CONTENTS

I. CALENDAR .................................................. 4
II. GENERAL INFORMATION ...................................... 12
III. TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS ........................................... 32
IV. INSTITUTIONAL POLICIES CONCERNING STUDENTS ........................................... 44
V. ADMISSION REQUIREMENTS .................................. 50
VI. GENERAL ACADEMIC REGULATIONS .................................. 58
VII. BACHELOR'S DEGREE REGULATIONS .............................. 70
VIII. SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS AND SUPPORT AREAS FOR 1984-86 ........................................... 79
IX. UNDERGRADUATE DEGREE PROGRAMS AND COURSE DESCRIPTIONS .................................. 83
INDEX ............................................................. 282
INFORMATION DIRECTORY ........................................... 290
MAPS ............................................................. 288

Appendix A Preprofessional Courses of Study in Law and the Health Fields
Appendix B List of Approved General Education Requirements Courses.

U.T. San Antonio and all of its activities are subject to the Rules and Regulations of the Board of Regents of the University of Texas System. The policies, regulations, and procedures stated in this catalog are subject to change without prior notice, if necessary, so that University policies are consistent with the policies of the Board of Regents of The University of Texas System and are in compliance with state and federal laws.

Students are held individually responsible for meeting all requirements as indicated in this catalog. Failure to read and comply with policies, regulations, and procedures will not exempt a student from whatever penalties he or she may incur.

No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under, any program or activity sponsored or conducted by The University of Texas System or any of its component institutions, on any basis prohibited by applicable law, including, but not limited to, race, color, national origin, religion, sex or handicap.
I. CALENDAR
UNDERGRADUATE

FALL SEMESTER, 1984

August 1
Wednesday. Deadline for applying for admission and providing supporting documents for Fall 1984.

August 21-23
Tuesday-Thursday. Registration, Orientation, Advisement.¹

August 27
Monday. Classes begin. First day of late registration.

August 31
Friday. Last day to add a class without special permission. Last day to choose credit-no-credit grading option. Last day of late registration. Last day to drop a course or withdraw without a record of the enrollment. Last day to withdraw and receive an 80% refund of tuition and fees.

September 3
Monday. Holiday.

September 10
Monday. Last day to withdraw and receive a 70% refund of tuition and fees.

September 12
Wednesday. Last day to add a class. Census date. Last day to drop a course and receive a refund.

September 17
Monday. Last day to withdraw and receive a 50% refund of tuition and fees.

September 24
Monday. Last day to withdraw and receive a 25% refund of tuition and fees.

October 1
Monday. Deadline for Fall 1984 degree candidates to apply for graduation.

October 15
Monday. Foreign student admission application deadline for Spring 1985. Spring 1985 deadline for filing Petition of Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.

October 26
Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.

November 22-24
Thursday-Saturday. Thanksgiving Holidays.

December 3
Monday. Last day to withdraw from the University.

December 10-15
Monday-Saturday. Final Examinations.

December 15
Saturday. Semester closes.

SPRING SEMESTER, 1985

December 3

January 9-10
Wednesday-Thursday. Registration, Orientation, Advisement.¹

January 14
Monday. Classes begin. First day of late registration.

January 18
Friday. Last day to add a class without special permission. Last day to choose credit-no-credit grading option. Last day of late registration. Last day to drop a course or withdraw without a record of enrollment. Last day to withdraw and receive an 80% refund of tuition and fees.

¹Some of the dates in the catalog calendar may be subject to change. A more detailed calendar will be published each semester in the Schedule of Classes issued by the Registrar.
January 25  Friday. Last day to withdraw and receive a 70% refund of tuition and fees.
January 29  Tuesday. Last day to add a class. Census date. Last day to drop a course and receive a refund.
February 1  Friday. Last day to withdraw and receive a 50% refund of tuition and fees.
February 8  Friday. Last day to withdraw and receive a 25% refund of tuition and fees.
February 15  Friday. Deadline for Spring 1985 degree candidates to apply for graduation.
March 1  Friday. Foreign student admission application deadline for Summer 1985.
March 15  Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned. Summer 1985 deadline for filing Petition for Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.
March 18-23  Monday-Saturday. Spring vacation.
April 29  Monday. Last day to withdraw from the University.
May 6-11  Monday-Saturday. Final Examinations.
May 11  Saturday. Semester closes.
May 12  Sunday. Commencement.

SUMMER SESSION, 1985

May 1  Wednesday. Deadline for applying for admission and providing supporting documents for Summer Session 1985.
May 30  Thursday. Registration, Orientation, Advisement for all three terms.
June 3  Monday. Classes begin for the first five-week or ten-week terms. First day of Late Registration. Foreign student admission application deadline for Fall 1985.
June 4  Tuesday. Last day to drop a course in the first five-week or ten-week term without a grade. Last day for late registration. Last day to add a course in the first five-week or ten-week term without special permission. Last day to choose credit-no-credit grading option.
June 5  Wednesday. Last day to withdraw from courses in the first five-week and ten-week terms and receive an 80% refund of tuition and fees.
June 6  Thursday. Last day to add a class in the first five-week or ten-week terms. Census date for the first five-week and ten-week terms. Last day to drop a course and receive a refund.
June 10  Monday. Last day for students enrolled in first five-week or ten-week terms to withdraw and receive a 50% refund of tuition and fees.

Some of the dates in the catalog calendar may be subject to change. A more detailed calendar will be published each semester in the Schedule of Classes issued by the Registrar.
June 17 Monday. Fall 1985 deadline for filing Petition for Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.

June 21 Friday. Last day to drop an individual course in the first five-week or ten-week terms. An automatic grade of "W" will be assigned.

July 1 Monday. Last day to withdraw from the University for the first five-week term.

July 2-3 Tuesday-Wednesday. Final examinations for courses in the first five-week term.

July 3 Wednesday. Close of first five-week term.

July 8 Monday. Registration for courses in second five-week term.

July 9 Tuesday. Classes begin for second five-week term. First day of Late Registration.

July 10 Wednesday. Last day to drop a course in the second five-week term without a grade. Last day for late registration and to add a course in the second five-week term without special permission. Last day to choose credit-no-credit grading option.

July 11 Thursday. Last day to withdraw from courses in the second five-week term and receive an 80% refund of tuition and fees.

July 12 Friday. Last day to add a class in the second five-week term. Census date. Last day to drop a course and receive a refund.

July 15 Monday. Last day for all Summer 1985 degree candidates to apply for graduation.

July 16 Tuesday. Last day to withdraw from courses in the second five-week term and receive a 50% refund of tuition and fees.

July 30 Tuesday. Last day to drop an individual course in the second five-week term. An automatic grade of "W" will be assigned.

August 7 Wednesday. Last day to withdraw from the University for the ten-week or second five-week term.

August 12-13 Monday-Tuesday. Final examinations for courses in the ten-week and second five-week terms.


FALL SEMESTER, 1985

August 1 Thursday. Deadline for applying for admission and providing supporting documents for Fall Semester 1985.

August 21-22 Wednesday-Thursday. Registration, Orientation, Advisement.3

August 26 Monday. Classes begin. First day of late registration.

3Some of the dates in the catalog calendar may be subject to change. A more detailed calendar will be published each semester in the Schedule of Classes issued by the Registrar.
August 30  Friday. Last day to add a class without special permission. Last day to choose credit-no-credit grading option. Last day of late registration. Last day to drop a course or withdraw without a record of the enrollment. Last day to withdraw and receive an 80% refund of tuition and fees.

September 2  Monday. Holiday.

September 9  Monday. Last day to withdraw and receive a 70% refund of tuition and fees.

September 11 Wednesday. Last day to add a class. Census date. Last day to drop a course and receive a refund.

September 16  Monday. Last day to withdraw and receive a 50% refund of tuition and fees.

September 23  Monday. Last day to withdraw and receive a 25% refund of tuition and fees.

October 1  Tuesday. Deadline for Fall 1985 degree candidates to apply for graduation.

October 15 Tuesday. Foreign student admission application deadline for Spring 1986. Spring 1986 deadline for filing Petition for Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.

October 25 Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.

November 28-30 Thursday-Saturday. Thanksgiving Holidays.

December 2  Monday. Last day to withdraw from the University.

December 9-14 Monday-Saturday. Final Examinations.

December 14 Saturday. Semester closes.

SPRING SEMESTER, 1986


January 15-16 Wednesday-Thursday. Registration, Orientation, Advisement.*

January 20 Monday. Classes begin. First day of late registration.

January 24 Friday. Last day to add a class without special permission. Last day to choose credit-no-credit grading option. Last day of late registration. Last day to drop a course or withdraw without a record of the enrollment. Last day to withdraw and receive an 80% refund of tuition and fees.

January 31 Friday. Last day to withdraw and receive a 70% refund of tuition and fees.

February 4 Tuesday. Last day to add a class. Census date. Last day to drop a course and receive a refund.

February 7 Friday. Last day to withdraw and receive a 50% refund of tuition and fees.

February 14 Friday. Last day to withdraw and receive a 25% refund of tuition and fees.

*Some of the dates in the catalog calendar may be subject to change. A more detailed calendar will be published each semester in the Schedule of Classes issued by the Registrar.
February 17  Monday. Deadline for Spring 1986 degree candidates to apply for graduation.

March 3  Monday. Foreign student admission application deadline for Summer 1986.

March 17  Monday. Summer 1986 deadline for filing Petition for Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.

March 21  Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.

March 24-29  Monday-Saturday. Spring vacation.

May 5  Monday. Last day to withdraw from the University.

May 12-17  Monday-Saturday. Final Examinations.

May 17  Saturday. Semester closes.

May 18  Sunday. Commencement.

SUMMER SESSION, 1986

May 1  Thursday. Deadline for applying for admission and providing supporting documents for Summer Session 1986.

May 29  Thursday. Registration, Orientation, Advisement for all three terms.\(^5\)

June 2  Monday. Classes begin for first five-week or ten-week terms. First day of Late Registration. Foreign student admission application deadline for Fall 1986.

June 3  Tuesday. Last day to drop a course in the first five-week or ten-week term without a grade. Last day for late registration. Last day to add a course in the first five-week or ten-week term without special permission. Last day to choose credit-no-credit grading option.

June 4  Wednesday. Last day to withdraw from courses in the first five-week and ten-week terms and receive an 80% refund of tuition and fees.

June 5  Thursday. Last day to add a class in the first five-week or ten-week terms. Census date for the first five-week and ten-week terms. Last day to drop a course and receive a refund.

June 9  Monday. Last day for students enrolled in first five-week or ten-week terms to withdraw and receive a 50% refund of tuition and fees.

June 16  Monday. Fall 1986 deadline for filing Petition for Reinstatement for students who have been academically dismissed. See page of this catalog for information pertaining to academic reinstatement.

June 20  Friday. Last day to drop an individual course in the first five-week or ten-week terms. An automatic grade of "W" will be assigned.

\(^5\)Some of the dates in the catalog calendar may be subject to change. A more detailed calendar will be published each semester in the Schedule of Classes issued by the Registrar.
June 27  Friday. Last day to withdraw from the University for the first five-week term.

July 2-3  Wednesday-Thursday. Final examinations for courses in first five-week term.

July 3  Thursday. Close of first five-week term.

July 7  Monday. Registration for courses in second five-week term.

July 8  Tuesday. Classes begin for second five-week term. First day of Late Registration.

July 9  Wednesday. Last day to drop a course in the second five-week term without a grade. Last day for late registration and to add a course in the second five-week term without special permission. Last day to choose credit-no-credit grading option.

July 10  Thursday. Last day to withdraw from courses in the second five-week term and receive an 80% refund of tuition and fees.

July 11  Friday. Last day to add a class in the second five-week term. Census date. Last day to drop a course and receive a refund.

July 15  Tuesday. Last day to withdraw from courses in the second five-week term and receive a 50% refund of tuition and fees. Last day for all Summer 86 degree candidates to apply for graduation.

July 29  Tuesday. Last day to drop an individual course in the second five-week term. An automatic grade of "W" will be assigned.

August 6  Wednesday. Last day to withdraw from the University for the ten-week or second five-week terms.

August 11-12  Monday-Tuesday. Final examinations for courses in the ten-week and second five-week terms.

