatives at the early design/manufacturing interface. Designing for manufacturing processing and factory capabilities as a function of quality, price, performance and productivity will be examined with emphasis on parts and process simplification, alternative methods, anticipated volumes and automated assembly.
5355. 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.
5356. 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. Prerequisite: Senior or graduate standing, or permission of instructor. Recommended: Understanding of simple statistical analysis.
5357. Optimized Mechanical Design. Examines 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.). Includes computer applications. Prerequisite: ME 4370 or equivalent.
5358. Design of Electronic Packaging. This course focuses 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 2320, 2340, 3332 and MATH 2343 or permission of instructor.
5359. 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; semiconductor 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. Prerequisites: ME 5342 and ME 5343.
5360. Electronic Product Design and Reliability. Provides a complete description of the fundamentals of the design process for electronic products. Covers the obtaining of the voice of the customer through processes such as Quality Function Deployment. Analyzes the process of conceptual design. Carries the concept through the parametric and tolerance analysis. The design review process will be discussed as well as a review of the use of CAD tools for schematic capture and PWB layout. Reviews the use of modern tools for the maintenance of design documentation, the process of product realization through prototypes, manufacturing trials, and the introduction into high volume manufacturing. The impact of design choices on product quality and reliability will be discussed in detail as will the prediction and measurement of product lifetimes. Prerequisites: ME 3340.
5361. Matrix Structural Analysis and Introduction to Finite Element Methods. A systematic approach to formulation of force and displacement method of analysis. Includes representation of structures as assemblages of elements and computer solution of structural systems. Prerequisite: ME 3350 or equivalent.
5362. 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.
5363. 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, the current technology, as well as leading edge tools are discussed. Prerequisites: ME 5342 and ME 5343 or permission of instructor.
5364. Introduction to Structural Dynamics. Introduction to dynamic responses of structures and behavior of structural components to dynamic loads and foundation excitations. Examines single- and multi-degree-of-freedom systems response and its applications to analysis of framed structures. Includes introduction to systems with distributed mass and flexibility. Prerequisite: MATH 2343.
5368. Project and Risk Management. Focuses on specific concepts, techniques and tools for managing projects successfully. Topics include 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.
5371. Gas Dynamics and Design 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 2342 and 2331.
5372. Introduction to CAD. Introduction to mechanical computer-aided design. Survey of technical topics related to computer-aided design and computer-aided manufacturing. Emphasis on the use of interactive computer graphics in modeling, drafting, assembly, and analysis. Extensive hands-on use of Pro/Engineer, a state-of-the-art computer aided design system. Prerequisite: Junior standing or consent of instructor.
5376. Robotics: Introduction to Computer-Aided Manufacturing. Introduction to industrial robotics and numerically controlled machines. Topics include economics of CAM applications or robotics in industry, robot safety, addition of senses and intelligence, and 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. Prerequisites: CSE 1341, PHYS 1403 and MATH 2343 or equivalent.
5383. Heating, Ventilating and Air Conditioning. Focuses on selection and design of basic refrigeration, air conditioning, and heating systems. Load calculations, psychometrics, cooling coils, cooling towers, cryogenics, solar energy applications and special topics are included. Prerequisites: ME 2331 and ME 3332.
5386. Convection Heat Transfer. Advanced topics in forced convection heat transfer using analytical methods and boundary-layer analysis. Explores laminar and turbulent flow inside smooth tubes and over external surfaces. Convection processes in high-speed flows are also examined. Prerequisite: ME 3332 or equivalent.
5(1-4)90. Undergraduate Seminar. Provides 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 chairman of the department in which the student expects to receive the degree. Variable credit of one to four term hours.
5(1-4)9(1-5). 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. Variable credit of one to four term hours.

## CENTER FOR SPECIAL STUDIES

The Special Studies designation is used to accommodate 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 Co-op students and first-year students exploring engineering degree programs.

## The Courses (SS)

1099, 2099, 3099, 4099, 5099. Engineering Co-op Workterm. 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 and student's evaluation forms.
1101. Engineering and Beyond. This one-hour course is designed to assist first-year students in making an informed decision about their choice of major. Students experience each engineering department and the degrees offered through real-world examples of engineering.
$\mathbf{5 ( 0 - 4 ) 9 ( 0 - 4 )}$. 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.

## RESERVE OFFICERS' TRAINING CORPS

Air Force. Air Force ROTC courses are not offered on the SMU campus. SMU students 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 (UNT). Students who participate in the UNT Air Force ROTC program are responsible for their own travel and other physical arrangements. 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.

The program is open to all students. First-year students may enroll in the fouryear program, and students with at least two undergraduate or graduate academic years remaining may apply for the two- or three-year program. Students who complete their program with at least a Bachelor's degree will be awarded commissions as U.S. Air Force officers.

Scholarships, available to qualified students in both four-year and two-year programs, provide full tuition, fees, textbook allowance, and a monthly tax-free
$\$ 100$ subsistence allowance. National competition is based on SAT or ACT results, Air Force Officer Qualifying Test results or college academic record, and extracurricular and athletic activities. Uniforms and textbooks for AFROTC courses are issued at no cost to cadets. Students with at least six months' active military service may be granted waivers on a portion of the general military course.

UNT's Air Force ROTC courses are described under "Aerospace Studies" in the Dedman College section of this catalog. Further program information and application procedures may be obtained by contacting AFROTC-Det 835, P.O. Box 305400, Denton TX 76203-5400; 940-565-2074; afrotc @unt.edu.

Army. 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 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 participate in the Army ROTC on-campus program by enrolling as they enroll for other SMU courses. Army ROTC courses are listed under ROTC in the Schedule of Classes and permission to enroll must be obtained from Karen Coleman at kcoleman@lyle.smu.edu or 214-768-3039.

## Administration and Faculty

## CORPORATE OFFICERS OF THE UNIVERSITY

R. Gerald Turner, President

Thomas E. Barry, Vice President for Executive Affairs
Chris Casey, Vice President for Business and Finance
Brad E. Cheves, Vice President for Development and External Affairs
Michael A. Condon, University Treasurer
Paul W. Ludden, Provost and Vice President for Academic Affairs
Paul J. Ward, Vice President for Legal Affairs, General Counsel and Secretary
Lori S. White, Vice President for Student Affairs

## ACADEMIC DEANS

John B. Attanasio, Judge James Noel Dean and Professor of Law, and William Hawley Atwell Chair of Constitutional Law for the Dedman School of Law
José Antonio Bowen, Dean of Meadows School of the Arts and Algur H. Meadows Chair
Cordelia Candelaria, Dean of Dedman College
David J. Chard, Leon Simmons Endowed Dean of Simmons School of Education and Human Development
William B. Lawrence, Dean of Perkins School of Theology
Gillian M. McCombs, Dean and Director of Central University Libraries
Albert W. Niemi, Jr., Dean of Cox School of Business and Tolleson Distinguished Professor of Business Leadership and Economics
Geoffrey C. Orsak, Dean of Lyle School of Engineering

## OFFICE OF THE PRESIDENT

Dexter Burger, Director of Internal Audit
Steve Orsini, Director of Athletics
Mary Jane Johnson, Executive Assistant to the President
Beth Wilson, Executive Assistant to the President and Associate Vice President of Institutional Access and Equity

# OFFICE OF THE PROVOST AND VICE PRESIDENT FOR ACADEMIC AFFAIRS 

Ellen Jackofsky, Associate Provost
Ellen Pryor, Associate Provost
James E. Quick, Associate Vice President for Research and Dean of Graduate Studies
Thomas W. Tunks, Associate Provost
Anthony Tillman, Assistant Provost of Strategic Initiatives and Director of Student Retention
John A. Hall, University Registrar and Executive Director of Enrollment Services
John Kalb, Director of Institutional Research
Ron Moss, Dean of Undergraduate Admission and Executive Director of Enrollment Services
Marc Peterson, Director of Financial Aid and Executive Director of Enrollment Services
Pat Woods, University Bursar and Executive Director of Enrollment Services

## OFFICE OF THE VICE PRESIDENT FOR BUSINESS AND FINANCE

Bill Detwiler, Associate Vice President for Human Resources and Business Services James E. Koons, Associate Vice President and University Engineer
John O'Connor, Associate Vice President and Controller
Joe Gargiulo, Chief Information Officer
Ernie Barry, Associate Vice President for Budgets

Mike Paul, Executive Director for Facilities Management and Sustainability Philip Jabour, Executive Director of Planning, Design and Construction

# OFFICE OF THE VICE PRESIDENT FOR DEVELOPMENT AND EXTERNAL AFFAIRS 

Patricia Ann LaSalle, Associate Vice President and Executive Director of Public Affairs
Pam Conlin, Assistant Vice President for University Development
Robert A. Bucker, Assistant to the Vice President for Strategic Affairs

## OFFICE OF THE VICE PRESIDENT FOR LEGAL AFFAIRS AND GOVERNMENT RELATIONS AND SECRETARY

Martha Fleisher, Associate University Counsel Susan Howe, Associate University Counsel Mary Anne Rogers, Associate University Secretary
Basil H. Thomson, Associate General Counsel

## OFFICE OF THE VICE PRESIDENT FOR STUDENT AFFAIRS

Judith Banes, Executive Director of Recreational Sports
Troy Behrens, Assistant Vice President for Student Affairs and Executive Director of Hegi Family Career Development Center
Judy Henneberger, Associate Chaplain
Jennifer Jones, Executive Director of Student Development and Programs
Patrick Hite, Executive Director of the Memorial Health Center
Larry Kanter, Executive Director of Finance
Steve Logan, Executive Director of Residence Life and Student Housing Arlene Manthey, Associate Director of Development
Lisa Webb, Associate Vice President for Student Affairs and Dean of Student Life

# OFFICES OF THE ACADEMIC DEANS 

## Dedman College

Dennis D. Cordell, Associate Dean for General Education
Jennifer Haden, Associate Dean for Student Records
Robert Pocklington, Associate Dean for Student Affairs
J. Randy Phillips, Associate Dean for Administration

Alma Alvaraz-Smith, Assistant Dean for Strategic Initiatives
David Doyle, Jr., Assistant Dean and Director of the University Honors Program

## Cox School of Business

William R. Dillon, Senior Associate Dean for Academic Affairs and Herman W. Lay Professor of Marketing and Professor of Statistics
Marcia K. Armstrong, Associate Dean for Master's Programs
Gary T. Moskowitz, Associate Dean for Undergraduate Business Programs
Frank R. Lloyd, Associate Dean of Executive and Management Development
Catherine Collins, Assistant Dean for Administration and Finance
George C. Johnson, Assistant Dean for Career Management and Corporate Relations
Linda Kao, Assistant Dean of Global Operations
Kevin Knox, Assistant Dean for External Relations
Tom Perkowski, Assistant Dean of Executive M.B.A. Program

## Simmons School of Education and Human Development

Katherine Hargrove, Associate Dean for Academic Affairs and Director of Center for
Teacher Education
Yolette García, Assistant Dean for External Affairs and Outreach
Rebecca Hood, Assistant Dean for Finance and Operations

## Meadows School of the Arts

Kevin Paul Hofeditz, Associate Dean for Student Affairs
Martin Sweidel, Associate Dean for Planning and Assessment
P. Gregory Warden, Associate Dean for Research and Academic Affairs

## Lyle School of Engineering

James G. Dunham, Associate Dean for Academic Affairs
Delores M. Etter, TI Director, Caruth Institute for Engineering Education
John B. Kiser, Associate Dean for Strategic Planning and Finance
Tammy L. Richards, Associate Dean for Operations, Enrollment, Marketing and Communications

## Dedman School of Law

Roy R. Anderson, Senior Associate Dean for Academics
Marc I. Steinberg, Senior Associate Dean for Research
Lynn Bozalis, Associate Dean for Development and Alumni Affairs
Ruth Cross, Associate Dean for Administration
Gail M. Daly, Associate Dean for Library and Technology, Director of Underwood Law Library
Martin L. Camp, Assistant Dean for Student Affairs
Virginia M. Keehan, Assistant Dean for Admissions
Karen Sargent, Assistant Dean for Career Services
Perkins School of Theology
Richard D. Nelson, Associate Dean for Academic Affairs
Duane Harbin, Assistant Dean for Information Technology and Institutional Research

## Research and Graduate Studies

Barbara Phillips, Assistant Dean for Graduate Studies
Alicia Brossette, Assistant Vice President for Research Administration

## Dedman College

ADMINISTRATION<br>Cordelia Candelaria, Ph.D., Dean<br>Dennis D. Cordell, Ph.D., Associate Dean for General Education<br>Jennifer Haden, Ph.D., Associate Dean for Student Records<br>Peter Moore, Ph.D., Associate Dean for Academic Affairs<br>J. Randy Phillips, M.B.A., Associate Dean for Administration<br>Robert Pocklington, Ph.D., Associate Dean for Student Affairs<br>Alma Alvaraz-Smith, Ph.D., Assistant Dean for Strategic Initiatives<br>David Doyle, Jr., Ph.D., Assistant Dean and Director of the University Honors Program<br>Rick Fethke, B.B.A., Financial Officer

## FACULTY

Gwendoline Aaron, Lecturer of French, M.A., Liège (Belgium)
Barbara Abad, Assistant Professor of French, M.Phil., New York
Dalia Abdelhady, Assistant Professor of Sociology, Ph.D., New York (Albany)
Adriana Aceves, Visiting Lecturer of Mathematics, M.S., Arizona
Alejandro Aceves, Professor of Mathematics, Ph.D., Arizona
Jeremy Du Quesnay Adams, Professor of History, Ph.D., Harvard
Michael A. Adler, Associate Professor of Anthropology, Ph.D., Michigan
Vladimir Ajaev, Assistant Professor of Mathematics, Ph.D., Northwestern
Brandy Alvarez, Lecturer of Italian, M.A., Yale
Steve Anderson, Adjunct Assistant Professor of Philosophy, J.D., SMU
Angela Ards, Assistant Professor of English, M.A., California (Los Angeles)
Sabri Ates, Assistant Professor of History, Ph.D., New York
Helen Babbili, Lecturer of Chemistry, M.S., Kakatiya (India)
Peter J. Bakewell, Edmund and Louise Kahn Professor of History, Ph.D., Cambridge
Austin Baldwin, Assistant Professor of Psychology, Ph.D., Minnesota
Nathan S. Balke, Professor of Economics, Ph.D., Northwestern
Manju Bansal, Adjunct Lecturer of Hindi, M.A., Kanpur
G. William Barnard, Associate Professor of Religious Studies, Ph.D., Chicago