II. GENERAL INFORMATION
THE UNIVERSITY OF TEXAS SYSTEM

BOARD OF REGENTS

Jon P. Newton, Chairman
Robert B. Baldwin, III, Vice-Chairman
Janey Slaughter Briscoe (Mrs. Dolph), Vice-Chairman
Arthur H. Dilly, Executive Secretary

MEMBERS

Terms Expire February 1, 1985
Jon P. Newton .................................. Austin
James L. Powell .................................. Fort McKavett
Howard N. Richards ............................... Austin

Terms Expire February 1, 1987
Janey Slaughter Briscoe (Mrs. Dolph) .............. Uvalde
Beryl Buckely Milburn (Mrs. Malcolm) .............. Austin
Tom B. Rhodes ..................................... Dallas

Terms Expire February 1, 1989
Robert B. Baldwin, III ................................ Austin
Jess Hay ............................................. Dallas
Mario Yzaquirre .................................. Brownsville

SYSTEM ADMINISTRATION

E. D. Walker, Chancellor
THE UNIVERSITY OF TEXAS AT SAN ANTONIO

EXECUTIVE OFFICERS

James W. Wagener ........................................ President
Gordon H. Lamb ........................................ Vice President for Academic Affairs
Rudolph Gomez .......................................... Vice President for Administration
Gary L. Hammon ......................................... Vice President for Business Affairs

DEANS

Charles E. Hathaway ................................. Dean, College of Sciences and Mathematics
Dwight F. Henderson ................................. Dean, College of Social and Behavioral Sciences
E. D. Hodo ............................................... Dean, College of Business
Rhoderick E. Key ...................................... Dean, College of Fine Arts and Humanities

Dora G. Hauser ........................................ Dean of Students
ADMINISTRATIVE STAFF

Anthony J. Arabia .................................. Director of Media Resources
Vincent L. Avallone ................................. Director of Career Planning and Placement Center
Roger J. Bilow ...................................... Assistant Director of Admissions
Jane S. Bonham ..................................... Director of Accounting
John H. Brown ....................................... Director of Admissions and Registrar
Manuel C. Chavez .................................. Chief of Police
Rudy A. Davalos .................................... Director of Athletics
Ernest DeWinne ..................................... Business Manager
James A. Forester ................................. Director of Student Services
Samuel M. Gonzales ................................. Director of Job Location and Development
Patricia A. Graham ................................ Associate Dean of Students
Frederick C. Hample ............................... Associate Registrar
Ronald D. Hedrick ................................ Director of the Counseling Center
Daniel O. Hogenauer .............................. Associate Dean, College of Sciences and Mathematics
Martha L. Horsman ................................ Bursar
Sandra Jordan ..................................... Director of News and Information
Michael F. Kelly ..................................... Director of Libraries
George E. Mangrem ................................ Director of Physical Plant
John W. Massey ..................................... Personnel Director
Richard S. Moore .................................. Director of General Services
Betty Murray ........................................ Director of Development
Larry E. Penley .................................... Associate Dean, College of Business
B. Michael Ramsey ................................. Director of Student Financial Aid
Joel G. Saegert ..................................... Assistant Vice President for Academic Affairs
Lynwood C. Siebold ................................. Director of Contracts and Grants
Cynthia Smith ....................................... Director, Internal Audit
William E. Stem .................................... Director of Budget and Planning
John A. Stoler ...................................... Assistant Dean, College of Fine Arts and Humanities
Katherine P. Strickland ............................ Director, Teacher Placement Service and Certification
Berry Sutherland .................................. Associate Dean, College of Social and Behavioral Sciences
C. Powell Trott .................................... Director of Purchasing
Rebecca B. Underwood ............................ Assistant Director of Admissions
Linda J. Whitson .................................... Assistant to the President
Robert F. Williams ................................ Radiation Safety Officer
DIVISION DIRECTORS

COLLEGE OF BUSINESS
James F. Gaertner ....................... Division of Accounting and Business Data Systems
Lila J. Flory-Truett ...................... Division of Economics and Finance
William D. Litzinger .................... Division of Management and Marketing

COLLEGE OF FINE ARTS AND HUMANITIES
James A. Broderick ........................ Division of Art and Design
Alan E. Craven ............................ Division of English, Classics, and Philosophy
Frank Pino, Jr. ............................. Division of Foreign Languages
Clarence J. Stuessy ......................... Division of Music

COLLEGE OF SCIENCES AND MATHEMATICS
Robert K. Smith .......................... Division of Earth and Physical Sciences
Mario J. Gonzalez, Jr. ...................... Division of Engineering
Matthew Wayner ........................... Division of Life Sciences
Stanley G. Wayment ....................... Division of Mathematics, Computer Science, and Systems Design

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES
Raymond R. Baird ........................ Division of Behavioral and Cultural Sciences
Joseph Michel ............................ Acting, Division of Bicultural-Bilingual Studies
Elwood B. Traylor ........................ Division of Education
Thomas J. Bellows ........................ Division of Social and Policy Sciences
FACULTY

COLLEGE OF BUSINESS

Division of Accounting and Business Data Systems

Ruth H. Bullard, Professor, B.S., Mary Hardin-Baylor College; M.B.A., Ph.D., University of Texas at Austin

James F. Gaertner, Professor, B.B.A., M.B.A., Sam Houston State University; Ph.D., Texas A&M University

Leslie L. McNeils, Professor, B.B.A., University of Oklahoma; M.B.A., University of Tulsa; Ph.D., University of Oklahoma

E. Lou Curry, Associate Professor, B.S., West Virginia University; J.D., St. Mary's University; LL.M., Emory University

Robert V. Egenolf, Associate Professor, B.S., Indiana University; M.B.A., Southwest Texas State University; Ph.D., Texas A&M University

Martha A. Fasci, Associate Professor, B.S., Our Lady of the Lake University; M.B.A., North Texas State University; Ph.D., University of Texas at Austin

Susan L. Nordhauser, Associate Professor, B.A., Cornell University; M.S., Purdue University; Ph.D., University of Texas at Austin

James U. Ross, Associate Professor, B.A., J.D., University of Texas at Austin

John E. Delaney, Assistant Professor, B.S., Northern Illinois University; M.A.S., University of Illinois at Urbana

David Martin Jennings, Assistant Professor, B.S., University of Illinois; M.B.A., University of Houston

Wilda Furr Meixner, Assistant Professor, B.B.A., Sul Ross State University; M.B.A., Southwest Texas State University

Fred Nordhauser, Assistant Professor, B.S., Cornell University; M.S., Ph.D., Purdue University

Petrea Kay Sandlin, Assistant Professor, B.B.A., M.P.A., University of Texas at Austin

Howard G. Smith, Assistant Professor, B.A., S.U.N.Y., College of Cortland, B.A., M.B.A., California State University, Fullerton

Division of Economics and Finance

Lila J. Flory-Truett, Professor, B.A., Kansas State University; M.A., Ph.D., University of Iowa

Antonio Furino, Professor, J.D., University of Rome; M.A., Ph.D., University of Houston

E. Douglas Hodo, Professor, B.B.A., M.S., Ph.D., University of Mississippi

Dale B. Truett, Professor, B.A., Purdue University; M.A., Ph.D., University of Texas at Austin

Paul N. Bartlett, Associate Professor, B.A., Lamar State University; M.A., Louisiana State University; J.D., University of Texas at Austin

Winfield Parker Betty, Associate Professor, B.A., M.B.A., University of Texas at Austin; Ph.D., North Texas State University

Kenneth E. Weiher, Associate Professor, A.B., College of William and Mary; M.A., Ph.D., Indiana University

Ronald M. Ayers, Assistant Professor, B.S., M.A., University of New Orleans; Ph.D., Tulane University

Lynda Y. de la Vina, Assistant Professor, B.A., Pan American University; M.A., Ph.D., Rice University

Keith W. Fairchild, Assistant Professor, B.A., University of Texas at Austin

Daphne D. Sipes, Assistant Professor, B.A., J.D., University of South Carolina

Alejandro Velez, Assistant Professor, B.A., American University; M.A., Ph.D., University of Florida

Lalatendu Misra, Instructor, C.M.E., Irimee, India; M.B.A., University of Texas at Austin

Division of Management and Marketing

William D. Litzinger, Professor, B.S., New York University; M.B.A., University of Pennsylvania; D.B.A., University of Southern California

William T. Flannery, Associate Professor, B.S., M.S., Ph.D., University of Houston

Sammy B. Gould, Associate Professor, B.S., Ohio University; M.B.A., University of Colorado; Ph.D., Michigan State University

Marye T. Hilger, Associate Professor, B.A., B.B.A., M.B.A., Ph.D., University of Texas at Austin
William G. Mitchell, Associate Professor, M.B.A., University of Chicago; D.B.A., Arizona State University
Larry E. Penley, Associate Professor, B.A., M.A., Wake Forest University; Ph.D., University of Georgia
Charles D. Porterfield, Associate Professor, B.A., M.B.A., North Texas State University; Ph.D., Louisiana State University
Paul Preston, Associate Professor, B.S., Florida Atlantic University; M.B.A., University of Florida; D.B.A., University of Colorado
Gary C. Raffaele, Associate Professor, B.S., State University of New York; M.B.A., University of Texas at Austin; D.B.A., Harvard Graduate School of Business
Joel G. Saegert, Associate Professor, B.S., Texas A&M University; M.S., Ph.D., University of Arizona
Richard B. Wadsworth, Associate Professor, B.S.; Texas A&M University; M.S., Ph.D., University of Colorado
Gloria M. Gatti, Assistant Professor, B.A., University of Florida; M.A., Western Kentucky University; Ph.D., University of Florida
Juan J. Gonzalez, Assistant Professor, B.S., Universidad Nacional Autonoma de Mexico, Mexico City; M.I.B.S., University of South Carolina
Robert H. Lengel, Assistant Professor, B.S., Pennsylvania State University; M.S., M.B.A., Rensselaer Polytechnic Institute; Ph.D., Texas A&M University
Woodie Austin Spivey, Assistant Professor, B.A.E., Georgia Institute of Technology; M.S., Texas Christian University; Ph.D., University of Houston
James D. Werbel, Assistant Professor, B.A., M.S., University of Wisconsin; Ph.D., Northwestern University
J. Thomas Yokum, Jr., Assistant Professor, B.A., M.A., Texas Christian University
William F. Webster, Instructor, B.S., Florida Southern College; M.S., University of Texas at Austin

COLLEGE OF FINE ARTS AND HUMANITIES

Division of Art and Design
Ronald C. Blnks, Professor, B.F.A., Rhode Island School of Design; M.F.A., Yale School of Art and Architecture
James A. Broderick, Professor, B.A., St. Ambrose College; M.A., University of Iowa
Charles T. Field, Professor, B.A., Stanford University; M.F.A., University of Washington
Jacinto Quiarte, Professor, B.A., M.A., San Francisco State College; Ph.D., Universidad Nacional Autonoma de Mexico
Richard R. Tangum, Professor, B.Arch., Texas Tech University; M.Arch., Virginia Polytechnic Institute; D.E.D., Texas A&M University
Steven J. Reynolds, Associate Professor, B.F.A., M.F.A., Colorado University; M.A., Denver University
Judith B. Sobr, Associate Professor, B.A., New York University; M.A., Ph.D., Harvard University
Michael Dinsmore Bigger, Assistant Professor, B.A., Miami University; M.F.A., Rhode Island School of Design
Leonard G. Lane, Jr., Assistant Professor, B.A., Rice University; M.Arch., Harvard University
Neil D. Maurer, Assistant Professor, B.A., Brown University; M.F.A., Rhode Island School of Design
Dennis Olsen, Assistant Professor, B.A., M.A., University of California, Los Angeles
Kent T. Rush, Assistant Professor, B.F.A., California College of Arts and Crafts; M.A., University of New Mexico
Jon Hunter Thompson, Assistant Professor, B.Arch., University of Texas at Austin; M.Arch., University of Oregon

Division of English, Classics, and Philosophy
Alan E. Craven, Professor, B.A., M.A., Ph.D., University of Kansas
Helen Aristar-Dry, Associate Professor, B.A., Southern Methodist University; M.A., Ph.D., University of Texas at Austin
Theresa M. Kelley, Associate Professor, B.A., University of Washington; M.A., Ph.D., Northwestern University
Eileen T. Lundy, Associate Professor, B.S., College of St. Teresa; Ph.D., University of Texas at Austin
Bonnie K. Lyons, Associate Professor, B.A., M.A., Ph.D., Tulane University
Margaret McBride, Associate Professor, B.A., University of Kansas; M.A., Ph.D., University of Pennsylvania
Arthur R. Miller, Associate Professor, B.A., West Liberty State College; M.A., Ph.D., Michigan State University
Marjorie R. Smelstor, Associate Professor, B.S., College of Mount Saint Joseph-on-the-Ohio; M.A., Ph.D., University of Wisconsin at Madison
John A. Stoler, Associate Professor, B.A., Ripon College; M.A., San Francisco State College; Ph.D., University of Arizona
Paul T. Alessi, Assistant Professor, B.A., Wabash College; M.A., Indiana University; Ph.D., University of Missouri
Mark Edward Allen, Assistant Professor, B.A., St. Norbert College; M.A., Arizona State University; Ph.D., University of Illinois
Wendy B. Barker, Assistant Professor, B.A., M.A., Arizona State University; Ph.D., University of California, Davis
Mark H. Bernstein, Assistant Professor, B.A., Queens College; M.A., California State University, Northridge; Ph.D., University of California, Santa Barbara
Nancy A. Gutierrez, Assistant Professor, B.A., Denison University; M.A., Ph.D., University of Chicago
Wayne D. Owens, Assistant Professor, A.B., Ohio University; M.A., Ph.D., DePaul University
Linda T. Smith, Assistant Professor, B.A., Ph.D., Texas Christian University

Division of Foreign Languages

Ricardo F. Benavides, Professor, B.A., M.A., Universidad de Chile; Ph.D., Universidad Central de Madrid
Beverly J. Gibbs, Professor, B.A., M.A., University of Michigan; Ph.D., University of Wisconsin at Madison
Jack Himmelblau, Professor, A.B., M.A., University of Chicago; Ph.D., University of Michigan
Joseph Michel, Professor, B.A., DeSalie College; M.A., Universidad Nacional Autonoma de Mexico; Ph.D., University of New Mexico
Frank Plno, Jr., Professor, B.A., M.A., Arizona State University; Ph.D., Northwestern University
Theodore L. Kassler, Associate Professor, A.B., Columbia University; A.M., Ph.D., Princeton University
Steven G. Kellman, Associate Professor, B.A., State University of New York; M.A., Ph.D., University of California at Berkeley
Townsend W. Bowling, Assistant Professor, A.B., Washington University, St. Louis; A.M., Middlebury College Graduate School of French in France; Ph.D., Yale University
Yolanda J. Broyles, Assistant Professor, B.A., University of Arizona; M.A., Ph.D., Stanford University
Sally Said, Assistant Professor, B.A., M.A., Ph.D., University of Texas at Austin
Marc D. Silberman, Assistant Professor, B.A., University of Minnesota; A.M., Ph.D., Indiana University