Eric Barnes, Associate Professor of Philosophy, Ph.D., Indiana
Scott Bartlett, Adjunct Assistant Professor of Philosophy, Ph.D., Southern Illinois (Illinois)
Raveendra N. Batra, Professor of Economics, Ph.D., Southern Illinois
Johannes Bauer, Assistant Professor of Biological Sciences, Ph.D., Free University of Berlin
William Edward Beauchamp, Associate Professor of French, Ph.D., Columbia
Steven C. Bergman, Research Professor II of Earth Sciences, Ph.D., Princeton
Denis Bettaver, Lecturer of French, M.A., Texas (Arlington)
Edward Robert Biehl, Dedman Family Distinguished Professor of Chemistry, Ph.D., Pittsburgh
Gordon Eastridge Birrell, Associate Professor of German, Ph.D., Stanford
David D. Blackwell, Hamilton Professor of Earth Sciences, Ph.D., Harvard
Damiano Bonuomo, Lecturer of Italian, M.A., Florida
Richard Bozorth, Associate Professor of English, Ph.D., Virginia
Jacqueline Bradley, Lecturer of English, M.A., SMU
Debra Branch, Lecturer of Sociology, Ph.D., Ohio State
Teresa Brentegani, Lecturer of Italian, B.A., Milan
Caroline Brettell, University Distinguished Professor of Anthropology, Ph.D., Brown
Alan S. Brown, Professor of Psychology, Ph.D., Northwestern
Seyom Brown, Professor of Political Science, Ph.D., Chicago
Christine E. Buchanan, Professor of Biological Sciences, Ph.D., Chicago

Paola Buckley, Lecturer of French, M.D., Maryland
Ronald Butler, C.F. Frensley Chair of Mathematics, Professor of Statistical Sciences, Ph.D., Michigan
John D. Buynak, Professor of Chemistry, Ph.D., Rice
Josephine Caldwell-Ryan, Lecturer of Women's Studies, Ph.D., SMU
Cordelia Candelaria, Professor of English, Ph.D., Notre Dame
Jing Cao, Assistant Professor of Statistical Science, Ph.D., Missouri
Thomas W. Carr, Associate Professor of Mathematics, Ph.D., Northwestern
Bradley Kent Carter, Associate Professor of Political Science, Ph.D., California
(Berkeley)
Mark A. Chancey, Associate Professor of Religious Studies, Ph.D., Duke
Carolyn E. Channell, Senior Lecturer of English, M.A., Case Western Reserve
John R. Chávez, Professor of History, Ph.D., Michigan
Bo Chen, Assistant Professor of Economics, M.S., Wisconsin
Marc Christensen, Research Assistant Professor II of Physics, Ph.D., George Mason
Philippe Chuard, Assistant Professor of Philosophy, Ph.D., Australian National
Yeo-Jin Chung, Assistant Professor of Mathematics, Ph.D., California (Irvine)
Thomas E. Coan, Associate Professor of Physics, Ph.D., California (Berkeley)
Richard W. Cogley, Associate Professor of Religious Studies, Ph.D., Princeton
Olga L.V. Colbert, Associate Professor of Spanish, Ph.D., Stanford
Marius Conceatu, Assistant Professor of French, Ph.D., Johns Hopkins
Jodi A. Cooley-Sekula, Assistant Professor of Physics, Ph.D., Wisconsin (Madison)
Dennis D. Cordell, Professor of History, Ph.D., Wisconsin
Anthony J. Cortese, Professor of Sociology, Ph.D., Notre Dame
John Cotton, Adjunct Lecturer of Physics, M.S., SMU
Edward F. Countryman, University Distinguished Professor of History, Ph.D., Cornell
R. Alan Covey, Assistant Professor of Anthropology, Ph.D., Michigan

Michael Crow, Lecturer of Psychology, Ph.D., SMU
Timothy Wood Crusius, Professor of English, Ph.D., Southern California
J. Michael Cruz, Lecturer of Sociology, Ph.D., Texas Woman's

Charles E. Curran, Scurlock Professor of Human Values, S.T.D., Gregorian, (Rome)
Ken Daley, Lecturer of Philosophy, Ph.D., Colorado
Simon Dalley, Lecturer of Physics, Southampton
Robert Clay Davis, Associate Professor of Mathematics, Ph.D., Tulane
Karen de Olivares, Adjunct Lecturer of Sociology, Ph.D., Michigan
Rajat Deb, Professor of Economics, Ph.D., London School of Economics
Crista J. DeLuzio, Assistant Professor of History, Ph.D., Brown
Miroslava Detcheva, Lecturer of Spanish, M.A., Baylor
Jill DeTemple, Assistant Professor of Religious Studies, Ph.D., North Carolina
Darryl Dickson-Carr, Associate Professor of English, Ph.D., California (Santa Barbara)
Melissa Barden Dowling, Associate Professor of History, Ph.D., Columbia
David D. Doyle, Jr., Adjunct Assistant Professor, Ph.D., City University of New York
Xinlin Du, Research Assistant Professor II of Earth Sciences, Ph.D., California (Berkeley)
Mallory M. Dubuclet, Lecturer of English, M.A., SMU
Irina Dumitrescu, Assistant Professor of English, Ph.D., Yale
Denise DuPont, Assistant Professor of Spanish, Ph.D., Yale
Elizabeth Dwelle, Lecturer of English, Ph.D., North Texas
Maria Eguez, Lecturer of Spanish, Ph.D., Maryland
Douglas E. Ehring, William Edward Easterwood Professor of Philosophy, Ph.D., Columbia

Sunday Eiselt, Assistant Professor of Anthropology, Ph.D., Michigan
Carl Johan Elverskog, Associate Professor of Religious Studies, Ph.D., Indiana
Gary Evans, Research Professor II of Physics, Ph.D., California Institute of
Technology
Anthony R. Fiorillo, Research Professor II of Earth Sciences, Ph.D., Pennsylvania
Justin Fisher, Assistant Professor of Philosophy, Ph.D., Arizona
Thomas B. Fomby, Professor of Economics, Ph.D., Missouri
Dennis A. Foster, D.D. Frensley Professor of English, Ph.D., California (Irvine)
Georita Frierson, Assistant Professor of Psychology, Ph.D., Ohio State
Serge Frolov, Associate Professor of Religious Studies and the Nate and Ann Levine
Endowed Chair in Jewish Studies, Ph.D., Claremont
Marie-Luise Gaettens, Associate Professor of German, Ph.D., Texas
Heather Garrett-Pelletier, Lecturer of French, Ph.D., Vanderbilt
Ian Gladwell, Professor of Mathematics, Ph.D., Manchester
Soroya Gollop, Assistant Professor of Philosophy, M.A., Auckland
Jo Goyne, Senior Lecturer of English, M.A., SMU
Robert T. Gregory, Professor of Earth Sciences, Ph.D., California Institute of Technology
Ezra Greenspan, Edmund J. and Louise W. Kahn Chair in Humanities and Professor of English, Ph.D., Brown
Diana Grumbles, Lecturer of English, M.A., SMU
Peggy Gui, Research Assistant Professor II of Physics, Ph.D., Delaware
Richard F. Gunst, Professor of Statistical Science, Ph.D., SMU
Richard Haberman, Professor of Mathematics, Ph.D., Massachusetts Institute of Technology
Thomas Hagstrom, Professor of Mathematics, Ph.D., California Institute of Technology
Rick Halperin, Adjunct Lecturer, Ph.D., Auburn
Kenneth M. Hamilton, Associate Professor of History, Ph.D., Washington
Robert B. Hampson, Associate Professor of Psychology, Ph.D., Virginia
Ian R. Harris, Associate Professor of Statistical Science, Ph.D., Birmingham (United Kingdom)
Robert L. Harrod, Associate Professor of Biological Sciences, Ph.D., Maryland
Marta Harvell, Lecturer of English, Ph.D., North Texas
Richard O. Hawkins, Associate Professor of Sociology, Ph.D., Washington
Kathy Jean Hayes, Professor of Economics, Ph.D., Syracuse
David Haynes, Associate Professor of English, M.A., Hamline (St. Paul)
George Henson, Lecturer of Spanish, M.A., Middlebury
Eugene T. Herrin, Jr., Shuler-Foscue Professor of Earth Sciences, Ph.D., Harvard
Stephen C. Hiltz, Adjunct Assistant Professor of Philosophy, Ph.D., Texas
Michael N. Holahan, Associate Professor of English, Ph.D., Yale
George Holden, Professor of Psychology, Ph.D., North Carolina
James Hollifield, Professor of Political Science, Ph.D., Duke
James Kirkland Hopkins, Professor of History, Ph.D., Texas
Vanessa Hopper, Lecturer of English, M.A., SMU
Werner Horsthemke, Associate Professor of Chemistry, Ph.D., Free University of Brussels
Kent Hornbostel, Associate Professor of Physics, Ph.D., Stanford
Susan Hornstein, Lecturer of Psychology, Ph.D., SMU
Michael Householder, Assistant Professor of English, Ph.D., California (Irvine)
Diana Howard, Lecturer of English, M.A., SMU
Robert Howell, Assistant Professor of Philosophy, Ph.D., Brown
Kathleen Hugley-Cook, Adjunct Lecturer of French, Ph.D., Johns Hopkins

Kyle Hyndman, Assistant Professor of Economics, Ph.D., New York
Dennis S. Ippolito, McElvaney Professor of Political Science, Ph.D., Virginia
Mary Jackman, Lecturer of English, Ph.D., New Mexico State
Bonnie Jacobs, Associate Professor of Environmental Science, Ph.D., Arizona
Louis Jacobs, Professor of Earth Sciences, Ph.D., Arizona
Calvin C. Jillson, Dedman Family Distinguished Professor of Political Science and Professor of Political Science, Ph.D., Maryland
Benjamin H. Johnson, Assistant Professor of History, Ph.D., Yale
Richard S. Jones, Professor of Biological Sciences, Ph.D., Wesleyan
Ernest N. Jouriles, Professor of Psychology, Ph.D., State University of New York (Stony Brook)
Jean Kazez, Adjunct Assistant Professor of Philosophy, Ph.D., Arizona
Robert L.P. Kehoe, III, Assistant Professor of Physics, Ph.D., Notre Dame
Matthew Keller, Assistant Professor of Sociology, Ph.D., California (Davis)
Robert Van Kemper, Professor of Anthropology, Ph.D., California (Berkeley)
Martine Kincaid, Lecturer of French, Ph.D., Cincinnati
Harold Knight, Lecturer of English, Ph.D., Iowa
Thomas J. Knock, Associate Professor of History, Ph.D., Princeton
Joseph F. Kobylka, Associate Professor of Political Science, Ph.D., Minnesota
Anna Kormilitsina, Assistant Professor of Economics, Ph.D., Duke
Linda Koski, Lecturer of Spanish, Ph.D., Stanford
Brigette Kovacevich, Assistant Professor of Anthropology, Ph.D., Vanderbilt
Sheri Locklear Kunovich, Assistant Professor of Sociology, Ph.D., Ohio State
James W. Lamb, Adjunct Assistant Professor of Philosophy, Ph.D., Brown
John C. Lamoreaux, Associate Professor of Religious Studies, Ph.D., Duke
Pamela Lange, Senior Lecturer of English, M.A., SMU
Michael Lattman, Professor of Chemistry, Ph.D., City University of New York
Verónica León, Senior Lecturer of Spanish, Ph.D., Texas
Bruce Levy, Lecturer of Humanities, Ph.D., Brown
Anne E. Lincoln, Assistant Professor of Sociology, Ph.D., Washington State Glenn Marston Linden, Associate Professor of History, Ph.D., Washington Steven E. Lindquist, Assistant Professor of Religious Studies, Ph.D., Texas Matthew Lockard, Assistant Professor of Philosophy, Ph.D., California
Victoria Lockwood, Associate Professor of Anthropology, Ph.D., California (Los Angeles)
Chris Logan, Lecturer of Psychology, Ph.D., Texas Tech
Robin W. Lovin, Maguire University Professor of Ethics, Ph.D., Harvard
Paul Ludden, Professor of Biological Sciences, Ph.D., Wisconsin
Michael Lusztig, Professor of Political Science, Ph.D., McGill
John Arthur Maguire, II, Professor of Chemistry, Ph.D., Northwestern
Luis Maldonado-Peña, Assistant Professor of Spanish, Ph.D., Georgetown
Luigi Manzetti, Associate Professor of Political Science, Ph.D., Iowa
Isaac Mbiti, Assistant Professor of Economics, A.M., Brown
A. Lee McAlester, Professor of Earth Sciences, Ph.D., Yale

Alexis M. McCrossen, Associate Professor of History, Ph.D., Harvard
Renee McDonald, Associate Professor of Psychology, Ph.D., Houston
Monnie McGee, Assistant Professor of Statistical Science, Ph.D., Rice
Jason R. McKenna, Research Assistant Professor II of Earth Sciences, Ph.D., SMU
Mihan House McKenna, Research Assistant Professor II of Earth Sciences, Ph.D., SMU
John Ashley Mears, Associate Professor of History, Ph.D., Chicago
Mogens V. Melander, Associate Professor of Mathematics, Ph.D., Technical University of Denmark