Division of Music

Bess E. Hieronymus, Professor, B.M., Mary Hardin-Baylor College; M.A., Smith College; D.M.A., University of Texas at Austin
Rhoderick E. Key, Professor, B.M.E., M.M.E., Southern Illinois University; Ed.D., University of Illinois
Gordon H. Lamb, Professor, B.M.E., Simpson College; M.M., University of Nebraska; Ph.D., University of Iowa
Clarence J. Stuessy, Professor, B.M., Southern Methodist University; M.A., Ph.D., Eastman School of Music
Nell E. Wilson, Professor, B.F.A., M.M., University of New Mexico; Ph.D., Indiana University, Bloomington
Michael A. Fink, Associate Professor, B.M., University of Southern California; M.M., New England Conservatory of Music; Ph.D., University of Southern California
Donald A. Hodges, Associate Professor, B.M.E., University of Kansas; M.M., Ph.D., University of Texas at Austin
Robert J. Rustowicz, Associate Professor, B.M.E., Central Michigan University; M.M., D.M.A., College Conservatory of Music
Larry J. Barnes, Assistant Professor, B.M., M.M., Cleveland Institute of Music; D.M.A., Eastman School of Music
Patricia J. Flowers, Assistant Professor, B.M., M.M., Kent State University; Ph.D., Florida State University
Janice Kay Hodges, Assistant Professor, B.M., Kansas University; M.M., Temple University; D.M.A., University of Texas at Austin
Reed K. Holmes, Assistant Professor, B.M., M.M., University of Tennessee, Knoxville; Ph.D., University of Texas at Austin
Darhyl S. Ramsey, Assistant Professor, B.M., Carson-Newman College; M.A., Ph.D., University of Iowa
John J. Silantian, Assistant Professor, B.M.E., Hartt College of Music; M.M., Catholic University, Washington, D.C.; D.M.A., University of Illinois
Evelyn W. Troxler, Assistant Professor, B.M., University of the Pacific; M.M., University of Southern California; D.M.A., University of Iowa

COLLEGE OF SCIENCES AND MATHEMATICS

Division of Earth and Physical Sciences
Charles E. Hathaway, Professor, B.S., Texas A&M University; Ph.D., University of Oklahoma
Charles Howard, Professor, B.S., Ph.D., University of Wisconsin at Madison
Herbert B. Silber, Professor, B.S., M.S., Lehigh University; Ph.D., University of California
Robert K. Smith, Professor, B.S., Washington State University; M.S., Ph.D., University of Iowa
B.S. Thyagarajan, Professor, B.S., Loyola College, India; M.S., Ph.D., Presidency College, India
John W. Adams, Associate Professor, B.S., M.S., Utah State University; Ph.D., Washington State University
Marvin L. Chatkoff, Associate Professor, B.A., University of Oklahoma; M.S., University of Southern California; Ph.D., University of New Mexico
Peter Hochmann, Associate Professor, M.S., Charles’ University, Prague; Ph.D., Czechoslovak Academy of Science, Prague
Robert D. Renthal, Associate Professor, B.A., Princeton University; Ph.D., Columbia University
Philip L. Stotter, Associate Professor, A.B., Harvard College; A.M., Ph.D., Columbia University
Miroslav Synek, Associate Professor, B.S., M.S., Charles’ University; Prague; Ph.D., University of Chicago
Robert Williams, Associate Professor, B.A., Gettysburg College; Ph.D., Emory University
Stuart Jay Birnbaum, Assistant Professor, B.S., S.U.N.Y., Stony Brook; Ph.D., University of Cambridge, England
James Martin Gallas, Assistant Professor, B.S., Albright College; M.S., Drexel University; Ph.D., University of Houston
James Ogden Jones, Assistant Professor, B.S., Midwestern State University; M.S., Baylor University; Ph.D., University of Iowa
Alan Paul Morris, Assistant Professor, B.S., University of London; Ph.D., University of Cambridge
Eric Rice Swanson, Assistant Professor, B.S., Western Michigan University; M.A., Ph.D., University of Texas at Austin
Weldon W. Hammond, Instructor, B.A., M.A., University of Texas at Austin

Division of Engineering
Mario J. Gonzalez, Jr., Professor, B.S.E.E., M.S.E.E., Ph.D., University of Texas at Austin
Richard S. Howe, Professor, B.S., University of Kentucky; S.M., Massachusetts Institute of Technology; M.S., Ph.D., University of Wisconsin
Chia Shun Shih, Professor, B.S., Taiwan, C.K. University; M.S., Ph.D., University of Texas at Austin
Gilbert Aguirre-Ramirez, Associate Professor, B.S., University of California at Berkeley; M.S.C.E., University of Washington; Ph.D., Purdue University
Daniel O. Hogenauer, Associate Professor, B.S., Haverford College; Ph.D., John Hopkins University
German A. Arroyo, Assistant Professor, B.S., Universidad Nacional de Ingenieria, Lima, Peru; M.S., Ph.D., New Mexico State University, Las Cruces, New Mexico
Faculty

Amir Karimi, Assistant Professor, B.S., Oregon State University; M.S., University of Portland; Ph.D., University of Kentucky

Mark Evan Lewittes, Assistant Professor, B.S., University of Illinois, Urbana; M.S., Cornell University, Ithaca; Ph.D., Colorado State University

Geoffrey W. Blaney, Instructor, B.S., Northeastern University; M.S., Massachusetts Institute of Technology

Arturo W. Riojas, Instructor, B.S., M.S., Stanford University

Division of Life Sciences

Charles H. Christiansen, Professor, B.S., University of North Dakota; M.A., Ball State University; Ph.D., University of Houston-Baylor College of Medicine

Helen V. Oujesky, Professor, B.A., B.S., Texas Woman's University; M.A., Texas Christian University; Ph.D., Texas Woman's University

Matthew J. Wayner, Professor, A.B., Dartmouth College; M.S., Tufts University; Ph.D., University of Illinois

M. Neal Guentzel, Associate Professor, B.A., M.A., Ph.D., University of Texas at Austin

Paul H. Rodriguez, Associate Professor, B.S., Creighton University; M.S., University of New Mexico; Ph.D., University of Rhode Island

Oscar W. VanAuken, Associate Professor, B.S., High Point College; M.S., Ph.D., University of Utah

Deborah L. Armstrong, Assistant Professor, B.A., Hiram College; M.S., Ph.D., Syracuse University

Karen J. Barnes, Assistant Professor, B.S., M.S., University of Kansas

James P. Chambers, Assistant Professor, B.A., St. Mary's University; M.A., Incarnate Word College; Ph.D., The University of Texas at San Antonio

John T. Davis, Assistant Professor, B.S., University of Texas, Galveston; M.A., The University of Texas at San Antonio

Paula F. Dehn, Assistant Professor, A.B., M.A., DePauw University; Ph.D., University of South Florida

Nancy J. Dragotta, Assistant Professor, B.S., Russell Sage College; M.S., Southwest Texas State University

Consuelo M. Kazen, Assistant Professor, B.S., University of Texas Medical Branch at Galveston; M.S., University of Texas at Austin

Kathye E. Light, Assistant Professor, B.S., University of Missouri; M.S., Virginia Commonwealth University

Andrew O. Martinez, Assistant Professor, B.S., College of Santa Fe; M.S., Ph.D., University of Arizona

Shirlyn B. McKenzie, Assistant Professor, B.S., Wisconsin State University; M.S., The University of Texas at San Antonio

Barbara A. Metzer, Assistant Professor, B.S., University of North Dakota; M.S., University of Minnesota

Marie A. Reilly, Assistant Professor, B.S., Northeastern University, Boston; M.S., Boston University

Dianna B. Roberts, Assistant Professor, B.A., Radcliffe College; M.S., Ph.D., The George Washington University

Richard K. Schwartz, Assistant Professor, B.S., Washington University School of Medicine; M.S., Boston University

David M. Senseman, Assistant Professor, B.S., Kent State University; M.S., Ph.D., Princeton University

Linda Smith, Assistant Professor, B.S., West Virginia University, Morgantown; M.S., West Virginia College, Institute

Steven T. Trella, Assistant Professor, B.S., Eastern Michigan University; M.A., Middle Tennessee State University

Andrew T.C. Tsin, Assistant Professor, B.Sc., Dalhousie University, Halifax, Nova Scotia; M.Sc., Ph.D., The University of Alberta, Edmonton

Division of Mathematics, Computer Science, and Systems Design

Manuel P. Berriozabal, Professor, B.S., Rockhurst College; M.S., Notre Dame University; Ph.D., University of California at Los Angeles
Lucio Tavernini, Professor, B.S., Heald Engineering College; M.S., University of Colorado; M.S., Ph.D., University of Wisconsin at Madison
Joseph E. Valentine, Professor, B.S., Southwest Missouri State; M.S., University of Illinois; Ph.D., University of Missouri
Stanley G. Wayment, Professor, B.S., Brigham Young University; M.S., University of Utah; M.S., Stanford University; Ph.D., University of Utah
Joe W. Duran, Associate Professor, B.S., Southern Methodist University; Ph.D., University of Texas at Austin
William B. Gearhart, Associate Professor, B.S., M.S., Ph.D., Cornell University
Stanley G. Wayment, Professor, B.S., University of Wisconsin at Madison
Hugh B. Maynard, Associate Professor, B.S., California Institute of Technology; M.A., Ph.D., University of Colorado
Kay A. Robbins, Associate Professor, B.S., Ph.D., Massachusetts Institute of Technology
Steven Robbins, Associate Professor, B.S., S.M., Ph.D., Massachusetts Institute of Technology
Ram C. Tripathi, Associate Professor, B.A., M.A., Banaras Hindu University, India; M.S., University of London; Ph.D., University of Edinburgh
Maurice Joseph Burke, Assistant Professor, B.S., Montana State University; B.A., Oxford University; M.A., Ph.D., University of Wisconsin at Madison
Youn-Min Chou, Assistant Professor, B.S., National Taiwan University, India; M.S., University of Texas at El Paso; Ph.D., Southern Methodist University
Harry Field Dole, Assistant Professor, B.A., University of Southern Mississippi; M.S., Ph.D., University of Chicago
Massoud Farhang, Assistant Professor, M.S., Aryamehr University of Technology, Tehran, Iran; M.S., Michigan State University; Ph.D., Wayne State University
Michael Donald Humphries, Assistant Professor, A.B., William Jewell College, Liberty, Missouri; M.S., Ph.D., University of Missouri, Rolla
Jerome P. Keating, Assistant Professor, B.S., M.A., Ph.D., University of Texas at Arlington
Ching-Man Kwan, Assistant Professor, B.S., Queen’s University, Kingston, Ontario; M.S., University of Wisconsin, Madison; Ph.D., University of North Carolina
Nikos Angelos Salingaros, Assistant Professor, B.S., University of Miami; M.A., Ph.D., State University of New York
Howard Reed Smith, Assistant Professor, B.S., University of Massachusetts; M.S., Indiana University; Ph.D., University of Texas at Austin
Betty P. Travis, Assistant Professor, B.A., M.A., St. Mary’s University; Ph.D., University of Texas at Austin
Gregory P. Wene, Assistant Professor, B.A., M.A., University of Texas at Austin; Ph.D., University of Iowa
Lawrence R. Williams, Assistant Professor, B.S., Texas Southern University; M.A., Ph.D., University of Michigan
Cheng-Hsuan Yuan, Assistant Professor, B.S., National Taiwan University; M.E.S., Ph.D., North Carolina State University

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

Division of Behavioral and Cultural Sciences

Richard E.W. Adams, Professor, B.A., University of New Mexico; M.A., Ph.D., Harvard University
Felix D. Almaraz, Jr., Professor, B.A., M.A., St. Mary’s University; Ph.D., University of New Mexico
Raymond R. Baird, Professor, A.B., Eastern New Mexico University; M.A., Ph.D., University of Washington
Dwight F. Henderson, Professor, B.A., M.A., Ph.D., University of Texas at Austin
Thomas R. Hester, Professor, B.A., University of Texas at Austin; Ph.D., University of California at Berkeley
David J. Schneider, Professor, B.A., Wabash College; Ph.D., Stanford University
Woodruff D. Smith, Professor, B.A., Harvard University; M.A., Ph.D., University of Chicago
Steven R. Boyd, Associate Professor, B.A., Claremont Men’s College; M.A., Ph.D., University of Wisconsin at Madison
James R. Dykes, Associate Professor, B.A., Ph.D., University of Texas at Austin
Joel D. Gunn, Associate Professor, B.A., M.A., University of Kansas; Ph.D., University of Pittsburgh
David R. Johnson, Associate Professor, B.A., University of Illinois; M.A., Ph.D., University of Chicago
María-Luisa Urdaneta, Associate Professor, B.A., M.A., University of Texas at Austin; Ph.D., Southern Methodist University
George David Bishop, Assistant Professor, B.A., Hope College; M.S., Ph.D., Yale University
Stephen J. Blank, Assistant Professor, B.A., University of Pennsylvania; M.A., Ph.D., University of Chicago
Antonio Calabria, Assistant Professor, A.B., Brown University, Providence; M.A., Ph.D., University of California, Berkeley
Ann Rochelle Eisenberg, Assistant Professor, B.A., M.A., Johns Hopkins University; Ph.D., University of California, Berkeley
F.G. Goering, Assistant Professor, B.A., M.A., Ph.D., University of Oklahoma
Robert M. Hill, II, Assistant Professor, A.B., M.A., Ph.D., University of Pennsylvania
Linda K. Pritchard, Assistant Professor, B.A., University of Michigan; M.A., Ph.D., University of Pittsburgh
Michael P. Ryan, Assistant Professor, B.A., Pomona College; Ph.D., Stanford University
James C. Schneider, Assistant Professor, B.A., St. Lawrence University; M.A., Ph.D., University of Wisconsin at Madison
Philip R. VanderMeer, Assistant Professor, B.A., Calvin College; M.A., Ph.D., University of Illinois

Division of Bicultural-Bilingual Studies

Curtis W. Hayes, Professor, B.A., M.A., California State University at Long Beach; Ph.D., University of Texas at Austin
Rodolfo Jacobson, Professor, M.A., Universidad de Panama; M.A., Ph.D., University of Michigan
Albar A. Pena, Professor, B.S., University of Texas at Austin; M.A., Texas A&I University; Ph.D., University of Texas at Austin
Mauricio E. Charpenel, Associate Professor, B.A., Central Missouri State; M.A., Universidad Nacional Autonoma de Mexico; M.L.S., Ph.D., University of Texas at Austin
Carolyn L. Kessler, Associate Professor, B.A., St. Mary-of-the-Woods College; M.S., Ph.D., Georgetown University
Robert D. Milk, Assistant Professor, B.A., M.A., Ph.D., Stanford University