David J. Meltzer, Henderson Morrison Professor of Anthropology, Ph.D., Washington
Alicia E. Meuret, Assistant Professor of Psychology, Ph.D., Hamburg
Daniel Millimet, Professor of Economics, Ph.D., Brown
Cas Milner, Research Professor II of Physics, Ph.D., Texas
Roy Mink, Research Professor of Earth Sciences, Ph.D., Moscow
Giovanni Mion, Lecturer of Philosophy, Ph.D., Cincinnati
Peter Moore, Professor of Mathematics, Ph.D., Rensselaer Polytechnic Institute
Francisco Morán, Associate Professor of Spanish, Ph.D., Georgetown
Daniel Moss, Assistant Professor of English, Ph.D., Princeton
Ross C. Murfin, Professor of English, Ph.D., Virginia
Jack E. Myers, Professor of English, M.F.A., Iowa
Jasper Neel, Professor of English, Ph.D., Tennessee
Betty Nelson, Senior Lecturer of Spanish, M.A., SMU
Judy Newell, Lecturer of Mathematics, M.S., SMU
Beth S. Newman, Associate Professor of English, Ph.D., Cornell
Pauline Newton, Lecturer of English, Ph.D., Tulsa
Hon Keung (Tony) Ng, Assistant Professor of Statistical Science, Ph.D., McMaster (Ontario)
Donald L. Niewyk, Professor of History, Ph.D., Tulane
Angela Nozaleda, Lecturer of Spanish, M.A., Madrid
Eva Oberdörster, Lecturer of Biology, Ph.D., Duke
Jennifer O'Brien, Lecturer of Chemistry, Ph.D., North Texas
Fredrick I. Olness, Professor of Physics, Ph.D., Wisconsin
Daniel T. Orlovsky, Professor of History, Ph.D., Harvard
William C. Orr, Professor of Biological Sciences, Ph.D., Wayne State
Thomas Osang, Associate Professor of Economics, Ph.D., California (San Diego)
Dayna Oscherwitz, Assistant Professor of French, Ph.D., Texas
Saltuk Ozerturk, Assistant Professor of Economics, Ph.D., New York
Shane Palmer, Research Professor II of Physics, Ph.D., Texas (Dallas)
Roger Parks, Lecturer of Spanish, M.S., New Mexico
Nia Parson, Assistant Professor of Anthropology, Ph.D., Rutgers
Alberto Pastor, Assistant Professor of Spanish, Ph.D., Madrid
Chun Hui Peng, Adjunct Lecturer of Chinese, M.A. Peking
Elise Pflum, Adjunct Lecturer of German, Ph.D., Texas
John Phinney, Adjunct Lecturer of Anthropology, M.A., Nebraska
Amy Pinkham, Assistant Professor of Psychology, Ph.D., Pennsylvania
Patricia Pisano, Adjunct Lecturer of English, M.A., Cincinnati
Luis Polanco, Lecturer of Spanish, M.A., North Texas
Nenad Popovic, Lecturer of Philosophy, Ph.D., Miami
Katherine Presnell, Assistant Professor of Psychology, Ph.D., Texas
James E. Quick, Professor of Earth Sciences, Ph.D. California Institute of Technology
Patricia Rawlins, Adjunct Lecturer of Latin, M.A., Texas
Douglas A. Reinelt, Professor of Mathematics, Ph.D., California Institute of Technology
Daniel Reynolds, Assistant Professor of Mathematics, Ph.D., Rice
Helen Reynolds, Lecturer of Economics, Ph.D., SMU
Theodore Rice, Lecturer of Mathematics, Ph.D., Iowa
Thomas Ritz, Associate Professor of Psychology, Ph.D., Hamburg
H. Bryan Robbins, Associate Professor of Wellness, M.Ed., Arkansas

Luke Robinson, Assistant Professor of Philosophy, Ph.D., California (San Diego)
Elizabeth Rojas-Auda, Lecturer of Spanish, Ph.D., Wisconsin (Madison)
Timothy Rosendale, Assistant Professor of English, Ph.D., Northwestern
David Rosenfield, Associate Professor of Psychology, Ph.D., Texas

Santanu Roy, Professor of Economics, Ph.D., Cornell
Lawrence S. Ruben, Professor of Biological Sciences, Ph.D., Minnesota
Elizabeth Russ, Associate Professor of Spanish, Ph.D., Columbia
Kamal Saggi, Professor of Economics, Ph.D., Pennsylvania
Rupinder Saggi, Lecturer of Economics, Ph.D., North Carolina
Rubén Sánchez-Godoy, Assistant Professor of Spanish, Ph.D., Pittsburgh
Martha G. Satz, Assistant Professor of English, Ph.D., Texas (Dallas)
Randall J. Scalise, Senior Lecturer of Physics, Ph.D., Pennsylvania State
Mark A.F. Schell, Professor of Chemistry, Ph.D., Toronto
Keiko Schneider, Lecturer of Japanese, M.A.T., School for International Training
William R. Schucany, Professor of Statistical Science, Ph.D., SMU
Nina Schwartz, Associate Professor of English, Ph.D., California (Irvine)
Ona Seaney, Lecturer of English, M.A., New Mexico
Stephen J. Sekula, Assistant Professor of Physics, Ph.D., Wisconsin (Madison)
Ling Shiao, Instructor of History, Ph.D., Brown
Dennis M. Simon, Associate Professor of Political Science, Ph.D., Michigan State
Lorelei Simpson, Assistant Professor of Psychology, Ph.D., California (Los Angeles)
Lisa Siraganian, Assistant Professor of English, Ph.D., Johns Hopkins
Daniel J. Slottje, Professor of Economics, Ph.D., Texas A\&M
C.W. Smith, Professor of English, M.A., Northern Illinois

Jasper Smits, Associate Professor of Psychology, Ph.D., Texas
Kelly Teague Smith, Lecturer of English, M.A., Texas Tech
Sherry L. Smith, Professor of History, Ph.D., Washington
Carolyn Smith-Morris, Assistant Professor of Anthropology, Ph.D., Arizona
Susan Fernandez Solera, Lecturer of Spanish, Ph.D., Complutense de Madrid
David Y. Son, Associate Professor of Chemistry, Ph.D., Massachusetts Institute of Technology
Willard Lester Spiegelman, Duwain E. Hughes Jr. Distinguished Professor of English, Ph.D., Harvard
Harold Stanley, Geurin-Pettus Distinguished Chair of American Politics and Political Economy, Ph.D., Yale
Linda Brewster Stearns, Professor of Sociology, Ph.D., New York (Stony Brook)
Lori Ann Stephens, Lecturer of English, Ph.D., Texas (Dallas)
Brandilyn Stigler, Assistant Professor of Mathematics, Ph.D., Virginia Tech
S. Lynne Stokes, Professor of Statistical Science, Ph.D., North Carolina

Tom E. Stone, Senior Lecturer of English, Ph.D., Denver
Teresa Strecker, Adjunct Associate Professor of Biology, Ph.D., California (Los Angeles)
Ryszard Stroynowski, Professor of Physics, Ph.D., Geneva (Switzerland)
H. Troy Stuckey, Research Associate Professor of Earth Sciences, Ph.D., North Texas

Brian W. Stump, Albritton Professor of Earth Sciences, Ph.D., California (Berkeley)
Rajani Sudan, Associate Professor of English, Ph.D., Cornell
Brent Sumerlin, Associate Professor of Chemistry, Ph.D., Southern Mississippi
Steven D. Sverdlik, Associate Professor of Philosophy, Ph.D., Columbia
Neil J. Tabor, Associate Professor of Earth Sciences, Ph.D., California (Davis)
Nobuko Taguchi, Adjunct Lecturer of Japanese, M.A., Arizona
Hiroki Takeuchi, Assistant Professor of Political Science, Ph.D., California
Adrian Tan, Lecturer of Sociology, M.A., Ohio
Johannes Tausch, Associate Professor of Mathematics, Ph.D., Colorado State
Brad Thompson, Associate Professor of Philosophy, Ph.D., Arizona
Vicki Tongate, Lecturer of English, M.A., SMU
John E. Ubelaker, Professor of Biological Sciences, Ph.D., Colorado State
Roberto Vega, Associate Professor of Physics, Ph.D., Texas

Rajan Vempati, Adjunct Professor of Chemistry, Ph.D., Texas A\&M
Steven B. Vik, Professor of Biological Sciences, Ph.D., Oregon
Pia Vogel, Associate Professor of Biological Sciences, Ph.D., Kaiserslautern (Germany)
Gabriela Vokic, Assistant Professor of Spanish, Ph.D., Purdue
James Waddle, Assistant Professor of Biological Sciences, Ph.D., Washington
John B. Wagner, Research Professor II of Earth Sciences, Ph.D., Texas (Dallas)
Ben J. Wallace, Professor of Anthropology, Ph.D., Wisconsin
John V. Walther, Matthews Professor of Earth Sciences, Ph.D., California (Berkeley)
Xinlei (Sherry) Wang, Associate Professor of Statistical Science, Ph.D., Texas
Wendy Watson, Assistant Professor of Political Science, Ph.D., Ohio State
David J. Weber, Robert H. and Nancy Dedman Professor of History, Ph.D., New Mexico
Shlomo Weber, Robert H. and Nancy Dedman Trustee Professor of Economics, Ph.D., Hebrew University of Jerusalem
Stephen K. Wegren, Professor of Political Science, Ph.D., Columbia
Steven Weisenburger, Jacob and Frances Mossiker Chair of Humanities and Professor of English, Ph.D., Washington
Kathleen A. Wellman, Professor of History, Ph.D., Chicago
Ronald Knox Wetherington, Professor of Anthropology, Ph.D., Michigan
Elizabeth Wheaton, Lecturer of Economics, Ph.D., Temple
Alvina Bonnie Wheeler, Associate Professor of English, Ph.D., Brown
Daniel Wiegman, Lecturer of Spanish, M.A., University of the Americas
Sarah Willen, Assistant Professor of Anthropology, Ph.D., Emory
Byron Williams, Research Professor II of Physics, Ph.D., Stanford
R. Hal Williams, Professor of History, Ph.D., Yale

Richard Kelso Williams, Professor of Mathematics, Ph.D., Vanderbilt
David J. Wilson, Associate Professor of Anthropology, Ph.D., Michigan
J. Matthew Wilson, Associate Professor of Political Science, Ph.D., Duke

Rita Winandy, Senior Lecturer of French, Ph.D., Pittsburgh
Alisa Winkler, Research Professor II of Earth Sciences, Ph.D., SMU
Dale A. Winkler, Research Professor II of Earth Sciences, Ph.D., Texas (Austin)
John Wise, Lecturer of Biology, Ph.D., Rochester
Patty Wisian-Neilson, Professor of Chemistry, Ph.D., Texas
Wayne A. Woodward, Professor of Statistical Science, Ph.D., Texas Tech
Crayton J. Yapp, Professor of Earth Sciences, Ph.D., California Institute of Technology
Jingo Ye, Associate Professor of Physics, Ph.D., Swiss Federal Institute of Technology
Yan Xia Xiaoshen Zhang, Lecturer of Chinese, M.A., Beijing Language
Sheng Xu, Professor of Mathematics, Ph.D., Cornell
Yunkai Zhou, Assistant Professor of Mathematics, Ph.D., Rice
Tatiana Zimakova, Adjunct Lecturer of Russian, Ph.D., Moscow
Pierre Zippi, Research Professor of Earth Sciences, Ph.D., Toronto
Alicia Zuese, Associate Professor of Spanish, Ph.D., Columbia

## EMERITUS FACULTY

Venita F. Allison, Professor Emerita of Biological Sciences, Ph.D., Texas Woman’s Thomas R. Arp, Professor Emeritus of English, Ph.D., Stanford Irving A. Baker, Professor Emeritus of Political Science, M.P.A., New York U. Narayan Bhat, Professor Emeritus of Statistical Science, Ph.D., Western Australia Lewis R. Binford, University Distinguished Professor Emeritus of Anthropology, Ph.D., Michigan
Richard P. Bland, Professor Emeritus of Statistics, Ph.D., North Carolina

James O. Breeden, Professor Emeritus of History, Ph.D., Tulane
James E. Brooks, Professor Emeritus of Earth Sciences, Ph.D., Washington
Kenneth Lane Carroll, Professor Emeritus of Religious Studies, Ph.D., Duke
Jeff D. Chalk, III, Professor Emeritus of Physics, Ph.D., Colorado
Shirley Corbitt, Professor Emerita of Physical Education
Herbert Corkran, Jr., Professor Emeritus of Political Science, Ph.D., Indiana
George W. Crawford, Professor Emeritus of Physics
Steven V. Daniels, Professor Emeritus of English, Ph.D., Harvard
Dale Davis, Professor Emeritus of Teacher Preparation
Ronald L. Davis, Professor Emeritus of History, Ph.D., Texas (Austin)
Vincenzo E. DeNardo, Professor Emeritus of Italian, Ph.D., California (Los Angeles)
Margareta Deschner, Professor Emerita of Foreign Languages and Literatures
Wonmo Dong, Professor Emeritus of Political Science, Ph.D., Georgetown
Ann M. Early, Lecturer Emerita of English, M.A.T., Harvard
Maurice G. Elton, Professor Emeritus of French, Ph.D., Cincinnati; Officier dans
l'Ordre des Palmes Académiques, French Ministry of Education
James Gerhardt, Professor Emeritus of Political Science, Ph.D., Harvard
Mary Alice Gordon, Professor Emerita of Psychology, Ph.D., Texas Christian
Henry L. Gray, Professor Emeritus of Mathematics and Statistics, Ph.D., Texas
Josef Hadar, Professor Emeritus of Economics, Ph.D., Minnesota
O.T. Hargrave, Professor Emeritus of History, Ph.D., Vanderbilt

David B. Hausman, Professor Emeritus of Philosophy, Ph.D., Iowa
Harold J. Hietala, Professor Emeritus of Anthropology and Statistical Science, Ph.D., California (Los Angeles)
Michael J. Holdaway, Professor Emeritus of Earth Sciences, Ph.D., California (Berkeley)
Richard Alan Hunt, Professor Emeritus of Psychology, Ph.D., Texas Christian
Robert G. Hunter, D.D. Frensley Professor Emeritus of English Literature, Ph.D., Columbia
Chandrakant Harilal Kapadia, Professor Emeritus of Statistical Science, Ph.D., Oklahoma State
Morton Brandon King, Jr., Professor Emeritus of Sociology, Ph.D., Wisconsin John Harry LaPrade, Professor Emeritus of Spanish, Ph.D., North Carolina Robert L. Laury, Professor Emeritus of Earth Sciences, Ph.D., Wisconsin John Mirick Lewis, Professor Emeritus of English, M.A., Harvard
William Mahler, Professor Emeritus of Biological Sciences, Ph.D., Iowa Anthony Edward Marks, Professor Emeritus of Anthropology, Ph.D., Columbia Luís Martín, Edmund and Louise Kahn Professor Emeritus of History, Ph.D., Columbia
William F. May, Cary M. Maguire Professor Emeritus of Ethics, Ph.D., Yale John Lawrence McCarthy, Professor Emeritus of Biological Sciences, Ph.D., Purdue Curtis W. McIntyre, Professor Emeritus of Psychology, Ph.D., Vanderbilt George McMillion, Professor Emeritus of Physical Education
Elizabeth G. Miller, Professor Emerita of Spanish, Ph.D., Texas (Dallas)
Peter K. Mollenhauer, Professor Emeritus of German, Ph.D., Texas
Montie Gene Monzingo, Professor Emeritus of Mathematics, Ph.D., Oklahoma
Ruth Morgan, Professor Emerita of Political Science, Ph.D., Louisiana State
J. Carter Murphy, Professor Emeritus of Economics, Ph.D., Chicago