Division of Education

Dewey D. Davis, Professor, B.S., Edinboro State College; M.Ed., Ph.D., University of Texas at Austin
John W. Holloman, Professor, B.A., Dillard University; M.A., West Virginia University; M.A., Universidad Interamericana, Saltillo; Ph.D., University of New Mexico
Wayne W. Laughery, Professor, B.A., M.A., San Diego State College; Ed.D., Columbia University Teachers College
Berry Sutherland, Professor, B.S., University of Texas at Austin; M.S., Ed.D., University of Houston
Elwood B. Traylor, Professor, B.A., Greenville College; M.A., Ph.D., Washington University at St. Louis
James W. Wagener, Professor, B.A., Southern Methodist University; M.A., Ph.D., University of Texas at Austin
Paul H. Westmeyer, Professor, B.S., M.A., Ball State University; Ed.D., University of Illinois
L. Jean York, Professor, B.A., Kalamazoo College; M.A., Wayne State University; Ed.D., Indiana University
Ronnie N. Alexander, Associate Professor, B.S., M.A., Central State University; Ed.D., University of Kansas
Anthony J. Arabia, Associate Professor, A.B., M.Ed., Ph.D., University of Pittsburgh
Cecile G. Burns, Associate Professor, B.M., University of Jacksonville; Ed.M., Ed. D., Temple University
Gillian E. Cook, Associate Professor, B.A., Sir George Williams University; Ed.M., Ed.D., Harvard Graduate School of Education
Nicholas M. DeLuca, Associate Professor, B.A., Columbia University; M.A., Ed.D., State University of New York at Albany
Richard A. Diem, Associate Professor, B.S., Bradley University; M.S., Southern Illinois University; M.A., Colorado State University; Ph.D., Northwestern University
Barbara M. Gonzalez, Associate Professor, B.A., M.A., Ph.D., University of Texas at Austin
Marian L. Martinello, Associate Professor, B.S., M.S., Queens College; Ed.D., Columbia University Teachers College
Kenneth W. Wunderlich, Associate Professor, B.A., Ph.D., University of Texas at Austin
Jesse T. Zapata, Associate Professor, A.A., San Antonio College; B.A., University of Texas at Austin; M.Ed., Texas Tech University; Ph.D., Arizona State University
George R. Colfer, Assistant Professor, B.S., Lock Haven State College; M.S., Ithaca College; Ph.D., Texas A&M University
Rudy A. Davalos, Assistant Professor, B.S.Ed., Southwest Texas State University; M.A.Ed., Georgetown College
Diana Mack Drake, Assistant Professor, B.A., Swarthmore College; Ed.M., Ed.D., Harvard Graduate School of Education
Larry B. Golden, Assistant Professor, B.Ed., University of Miami; M.S., City University of New York; Ph.D., Arizona State University
Ronald D. Hedrick, Assistant Professor, A.B., M.Ed., University of Missouri; Ed.D., University of South Dakota
Joyce Honeychurch, Assistant Professor, B.A., University of California, Berkeley; M.A., Ph.D., Stanford University
Rosalind Horowitz, Assistant Professor, M.A., Ph.D., University of Minnesota
Tony Wayne Johnson, Assistant Professor, B.A., Western Carolina University; M.A., Ph.D., George Peabody College
Diane Lee Ryndak, Assistant Professor, B.S., Illinois State University; M.Ed., University of Vermont
Katherine Strickland, Assistant Professor, B.A., M.S., University of Wisconsin; Ph.D., University of Florida
William H. Teale, Assistant Professor, B.A., Pennsylvania State University; M.Ed., Ed.D., University of Virginia
Linda J. Whitson, Assistant Professor, B.A., Texas Tech University; M.S., Ph.D., Texas A&M University
Suzanne Marie Winter, Assistant Professor, B.S., Southwest Texas State University; M.S., Corpus Christi State University; Ph.D., University of Texas at Austin
Sue Clark Wortham, Assistant Professor, B.S., University of Houston; M.A., Southwest Texas State University; Ph.D., University of Texas at Austin
Barbara Radgowski Auer, Instructor, B.A., Millersville State University, Pennsylvania; M.Ed., Bowling Green State University

Division of Social and Policy Sciences
Thomas J. Bellows, Professor, B.A., Augustana College; M.A., University of Florida; M.A., Ph.D., Yale University
Rudolph Gomez, Professor, B.S., Utah State University; M.A., Stanford University; Ph.D., University of Colorado
Ronald H. Rogers, Professor, B.S., Florida State University; M.S., Michigan State University; M.P.A., University of Southern California; Ph.D., Claremont Graduate School
Thomas A. Baylis, Associate Professor, A.B., Duke University; M.A., Ph.D., University of California, Berkeley
John A. Booth, Associate Professor, B.A., Rice University; M.A., Ph.D., University of Texas at Austin
James D. Calder, Associate Professor, B.A., University of Maryland; M.S., California State University at Long Beach; Ph.D., Claremont Graduate School
Richard A. Gambitta, Associate Professor, B.A., M.A., Ph.D., Syracuse University
Edgar W. Mills, Jr., Associate Professor, D.B., Ph.B., University of Chicago; Ph.D., Harvard University
Roger C. Barnes, Assistant Professor, B.A., M.A., M.Phil., Ph.D., University of Kansas
Henry G. Cisneros, Assistant Professor, B.A., M.U.R.P., Texas A&M University; M.P.A., Harvard University; D.P.A., George Washington University
Richard J. Harris, Assistant Professor, B.A., Macalester College; M.A., Ph.D., Cornell University
Richard C. Jones, Assistant Professor, B.S., Austin Peay State University; M.A., Indiana University; Ph.D., Ohio State University
Richard A. Lawrence, Assistant Professor, B.A., Bethel College; M.A., St. Mary's University; Ph.D., Sam Houston State University
Raymond R. Leal, Assistant Professor, B.S., University of Texas at Austin; M.A., University of Arkansas; Ph.D., Indiana University
Judith S. McIlwee, Assistant Professor, B.A., San Diego State University; M.A., Ph.D., University of California, San Diego
Michael T. Miller, Assistant Professor, B.S., M.S., Ph.D., Texas A&M University
Robert A. Milne, Assistant Professor, B.A., University of Texas at Austin; M.A., Ph.D., Syracuse University
Mary K. O'Brien, Assistant Professor, B.A., University of New Orleans; M.A., Louisiana State University; Ph.D., University of Massachusetts
Kathleen Toth, Assistant Professor, B.A., M.A., Ohio State University; Ph.D., Boston University
Avelardo Valdez, Assistant Professor, B.S., M.A., University of Wisconsin, Milwaukee; M.A., Ph.D., University of California, Los Angeles
Richard P. Young, Assistant Professor, B.A., Lawrence College; M.A., Ph.D., Stanford University
Vernon T. Coleman, Instructor, B.A., California State University Dominguez Hills; M.A., University of California, Los Angeles
Darrell L. Mabe, Instructor, B.A., M.A., St. Mary's University
HISTORY

On June 5, 1969, the legislative act creating The University of Texas at San Antonio as a component institution of The University of Texas System was signed into law by the Governor. By this legislation directing that The University of Texas at San Antonio offer "courses leading to such customary degrees as are offered at leading American universities," the Legislature of the State of Texas established a new public institution of higher learning that would serve both undergraduate (lower and upper division) and graduate students. The legislation further stipulated that The University be "one of the first class."

In May, 1970, the Board of Regents of The University of Texas System accepted a gift of approximately 600 acres of wooded land located sixteen miles northwest of the center of San Antonio to serve as the permanent campus for The University of Texas at San Antonio. Shortly thereafter administrative and planning offices were established in the former Maison Blanche building on the grounds of HemisFair Plaza.

By the end of 1970, a master conceptual plan for the permanent campus was approved by the Board of Regents, and by June, 1971, final plans and specifications for the first seven permanent buildings of the campus were completed. After completion of the site improvement work, construction contracts were awarded in May, 1972, calling for a completion date of May, 1974, subsequently revised because of construction delays.

In January, 1972, temporary classrooms and offices were acquired in northwest San Antonio in the Koger Executive Center at the intersection of Loop 410 and Babcock Road. Graduate students enrolled for the first time at the Koger site in June, 1973. These facilities were occupied by The University until buildings on the new campus became available. Upper-division junior and senior students were accepted on the permanent campus in September, 1975; and lower-division students were registered in June, 1976.

In the Spring of 1972, the Board of Regents of The University of Texas System and the Coordinating Board, Texas College and University System approved the academic organization and degree programs recommended for the new university. These degree programs, additional degree programs subsequently approved, as well as additional changes in UT San Antonio's organizational structure are described in the institutional catalogs.

UTSA grew rapidly in its early years from 671 graduate students in June of 1973 to 12,070 undergraduate and graduate students in September, 1983. The University has awarded 5,975 Bachelor's degrees and 3,100 Master's degrees as of August, 1983.

The second phase of campus construction was initiated in Summer 1977. This phase consisted of a classroom and office building; an addition to the Arts Building, including a sculpture and ceramics studio building; ten outdoor championship tennis courts; and an outdoor multi-purpose playing field with 400-meter running track.

The Student Representative Assembly had its constitution approved by the Board of Regents on October 1, 1976, and the first slate of officers was elected on November 22, 1976.

The Alumni Association was chartered in Fall 1977.

PURPOSE AND PHILOSOPHY

The major purpose of The University of Texas at San Antonio is to respond, in a climate of intellectual freedom and with academic programs of the highest quality, to the educational needs of the multicultural community of metropolitan San Antonio and the South Texas region, the State of Texas, the nation, and the international community.
The University is committed to excellence in teaching and scholarship and to flexibility in academic programs and instructional approaches, as it seeks to guide individual students toward achievement of their maximum potential.

Through programs of a multidisciplinary character, UT San Antonio strives to eliminate the isolation of disciplines and to reflect the integrated nature of societal issues and problems. The University is committed to cooperation with all institutions of higher education in San Antonio and the surrounding region and is a member of the Higher Education Council of San Antonio. UT San Antonio also cooperates with the San Antonio community to improve accessibility to library resources; to provide internships with local professions and businesses; to offer continuing education institutes, seminars, and special activities; and to utilize local, non-university personnel with special talents and abilities to enrich classroom instruction. To serve the metropolitan area of Bexar County, The University offers courses and programs on off-campus locations in the urban area where a need is demonstrated, provided their academic quality can be maintained in the off-campus location.

The mission of The University of Texas at San Antonio is to provide intellectual, cultural, and economic opportunities to its multiple constituencies.

ORGANIZATION

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

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

The President at UT San Antonio is assisted by a staff including a Vice President for Academic Affairs, a Vice President for Administration and a Vice President for Business Affairs. The Vice President for Academic Affairs provides the President with advice and counsel on academic matters and acts as a liaison between the President’s Office and faculty committees concerned with academic matters. The Vice President for Academic Affairs chairs the Deans’ Council. With approval of the Board of Regents of a non-traditional administrative structure for graduate education at UT San Antonio, the administrative functions that ordinarily are the responsibility of a Graduate Dean are carried out by the Vice President for Academic Affairs. As the administrative officer responsible for graduate education, this officer chairs the Council on Graduate Education. The Vice President for Administration provides the President with advice and counsel on the general administrative services of The University and acts as liaison between the President’s Office and all University standing committees. This officer is responsible for sponsored research and contracts, affirmative action, and the duties performed by the Director of Media Resources, the Director of Libraries and the Dean of Students. The Vice President for Business Affairs provides the President with advice and counsel on fiscal affairs and has direct responsibility for the business operation of The University including operation of the physical plant. This officer is responsible for budget preparation and analysis.

Operational administration of the graduate and undergraduate programs of The University is the responsibility of the Deans of the four Colleges. The Deans report to the Vice President for Academic Affairs. They provide leadership in program, faculty, and staff development.
Instructional programs within the Colleges are organized by Divisions, headed by Division Directors, who have responsibility under the Dean for the operation of their Divisions. Division Directors also are expected to provide leadership in faculty and staff development and in academic program development.

Continuing Education activities of The University are coordinated within each of the four colleges. Through each of the college deans, the University develops, promotes, coordinates, evaluates, and provides financial and logistical support for conferences, institutes, short courses, workshops, seminars, and special training programs. While no permanently assigned faculty are employed, instructors for the various activities are selected from one or more of the four Colleges within The University of Texas at San Antonio, or from institutions or organizations outside The University.

ACCREDITATION

The University of Texas at San Antonio is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools as a Level III, General postsecondary institution.

THE JOHN PEACE LIBRARY

The John Peace Library of The University of Texas of San Antonio named in 1974 in honor of the late former Chairman of The University of Texas System Board of Regents, has undergone rapid development and expansion since 1972, when work began on the development of collections. As of Fall 1983 the collections of the library include 300,000 cataloged volumes; 110,000 federal, state and local documents; and 265,000 volume equivalents held in microform for a wide range of subjects. The library has approximately 2,200 subscriptions to periodicals and receives as a designated depository a wide variety of federal, state, and local documents. All materials have been selected to support the teaching and research needs of UT San Antonio.

The UT San Antonio special collections and rare books focus on Western Americana and on Texana. Most notable among the special collections are the John Peace Collection of books and documents in the period of the Texas Republic and the Kathryn Stoner O’Connor Collection of early Texas and Mexican materials owned by the Sons of the Texas Republic, on permanent deposit in the Special Collections department.

The public service staff includes professional librarians with subject specialties who offer reference and bibliographic assistance to students and faculty. An on-line catalog and on-line computer searching is available as is a full range of inter-library loan services. Circulations, acquisitions and cataloging procedures are highly automated. The library is a member of OCLC, a national cataloging network. It is also a member of the Council on Research and Academic Libraries (CORAL), a library network which has as its goals the developing and strengthening of information resources and services in the greater San Antonio area.

The library building is designed to offer full services and convenience to students and faculty. The majority of books and periodicals are on open shelves for browsing and ease of access. In addition to the traditional library facilities, the John Peace Library also has full audio-visual capability, music listening facilities, and a curriculum materials center. Carrels, group study rooms, lounges, and faculty studies are conveniently located throughout the building to provide ideal study conditions. Coin-operated copying equipment for paper and microform materials are available to library users.1

1Additional information on the John Peace Library and on its borrowing regulations may be obtained in the Library.
COMPUTING RESOURCES

Presently, computing services at The University are provided by an IBM 370/158, an IBM 4341, and a DEC VAX 11/780. These systems support administrative and academic activity with both on-line and batch capability. Approximately 200 full-screen terminals are directly attached to these systems. The on-line direct access storage capacity is 12.7 billion bytes (characters) of data.

On-line administrative processing is maintained through the use of the teleprocessing system COM-PLETE and the data base management system ADABAS. Computer related course assignments and faculty research are facilitated by both IBM’s Conversational Monitoring System (CMS) and DEC’s Virtual Machine System (VMS).

THE CENTER FOR STUDIES IN BUSINESS, ECONOMICS, AND HUMAN RESOURCES

The Center for Studies in Business, Economics, and Human Resources is the research center of the College of Business. The major objective of the Center is to offer the opportunity for students and faculty of The University to have an adequate environment for problem solving and community-related research. While the Center is an integral part of the College of Business, it interacts with the faculty of the other Colleges to provide an interdisciplinary approach to research and business education.

The focus of activity at the Center is on application of theories and research techniques to produce useful information for public and private decision making. Specialized data files are maintained on a continuing basis, while a research library and information systems guide interested users to sources of information. The knowledge and experience of The University’s faculty are utilized to solve specific problems in the broad categories of management, finance, administration, planning, economic feasibility, production, economic impact, anti-trust laws and procedures, international trade, environmental protection, and manpower utilization.

CENTER FOR APPLIED RESEARCH AND TECHNOLOGY

The Center for Applied Research and Technology (CART) is the research center of the College of Sciences and Mathematics. The major goals of CART are to offer opportunities for expanded research in the science and engineering fields for faculty and graduate students, to provide an educational opportunity whereby individual skills can be developed to fill employers’ needs for applied scientists, and to provide research-related services for the community at large. Although CART is a part of the College of Sciences and Mathematics, it interacts with the faculty of other Colleges and with the local research community through the Southwest Research Consortium.

CART serves as a focal point for science and engineering research activities at The University by providing guidance and programs for contract and grant management and by furnishing analytical services and research support for faculty and students. Exceptional students have an opportunity to gain valuable work experience through CART’s technical services and research programs.

The CART staff includes faculty, research associates, students, and technical and support personnel.

CART seeks to support the individual involved in research, as well as to nourish team research for projects requiring the strength of individuals drawn from the various disciplines. Individual research projects are active in all areas of the College, ranging from biology, chemistry, computer science and systems design, engineering to geology. Team research efforts have been conducted in diverse areas involving pharmacological chemistry, health related issues, and energy and environmental studies.
THE CENTER FOR ARCHAEOLOGICAL RESEARCH

The Center for Archaeological Research (in the College of Social and Behavioral Sciences) was established in September, 1974. Among its objectives are: (1) to provide the opportunity for students to train in archaeology; (2) to promote archaeological research in the South and South Central Texas region; (3) to carry out archaeological surveys and assignments for federal and state agencies as required by legislation and executive orders; (4) to aid local agencies and citizens who need the services of trained archaeologists.

The Center’s staff includes a number of graduate and undergraduate students, who, along with other Center personnel, have conducted archaeological investigations in various parts of Texas, particularly in the South, Southwest, and Central sections of the state. Results of these investigations are published in more than 125 volumes in the Center’s four publication series: Archaeological Survey Reports, Regional Studies, Special Reports, and Guidebooks in Archaeology.

The Center has administered more than 270 contracts and grants to date, among which was a two-year study of the archaeology and ethnohistory of the Spanish mission complex at Guerrero, Mexico, a multi-year study of the prehistory and history of the Choke Canyon Reservoir area in southern Texas, and four seasons of excavation at the Maya site of Colha in Belize, Central America. Several projects have also been carried out in Louisiana and New Mexico. In addition, the Center has helped to organize and support regional archaeological surveys and excavations and has participated in local, state, and international archaeological conferences.

CENTER FOR LEARNING AND DEVELOPMENT RESEARCH IN EDUCATION

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

The Center’s role involves identifying and coordinating faculty, student, and community interests, needs, and resources. Faculty members from the College and The University, with interest and training in learning and development in education, participate in projects related to the Center’s activity.

RESEARCH CENTER FOR THE ARTS AND HUMANITIES

The Research Center for the Arts and Humanities is located in the College of Fine Arts and Humanities. The Center’s activities encompass the fine arts (visual and performing arts) and humanities (art and architectural history, and art criticism, literature, dramatic literature and foreign languages). The goals of the Center include providing assistance to faculty, students and other persons interested in pursuing research and further studies, and making available general information on the arts of Western Europe and the Americas.

The Center fosters professional research in the fine arts and humanities. It provides opportunities for faculty and students in the College to continue their research and to serve the community of scholars within and outside The University.
THE UNIVERSITY BOOKSTORE
The University Bookstore, owned and operated by UT San Antonio, is located on the first level of the Science Building adjacent to the Student Lounge. The Bookstore provides a complete stock of all required and recommended books for UT San Antonio courses. In addition, the University Bookstore carries a complete line of general school supplies, writing instruments, art materials, soft goods, decals, greeting cards, and a variety of gift items.

THE UNIVERSITY CAFETERIA
The University Cafeteria, located in the heart of the campus on the first level of the John Peace Library, provides food and beverage service to the university community. Owned and operated by UT San Antonio, the Cafeteria is open week days to provide breakfast, lunch, dinner and snacks. It features daily specials in all areas including breakfasts, hot and cold sandwiches, complete lunches and dinners and salad bar. Catering for both large and small groups is available through the foodservice office. For a coffee break or quick lunch, the Cafeteria operates a sandwich shop, The Subway, located on the first level of the Humanities-Business Building.

OFFICE OF MEDIA RESOURCES
The Office of Media Resources, located in the Multidisciplinary Studies Building, offers a variety of media services in support of academic activities. Some of the services include distribution of audio-visual equipment for classroom and research use, graphics arts production including typesetting and original art work, photographic services, off-air television and audio recording, and public address sound support.
III. TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS
PAYMENT AND REFUND POLICIES

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

PAYMENT

Students are entitled to enter class or laboratory only after their tuition, fees, and deposits have been paid. Payment may be made by personal check for the exact amount due, provided the bank transit number is encoded thereon in compliance with revised Federal Reserve Bank regulations. Checks for larger amounts if the difference is to be paid in cash to the students, cannot be accepted. In paying by check, students should exercise care. A bad check, whether given by mistake or otherwise, unless it is the admitted error of the bank concerned, is likely to delay actual payment and thus result in a penalty as outlined in the section on Bad Check Charges.

Personal checks may be cashed in the University Bookstore for an amount up to $5.00. It is recommended that students establish checking accounts in local San Antonio banks before enrolling in order that they can easily cash checks in the city. Many local merchants will not cash out-of-town checks.

TUITION

Pursuant to Subchapter B, Chapter 54, Texas Education Code, each student who registers at UT San Antonio is required to pay tuition according to the number of semester credit hours for which registration is completed and according to his/her residence classification, as set forth in the tables on the following pages:

<table>
<thead>
<tr>
<th>Number of Hours Taken</th>
<th>Residents of Texas</th>
<th>Nonresidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50.00</td>
<td>40.00</td>
</tr>
<tr>
<td>2</td>
<td>50.00</td>
<td>80.00</td>
</tr>
<tr>
<td>3</td>
<td>50.00</td>
<td>120.00</td>
</tr>
<tr>
<td>4</td>
<td>50.00</td>
<td>160.00</td>
</tr>
<tr>
<td>5</td>
<td>50.00</td>
<td>200.00</td>
</tr>
<tr>
<td>6</td>
<td>50.00</td>
<td>240.00</td>
</tr>
<tr>
<td>7</td>
<td>50.00</td>
<td>280.00</td>
</tr>
<tr>
<td>8</td>
<td>50.00</td>
<td>320.00</td>
</tr>
<tr>
<td>9</td>
<td>50.00</td>
<td>360.00</td>
</tr>
<tr>
<td>10</td>
<td>50.00</td>
<td>400.00</td>
</tr>
<tr>
<td>11</td>
<td>50.00</td>
<td>440.00</td>
</tr>
<tr>
<td>12</td>
<td>50.00</td>
<td>480.00</td>
</tr>
</tbody>
</table>

1All tuition charges and fees are subject to change without notice.
2See Exemption from Tuition and Fees in this section of the catalog.
3Tuition for resident or nonresident students registered for thesis or dissertation credit only is $12.00 for residents of Texas and $50.00 for nonresidents (U.S. citizens and foreign students) in those instances where such credit is the final credit-hour requirement for the degree in progress.
### TUITION SUMMER SESSION

<table>
<thead>
<tr>
<th>Number of Hours Taken</th>
<th>Residents of Texas</th>
<th>NonResidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Each Summer Term</td>
<td>Entire Session</td>
</tr>
<tr>
<td>1</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>2</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>3</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>4</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>5</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>6</td>
<td>25.00</td>
<td>50.00</td>
</tr>
<tr>
<td>7</td>
<td>28.00</td>
<td>50.00</td>
</tr>
<tr>
<td>8</td>
<td>32.00</td>
<td>50.00</td>
</tr>
<tr>
<td>9</td>
<td>36.00</td>
<td>50.00</td>
</tr>
<tr>
<td>10</td>
<td>40.00</td>
<td>50.00</td>
</tr>
<tr>
<td>11</td>
<td>44.00</td>
<td>50.00</td>
</tr>
<tr>
<td>12</td>
<td>48.00</td>
<td>50.00</td>
</tr>
<tr>
<td>13</td>
<td>52.00</td>
<td>52.00</td>
</tr>
<tr>
<td>14</td>
<td>56.00</td>
<td>56.00</td>
</tr>
<tr>
<td>Each Additional Hour</td>
<td>4.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

**CONCURRENT TUITION**

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

**RESIDENCE REGULATIONS**

A student entering or re-entering The University of Texas at San Antonio may be required to file a residence questionnaire. The student’s status as a resident or non-

---

*Tuition for resident or nonresident students registered for thesis or dissertation credit only is $12.00 for residents of Texas and $50.00 for nonresidents (U.S. citizens and foreign students) in those instances where such credit is the final credit-hour requirement for the degree in progress.*
resident will be made in accordance with the Texas Education Code. If the applicant has any doubt about his/her status, he/she should consult the Director of Admissions and Registrar prior to registration. There can be no change in residence classification without the express authorization of the Registrar.

**PENALTY FOR PAYMENT OF TUITION UNDER INCORRECT RESIDENCE CLASSIFICATION**

Responsibility for registering under the proper residence classification rests with the student. A student who wrongly pays the Texas, rather than the nonresident, tuition is subject to a penalty of $10.00 for each registration under incorrect residence classification. In addition, if a student has obtained residence classification by virtue of deliberate concealment or misrepresentation of facts, he/she may be subject to disciplinary action.

**GENERAL FEE AND STUDENT SERVICES FEE**

Each student who registers at UT San Antonio is required to pay general fees and service fees according to the number of semester credit hours for which registration is completed, as set forth in the table below:

<table>
<thead>
<tr>
<th>SEMESTER HOURS</th>
<th>GENERAL FEE</th>
<th>STUDENT SERVICES FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.00</td>
<td>6.50</td>
</tr>
<tr>
<td>2</td>
<td>12.00</td>
<td>13.00</td>
</tr>
<tr>
<td>3</td>
<td>18.00</td>
<td>19.50</td>
</tr>
<tr>
<td>4</td>
<td>24.00</td>
<td>26.00</td>
</tr>
<tr>
<td>5</td>
<td>30.00</td>
<td>32.50</td>
</tr>
<tr>
<td>6</td>
<td>36.00</td>
<td>39.00</td>
</tr>
<tr>
<td>7</td>
<td>42.00</td>
<td>45.50</td>
</tr>
<tr>
<td>8</td>
<td>48.00</td>
<td>52.00</td>
</tr>
<tr>
<td>9</td>
<td>54.00</td>
<td>58.50</td>
</tr>
<tr>
<td>10</td>
<td>60.00</td>
<td>65.00</td>
</tr>
<tr>
<td>11</td>
<td>66.00</td>
<td>71.50</td>
</tr>
<tr>
<td>12</td>
<td>72.00</td>
<td>78.00</td>
</tr>
<tr>
<td>13</td>
<td>78.00</td>
<td>78.00</td>
</tr>
<tr>
<td>14</td>
<td>84.00</td>
<td>78.00</td>
</tr>
<tr>
<td>15</td>
<td>90.00</td>
<td>78.00</td>
</tr>
<tr>
<td>Each Additional Hour</td>
<td>6.00</td>
<td>-0-</td>
</tr>
</tbody>
</table>

**UNIVERSITY CENTER FEE**

University Center Fees are as follows:
$15.00 per student each regular session; $7.50 each summer session.

**DEGREE APPLICATION FEE**

An $8.00 application fee is required of candidates for a degree. Application for a degree must be made at the Registrar’s Office and the fee paid according to the specific dates listed under Application for the Degree. This fee is not refundable and must be paid.
Tuition, Fees, Charges, Penalties and Deposits / 35

each time an application for a degree is filed. Cap and gown rental is not provided as part of the degree application fee.
Veterans attending The University under an exemption* are not exempt from payment of this fee.