Ladislav P. Novak, Professor Emeritus of Anthropology, Ph.D., Minnesota
Benjamin Aby Petty, Professor Emeritus of Philosophy and Religious Studies, Ph.D., Boston
Bruce Pringle, Professor Emeritus of Sociology

Campbell B. Read, Professor Emeritus of Statistical Science, Ph.D., North Carolina
George W. Reddien, Jr., Professor Emeritus of Mathematics, Ph.D., Georgia Tech
Richard R. Rubottom, Professor Emeritus of Political Science
William R. Russell, Professor Emeritus of Economics, Ph.D., Washington
C. Garth Sampson, Professor Emeritus of Anthropology, D.Phil., Oxford

Tae Kun Seo, Professor Emeritus of Economics, Ph.D., Texas A\&M
Lawrence F. Shampine, Professor Emeritus of Mathematics, Ph.D., California Institute of Technology
Kenneth Dale Shields, Professor Emeritus of English, Ph.D., Edinburgh
Margaret M. Shriver, Professor Emerita of French, M.A., SMU
Doris Wyatt Simons, Professor Emerita of Mathematics, M.A., SMU
Franklin Sogandares-Bernal, Professor Emeritus of Biological Sciences, Ph.D., Nebraska
Sallie M. Strange, Professor Emerita of English, M.A., SMU
William H. Tedford, Jr., Professor Emeritus of Psychology, Ph.D., Emory
Vigdor L. Teplitz, Professor Emeritus of Physics, Ph.D., Maryland
Marshall N. Terry, Professor Emeritus of English, M.A., SMU
Ann Van Wynen Thomas, Professor Emerita of Political Science, LL.M., SMU
Joseph B. Tyson, Professor Emeritus of Religious Studies, Ph.D., Union Theological Seminary
Zoë Goss Urbanek, Professor Emerita of Foreign Languages and Literatures, M.A., Northwestern
Jutta Irene Van Selm, Professor Emerita of German, Ph.D., Texas
Benjamin Christopher Watts, Professor Emeritus of Education, Ph.D., Colorado State College of Education
Patricia Webb, Professor Emerita of Teacher Preparation
D. Fred Wendorf, Henderson Morrison Professor Emeritus of Anthropology, Ph.D., Harvard
André Winandy, Professor Emeritus of French, Ph.D., Pittsburgh
Samuel A. Zimmerman, Professor Emeritus of Spanish, Ph.D., Florida

# Annette Caldwell Simmons School of Education and Human Development 

ADMINISTRATION<br>David J. Chard, Ph.D., Leon Simmons Endowed Dean<br>Katherine Hargrove, Ph.D., Associate Dean for Academic Affairs<br>Yolette García, M.A., Assistant Dean for External Affairs and Outreach<br>Rebecca Hood, M.A., Assistant Dean for Finance and Operations<br>Patricia Addington, M.P.A., Director of Development<br>Sharon Hartley, B.A., Assistant to the Dean and Assistant Financial Officer<br>FACULTY<br>Jill Allor, Associate Professor of Education, Ed.D., Vanderbilt<br>Lee Alvoid, Senior Lecturer of Education, Ph.D., Texas Woman's<br>Robert Barner, Lecturer of Dispute Resolution and Counseling, Ph.D., The Fielding Institute<br>B. Harold Barkley, Jr., Lecturer of Counseling, Ph.D., North Texas<br>Marilyn Barr, Lecturer of Wellness, Ph.D., Texas Woman's<br>Abigail Bartoshesky, Lecturer of Education, Ed.D., George Washington<br>David Bertrand, Lecturer of Wellness, M.S., Baylor<br>Laurie Campbell, Lecturer of Education, Ed.D., Regent<br>David Chard, Professor of Education, Ph.D., Oregon<br>Piotr Chelstowski, Lecturer of Wellness, M.A., M.S., Warsaw<br>Deborah Diffily, Associate Professor of Education, Ph.D., North Texas<br>Brian Fennig, Lecturer of Wellness, M.L.S., M.A., SMU, Stephen F. Austin<br>Leanne Ketterlin Geller, Associate Professor of Educational Policy and Leadership, Ph.D., Oregon<br>Peter Gifford, Associate Professor of Wellness, Ph.D., Illinois<br>Donna Gober, Lecturer of Wellness, Ed.D., Lamar<br>Katherine Hargrove, Senior Lecturer of Education, Ph.D., Texas Woman's<br>Gail Hartin, Lecturer of Education, Ph.D., North Texas<br>Thomas L. Hartsell, Lecturer of Dispute Resolution and Counseling, J.D., Michigan State<br>Lynn Romejko Jacobs, Associate Professor of Wellness, Ph.D., Texas Woman's<br>Caroline Kethley, Assistant Professor of Education, Ph.D., Texas (Austin)<br>Jiang (JoAnn) Lan, Associate Professor of Education, Ed.D., Northern Illinois<br>G. Reid Lyon, Distinguished Professor of Educational Policy and Leadership, Ph.D., New Mexico<br>Patricia Mathes, Texas Instruments Endowed Chair of Reading Research and Professor of Education, Ph.D., Vanderbilt<br>Gay McAlister, Lecturer of Dispute Resolution and Counseling, Ph.D., Texas Woman's<br>Nancy Montgomery, Lecturer of Education, Ed.D., Texas A\&M (Commerce)<br>Barbara Morganfield, Senior Lecturer of Education, Ed.D., Vanderbilt<br>William Pulte, Associate Professor of Education, Ph.D., Texas (Austin)<br>Héctor Rivera, Assistant Professor of Education, Ph.D., California (Santa Cruz)<br>J. Kyle Roberts, Associate Professor of Education, Ph.D., Texas A\&M<br>Gary Robinson, Lecturer in Dispute Resolution and Counseling, J.D., Loyola (Los<br>Angeles)<br>Janis Sayers, Lecturer of Education, Ph.D., North Texas<br>Kenneth L. Springer, Associate Professor of Education, Ph.D., Cornell<br>Paige Ware, Assistant Professor of Education, Ph.D., California (Berkeley)<br>Anne Weil, Lecturer of Wellness, M.A., Naropa<br>Peter Weyand, Assistant Professor of Wellness, Ph.D., Georgia<br>Vicki Wood, Lecturer of Wellness, M.A., Amberton<br>Terri Sue Zerfas, Lecturer of Education, Ph.D., Texas A\&M (Commerce)

## PROGRAM DIRECTORS

Hal Barkley, Ph.D., Director of Master's Program in Counseling Deborah Diffily, Ph.D., Director of Master's Programs in Education Gail Hartin, Ph.D., Director of Undergraduate Teacher Certification Amy Heitzman, M.A., M.Ed., Executive and Professional Education Ne'Shaun Robinson Jones, M.S., Director of TRIO Programs
Michele Mrak, M.A., Director of Graduate Liberal Studies
Anthony Picchioni, Ph.D., Chair of Department of Dispute Resolution and Counseling Kyle Roberts, Ph.D., Director of Ph.D. Program in Education and Human

Development
Gary Robinson, Director of Dispute Resolution Program Marilyn Swanson, M.Ed., Director of Programming for Gifted Students Institute Karen Vickery, Ed.D., Director of Learning Therapy

## EMERITUS FACULTY

Paul Hook, Professor Emeritus of Physical Education
Bryan Robbins, Professor Emeritus of Physical Education

## Cox School of Business

## ADMINISTRATION

Albert W. Niemi, Jr., Ph.D., Dean and Tolleson Distinguished Professor of Business Leadership and Economics
Mary D. Powell, Executive Assistant to the Dean
William R. Dillon, Ph.D., Senior Associate Dean for Academic Affairs
Marcia K. Armstrong, Ph.D., Associate Dean for Master's Programs
Frank R. Lloyd, Ph.D., Associate Dean of Executive and Management Development
Gary T. Moskowitz, Ph.D., Associate Dean for Undergraduate Business Programs
Catherine Collins, B.B.A., Assistant Dean for Administration and Finance
George C. Johnson, M.B.A., Assistant Dean for Career Management Center and Corporate Relations
Linda Kao, B.B.A., Assistant Dean for Global Operations
Kevin Knox, B.B.A., Assistant Dean for External Relations
Lynda Oliver, M.B.A., Assistant Dean for Marketing and Communications
FACULTY
Ellen Allen, Senior Lecturer in Information Technology and Operations Management, Ph.D., SMU
Jeffrey W. Allen, Senior Lecturer in Finance, Ph.D., Purdue
Aydin Alptekinoğlu, Assistant Professor of Information Technology and Operations Management, Ph.D., California (Los Angeles)
Brian J. Barry, Senior Lecturer in Accounting, Ph.D., Texas A\&M
Thomas E. Barry, Professor of Marketing, Ph.D., North Texas
Amit Basu, Charles Wyly Professor of Information Systems, Ph.D., Rochester
Charles A. Besio, Senior Lecturer in Marketing, M.B.A., SMU
Sreekumar R. Bhaskaran, Assistant Professor of Information Technology and Operations Management, Ph.D., Texas (Austin)
Nilabhra Bhattacharya, Associate Professor of Accounting, Ph.D., Georgia
Richard A. Briesch, Associate Professor of Marketing, Ph.D., Northwestern
Brian R. Bruce, Senior Lecturer of Finance, M.B.A., Chicago
William B. Brueggeman, Clara R. and Leo F. Corrigan Sr. Professor of Real Estate, Ph.D., Ohio State
Jay Carson, Assistant Professor of Management and Organizations, Ph.D., Maryland
Anchada Aida Charoenrook, Visiting Assistant Professor in Finance, Ph.D., Michigan
Andrew H. Chen, Distinguished Professor of Finance, Ph.D., California (Berkeley)
James C. Collins, Jr., Senior Lecturer in Information Technology and Operations Management, M.S.I.E., SMU
Sonja C. Corbin, Senior Lecturer in Marketing, M.B.A., Texas Christian
David Carroll Croson, Associate Professor of Strategy and Entrepreneurship, Ph.D., Harvard
Michael L. Davis, Senior Lecturer in Finance, Ph.D., SMU
Hemang A. Desai, Robert B. Cullum Professor of Accounting, Ph.D., Tulane
William R. Dillon, Herman W. Lay Professor of Marketing and Herman W. Lay Professor of Statistics, Ph.D., City University of New York
Edward J. Fox, Associate Professor of Marketing, Ph.D., Pennsylvania
Judith H. Foxman, Senior Lecturer in Marketing, M.B.A., SMU
Mel Fugate, Associate Professor of Management and Organizations, Ph.D., Arizona State
Amar Gande, Assistant Professor of Finance, Ph.D., New York
Bezalel Gavish, Eugene J. and Ruth F. Constantin Distinguished Professor of Business, Ph.D., Technion, Israel Institute of Technology
J. Douglas Hanna, Associate Professor of Accounting, Ph.D., Cornell

Peter A. Heslin, Assistant Professor of Management and Organizations, Ph.D., Toronto
Daniel J. Howard, Professor of Marketing, Ph.D., Ohio State
Ellen F. Jackofsky, Associate Professor of Management and Organizations, Ph.D., Texas (Dallas)
Swaminathan Kalpathy, Assistant Professor of Finance, Ph.D., Arizona State
Roger A. Kerin, Harold C. Simmons Distinguished Professor of Marketing, Ph.D., Minnesota
Barbara W. Kincaid, Senior Lecturer in Law, J.D., SMU
Panayiota Konstantina Kiousis, Visiting Assistant Professor of Strategy and Entrepreneurship, Ph.D., California (Los Angeles)
Maribeth Kuenzi, Assistant Professor of Management and Organizations, Ph.D., Central Florida
Chun H. Lam, Associate Professor of Finance, Ph.D., Duke
Dwight R. Lee, William J. O'Neil Endowed Chair in Global Markets and Freedom and Scholar-in-Residence, Ph.D., California
David T. Lei, Associate Professor of Strategy and Entrepreneurship, Ph.D., Columbia
Qin Lei, Assistant Professor of Finance, Ph.D., Michigan
Zining Li, Assistant Professor of Accounting, Ph.D., Minnesota
Joseph Magliolo, III, Professor of Accounting and Distinguished Chair in Accounting, Ph.D., Stanford
William F. Maxwell, Professor of Finance and Mary Jo Vaughn Rauscher Chair in Financial Investments, Ph.D., George Washington
Darius P. Miller, Professor of Finance and Caruth Chair in Finance, Ph.D., California (Irvine)
Maria A. Minniti, Bobby B. Lyle Professor of Entrepreneurial Studies, Ph.D., New York
Albert W. Niemi, Jr., John and Debbie Tolleson Distinguished Professor of Business Leadership and Economics, Ph.D., Connecticut
Joonwook Park, Assistant Professor of Marketing, Ph.D., Penn State
Robin L. Pinkley, Professor of Management and Organizations, Ph.D., North Carolina
Mina J. Pizzini, Assistant Professor of Accounting, Ph.D., Pennsylvania
T. Andrew Poehlman, Assistant Professor of Marketing, Ph.D., Yale

Amy V. Puelz, Senior Lecturer in Information Technology and Operations Management, Ph.D., Nebraska (Lincoln)
Robert Puelz, Associate Professor of Insurance and Financial Services and Charles L. Dexter Chair in Insurance, Ph.D., Georgia
Miguel A. Quiñones, O. Paul Corley Distinguished Chair in Organizational Behavior, Ph.D., Michigan
Priyali Rajagopal, Assistant Professor of Marketing, Ph.D., Ohio State
Karthik Ramachandran, Assistant Professor of Information Technology and Operations Management, Ph.D., Texas (Austin)
Robert W. Rasberry, Assistant Professor of Management and Organizations, Ph.D., Kansas
Natalia I. Reisel, Assistant Professor of Finance, Ph.D., Rutgers
Susan M. Riffe, Senior Lecturer in Accounting, Ph.D., Southern California
Charles B. Ruscher, Lecturer in Finance, Ph.D., Arizona
Ulrike Schultze, Assistant Professor of Information Technology and Operations Management, Ph.D., Case Western Reserve
John H. Semple, Marilyn and Leo Corrigan Professor of Information Technology and Operations Management, Ph.D., Texas (Austin)
Raj Sethuraman, Marilyn and Leo Corrigan Associate Professor of Marketing, Ph.D., Northwestern