LATE REGISTRATION FEE
A late registration fee of $5.00 is charged for the first day of the late registration, and an additional $2.50 per day is assessed thereafter. The maximum late registration fee for any one term is $15.00. This fee may be waived only in extenuating circumstances by the President or his delegate. The late registration fee is not refundable.

LIBRARY FINES FOR OVERDUE MATERIALS AND FOR LOST OR DAMAGED ITEMS
Fines are charged for overdue library materials and for library items that are lost or damaged.*

CHALLENGING UNDERGRADUATE COURSES BY EXAMINATION FEE
A fee of $15.00 per examination is required of students who challenge UT San Antonio undergraduate courses. Procedures for challenging undergraduate courses by examination are set forth under Bachelor's Degree Regulations in this catalog.

BAD CHECK CHARGE
A charge of $10.00 is assessed for each returned check to offset the cost of handling dishonored checks. The University will not accept a check from a student who wittingly or unwittingly has previously given two bad checks.

REPLACEMENT OF STUDENT IDENTIFICATION CARD CHARGE
A charge of $2.00 is assessed for the issuance of a duplicate student identification card. This charge must be paid at the time the application for the duplicate is made.

TRANSCRIPT CHARGE
A charge of $1.00 is made for each UT San Antonio transcript. This fee must be paid before a transcript will be issued.

LABORATORY FEE
In certain courses a laboratory fee, not to exceed the actual cost of materials and supplies and not less than $2.00 nor more than $8.00, may be charged. When a laboratory fee is charged, the schedule of classes indicates the associated fee.

SUPPLEMENTARY AND SPECIAL FEES
Certain art, music and other courses may require supplementary or special fees. When such fees are charged, the schedule of classes indicates the associated fee.

AUDITING FEE
All auditors of courses must submit an approved Request for Audit Form to the Registrar.

*See Exemption for Tuition and Fees in this section of the catalog.
*Borrowing and fine regulations of the John Peace Library are available in the Library.
Students registered at UT San Antonio may, with the approval of the instructor and Dean of the College in which the course is offered, audit courses by paying an auditing fee of $5.00 per course. The audit fee is not refundable.

Upon approval of a Request for Audit Form, a non-student auditor must pay an auditing fee of $25.00 per course. The fee is not refundable. Non-students over 65 are permitted to audit without paying a fee, provided space is available and a Request for Audit Form is approved. Non-student auditors who wish library privileges may receive them by paying a non-student library deposit (Limited Borrower’s Deposit) of $15.00 at the John Peace Library.

Permission to audit may be obtained and fees paid only during the late registration period.

**PARKING FEES**

All vehicles parked on the campus must be in compliance with the *UTSA Parking and Traffic Regulations*. Copies of these regulations are available during registration, and in the University Police office and Bursar’s office.

Parking fees for students are as follows:

- **Class G**
  - $15.00 General parking permit, if purchased during the fall semester
  - 7.00 General parking permit, if purchased during the spring semester
  - 2.00 General parking permit, if purchased during the summer session

- **Class C**
  - $8.00 Motorcycle, motor scooter, motorbike parking permit, if purchased during the fall semester
  - 4.00 Motorcycle, motor scooter, motorbike parking permit, if purchased during the spring semester
  - 2.00 Motorcycle, motor scooter, motorbike parking permit, if purchased during the summer session
  - 2.00 Bicycle parking permit, if purchased any time during the academic year

- **Class M**
  - $10.00 Mini-car if purchased during the fall semester
  - 5.00 Mini-car if purchased during the spring semester
  - 2.00 Mini-car if purchased during the summer session

Parking permits are available for handicapped and disabled persons in accordance with applicable statutory law and U.T. San Antonio Parking and Traffic Regulations. Refunds for unused portions of parking permits must be requested on the “Refund Request Form” available in the University Police Traffic office. Refunds will be made in accordance with the current UTSA Parking & Traffic Regulations, Article II, Subdivision II, Section 7.

**FIELD TRIP FEE**

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

A fee of $4.00 for a semester or a summer term is required of every student registering for physical instruction. Lockers, towels, and locks are provided.

STUDENT GYMNASIUM AND FACILITY USE FEE

Students not registered for physical education activity class who desire to use a locker and a lock may obtain it by paying a fee of $2.00 for a semester or summer session or any part thereof. Towels are not provided.

UTSA FACULTY AND STAFF GYMNASIUM AND FACILITY USE FEE

Faculty and staff gymnasium and facility use fees are required. Faculty and staff (and their guests) may use the Convocation Center and Gymnasium and other recreational facilities at specified hours only. Fees are charged according to the schedule below. Lockers and locks are provided. In order for a spouse or a child to use the facilities, the student, faculty, or staff member must first pay his/her use fee. Children must be accompanied by a parent or guardian.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ANNUAL FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. UTSA Personnel</td>
<td></td>
</tr>
<tr>
<td>1) Faculty-staff member</td>
<td>$12.00</td>
</tr>
<tr>
<td>2) Faculty-staff spouse</td>
<td>6.00</td>
</tr>
<tr>
<td>3) Faculty-staff child</td>
<td>3.00 (maximum of $25.00 per family)</td>
</tr>
<tr>
<td>4) Student spouse</td>
<td>3.00</td>
</tr>
<tr>
<td>5) Student child</td>
<td>1.00</td>
</tr>
<tr>
<td>B. Guest fee</td>
<td>$ 1.00</td>
</tr>
<tr>
<td>Guest of UT San Antonio student, faculty member, or staff member</td>
<td></td>
</tr>
</tbody>
</table>

These fees are non-refundable.

TENNIS CENTER FEE

Students registered for an HPE activity class and all students who have paid the gymnasium and facility use fee may use the Tennis Center. In addition, full-time student dependents, UTSA full-time faculty and staff and their dependents, and the general public may use the Tennis Center at specified hours. Fees are charged according to the schedule below. By paying the Tennis Center fee, a person is entitled to use any of the other athletic facilities.

Student Dependents. The spouse or child of a full-time student may use the Tennis Center and all other athletic facilities. Fees are charged according to the schedule below. A full-time undergraduate student is one enrolled for at least 12 semester hours in the fall or spring semester or for 6 or more hours during a summer term.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ANNUAL FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Full-time student spouse</td>
<td>$6.00 per semester or entire summer</td>
</tr>
<tr>
<td>2. Full-time student child</td>
<td>6.00 per semester or entire summer</td>
</tr>
</tbody>
</table>

Lockers and locks are provided. In order for a spouse or child to use the Tennis Center, the student, faculty or staff member must first pay his/her use fee. Children must be accompanied by a parent or guardian.
UTSA Personnel and Dependents. Full-time faculty and staff desiring to use the Tennis Center are charged according to the schedule below:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>ANNUAL FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Faculty-staff member</td>
<td>$12.00</td>
</tr>
<tr>
<td>2. Faculty-staff spouse</td>
<td>12.00</td>
</tr>
<tr>
<td>3. Faculty-staff child</td>
<td>12.00 (maximum of $40.00 per family)</td>
</tr>
</tbody>
</table>

General Public and Guests. The general public and guests of UTSA students and personnel may use the Tennis Center at certain hours for $1.50 per person for a 1½ hour reservation. Part-time faculty and staff, and dependents of part-time faculty, staff and students are considered in the category of general public. The University of Texas Health Science Center at San Antonio faculty/staff/students and The Institute of Texan Cultures employees are in this category. The University reserves the right to give the general public lowest priority in use of the Tennis Center. General public and guest fees are payable at the Tennis Center office.

DUPLICATE FEE RECEIPT

A service charge of $1.00 is assessed for the issuance of a duplicate fee receipt. This charge must be paid at the time the application for a duplicate fee receipt is made.

GENERAL PROPERTY DEPOSIT

Every student must make a general property deposit of $10.00 at the time of initial registration to protect The University from losses, such as property loss, damage, or breakage, violation of rules in any University library or laboratory, failure to return keys furnished by The University, or damage to or loss of any other University property. Charges are billed directly to the student or are collected by the department upon reissue of supplies or property. Failure to pay the charges promptly results in denial of the student’s readmission or re-enrollment and in refusal to issue the student’s transcript by The University. The property deposit records are reviewed periodically, and if charges have been made against the deposit, the student may be required to bring the deposit up to $10.00.

The deposit will be refunded upon request, less outstanding charges, only when the student officially withdraws from school or graduates. A general property deposit which remains without call for refund for a period of four years from the date of last attendance at The University shall be forfeited, and the deposit shall become operative to the permanent use and purpose of student scholarships.

CAREER PLANNING AND PLACEMENT REGISTRATION FEE

UT San Antonio students and alumni interested in a credential file for employment purposes or for application to graduate or professional school, are invited to use the services of the Career Planning and Placement Center. There is no registration fee for students currently attending UT San Antonio. There is a $3.00 fee for alumni who are interested in using the Career Planning and Placement Center services after leaving UT San Antonio. Active registrants may make use of the full range of services offered by the Center, e.g., on-campus interviewing, part-time job service, resume and interview seminars, vacancy listings, direct job referral, and duplication and mailing of credential file materials to prospective employers.

TEACHER PLACEMENT SERVICE FEE

Presently enrolled students of The University of Texas at San Antonio may register for teacher placement services with the Office of Teacher Certification and Placement on
a no fee basis. Nonstudents and alumni will be charged an annual $5.00 registration fee. The registrant receives the preparation, duplication and maintenance of three sets of credentials. A handling fee of $5.00 plus copying charges will be assessed for each additional set requested.

**PROFESSIONAL LIABILITY (MALPRACTICE) INSURANCE**

Prior to official registration for courses that place them in a clinical situation, allied health students are required under the Rules and Regulations of The University of Texas System Board of Regents to show evidence of professional liability (malpractice) insurance coverage. The Director of the Division of Life Sciences may be consulted relative to obtaining such insurance.

**EXEMPTION FROM TUITION AND FEES**

The Statutes of the State of Texas prescribe certain cases in which students can be exempted from tuition and/or certain fees. The various types of exemptions are described below; however, in each case it is the student’s responsibility to initiate the action of applying for an exemption through the Registrar’s Office and providing satisfactory evidence that all conditions required for the exemption have been met. Until such time as the exemption is granted, a student is required to pay all tuition and fees from his or her own funds. Students who might be eligible for an exemption should apply for the exemption at the Registrar’s Office at least one month prior to registration for the term in which they plan to utilize the exemption.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>ELIGIBILITY</th>
<th>FEES EXEMPTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accredited School Scholarship</td>
<td>Highest ranking graduate of an accredited Texas high school</td>
<td>Tuition during first two semesters (long session) following graduation</td>
</tr>
<tr>
<td>Texas Ex-Servicemen</td>
<td>(1) Resided in Texas for 12 months prior to registration</td>
<td>Tuition</td>
</tr>
<tr>
<td></td>
<td>(2) A bona fide legal resident of Texas at time entered service</td>
<td>Laboratory fees</td>
</tr>
<tr>
<td></td>
<td>(3) Served in armed forces in World War I, World War II, Korean Conflict, or the Cold War</td>
<td>Supplementary fees</td>
</tr>
<tr>
<td></td>
<td>(4) Honorably discharged</td>
<td>General fee</td>
</tr>
<tr>
<td></td>
<td>(5) Not eligible for Federal Educational benefits</td>
<td></td>
</tr>
<tr>
<td>Children of Disabled Texas Firemen and Peace Officers</td>
<td>For children under 21 years of age of disabled full-paid or volunteer firemen, full-paid municipal, county, or state peace officers, or custodians of the Department of Corrections, or game wardens</td>
<td>Tuition Required fees</td>
</tr>
<tr>
<td>Blind and Deaf Students</td>
<td>A blind disabled person, or a person whose sense of hearing is nonfunctional</td>
<td>Tuition Required fees General Property Deposit</td>
</tr>
</tbody>
</table>
### DESCRIPTION

<table>
<thead>
<tr>
<th></th>
<th>ELIGIBILITY</th>
<th>FEES EXEMPTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children of Texas Veterans</td>
<td>For children of members of the armed forces who were killed in action in World War II, Korean Conflict, or the Cold War, and to orphans of members of the Texas National Guard killed since January 1, 1946, while on active duty. Children cannot be eligible for Federal Educational benefits.</td>
<td>Tuition</td>
</tr>
</tbody>
</table>
| Good Neighbor Scholarship | (1) Native-born students from other nations of the American hemisphere — limited to 235 students each year  
(2) Furnish certified evidence of native-born citizenship and scholastic qualifications | Tuition        |
| Firemen Enrolled in Fire Science Courses | Enrolled in course offered as part of fire science curriculum | Tuition        |
| Children of Prisoners of War or Persons Missing in Action | Dependent person under 25 years of age who receives majority of support from parent. Parent classified by Department of Defense as a Prisoner of War or Missing in Action at the time of registration | Tuition        |
| General fee | When payment of fee causes undue economic hardship — number of exemptions limited to 5 percent of the total enrollment | General fee    |

NOTE: Required fees include laboratory fees, supplementary fees, the general fee, student services fee, and the University Center fee.

### REFUND POLICY AND ADJUSTMENT OF FEES FOR STUDENTS WITHDRAWING, ADDING, OR DROPPING COURSES

A student who officially withdraws from The University prior to the first class day will be refunded 100% of collected tuition and returnable fees.

In a Fall or Spring semester, upon surrender of the student identification card, a student withdrawing officially a) during the first five class days receives a refund of 80 percent of the applicable portion of the tuition and fees; b) during the second five class days, 70 percent; c) during the third five class days, 50 percent; d) during the fourth five class days 25 percent; e) after the fourth five class days, no refund. In a summer term, a student withdrawing officially a) during the first three class days receives a refund of 80 percent of the applicable portion of the tuition and fees; b) on the fourth, fifth, or sixth day, 50 percent; c) the seventh day of classes and thereafter, no refund.

A student who enrolls in The University for a given term and who is subsequently required to withdraw because of academic dismissal the previous term, receives a full refund of all tuition and fees.