Wayne H. Shaw, Helmut Sohmen Distinguished Professor of Corporate Governance, Ph.D., Texas (Austin)
Tasadduq Shervani, Marilyn and Leo Corrigan Associate Professor of Marketing, Ph.D., Southern California
James L. Smith, Cary M. Maguire Professor of Oil and Gas Management, Ph.D., Harvard
Marion G. Sobol, Professor of Information Technology and Operations Management, Ph.D., Michigan
Gregory A. Sommers, Senior Lecturer of Accounting, Ph.D., Ohio State
Johan Sulaeman, Assistant Professor of Finance, Ph.D., Texas (Austin)
Jacquelyn S. Thomas, Associate Professor of Marketing, Ph.D., Northwestern
Rex W. Thompson, James M. Collins Professor of Finance, Ph.D., Rochester
Michael F. van Breda, Associate Professor of Accounting, Ph.D., Stanford
Donald M. VandeWalle, Associate Professor of Management and Organizations, Ph.D., Minnesota
Kumar Venkataraman, Fabacher Endowed Professorship in Alternative Asset Management, Ph.D., Arizona State
Ramgopal Venkataraman, Assistant Professor of Accounting, Ph.D., Penn State
Michel R. Vetsuypens, Professor of Finance, Ph.D., Rochester
Glenn Voss, Marilyn and Leo Corrigan Associate Professor of Marketing, Ph.D., Texas A\&M
Zannie G. Voss, Professor of Marketing and Chair of Arts Administration, Ph.D., Institut d'Administration des Entreprises
Gordon Walker, David B. Miller Professorship in Business and Professor of Strategy and Entrepreneurship, Ph.D., Pennsylvania
Catherine Weber, Senior Lecturer in Law, J.D., SMU
Wendy M. Wilson, Assistant Professor of Accounting, Ph.D., North Carolina (Chapel Hill)
Jeff Jiewei Yu, Assistant Professor of Accounting, Ph.D., Ohio State
Qi Zhou, Assistant Professor of Strategy and Entrepreneurship, Ph.D., Ohio State

## EMERITUS PROFESSORS

Marvin L. Carlson, Professor Emeritus of Accounting, Ph.D., Wisconsin
Alan B. Coleman, Professor Emeritus of Finance, Ph.D., Stanford
Elbert B. Greynolds, Jr., Professor Emeritus of Accounting, Ph.D., Georgia State
Richard W. Hansen, Professor Emeritus of Marketing, Ph.D., Minnesota
Thomas V. Hedges, Professor Emeritus of Accounting, D.B.A., Indiana
Richard O. Mason, Professor Emeritus of Management Sciences, Ph.D., California (Berkeley)
Sydney Chandler Reagan, Professor Emeritus of Real Estate and Regional Science, Ph.D., Harvard
John W. Slocum, Jr., Professor Emeritus of Management and Organizations, Ph.D., Washington
John A. Stieber, Professor Emeritus of Finance, M.A., SMU
Rhonald D. Walker, Professor Emeritus of Accounting/Business Law and Taxation, J.D., SMU

Leland Michael Wooton, Professor Emeritus of Management and Organizations, Ph.D., Southern California
Frank A. Young, Professor Emeritus of Insurance, M.A., Michigan

ADMINISTRATION<br>José Antonio Bowen, Ph.D., F.R.S.A., Dean, Algur H. Meadows Chair Kevin Paul Hofeditz, M.F.A., Associate Dean for Student Affairs Martin Sweidel, D.M.A., Associate Dean for Planning and Assessment<br>P. Gregory Warden, Ph.D., Associate Dean for Research and Academic Affairs, University Distinguished Professor of Art History<br>Zhanat Elliston, M.B.A., Director of Business and Finance<br>Pam Henderson, Director of Scholarships<br>Tommy Newton, M.L.A., Director of Student Recruitment<br>Mark Roglán, Ph.D., Director of Meadows Museum<br>Karen Vassar, B.B.A., Director of Marketing and Communications<br>Kris Muñoz Vetter, M.A., Director of Development and External Affairs<br>Mary Lynn Amoyo, B.S., Assistant Director of Alumni Relations<br>Leslie Garner, M.F.A., Assistant Director of Development<br>Raul Magdaleno, B.A., Associate Director of Diversity and Community Outreach<br>Lynda Stansbury, B.S., Assistant Director of Development<br>Joe Hoselton, B.M., Coordinator of Graduate Admissions<br>Chuck Donaldson, B.A., Degree Counselor<br>Janet Stephens, B.S., Degree Counselor<br>FACULTY AND ARTISTIC STAFF<br>Division of Advertising<br>Temerlin Advertising Institute<br>Patricia Alvey, Distinguished Chair, Director, Ph.D., Texas (Austin)<br>Janet Bustin, Adjunct Lecturer, M.B.A., SMU<br>Steven Edwards, Associate Professor, Ph.D., Texas (Austin)<br>W. Glenn Griffin, Assistant Professor, Ph.D., Texas (Austin)<br>David Hadeler, Lecturer, M.J., North Texas<br>Nathan Huey, Adjunct Lecturer, M.A., Texas (Austin)<br>Alice Kendrick, Professor, 2003-04 Meadows Foundation Distinguished Teaching<br>Professor, Ph.D., Tennessee (Knoxville)<br>Yeo Jung Kim, Assistant Professor, Ph.D., Texas (Austin)<br>Carrie La Ferle, Professor, Ph.D., Texas (Austin)<br>Christopher Owens, Adjunct Lecturer, B.S.A., North Texas<br>Kartik Pashupati, Assistant Professor, Ph.D., Michigan State<br>Division of Art<br>Charles DeBus, Senior Lecturer, B.F.A., Dallas<br>Carola Dreidemie, Assistant Professor, M.F.A., Texas Woman's; M.F.A., Pratt Institute<br>School of Art and Design<br>Barnaby Fitzgerald, Professor, M.F.A., Yale<br>Debora Hunter, Associate Professor, M.F.A., Rhode Island School of Design<br>Bill Komodore, Professor, M.F.A., Tulane<br>Laurence Scholder, Professor, 1992-93 Meadows Foundation Distinguished Teaching<br>Professor, M.A., Iowa<br>Noah Simblist, Associate Professor, M.F.A., Washington<br>James W. Sullivan, Chair, Professor, M.F.A., California State (Long Beach)<br>Philip Van Keuren, Associate Professor, M.F.A., SMU<br>Mary Vernon, Professor, Altshuler Distinguished Professor 2006-2008, 1998-99<br>Meadows Foundation Distinguished Teaching Professor, M.A., New Mexico<br>\section*{Division of Art History}<br>Janis Bergman-Carton, Division Chair, Associate Professor, Ph.D., Texas (Austin)<br>Amy Buono, Assistant Professor, Ph.D., California (Santa Barbara)

Randall C. Griffin, Associate Professor, Ph.D., Delaware
Adam Herring, Associate Professor, Ph.D., Yale
Karl Kilinski, II, University Distinguished Teaching Professor, Ph.D., Missouri
Pamela Patton, Associate Professor, Ph.D., Boston
Lisa Pon, Associate Professor, Ph.D., Harvard
Mark Roglán, Adjunct Associate Professor, Director of Meadows Museum, Ph.D., Autónoma de Madrid
Eric Stryker, Instructor, A.B.D., Yale
P. Gregory Warden, Associate Dean for Academic Affairs, University Distinguished Professor, 1996-97 Meadows Foundation Distinguished Teaching Professor, Ph.D., Bryn Mawr
Eric White, Adjunct Professor, Ph.D., Boston
Division of Arts Administration
Zannie Giraud Voss, Chair, Professor, Ph.D., Institut d'Administration des Entreprises (Aix-en-Provence)

## Division of Cinema-Television

Pamela Elder, Associate Professor, M.A., Memphis
Sean Griffin, Associate Professor, Ph.D., Southern California
Kevin Heffernan, Associate Professor, Ph.D., Wisconsin (Madison)
Kelli Herd, Senior Lecturer, M.A., Texas (Dallas)
Mark Kerins, Assistant Professor, Ph.D., Northwestern
Derek Kompare, Assistant Professor, Ph.D., Wisconsin (Madison)
Rachel V. Lyon, Professor, Chair, M.F.A., Illinois (Chicago)
Carolyn Macartney, Associate Professor, M.F.A., School of the Art Institute of Chicago
David Sedman, Associate Professor, Director of Meadows Engineering and
Technology, Ph.D., Bowling Green
Rick Worland, Professor, 1997-98 Meadows Foundation Distinguished Teaching
Professor, Ph.D., California (Los Angeles)
Division of Corporate Communication and Public Affairs
Christina Baily-Byers, Visiting Senior Lecturer, M.B.A., Nova Southeastern
Maria Dixon, Assistant Professor, Ph.D., Missouri
Nina Flournoy, Senior Lecturer, B.A., Louisiana
Rita Kirk, Professor, 2000-01 Meadows Foundation Distinguished Teaching
Professor, 2003-04 University Distinguished Teaching Professor, Ph.D., Missouri
Owen Lynch, Assistant Professor, Ph.D., Texas A\&M
Mark McPhail, Division Chair, Professor, Ph.D., Massachusetts (Amherst)
Cecilia Norwood, Adjunct Lecturer, M.B.A., North Texas
Kelly Reddell, Adjunct Lecturer, J.D., SMU
Christopher Salinas, Assistant Professor, Assistant Director of Forensics, Ph.D., Wayne State
Daniel Schill, Assistant Professor, Ph.D., Kansas
Ben Voth, Professor, Director of Forensics, Ph.D., Kansas

## Division of Dance

Shelley C. Berg, Professor, Ph.D., New York
Danny Buraczeski, Associate Professor, B.A., Bucknell
Mary Condon, Adjunct Lecturer, M.S.P.T., Boston
Shelley Estes, Adjunct Lecturer, B.S.E., Arkansas; Pilates Unlimited Full Certification Heather Guthrie, Division Coordinator, B.A., Art Institute of Dallas
Patricia Harrington Delaney, Associate Professor, M.F.A., SMU
Andrew Parker, Lecturer, International Teacher, Ballet Master, Principal Dancer, Choreographer

Leslie Peck, Associate Professor, Balanchine Trust Repetiteur and Principal Dancer Deborah Barr Truitt, Dance Production Supervisor/Lecturer, B.A., Southwestern Myra Woodruff, Division Chair, Professor, B.A., New York, International Artist, Instructor, Choreographer, Graham Technique Scholar

## Accompanists

Richard Abrahamson, Staff Musician, Juilliard School of Music
Jamal Mohamed, Staff Musician, Percussion Specialist
Mina Polevoy, Part-Time Staff Musician
Edward Lee Smith, Part-Time Staff Musician, Percussion Specialist
Daniel J. Sullivan, Part-Time Staff Musician, M.M., SMU
Janeen Vestal, Part-Time Staff Musician, B.M., SMU
Division of Journalism
Carolyn Barta, Senior Lecturer, M.A., Texas (Austin)
Jake Batsell, Assistant Professor, M.A., Texas (Austin)
Craig Flournoy, Associate Professor, Ph.D., Louisiana State
Michele Houston, Senior Lecturer, B.S., Texas (Austin)
Camille Kraeplin, Associate Professor, Ph.D., Texas (Austin)
Tony Pederson, Belo Distinguished Chair, M.A., Ohio State
Lucy L. Scott, Executive-in-Residence, B.F.A., SMU
Jayne Suhler, Senior Lecturer, M.A., Texas (Austin)
Karen Thomas, Lecturer, M.S., Columbia
Mark N. Vamos, Journalist-in-Residence, William J. O'Neil Chair in Business Journalism, M.S., Columbia

## Division of Music

Robert Kemble Dodson, Director of Division of Music, Professor of Music, M.M., Indiana
Samuel Holland, Professor of Music, Associate Director for Academic Affairs, Director of Graduate Studies, Chair of Piano Pedagogy, Ph.D., Oklahoma Alan Wagner, Assistant Director for Student Affairs, Ph.D., Florida State

## Ensemble Directors

Nancy Cochran, Professor of Music, Coordinator of Chamber Music, M.M., Ball State Jack Delaney, Professor of Music, Director of Bands, 1999-2000 Meadows Foundation Distinguished Teaching Professor, D.M.A., Cincinnati College-Conservatory of Music
Pamela Elrod, Associate Professor, Director of Choral Activities, D.M.A., Illinois Hank Hammett, Lecturer, Director of Opera, M.M., Texas
Jon Lee, Adjunct Lecturer, Director of Percussion Ensemble, M.M., SMU
Jamal Mohamed, Adjunct Lecturer, Director of World Music Ensemble
Paul Phillips, Professor, Director of Orchestral Activities, D.M.A., Eastman School of Music
Akira Sato, Adjunct Lecturer, Director of Meadows Jazz Orchestra, M.M., North Texas

## Instrumental Faculty

## Flute

Deborah Baron, Adjunct Assistant Professor, DSO, M.M., Juilliard School
Jean Larson, Adjunct Associate Professor, Principal Flute DSO, M.M., Texas
Kara Kirkendoll Welch, Adjunct Assistant Professor, DSO, M.M., SMU

## Oboe

Erin Hannigan, Adjunct Associate Professor, Principal Oboe DSO, M.M., Eastman School of Music

## Clarinet

Paul Garner, Adjunct Associate Professor, Associate Principal Clarinet DSO, M.M., Kansas

## Bassoon

Wilfred Roberts, Adjunct Associate Professor, Principal Bassoon DSO, B.M., Oberlin College Conservatory of Music

## Saxophone

Donald Fabian, Adjunct Assistant Professor, M.M., Michigan State

## Trumpet

Tom Booth, Chair of Woodwinds, Brass and Percussion, Adjunct Associate Professor, DSO, M.M., Illinois

## Horn

Haley Hoops, Adjunct Lecturer, DSO, M.M. Northwestern
Gregory Hustis, Adjunct Professor, 1995-96 Meadows Foundation Distinguished Teaching Professor, Principal Horn DSO, B.M., Curtis Institute of Music

## Trombone

John Kitzman, Adjunct Associate Professor, Principal Trombone DSO, B.M., Michigan

## Tuba

Matthew Good, Adjunct Associate Professor, DSO, B.M., Curtis Institute of Music

## Percussion

John Bryant, Adjunct Lecturer
Kalman Cherry, Adjunct Associate Professor, Principal Timpani DSO, Artist Diploma, Curtis Institute of Music
Douglas Howard, Adjunct Associate Professor, Principal Percussion DSO, M.M., Catholic University of America
Drew Lang, Adjunct Lecturer, M.M., Arizona
Ed Smith, Adjunct Lecturer

## Violin

Emanuel Borok, Adjunct Professor, Concertmaster DSO
Chee-Yun Kim, Artist-in-Residence, International Recording Artist and Violinist
Diane Kitzman, Adjunct Assistant Professor, B.A., Michigan
Viola
Ellen Rose, Adjunct Associate Professor, Principal Viola DSO, M.M., Juilliard School of Music
Barbara Sudweeks, Adjunct Associate Professor, Associate Principal Viola DSO, Curtis Institute of Music (Utah)

## Cello

Christopher Adkins, Adjunct Associate Professor, Principal Cello DSO, M.M.A., Yale
Andres Diaz, Artist-in-Residence, Associate Professor, B.M. and Artist Diploma, New England Conservatory, International Recording Artist and Cellist

## Double Bass

Thomas Lederer, Adjunct Associate Professor, Co-Principal Double Bass DSO, B.F.A., Carnegie Mellon

## Harp

Susan Dederich-Pejovich, Adjunct Assistant Professor, Principal Harp DSO, B.A., Cleveland Institute of Music

## Guitar

Robert Guthrie, Adjunct Professor, B.M., North Carolina School of the Arts

## Keyboard

## Organ/Harpsichord

Larry Palmer, Professor of Harpsichord and Organ, A.Mus.D., Eastman School of Music

## Piano

Joaquin Achucarro, Joel Estes Tate Professor of Piano, International Recording Artist and Pianist
Alessio Bax, Adjunct Assistant Professor, Artist Certificate, M.M., SMU
Wesley Beal, Adjunct Lecturer, Accompanist, M.M., SMU
Lucille Chung, Adjunct Lecturer, M.M., Artist Certificate, SMU
Tara Emerson, Accompanist, M.M., South Carolina
Kevin Gunter, Adjunct Lecturer, Class Piano, M.M., SMU
David Karp, Professor of Piano, D.M.A., Colorado
Carol Leone, Associate Professor, Chair of Piano, Ph.D., North Texas
Alfred Mouledous, Professor of Piano, M.M., Eastman School of Music
David Porritt, Piano Technician, B.S., John Brown

## Piano Pedagogy/Preparation

Samuel S. Holland, Professor of Music, Chair of Piano Pedagogy, Ph.D. Oklahoma
Matthew Kline, Lecturer in Piano Pedagogy, Associate Director of Piano Preparatory Department, M.M., SMU
Catharine Lysinger, Lecturer in Piano Pedagogy, Director of Piano Preparatory Department, D.M.A., Houston

Music Education

Sarah Allen, Assistant Professor of Music Education, Ph.D., Texas
Lynne Jackson, Adjunct Assistant Professor, M.M., Michigan
Brian Merrill, Adjunct Assistant Professor, M.M.E., North Texas
Deborah Perkins, Adjunct Assistant Professor, Ph.D., North Texas
Julie Scott, Lecturer, M.M., SMU
James Tran, Adjunct Lecturer, M.M., SMU
Thomas W. Tunks, Associate Provost, Professor of Music Education, Ph.D., Michigan State

Music History/Literature
José Antonio Bowen, Dean, Professor of Music History, Ph.D., Stanford
Kim Corbet, Adjunct Assistant Professor of Music History, M.M., Texas Christian
Hedy Law, Assistant Professor of Music History, Ph.D., Chicago
Donna Mayer-Martin, Associate Professor, Chair of Music History, Ph.D., Cincinnati College-Conservatory of Music
Jesus Ramos-Kittrell, Assistant Professor of Music History, Ph.D., Texas
Kevin Salfen, Visiting Assistant Professor of Music History, Ph.D., North Texas
Music Theory/Composition
Mark Feezell, Adjunct Assistant Professor of Music Theory, Ph.D., North Texas
Gary Foster, Adjunct Associate Professor of Music Theory, Ph.D., Louisiana State
Robert Frank, Associate Professor, Chair of Composition and Music Theory, Ph.D., North Texas
Kevin Hanlon, Associate Professor of Composition, D.M.A., Texas
David L. Mancini, Associate Professor of Music Theory, Ph.D., Yale
Simon Sargon, Professor of Composition, M.S., Juilliard School of Music
Martin Sweidel, Associate Dean, Associate Professor of Composition, D.M.A., Cincinnati College-Conservatory of Music
Xi Wang, Assistant Professor of Music Theory and Composition, D.M.A., Cornell
Leonardo Zuno, Adjunct Lecturer in Music Theory, M.M., SMU

Music Therapy<br>Barbara Bastable, Adjunct Assistant Professor of Music Therapy, M.A., Texas Woman's<br>Robert Krout, Professor, Chair of Music Therapy, Ed.D., Columbia, MT-BC, R.M.Th.<br>\section*{Sacred Music}<br>Christopher Anderson, Associate Professor of Sacred Music, Ph.D., Duke<br>Michael Hawn, Professor, D.M.A., Southern Baptist Theological Seminary<br>\section*{Voice}<br>Dale Dietert, Lecturer, M.M., Texas<br>Virginia Dupuy, Professor, M.M., Texas<br>Martha Gerhart, Adjunct Lecturer, Vocal Coach, M.M., Colorado<br>Hank Hammett, Lecturer, Director of Opera, M.M., Texas<br>Joan Heller, Senior Lecturer, Chair of Voice, M.M., New England Conservatory<br>Barbara H. Moore, Professor, 2004-2005 Meadows Foundation Distinguished Teaching Professor, M.S., Illinois<br>Timothy Seelig, Adjunct Assistant Professor, D.M.A., North Texas<br>Jason Smith, Visiting Lecturer, Vocal Coach, M.M., Florida State

Recording Engineering
Roy Cherryhomes, Lecturer and Recording Engineer, B.F.A., SMU
Division of Theatre
Dawn Askew, Master Electrician, B.A., Southwestern Oklahoma State
Jason Biggs, Sound Engineer/Designer, B.M., SMU
Rhonda Blair, Professor of Theatre, Ph.D., Kansas
Linda Blase, Adjunct Lecturer, M.F.A., Trinity
Leslie Brott, Assistant Professor of Theatre, M.F.A., Pennsylvania State
Brad Cassil, Lecturer in Stage Management, B.F.A., California Institute of the Arts
Michael Connolly, Associate Professor of Theatre, Ph.D., Indiana
James Crawford, Assistant Professor of Theatre, M.F.A., California (San Diego)
Marsha Grasselli, Lecturer and Production Manager, M.F.A., Goodman School of Drama (Chicago)
Jack Greenman, Assistant Professor of Theatre, M.F.A., California (Irvine)
Charles Helfert, Associate Professor of Theatre, 2003-04 Meadows Foundation Distinguished Teaching Professor, Ph.D., Wisconsin
Kevin Paul Hofeditz, Associate Dean for Student Affairs, Professor of Theatre, M.F.A., Missouri (Kansas City)

Steve Leary, Technical Director, B.A., Cameron
Bill Lengfelder, Professor of Theatre, M.F.A., Lindenwood
Cecil O'Neal, Professor of Theatre, B.A., Wisconsin
Russell Parkman, Associate Professor of Theatre, M.F.A., Yale School of Drama
Sara Romersberger, Associate Professor of Theatre, M.A. (Certified in Mime), Illinois
Ashley Smith, Assistant Professor of Theatre, M.F.A., Delaware
Gretchen Smith, Associate Professor of Theatre, Ph.D., Indiana
Claudia Stephens, Associate Professor of Theatre, M.F.A., Carnegie Mellon
Giva Taylor, Lecturer, Costume Shop Manager, M.F.A., SMU
Kathy Windrow, Adjunct Lecturer, M.A., M.F.A., SMU
Stanley Wojewodski, Distinguished Professor of Directing, M.F.A., Catholic University of America
Steve Woods, Professor of Theatre, M.F.A., New Orleans

## EMERITUS PROFESSORS

Robert T. Anderson, University Distinguished Professor of Organ and Sacred Music, 1981-82 Meadows Foundation Distinguished Teaching Professor, D.S.M., Union Theological Seminary
Robert Beard, Professor Emeritus of Dance, M.F.A., SMU
Carole Brandt, Professor Emerita of Theatre, Ph.D., Southern Illinois
Annemarie Weyl Carr, University Distinguished Professor Emerita of Art History, 1989-90 Meadows Foundation Distinguished Teaching Professor, Ph.D., Michigan
Robert B. Chambers, Professor Emeritus of Stage Design, M.A., Kansas
Alessandra Comini, University Distinguished Professor Emerita, 1986-87 Meadows Foundation Distinguished Teaching Professor, Ph.D., Columbia
Charles Eagle, Professor Emeritus of Music Therapy
Eugene Ellsworth, Professor Emeritus of Music
Elizabeth A. Ferguson, Professor Emerita of Dance, 1985-86 Meadows Foundation Distinguished Teaching Professor, M.F.A., SMU
John Gartley, Professor Emeritus of Cinema, Ph.D., Michigan
Kenneth W. Hart, Professor Emeritus of Sacred Music
Ralph M. Hays, Professor Emeritus of Music
Mesrop Kesdekian, Professor Emeritus of Theatre, M.A., Penn State
Arthur B. Koch, Professor Emeritus of Art, 2004-05 Meadows Foundation Distinguished Teaching Professor, M.S.A., Washington
Karen Kriete, Professor Emerita of Dance, New York City Ballet Scholar
Lois B. Land, Professor Emerita of Music
Bob R. Leonard, Professor Emeritus of Theatre, Ph.D., Kansas
Margaret Loft, Professor Emerita of Theatre
John McElroy, Professor Emeritus of Art, M.S., Florida State
David McHam, Professor Emeritus of Communications, 1994-95 Meadows Foundation Distinguished Teaching Professor, M.S., Columbia
Dale Moffitt, Professor Emeritus of Theatre, 1991-92 Meadows Foundation Distinguished Teaching Professor, Ph.D., Washington State
Jim Morris, Professor Emeritus of Communications, Ed.D., North Texas
James A. Ode, Professor Emeritus of Music Education, D.M.A., Performer's Certificate, Eastman School of Music
G. Donald Pasquella, Professor Emeritus of Communications, M.A., Iowa

Darwin Payne, Professor Emeritus of Communications, Ph.D., Texas (Austin)
Ross W. Powell, Professor Emeritus of Music, M.M. Eastman School of Music
Martin S. Reese, Professor Emeritus of Communications
Don Umphrey, Professor Emeritus of Advertising, Ph.D., Texas (Austin)
Wilbert Verhelst, Professor Emeritus of Art, M.A., Denver
Stephen D. Wilder, Professor Emeritus of Art, M.F.A., Wisconsin

## ADMINISTRATION

Geoffrey C. Orsak, Ph.D., Dean
James G. Dunham, P.E., Ph.D., Associate Dean for Academic Affairs
John B. Kiser, M.B.A., Associate Dean for Strategic Planning and Finance
Tammy L. Richards, P.E., M.B.A., Associate Dean for Operations, Enrollment,
Marketing and Communications
Richard S. Barr, Ph.D., Chair of Engineering Management, Information and Systems
Marc P. Christensen, Ph.D., Chair of Department of Electrical Engineering
Bijan Mohraz, P.E., Ph.D., Interim Chair of Department of Environmental and Civil
Engineering
Sukumaran Nair, P.E., Ph.D., Chair of Department of Computer Science and Engineering
M. Volkan Otugen, Ph.D., Chair of Department of Mechanical Engineering

DeeDee Conway, Financial and Information Officer
Misti Compton, Executive Assistant to the Dean

## RESIDENT FACULTY

Khaled Abdelghany, Assistant Professor of Environmental and Civil Engineering, Ph.D., Texas (Austin)
Alfredo Armendariz, Research Associate Professor of Environmental and Civil Engineering, Ph.D., North Carolina
Jong-Wha Bai, Visiting Lecturer of Environmental and Civil Engineering, M.S., Texas A\&M (College Station)
H. Charles Baker, P.E., Senior Lecturer of Electrical Engineering, Ph.D., Texas (Austin)
Richard S. Barr, Associate Professor of Engineering Management, Information and Systems, Ph.D., Texas (Austin)
Elena Borzova, Lecturer of Mechanical Engineering, Ph.D., SMU
Jerome K. Butler, P.E., University Distinguished Professor of Electrical Engineering, Ph.D., Kansas
Joseph Camp, Assistant Professor of Electrical Engineering, Ph.D., Rice
Marc P. Christensen, Associate Professor of Electrical Engineering, Ph.D., George Mason
Frank Coyle, Senior Lecturer of Computer Science and Engineering, Ph.D., SMU
Carlos E. Davila, Associate Professor of Electrical Engineering, Ph.D., Texas (Austin)
Roger O. Dickey, P.E., Senior Lecturer of Environmental and Civil Engineering, Ph.D., SMU
Scott C. Douglas, Professor of Electrical Engineering, Ph.D., Stanford
James G. Dunham, P.E., Associate Professor of Electrical Engineering and Associate Professor of Computer Science and Engineering, Ph.D., Stanford
Margaret H. Dunham, P.E., Professor of Computer Science and Engineering, Ph.D., SMU
Usama El Shamy, P.E, Assistant Professor of Environmental and Civil Engineering, Ph.D., Rensselaer Polytechnic Institute
Delores M. Etter, Professor of Electrical Engineering and Texas Instruments Distinguished Chair in Engineering Education, Ph.D., New Mexico
Donald E. Evans, Lecturer of Computer Science and Engineering, D.M.A., North Texas
Gary Evans, P.E., Professor of Electrical Engineering, Ph.D., California Institute of Technology
Mark Fontenot, Lecturer of Computer Science and Engineering, M.S., SMU
W. Milton Gosney, P.E., Cecil and Ida Green Professor of Electrical Engineering, Ph.D., California (Berkeley)
Ping Gui, Assistant Professor of Electrical Engineering, Ph.D., Delaware