---

*These refund percentages are applicable to tuition, the supplementary fees, the general fee, laboratory fees, University Center fee, and the student services fee.*
Refunds of tuition, applicable fees, general fees, and student service fees are made for courses dropped during the first twelve class days in the fall and spring or during the first four class days in a summer term if the student paid more than the minimum required and if the student has dropped below the total number of hours for which he or she originally registered provided the student remains enrolled for the semester or term. Tuition and applicable fees for added courses are collected daily, net of dropped courses, during the add/drop period.

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

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

The University reserves the right to deduct from the refund any outstanding financial obligations owed The University.

DEBTS OWED THE UNIVERSITY

In the event of non-payment of debts owed to The University (or failure to meet admission requirements), any of the following actions may be taken:

1. Denial of readmission of the student.
2. Denial of further registration.
3. Withholding of official transcripts.
4. Withholding a diploma to which the student would otherwise be entitled.

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

A student who pays tuition and fees with a check which is not subsequently honored by a bank and the fault is not that of the bank and who does not make payment within five days will be withdrawn from The University by the Registrar for non-payment of tuition and fees.
IV. INSTITUTIONAL POLICIES CONCERNING STUDENTS
RULES AND REGULATIONS OF THE BOARD OF REGENTS

All students of The University of Texas at San Antonio are subject to the rules and regulations governing student conduct and discipline as set out in the Rules and Regulations of the Board of Regents of The University of Texas System and in the UT San Antonio Institutional Rules on Student Services and Activities.

The Regents' Rules and the Institutional Rules on Student Services and Activities have full force and effect as they concern all UT San Antonio students. The Regents' Rules may be consulted in the offices of the President, the Vice Presidents, and the Deans and in the John Peace Library.

A student at The University neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to comply with both the penal and civil statutes of the State and the federal government, the Rules and Regulations of the Board of Regents, and the policies and procedures of The University of Texas at San Antonio.

The Institutional Rules on Student Services and Activities may be obtained in the Office of the Dean of Students.

STUDENT ACTIVITIES

Student activities revolve around a variety of student organizations reflecting the social, service, cultural, political and academic interests of the diverse student community. Student activities are designed to enhance classroom education, to assist students in developing leadership qualities, to develop interpersonal skills and to create a stimulating campus environment.

Programs coordinated from the Student Activities Office include the UTSA Alumni Association and University Center Programs and Student Activity Calendar. The Student Handbook, Student Organizations Guide, and Parliamentary Procedure Simplified are publications made available through this office. An inner-campus message center for registered student organizations is located by the Student Activities office.

STUDENT HEALTH SERVICES

The application for admission to The University of Texas at San Antonio includes a Health Information Form. This form must be completed by the student and returned to The University Student Health Center before the student can register.

When The University is in session, a registered nurse is on duty during class hours, and, when needed, a referral is made to a physician for medical treatment. The University Student Health Center has only limited medical capabilities.

Students are advised to carry health and accident insurance. Out-of-town students should have documents to verify insurance coverage to avoid possible delays in obtaining medical treatment.

COUNSELING CENTER

The Counseling Center provides professional services which are designed to help meet the personal and developmental needs of students.

Services offered include individual sessions for personal, educational, and vocational concerns as well as services to couples with relationship difficulties. Group sessions are offered on a regular basis on topics such as assertion training, personal growth, and weight control.

In addition, self-help cassette tapes are available for listening in person or by phone on a variety of topics ranging from friendship-building to suicidal crisis.
Counseling psychologists in the Center deal with a variety of student concerns and utilize counseling techniques, psychological assessment, and other aids to assist students. All counseling is free, confidential, and on a voluntary basis.

TESTING CENTER

The Testing Center provides a university-wide testing service. National tests are given on national testing dates. For the student seeking a better self-understanding, interest and personality inventories, achievement tests and intelligence tests may be scheduled by appointment in the Testing Center.

Students are encouraged to satisfy degree requirements through credit by examination (covered in Section VII). A brochure on Credit by Examination at UT San Antonio is available on the various tests which are accepted for credit by The University. For additional information students should consult the Credit by Examination section of the present catalog and the Credit by Examination brochure available from the Testing Center, as well as in the Admissions Office.

ADVICEMENT

Advisement for undeclared majors is a function of the Division of Students Services. This program is designed to provide basic information to students who are undecided about their educational goals. Academic advising for declared majors is carried on in the four Colleges, and information should be sought in the academic Deans' offices.

Advisement for all freshmen enrolled in the Provisional Admission Program is coordinated by the Division of Student Services.

FINANCIAL AID

Programs to assist students and parents in financing an education at UT San Antonio are administered by the Office of Student Financial Aid. Students may apply for financial assistance through scholarship, grant, work study and loan programs.

Eligibility for the majority of financial aid programs is determined through an analysis of a family's financial need. This analysis is made after the student completes and submits a financial statement to an agency approved by the federal government. Before a student can be considered for most forms of financial aid, he or she must:

1. Be officially admitted to The University.
2. File a financial statement with an approved agency.
3. File a UT San Antonio Application for Financial Aid with the Office of Student Financial Aid; and
4. Meet deadlines set by the Office of Student Financial Aid.

Financial aid programs available to undergraduate students include College Work Study, Pell Grant (formerly the Basic Educational Opportunity Grant), Supplemental Educational Opportunity Grant, Texas Public Education-State Student Incentive Grant; the National Direct Student Loan, several Guaranteed Student Loan programs, and various scholarships. The same programs are available to graduate students except the Pell and Supplemental Grants.

Consideration for the Pell Grant and the Guaranteed Student Loan programs is automatically given to any undergraduate student who completes the application process. However, all other major financial aid programs have a limited amount of funds which must be granted on a first-come, first-served basis. Therefore, students are strongly encouraged to complete their application by March 1st of each year.

Application forms and detailed instructions on applying are available through the Office of Student Financial Aid.
CAREER PLANNING AND PLACEMENT CENTER

The Career Planning and Placement Center offers a variety of services and programs in response to the placement needs of UT San Antonio students and alumni.1 To assist students in career development activities, the Center provides information on employment opportunities related to their college majors.

This information includes an annual report on the placement activities of UT San Antonio graduating students, average starting salary, the type of positions accepted, and, when available, the relationship between fields of study and accepted positions.

The Center provides the following services: part-time and summer employment opportunities; career placement for students and alumni after graduation; and assistance in the selection of graduate or professional schools. Students and alumni may establish a placement file and use the on-campus interview schedule to meet the representatives from business, industry, and government to explore professional employment opportunities.

Placement programs available at the Center are designed to assist all students in the development of effective job hunting skills and methods, e.g., effective letter writing, launching broadcast mail campaigns, resume development, and interview-skills training. Students are seen on a “drop-in” or appointment basis at the Career Planning and Placement Center.

Students and alumni are encouraged to use the career, vocational, and educational counseling services of the Center and its Career Resource Library. Students who have not decided which college major they wish to pursue can participate in the life planning workshops, value clarification labs, decision-making seminars (labs), and career exploration symposia offered by the Center. Vocational testing, including aptitude and interest inventories, is also available.

TEACHER PLACEMENT SERVICE

The Teacher Placement Service, located in the Office of Teacher Certification and Placement, assists students from all Colleges and Divisions within The University of Texas at San Antonio who seek employment in the field of education by facilitating contact and communication between students and employers.2

The services of the Teacher Placement Service are available to all presently enrolled students, as well as alumni of The University of Texas at San Antonio.

INTERCOLLEGIATE ATHLETICS

UT San Antonio fields mens’ and womens’ teams for intercollegiate competition in Division I of the NCAA. Mens’ sports include: cross country, basketball, indoor track, volleyball, outdoor track, tennis, golf and rifle. Womens’ sports include: cross country, volleyball, basketball, outdoor track and tennis.

INTRAMURAL AND RECREATIONAL ACTIVITIES

UT San Antonio offers a wide range of intramural programs and recreational activities. The facilities available in the Convocation Center and the Physical Education Building include gymnasiums for basketball and volleyball, weight machines, badminton and shuffle-board courts, and a jogging path. Also available is the 400-meter synthetic track with a grass playing infield and a tennis center. Students are able to participate in tennis, track, volleyball, badminton, shuffleboard, table tennis, softball, soccer and touch football.

1 Fees for services of the Career Planning and Placement Center are set forth in Section III of this catalog.
2 Fees for the Teacher Placement Service are set forth in Section III of this catalog.
LIVING ACCOMMODATIONS

The University provides no on-campus housing. Students are responsible for providing their own housing facilities. A housing directory is available in the Division of Student Services to assist students in finding living accommodations in the San Antonio community.

IDENTIFICATION CARDS

Student identification cards are mandatory. The card is nontransferable. A replacement cost of $2.00 is charged for lost or mutilated cards.

DIRECTORY INFORMATION

All educational records of students at The University of Texas at San Antonio are maintained in accordance with State and Federal Laws.

Pursuant to the Family Educational Rights and Privacy Act, Directory Information at UT San Antonio includes the following:

- Student’s Name
- Current and Permanent Address
- Telephone Listing
- Date and Place of Birth
- Major Field of Study, including concentration
- Classification
- Participation in Officially Recognized Activities and Sports
- Weight and Height of Members of Athletic Teams
- Dates of Attendance
- Degrees and Awards Received
- Most Recent Previous Educational Agency or Institution Attended

A student’s consent is presumed, unless a written request to restrict the information as confidential is made by the student in the Registrar’s Office on a prescribed form no earlier than the first day of registration and no later than the 12th class day in a semester or the 4th class day in a summer term. This consent or restriction remains in effect for the duration of the semester or summer term and must be refiled each subsequent semester or term that the student wishes to restrict the information. In those cases where a student files a request for restriction of information, such information is treated as confidential, and, in response to public inquiries, The University will verify only whether an individual is currently enrolled at The University.

For more specific information concerning the disclosure, review, release, and confidentiality of student records under the Family Educational Rights and Privacy Act of 1974, 20 U.S.C. Section 1232g, consult the Institutional Rules on Student Services and Activities available in the Office of the Dean of Students.

ORIENTATION

An orientation program is available to acquaint new students with the purposes and programs of The University, and with the academic advisement and registration procedures. This program is planned and implemented through the Division of Student Services.

LOST AND FOUND

All abandoned articles found on The University campus are turned in to the University Police office. Items can be claimed upon proper identification of ownership. Any article not claimed within sixty (60) days will be turned over to the Business Manager for final disposition.
HANDICAPPED STUDENTS
Handicapped students requiring special assistance should contact the Division of Student Services.

INTERNATIONAL STUDENTS
Foreign students who are enrolled at UT San Antonio should contact the Division of Student Services for assistance.
V. ADMISSION REQUIREMENTS
ADMISSION

Admission requirements for undergraduate study at UT San Antonio are designed so that students admitted will have a high probability of success in undergraduate academic work. The criteria for the various classifications of admission are set forth in the following paragraphs. Each admission case is reviewed individually and exceptional circumstances should be discussed with an admissions counselor. The University will admit all students who are holders of bona fide University of Texas at San Antonio scholarships designated by the President.

ADMISSION OF FIRST-TIME FRESHMEN

In-state applicants for admission who have graduated from an accredited Texas high school within five years of the date of first enrollment at UT San Antonio and who have never attended a college or university must have a minimum total score on either the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board or the American College Testing Program (ACT) corresponding to their high school rank in class as indicated in the following table:

<table>
<thead>
<tr>
<th>High School Rank in Class</th>
<th>Minimum Total SAT Score</th>
<th>Minimum Total ACT Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 10%</td>
<td>Score must be submitted; no minimum score is required</td>
<td>Score must be submitted; no minimum score is required</td>
</tr>
<tr>
<td>Top 25% (but not top 10%)</td>
<td>700</td>
<td>15</td>
</tr>
<tr>
<td>Second 25%</td>
<td>750</td>
<td>17</td>
</tr>
<tr>
<td>Third 25%</td>
<td>800</td>
<td>19</td>
</tr>
<tr>
<td>Fourth 25%</td>
<td>850</td>
<td>21</td>
</tr>
<tr>
<td>GED Test</td>
<td>850</td>
<td>21</td>
</tr>
</tbody>
</table>

Any high school senior who takes the ACT or SAT and lists UTSA as one of the institutions to receive his/her test scores is now being provided with automatic admission information and, where possible, an admission decision within several weeks from the time UTSA receives the student’s test scores from ACT/SAT. No high school senior who has his/her test scores sent to UTSA will need to request an application for admission or other admission information.

The Admissions Office will determine the admission status of each student and forward a pre-printed application and the appropriate letter to the student indicating his/her admission status as well as information on what else remains to complete the admission process. Those scoring 21 on the ACT or 850 on the SAT will be granted automatic admission (contingent upon graduation from high school) and will need only to sign the application, complete any missing data called for on the application, and return the application to the Admissions Office along with a sixth or seventh semester high school transcript. Those making minimum scores but needing the proper rank-in-class to be accepted will be apprised of this information but they, too, must return the pre-printed application to begin the admission process.

Both in-state and out-of-state applicants for admission who have graduated from an accredited high school five or more years prior to the date of first enrollment at UT San Antonio and who have never attended a college or university are eligible for admission regardless of high school rank in class and irrespective of SAT or ACT scores.

Out-of-state applicants for admission who have graduated from an accredited high school within five years of the date of first enrollment at UT San Antonio must be in the top half of their graduating class and must have minimum SAT or ACT scores cor-
responding to those required for in-state applicants who graduate in the top 25 percent or the second 25 percent of their class.

Applicants furnishing results on the General Educational Development Test are required to have an average standard score of 45 or above on the five tests in the battery and to have no scores less than 35 on any of the five tests. GED tests taken more than five years prior to application do not require SAT or ACT scores.