Richard V. Helgason, Associate Professor of Engineering Management, Information and Systems and Associate Professor of Computer Science and Engineering, Ph.D., SMU
LiGuo Huang, Assistant Professor of Computer Science and Engineering, Ph.D., Southern California
Yildirim Hürmüzlü, Professor of Mechanical Engineering, Ph.D., Drexel
Jeffery L. Kennington, P.E., Professor of Engineering Management, Information and Systems, Ph.D., Georgia Institute of Technology
Alireza Khotanzad, P.E., Professor of Electrical Engineering, Ph.D., Purdue
Fatih Kocan, Assistant Professor of Computer Science and Engineering, Ph.D., Case Western Reserve
Radovan Kovacevic, Herman Brown Chair Professor of Mechanical Engineering, Ph.D., Montenegro
Paul Krueger, Associate Professor of Mechanical Engineering and Associate Professor of Environmental and Civil Engineering, Ph.D., California Institute of Technology
José Lage, P.E., Professor of Mechanical Engineering, Ph.D., Duke
Choon S. Lee, Associate Professor of Electrical Engineering, Ph.D., Illinois (Urbana)
Mary Alys Lillard, Lecturer of Engineering Management, Information and Systems, M.S., SMU

Charles M. Lovas, P.E., Associate Professor of Mechanical Engineering, Ph.D., Notre Dame
Elisabeth A. Marley, Visiting Assistant Professor of Electrical Engineering, Ph.D., Massachusetts Institute of Technology
David W. Matula, Professor of Computer Science and Engineering, Ph.D., California (Berkeley)
Gretchen Miller, Lecturer of Engineering Management, Information and Systems, M.B.A., Texas (Arlington)

Bijan Mohraz, P.E., Professor of Environmental and Civil Engineering and Professor of Mechanical Engineering, Ph.D., Illinois (Urbana)
Dona Mularkey, Lecturer of Mechanical Engineering, Ph.D., Vanderbilt
Sukumaran Nair, P.E., Professor of Computer Science and Engineering and Professor of Electrical Engineering, Ph.D., Illinois (Urbana)
Eli V. Olinick, Associate Professor of Engineering Management, Information and Systems, Ph.D., California (Berkeley)
Geoffrey C. Orsak, Professor of Electrical Engineering, Ph.D., Rice
M. Volkan Otugen, Professor of Mechanical Engineering, Ph.D., Drexel

Panos Papamichalis, P.E., Professor of Electrical Engineering, Ph.D., Georgia Institute of Technology
Behrouz Peikari, P.E., Professor of Electrical Engineering, Ph.D., California (Berkeley)
Donald C. Price, Lecturer of Mechanical Engineering, Ph.D., Oklahoma State
Peter E. Raad, P.E., Professor of Mechanical Engineering, Ph.D., Tennessee (Knoxville)
Dinesh Rajan, Associate Professor of Electrical Engineering, Ph.D., Rice
Edmond Richer, Robert Womack Chair Associate Professor of Mechanical Engineering, Ph.D., SMU
Thomas Siems, Senior Lecturer of Engineering Management, Information and Systems, Ph.D., SMU
Jerrell R. Stracener, Scholar in Residence of Engineering Management, Information and Systems, Ph.D., SMU
William Swanson, Visiting Lecturer of Engineering Management, Information and Systems, B.S., Texas A\&M

Stephen A. Szygenda, P.E., Cecil H. Green Chair Professor of Computer Science and Engineering and Cecil H. Green Chair Professor of Engineering Management, Information and Systems, Ph.D., Northwestern
Mitchell A. Thornton, P.E., Professor of Computer Science and Engineering and Professor of Electrical Engineering, Ph.D., SMU
Jeff Tian, P.E., Associate Professor of Computer Science and Engineering, Ph.D., Maryland
Wei Tong, Professor of Mechanical Engineering, Ph.D., Brown
Yuhang Wang, Assistant Professor of Computer Science and Engineering, Ph.D., Dartmouth
David A. Willis, Associate Professor of Mechanical Engineering and Associate Professor of Environmental and Civil Engineering, Ph.D., Purdue
Jeong Ho You, Assistant Professor in Mechanical Engineering, Ph.D., Illinois (Urbana)
Jim T. Yu, Assistant Professor of Environmental and Civil Engineering, Ph.D., Johns Hopkins
Andrew Junfang Yu, Assistant Professor of Engineering Management, Information and Systems, Ph.D., Louisiana State

## EMERITUS FACULTY

Kenneth L. Ashley, P.E., Professor Emeritus of Electrical Engineering, Ph.D., Carnegie Mellon
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)
Jack P. Holman, P.E., Professor Emeritus of Mechanical Engineering, Ph.D., Oklahoma State
Lorn L. Howard, P.E., Professor Emeritus of Electrical Engineering, Ph.D., Michigan State
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 Environmental and Civil Engineering, Ph.D., Texas (Austin)
Mandyam D. Srinath, P.E., Professor Emeritus of Electrical Engineering, Ph.D., Illinois (Urbana)
Hal Watson, Jr., P.E, Professor Emeritus of Mechanical Engineering, Ph.D., Texas (Austin)

## ADJUNCT FACULTY

Martin Achtenhagen, Adjunct Assistant Professor of Electrical Engineering, Ph.D., Ecole Polytechnique Federal de Lausanne (Photodigm)
Jeffrey Alcantara, Adjunct Lecturer of Computer Science and Engineering, B.F.D., Texas A\&M (Reel FX Creative Studios)
Abdelhalim Alsharqawi, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Central Florida (Texas Instruments)
Bogdan Antohe, Adjunct Associate Professor of Mechanical Engineering, Ph.D., SMU (MicroFab)
Karl Arunski, Adjunct Assistant Professor 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 Assistant Professor of Engineering Management, Information and Systems, M.B.A., Chicago (Technisource)

Arthur Beck, P.E., Adjunct Associate Professor of Environmental and Civil Engineering, M.S., SMU (B.S.M. Engineers)

Robert L. Bell, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.E.E.E., Brigham Young (Lockheed Martin)
William David Bell, Adjunct Assistant Professor of Engineering Management, Information and Systems, D.E., SMU (U.S. Defense Department)
Mark K. Boyd, P.E., Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., SMU (LCA Environmental)
William A. Bralick, Jr., Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Pennsylvania State (Paladin Logic Inc.)
Ann E. Broihier, Adjunct Lecturer of Computer Science and Engineering, M.S., Northern Illinois (Raytheon)
Hakki Candan Cankaya, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU (Alcatel)
Gerald R. Carney, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., North Texas (U.S. Environmental Protection Agency)
Robert Casagrande, Adjunct Assistant Professor of Environmental and Civil Engineering, M.B.A., SMU
Jean Chastain, Adjunct Lecturer of Engineering Management, Information and Systems, M.B.A., Dallas

George W. Chollar, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Texas Tech (The Statistical Design Institute)
Christian Christensen, Adjunct Lecturer of Computer Science and Engineering, M.S., SMU
Cheng Chung Chen, Adjunct Assistant Professor of Electrical Engineering, Ph.D., Florida
Joseph R. Cleveland, Adjunct Assistant Professor of Electrical Engineering, Ph.D., Iowa State (Samsung - retired)
Eric B. Cluff, Adjunct Assistant Professor of Mechanical Engineering, M.S., SMU (Abbott Labs)
Kevin D. Cluff, Adjunct Assistant Professor of Engineering Management, Information and Systems, P.E., Ph.D., Maryland (College Parks) (Abbott Labs)
David S. Cochran, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Auburn (System Design LLC)
Howard Cowin, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S.E., California State (Northridge) (Lockheed Martin)
Weiping Dai, P.E., Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., Carnegie Mellon (Trinity Consultants)
Gunter H. Daley, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S., SMU (UGS)
Christopher M. Davis, Adjunct Lecturer of Engineering Management, Information and Systems, M.B.A., Texas (Austin) (ForeScout Technologies)
Betsy del Monte, Adjunct Associate Professor of Environmental and Civil Engineering, M.Arch., Rice (Beck)

Peter A. DeLisle, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Texas (Austin) (Educet)
Dennis Delzer, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Oregon State (TI/Raytheon)
James Duke, P.E., Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Colorado State
Ted Dumas, P.E., Adjunct Associate Professor of Environmental and Civil Engineering and Adjunct Professor of Mechanical Engineering, M.S.C.E., SMU
Matthew Durchholz, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU (Lockheed Martin)

Rajeev Dwivedi, Adjunct Assistant Professor of Mechanical Engineering, Ph.D., SMU
John H. Easton, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Alabama (Birmingham) (Technico Environmental Inc.)
Carl Edlund, P.E., Adjunct Associate Professor of Environmental and Civil Engineering, B.S.M.E., Maryland (U.S. Environmental Protection Agency)

Fawzi Elghadamsi, P.E., Adjunct Associate Professor of Environmental and Civil Engineering and Adjunct Associate Professor of Mechanical Engineering, Ph.D., SMU (HDR)
Jahanzeb Faizan, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU
Andrew Felder, Adjunct Associate Professor of Environmental and Civil Engineering, J.D., New York Law School (The Arsenal Companies)

Edward Forest, Retired Chair of Environmental and Civil Engineering, Ph.D., Princeton
Dennis Frailey, Adjunct Professor of Computer Science and Engineering and Adjunct Professor of Engineering Management, Information and Systems, Ph.D., Purdue (Raytheon)
Santos Garza, Adjunct Assistant Professor of Mechanical Engineering, Ph.D., Texas Tech (Texas Instruments)
Prasad Golla, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU (UT Southwestern Medical Center)
Ganesh L. Harpavat, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Rochester (Lucent Technologies)
Ahmed Hímimy, Adjunct Assistant Professor of Electrical Engineering, Ph.D., SMU (Andrew Corp.)
Hossam Hímimy, Adjunct Associate Professor of Electrical Engineering, Ph.D., SMU (Ericsson)
James Hinderer, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Texas (Austin) (Raytheon)
Anwar Hirany, P.E., Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., Cornell (EPRI)
Michael E. Hopper, P.E., Adjunct Professor of Engineering Management, Information and Systems, D.E.E.M., SMU
Louis Hosek, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Oklahoma (American Electric Power)
Gerard Ibarra, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU
Ron Jackson, Adjunct Assistant Professor of Environmental and Civil Engineering, B.S., Northern Illinois (KDFW-TV)

Timothy L. Jacobs, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Purdue (American Airlines)
Shantanu Kangude, Adjunct Assistant Professor of Electrical Engineering, Ph.D., Georgia Institute of Technology (Texas Instruments)
Bhanu Kapoor, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU
Mohamed Khalil, Adjunct Assistant 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 Kinnaird, P.E., Adjunct Associate Professor of Electrical Engineering, Ph.D., SMU (Texas Instruments)
James E. Langford, Adjunct Associate Professor of Environmental and Civil Engineering, M.Arch., Harvard (James E. Langford, Architects and Planners LLC)

Lacy Lapio, Adjunct Lecturer of Computer Science and Engineering, B.S., SMU (Bank of America Securities)
Donald L. Legg, P.E., Adjunct Associate Professor of Environmental and Civil Engineering, M.S.S.M., Akron (Bell Helicopter)
Richard Levine, P.E., Adjunct Professor of Electrical Engineering, Ph.D., Massachusetts Institute of Technology (Beta Scientific Laboratory)
Richmond G. Lewin, Adjunct Instructor of Computer Science and Engineering, M.C.S.E., SMU

Lun Li, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU
Jan Lyons, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., Alabama (Huntsville)
Babu V. Mani, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Nova Southeastern (Alcatel)
Paul Martin, P.E., Adjunct Assistant Professor of Environmental and Civil Engineering, M.S., Nebraska

Matthew R. McBride, Adjunct Lecturer of Computer Science and Engineering, M.S., SMU (Countrywide Financial)
Shannon K. McCall, P.E., Adjunct Associate Professor of Environmental and Civil Engineering, M.S.E.E., Georgia Institute of Technology (Telios)
Lee McFearin, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU (Crane Wireless Monitoring Solutions)
Charles Donald Montgomery, Jr., Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Texas (Dallas) (Method by Design)
Freeman L. Moore, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., North Texas (Raytheon Systems Co.)
Padmaraj M.V. Nair, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., SMU
Dario Nappa, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU (Texas Instruments)
Nhut Nguyen, Adjunct Assistant Professor of Electrical Engineering, Ph.D., Tokyo (Samsung)
David Nowacki, Adjunct Assistant Professor of Mechanical Engineering, M.B.A., M.S., Louisiana State

Jennifer O'Brien, Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., North Texas
Robert S. Oshana, Adjunct Lecturer of Computer Science and Engineering, M.S., SMU (ObjectSpace Inc.)
David Peters, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S., Texas (Dallas)
John J. Pfister, Adjunct Assistant Professor of Computer Science and Engineering, M.C.S., Texas A\&M (Texas Instruments - retired)

Oscar K. Pickels, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.B.A., SMU
Jon Piot, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.B.A., Harvard Business School (Technisource)
Leonid Popokh, Adjunct Lecturer for Computer Science and Engineering, M.S., Texas (Dallas)
Jon D. Rauscher, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Colorado State (U.S. Environmental Protection Agency)
Mohamed Omar Rayes, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Kent State

James Rodenkirch, Adjunct Lecturer of Engineering Management, Information and Systems, M.S., SMU
Christopher Rynas, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S.E., Texas Tech (Raytheon)
Mark Sampson, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S., Southern California (UGS)
Steven Sanazaro, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.A., Illinois (Champaign)
Nand M. Singh, Adjunct Assistant Professor of Engineering Management, Information and Systems, D.E.E.M., SMU (MinMax Technologies)
Stephen C. Skinner, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU (Bell Helicopter)
Gordon Sohl, Adjunct Associate Professor of Electrical Engineering, B.S., Minnesota (Abbott Laboratories - retired)
Terrill Brett Spell, Adjunct Lecturer for Computer Science and Engineering, M.S., SMU
Gheorghe Spiride, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU (Nortel Networks)
D. Blair Spitzberg, Adjunct Associate Professor of Environmental and Civil Engineering, Ph.D., Texas (U.S. Nuclear Regulatory Commission)
John Stanley, Adjunct Assistant Professor of Environmental and Civil Engineering, M.S., SMU (FACServices Inc.)

Stephen L. Stepoway, Adjunct Assistant Professor of Computer Science and Engineering, Ph.D., Texas (Dallas)
Bennett Stokes, Adjunct Associate Professor of Environmental and Civil Engineering, J.D., Texas (Austin)

Patricia A. Taylor, Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., SMU (U.S. Environmental Protection Agency)
Ken Thomas, Adjunct Assistant Professor of Environmental and Civil Engineering, M.S., Amberton

Allen Tilley, Adjunct Lecturer of Mechanical Engineering, M.B.A., SMU
Philip K. Turner, Adjunct Assistant Professor of Environmental and Civil Engineering, Ph.D., North Texas (U.S. Environmental Protection Agency)
John Via, III, Adjunct Assistant Professor of Engineering Management, Information and Systems, D.E.E.M., SMU (Alcon Laboratories)
Andrew K. Weaver, Adjunct Assistant Professor of Mechanical Engineering, M.A., Navy; M.P.A., Troy State
James R. Webb, Adjunct Assistant Professor of Entrepreneurship and Business Development in Manufacturing, M.B.A., Dallas
Dan Wittliff, Adjunct Assistant Professor of Environmental and Civil Engineering, M.B.A., Oklahoma (GDS Associates Inc.)

Scott Woodrow, P.E., Adjunct Assistant Professor of Environmental and Civil Engineering, M.S., SMU (Dallas Cowboys)
John Yarrow, Adjunct Assistant Professor of Engineering Management, Information and Systems, M.S., North Texas (XO Communications)
Hossam Zaki, Adjunct Assistant Professor of Engineering Management, Information and Systems, Ph.D., SMU (Zilliant)

## A

absences, excused for university
extracurricular activities 46
academic advising 36, 91
academic forgiveness 26,50
academic integrity 108
academic petitions and waivers 51
academic programs 89
academic progress 31, 41
accounting 293, 298
accreditation 16
administration and faculty 484
admission to the university 17
advertising 315
advising policy 36,91
aerospace studies 129
African and Middle Eastern studies 220
Altshuler Learning Enhancement
Center (A-LEC) 82
anthropology 128
apartments 33
AP examinations 19
application deadlines 18
Army and Air Force ROTC 482
art 322
art history 335
Asian studies 214
attendance 45
audit enrollment (course visitor) 40
auditions, performing arts 19

## B

baccalaureate degree programs 90
biochemistry 139
biological sciences 141
business administration 286, 292, 296, 299
business law 306
Business Leadership Institute 281, 299

## c

calendar 10
career counseling 291
Career Development Center 114
Caruth Institute 282, 307
cell phones 37
Center for Special Studies 482
change of academic program 38
chaplain 113
chemistry 146
Chinese 182
cinema-television 346
civil engineering 450
classical studies 149
classification of students 46
CLEP examinations 20
code of conduct 108
commencement participation 52
computer science and engineering 414
concurrent degree programs 39
confidentiality of education records
35, 119
cooperative education 408
corporate communication and public affairs 352
course numbers 51
Cox School of Business 280
academic dismissal 41, 44
academic probation 44
academic suspension 44
admission 284
honors program 291
credit by examination 19
cultural formations 62
curriculum, general education 53

## D

dance 358
declaration of major 38
Dedman College of Humanities and Sciences 121
academic dismissal 44
academic probation 42,43
academic suspension 42,43
admission 125
departmental distinction 122, 127
general information 121
honors programs 122
internship 124
programs for professional students 122
readmission 43
term probation 42,43
departmental examinations 20
description of the university 15
Diagnostic Center for Dyslexia and Related Disorders 277
dismissal 41
dual credit/college programs 22
dyslexia 277

## E

earth sciences 150
economics 157
education abroad 96
educational facilities 82
education courses 272
electrical engineering 427
e-mail address 37
engineering management, information and systems 442
English 164
English as a second language 95
enrollment 35
environmental and civil engineering 450
environmental science 173
environmental studies 176
ethnic studies 179
European studies 215
evening degree program 181
exemptions and exceptions 79

## F

final examinations 47
finance 293, 300
financial aid 30,311
financial consulting 294
financial information 28
foreign languages and literatures 181
foreign literature courses in English 195
foreign transcript credit 23,94
fraternities 112
French 183
fundamentals 53

## G

general education curriculum 53
academic probation 41
academic suspension 41
exemptions and exceptions 53
geology 150,152
German 185
Gifted Students Institute 275
grade appeals 51
grade changes 49
grade-point average 49
grades 48
grades for repeated courses 50
graduation 52

## H

health examination 19
health services 114
high school curriculum 17
Hindi 187
history 197
home school criteria 18
honor code 108
honors programs 90, 122
honor system 109
housing deposit 25
housing policy 32
human diversity cocurricular requirement 79
human rights minor 208

## I

individualized studies in the liberal arts 209
information systems 302
information technology office 88
Institute for Reading Research 274
interdisciplinary studies in the arts 367
international and area studies 211
International Center 92, 96
international certificate programs 93
international students 26, 92
international studies 211
intramurals 117
Italian 187

## J

Japanese 189
journalism 368

## L

laboratories and research facilities 85
Latin 189
Latin American and Iberian studies 217
libraries 82
lifelong learning programs 278
Lyle School of Engineering 403
academic dismissal 45
academic probation 45
academic suspension 45
admission 410
cooperative education 408
internship program 406

## M

mailing addresses 37
management and organizations 295, 303
marketing 294, 304
markets and culture 221
mathematics 226
Meadows School of the Arts 308
academic dismissal 45
academic probation 44
academic suspension 44
admission 310
mechanical engineering 466
Mediation Clinic 277
medieval studies 230
ministries 113
mission statement 15
multicultural student affairs 111
multiple majors and minors 124
museum 87
music 376

## N

name change 37
natural sciences 177, 234
new student programs 111
no-credit enrollment 40
nondegree students 27
nondiscrimination notice 2

## P

pass/fail option 49
payment options 29
perspectives courses 53, 57
philosophy 234
physics 238
placement examinations 20
policies and procedures 35
political science 242
prelaw 123
premedical/dental 123
preprofessional students 123
probation 41
psychology 250
public policy 253

## R

readmission of students 25
real estate finance 296
real estate, risk management and business law 305
recreational sports 116
religious studies 255
required testing 18, 93
Reserve Officers’ Training Corps 106, 482
reserving a place 19,24
residence accommodations 32
residence application 32
residence halls, undergraduate 33
residence halls, upperclass, graduate student and family halls 33
residence, special needs 33
residency requirement 37
right to know 119
risk management and insurance area 306
Russian 190

## S

satisfactory progress policy 31
schedule changes 39
science and technology 56
services for students with disabilities 51, 111, 119
Simmons School of Education and Human Development 269, 485
SMU-in-Legacy 106
SMU-in-Taos 85, 107
sociology 260
sororities 112
Spanish 191
statistical science 263
statute of limitations for degree plans 52
strategy and entrepreneurship 307
student activities 111
student affairs 108
student center 112
student file number 36
student life 108
student media 113
students with disabilities 51, 111, 119
study abroad 96
summer programs 97
suspension 41

## T

teacher certification $124,142,270$
teaching and learning 270
telephone 37
term-hour loads 47
term programs 96
testing 18
theatre 396
transcript 23, 38, 94
transfer admission criteria 22
transfer courses from other
institutions 36

## V

volunteer programs 113

## W

wellness - Choices for Living 54, 275
winter programs 97
withdrawal from the university 28 , 36, 39
Women's Center 113
women's and gender studies 265


[^0]:    *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.

[^1]:    *Grades not included in grade-point average.

[^2]:    Meadows School of the Arts
    Division of Art History
    ARHS 1303 Introduction to Western Art, Part I: Prehistoric through Medieval

[^3]:    Dedman College
    Department of Anthropology
    ANTH 1321 First-Year Seminar in Anthropology
    *ANTH 2301 Introductory Cultural Anthropology
    *ANTH 2302 Peoples of the Earth: Humanity's First Five Million Years
    ANTH 3302 Monkeys and Apes: The Non-Human Primates
    *ANTH 3303 Psychological Anthropology
    *ANTH 3304 North American Archaeology
    *ANTH 3311 Mexico: From Conquest to Cancun
    *ANTH 3312 Meso-American Archaeology
    *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 3318 Prehistory of the American Southwest
    *ANTH 3319 Human Ecology
    ANTH 3323 East Asia: Cultural Traditions and Transformations
    *ANTH 3344 Cultural Aspects of Business
    *ANTH 3346 Culture and Diversity in American Life
    *ANTH 3353 Indians of North America
    *ANTH 3354 Latin America: Peoples, Places and Power
    ANTH 3355 Society and Culture in Contemporary Europe
    ANTH 3356 Before Civilization
    *ANTH 3361 Language in Culture and Society
    *ANTH 3376 Caribbean Transformations
    *ANTH 4309 Human Rights, Indigenous Peoples, and Nation States
    Department of Psychology
    PSYC 1300 Introduction to Psychology
    PSYC 3332 Developmental Psychology
    PSYC 3341 Social Psychology
    Department of Sociology
    SOCI 2300 Social Problems
    SOCI 2310 Introduction to Sociology
    *SOCI 3340 Global Society

[^4]:    * Course is taught only at SMU-in-Taos.

    Course Prerequisites:
    ${ }^{1}$ One 1300-level GEOL course or permission of instructor.
    ${ }^{2}$ High school chemistry and algebra.
    ${ }^{3}$ BIOL 1401 and 1402 or permission of instructor.

[^5]:    1. Proficiency in written and spoken German demonstrated by course work in GERM 3311 (Talking and Writing about Modern Germany).
    2. GERM 3320 (Contemporary German Culture).
[^6]:    1. Required courses include: LATN 2311, 2312, 3323, 3324, 3325.
    2. One course from the following list of supporting courses:

    ARHS 3312, ARHS 3314, ARHS 3316, ARHS 3319, CF 3392 (ARHS 3318), CF 3346
    (RELI 3352), CFA 3307 (RELI 3371), CLAS 2311, ENGL 3382, HIST 3350, HIST 3354, HIST 3355 (CF 3325), HIST 3356, HIST 3361.

[^7]:    Introduction to World Cultures
    ANTH 2301 Introductory Cultural Anthropology
    HIST 1302 World Cultures and Civilization
    SOCI 2377 Markets and Cultures
    International Politics
    PLSC 1340 Introduction to Comparative Politics
    PLSC 1380 Introduction to International Relations
    International Economics
    ECO 3321 International Economic Policy (Prerequisites: ECO 1311 and 1312)
    ECO 4357 International Trade (Prerequisite: ECO 3301)
    ECO 4358 International Macroeconomic Theory and Policy (Prerequisite: ECO 3302)
    PLSC 3389 International Political Economy (also SMU-in-Oxford)

[^8]:    * Only available to Business majors with a minor or second major in International Studies. Studies faculty member, culminating in a written report. Prerequisites: Written approval of the instructor and the program director or a designate, at least sophomore standing and appropriate introductory and advanced course preparation.

[^9]:    * Credit toward Medieval Studies major.

[^10]:    $\dagger$ 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.

[^11]:    The following courses may also be used to meet minor requirements:
    ANTH 3310 Gender and Sex Roles: A Global Perspective
    ANTH 3336 Gender and Globalization: Cultural and Ethical Issues
    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
    CTV 2332 American Popular Film
    CTV 2362 Diversity and American Film
    CTV 3302 Images of Women in Television (subject to approval)
    CTV 3310 Screen Artists (subject to approval)
    CTV 3360 Gender and Representation in World Cinema
    CTV 3395, 3398 Topics in Cinema/Television (subject to approval)
    CTV 4350 Gender Issues in Communication
    ECO 4351 Labor Economics
    ECO 5357 Economics of Human Resources
    ENGL 1360 The American Heroine: Fiction and Fact
    ENGL 3344 Victorian Gender
    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 (FL 3359) Masculinities: Images and Perspectives
    ENGL 3364 (WGST 3370) Women and the Southwest
    ENGL 3379 Literary and Cultural Contexts of Disability: Gender, Care and Justice
    ENGL 3361, 4363, 6391, 6392, 6393, 6394, 6395 Seminars (subject to approval)
    FL 3312 Women in Modern China
    FL 3359 (ENGL 3359) Masculinities: Literary Images and Perspectives
    FL 3363 (WGST 3347) Figuring the Feminine
    HIST 1322 Seminar in European History: Renaissance Queens and Mistresses (subject to approval)
    HIST 3301 Human Rights: America's Dilemma
    HIST 3310 Problems in American History: Women's Movements/Gender Systems (subject to approval)
    HIST 3312 Women in American History
    HIST 3317 Women in Latin American Societies
    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 3357 (ENGL 3371) Joan of Arc: Her story, in History, Literature and Film
    HIST 3394 The New Woman: The 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
    HR 8331 Women in World Religions (instructor approval)
    HX 7327 Women in the History of Christianity (instructor approval)
    HX 8329 Mary and Christian Tradition (instructor approval)
    MDVL 3352 Ideals and Ideals of Gender in the Middle Ages
    MUHI 3341 Women and Music "Like a Virgin": From Hildegard to Madonna
    MUHI 4341 Women Composers and Performers in the 19th and 20th Centuries (majors only)
    PHIL 3305 Philosophy and Gender
    PLSC 3370 Women and Politics

[^12]:    CSE - Department of Computer Science and Engineering
    EE - Department of Electrical Engineering
    EMIS - Department of Engineering Management, Information and Systems
    ENCE - Department of Environmental and Civil Engineering
    ME - Department of Mechanical Engineering
    SS - Center for Special Studies

[^13]:    (*Students choosing the gaming track require 16 hours of coursework in the Game Development track and only six hours of advanced electives in the Lyle Engineering School for a total degree requirement of 124 hours)

[^14]:    Professors: Jeffery L. Kennington, Stephen Szygenda, Margaret H. Duhnam (Computer Science); U. Narayan Bhat (Statistics); Marion Sobol (Business); Associate Professors: Richard V. Helgason, Eli V. Olinick, Jeff Tian (Computer Science); Assistant Professor: Junfang Yu; Scholar in Residence in EMIS: Jerrell R. Stracener; Senior Lecturer: Thomas Siems; Lecturers: Mary Alys Lillard, Gretchen Miller; Visiting Lecturer: William Swanson; Adjunct Faculty: Karl Arunski, John Baschab, Robert Bell, William David Bell, George Chollar, Kevin Cluff, David Cochran, Howard Cowin, Dennis Delzer, Matthew Durchholz, James Hinderer, Michael Hopper, Gerard Ibarra, John Lipp, Jan Lyons, Robert Oshana, David Peters, Oscar K. Pickels, Jon Piot, Christopher Rynas, Mark Sampson, Steven P. Sanazaro, Nand Singh, Gheorghe Spiride, John Via, John Yarrow, Hossam Zaki.