Recommended preparation. High school students who anticipate applying to UT San Antonio are strongly encouraged to include in their preparation for university study work in courses involving language skills; courses in quantification skills; and courses in subjects contributing to a broad academic background, such as English and foreign languages, speech, social sciences, history, mathematics and sciences, and the fine arts. Students enrolling in UT San Antonio courses in which they have prior knowledge are encouraged to earn credit toward graduation through the Credit by Examination Program. The nature and number of high school units are suggested as follows:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics: algebra, geometry, trigonometry, and advanced mathematics</td>
<td>3 or more</td>
</tr>
<tr>
<td>One foreign language</td>
<td>2 or more</td>
</tr>
<tr>
<td>Natural science</td>
<td>2 or more</td>
</tr>
<tr>
<td>Social science</td>
<td>2 or more</td>
</tr>
<tr>
<td>Fine arts</td>
<td>1 or more</td>
</tr>
</tbody>
</table>

These specific units, although not required for admission, are recommended, since The University expects each applicant to be prepared for academic work at the university level.

Basic English Requirement. Entering students whose scores on the SAT verbal or ACT English sections indicate deficiencies in basic English skills are required to enroll in ENG 1003, Basic English. The course is offered on a credit/no-credit basis, and a student required to take ENG 1003 must receive credit for the course before being permitted to enroll in ENG 1013. Cut-off scores are published in the Schedule of Classes for each semester and the summer session. Credit for 1003 cannot be used to satisfy any degree requirements.

Early Admission. Applicants for admission as first-time freshmen who are attending high school at the time of application and who meet the rank-in-class and SAT and ACT score requirements during their senior year, are admitted pending certification of high school graduation. Applicants not meeting these requirements prior to graduation are reconsidered for admission upon submission of final transcripts or new test scores.

ADMISSION OF TRANSFER STUDENTS

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

1) Meet the same rank-in-class and SAT, or rank-in-class and ACT, requirements as first-time freshmen;
2) Have at least a "C" average (2.0 grade-point average on a 4.0 scale) on all college or university hours attempted; and
3) Must be in good standing at the last institution attended.

1A unit represents a year of study in one subject at an accredited secondary school.
Applicants for admission who have earned 30 or more semester hours of credit from accredited colleges or universities must:

1) Have at least a "C" average (2.0 grade-point average on a 4.0 scale) on all college or university hours attempted; and
2) Must be in good standing at the last institution attended.

Applicants for admission as transfer students who are enrolled at another accredited college or university at the time of application for admission and who have at least a "C" average on all college-level work attempted to date at other institutions may be admitted pending receipt of final transcripts verifying the cumulative "C" average and good standing. For applicants not meeting these requirements, determination of eligibility for admission is deferred until all final transcripts are received.

ADMISSION OF INTERNATIONAL FRESHMEN STUDENTS

All applicants for admission as freshmen who are not citizens of the United States or whose previous education has been outside the United States must:

1. Have credits equivalent to those of students entering from an accredited secondary school in the United States, as determined by the Admissions Office;
2. Have superior grades on work done in secondary school, as determined by the Admissions Office;
3. Submit scores from the Test of English as a Foreign Language (TOEFL). A minimum score of 550 on the TOEFL is required. Subsequent English tests and preparation may be required by a student's advisor if his or her performance in English is unsatisfactory. TOEFL scores are not required for international students from countries where English is the primary language of instruction and the language spoken in the home; nor are TOEFL scores required for non-citizens of the United States graduating from United States high schools and satisfactorily completing a minimum of two units in English, although a composite SAT or ACT test score appropriate to rank in class is required.
4. Submit a statement guaranteeing the student's ability to pay all expenses while a student at The University, if attendance under the F-1 (student) visa is anticipated. The statement may be sent from a parent or guardian when endorsed by a bank or other reliable institution, or from a United States citizen who will accept responsibility for the student's financial needs.
5. Have applications and supporting credentials on file in the Admissions and Registrar's Office by the admission deadline: Fall, June 1; Spring, October 15; Summer, March 1.

ADMISSION OF INTERNATIONAL TRANSFER STUDENTS

International students who have attended a college or university in a country other than the United States must:

1. Have qualifications equal to those required for transfer from a college or university in the United States; and
2. Satisfy requirements 3, 4, and 5 above for international freshmen students.

To be eligible for admission, international students who have attended another college or university in the United States must:

1. Have completed at least 30 semester hours of credit with a "C+" average (2.5 on a 4.0 scale) on all work attempted; and
2. Satisfy requirements 3, 4, and 5 above for international freshmen students.

TOEFL scores are not required for non-citizens of the United States graduating from United States colleges and universities with at least a baccalaureate degree.
PROVISIONAL ADMISSION PROGRAM FOR FRESHMEN

Any Texas resident applying as a freshman who has not attended a college or university and who is a graduate of an accredited high school but who does not qualify for admission due to an inadequate SAT or ACT score may be admitted on a provisional basis for the spring semester or for the first summer term. During this time provisional students are given an opportunity to demonstrate that they can perform college-level work and that they can reasonably be expected to make progress toward a degree.

A student admitted to the Provisional Admission Program is required to take courses selected from English (except ENG 1003), mathematics, natural sciences, and language and may not take courses in other disciplines until the provisional status is removed. The student must demonstrate ability to perform college work by obtaining an overall "C" average (2.0 in a 4.0 scale) in 12 semester hours of work from these fields. A student is expected to complete these 12 hours of work during his/her initial semester at UT San Antonio. Upon completion of 12 hours of work from these fields, a student is admitted as a regular university student in subsequent semesters. If a student enrolls for fewer than 12 hours and does not earn a 2.0 grade-point average, but earns at least a 1.50 grade-point average, the student may enroll for the next term. After 12 hours have been completed, the required cumulative grade-point average of 2.0 must have been reached, or the student will be placed on academic dismissal. Before reinstatement can be considered, the student must submit a transcript from other colleges or universities attended, showing at least 30 hours of coursework with at least a 2.0 average, and petition for reinstatement by the published deadline.

ADMISSION AS SPECIAL STUDENTS

An applicant who wishes to enroll in courses at the undergraduate level only without pursuing a degree at The University of Texas at San Antonio, should apply for admission as a special student. A special student may register for any undergraduate course for which the prerequisites have been met and in which space is available.

Admission as a special student requires that the applicant have at least a "C" average (2.0 on a 4.0 scale) on the last 30 semester hours attempted as well as be in good standing at the last accredited college or university attended. Applicants with less than 30 semester hours attempted must meet the same admission requirements as first-time freshmen and have at least a "C" average on any college or university coursework attempted and be in good standing at the last institution attended. To be admitted later as a regular degree-seeking student, the special student must apply for admission and meet the same admission requirements as listed above for transfer students. Beginning freshmen and international students may not apply as special students.

ADMISSION OF SUMMER TRANSIENT STUDENTS

An applicant who wishes to enroll for a summer session only, in courses at the undergraduate level without pursuing a degree at The University of Texas at San Antonio should apply for admission as a transient student. In order to qualify as a transient student at the undergraduate level, the applicant must provide a statement of good standing from the Registrar's Office of the college or university last attended, as well as an application for admission.

Transient students may register for any courses for which they have the necessary prerequisites and in which space is available. A student registered in this capacity cannot register for the following term unless he or she has been admitted as a degree-seeking or special student according to the provisions set forth above. Beginning freshmen and international students may not apply as summer transient students.
ADMISSION OF HIGH SCHOOL STUDENTS

Selected high school seniors may be admitted (as special students) in order to enroll in university courses while completing their high school studies. Students seeking this admission category normally score above the average ACT/SAT scores required for admission from high school graduates. Students must be recommended for the program of study by the high school counselor, and must be approved for enrollment by the Dean(s) of the College(s) in which they anticipate taking courses. High school students admitted as special students are eligible to register for any undergraduate course for which they have the prerequisites and in which space is available.

UNIVERSITY HONORS PROGRAM

The University Honors Program is a rigorous four-year curriculum of disciplinary and interdisciplinary classes, supervised research, and ongoing faculty advisement. Honors students who are selected on the basis of grades, test scores, recommendations, and a writing sample, form a unique group within The University. Students wishing to apply for admission to The University Honors Program should write to the Director of the Program before the deadline for regular admission to The University. Students currently enrolled in The University who wish to apply for The Honors Program should contact the Program Director.

THE GIFTED AND TALENTED STUDENT PROGRAM

The University of Texas at San Antonio Gifted and Talented Student Program, conducted during the first session of summer school, is an opportunity for talented high school students to enroll in selected university courses and earn university credit. The program is limited to students who have completed the tenth grade by the date classes begin and is not available to Seniors. Selection criteria include grades, teacher recommendations, interviews, and, in some disciplines, test scores or submission of materials that indicate potential for the program. Students pay tuition and fees as described in the Tuition and Fees section of this catalog. Scholarships awarded solely on the basis of financial need are available for a limited number of students who meet the admission criteria of the program.

APPLICATION DATES

Students are urged to apply for admission as early as possible so that matters regarding admission can be resolved well in advance of the beginning of a term. Applications for admission are accepted as early as nine months before the term in which the students wishes to enter The University. The latest a completed application and all required supporting documents are accepted is August 1 for the Fall Semester, December 1 for the Spring Semester, and May 1 for the Summer Sessions. Failure to meet these admission deadlines will defer admission until a subsequent term.

ADMISSION PROCEDURES

Each applicant for admission is individually responsible for ensuring that all required support documents (e.g., application form, test results, and required transcripts) are on file in the Admissions Office in accordance with admission deadlines, since admission is not granted until the applicant’s file is complete. All documents submitted in support of an application become the property of The University and cannot be returned.
Students who apply for admission to The University of Texas at San Antonio for any term and do not register, must re-apply for admission if they wish to enroll at a later date. A subsequent application for admission must be in accordance with current admission requirements. New transcripts, test scores, and all other supporting documents are required since files for admitted students who do not register are not retained.

DECLARATION OF PREVIOUS COLLEGE WORK ATTEMPTED

Students are not at liberty to disregard previous college work attempted. All students transferring to The University of Texas at San Antonio must list all colleges attended on their UT San Antonio application for admission. Failure to do so will result in disciplinary action against the student, including the possibility of permanent dismissal.

RE-ADMISSION POLICIES AND PROCEDURES

Former UT San Antonio students who have not been in attendance for one or more long semesters (Fall or Spring) must file an application for readmission.

All former students returning to UT San Antonio who have attended other institutions of higher education since they were last enrolled must submit an official transcript from each such institution. Eligibility for re-admission for any former student depends on the student's academic status at the conclusion of his/her last UT San Antonio enrollment and on any subsequent college or university work attempted.

ADMISSION TO TEACHER CERTIFICATION PROGRAMS

The University of Texas at San Antonio is approved by the Texas Education Agency to recommend students for teaching certificates in various baccalaureate degree areas. Students who wish to prepare for teaching should apply for admission to The University through the Admissions Office either as a degree-seeking or special student, and for admission to a certificate program through the Office of Teacher Certification and Placement in the Division of Education.

Applications for admission to Teacher Education for purpose of Certification should be submitted at or before the time the student attains upper-division standing. Some academic requirements for the teaching certificate are in addition to those for the degree. Certificate program requirements are described in detail in a brochure available from the Office of Teacher Certification and Placement.
VI. GENERAL ACADEMIC REGULATIONS
REGISTRATION

All students who attend classes at The University of Texas at San Antonio must be registered officially or must be approved auditors. Registration instructions are included in the Schedule of Classes issued each term. Questions regarding registration should be directed to the Registrar’s Office.

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

LATE REGISTRATION

Late registration permits students to register during the allowed time indicated in the schedule of classes issued each term. Students who register late are charged an additional $5.00 the first day of late registration and an additional $2.50 per day thereafter to a maximum of $15.00 for any one term. This fee is non-refundable. Instructions for late registration are available in the Registrar’s Office. Students are not permitted to register after the close of late registration.

Students who register late are responsible for completing any work missed in the courses for which they enrolled during the time the course was in session prior to their being registered. It may be necessary for late registrants to select courses in which to enroll from a reduced schedule since many courses will have been closed at their capacities.

ADDING COURSES

After registration, but during the first week of classes in a semester, or the first two class days in a summer term, a student may add a course only with the approval of the course instructor, the student’s advisor, and the Division Director for which the course is offered. A special student should seek approval of the course instructor and Dean of the College in which the course is offered. A student seeking certification only should seek approval of the course instructor and Dean of the College in which the course is offered. After the first week of classes and through the twelfth class day of any semester, or on the third or fourth class day of any summer term, the additional approval of the Dean of the College in which the course is offered is required. A special student and a student seeking certification only should seek the additional approval of the Dean of the College in which the course is offered. After the twelfth class day of any semester or after the fourth class day of any summer term, students may not add a course except for extremely rare and extenuating circumstances as approved by the Vice President for Academic Affairs. Undergraduates seeking to add a graduate course in any of these time periods must obtain the special approvals specified in the sections “Enrollment in Graduate Courses for Undergraduate Credit” and “Enrollment in Graduate Courses for Graduate Credit” in this catalog. The University Calendar indicates the deadline dates for adding courses.

DROPPING COURSES

Courses officially dropped during the add/drop period (the first week of a semester or the first two days of a summer session) do not appear on the student’s transcript. A student who drops courses after the add/drop period and through the first nine weeks of a semester or the first three weeks of a summer term may drop courses and receive an automatic grade of “W.” The student is responsible for filing the change with the Registrar’s Office so that the action becomes official.
Students may not drop an individual course later than the last day of the ninth week of classes or after the first three weeks of a summer term. The University Calendar indicates the deadline dates for students to drop courses each term.

During the first nine weeks of a semester or the first three weeks of a summer term, the instructor may drop a student from class for non-attendance. The student will receive a grade of "W." After these periods, the instructor may recommend to the Dean that a student be dropped from class when the instructor can show that unusual circumstances exist to warrant such action. The Dean, with the approval of the Vice President for Academic Affairs, may drop a student from class; the student will receive a grade of "W" if the student was passing at the time of the drop or a grade of "F" if the student was failing at the time of the drop.

WITHDRAWAL PROCEDURES

A student who finds it necessary to withdraw from The University (i.e., drop all courses for which he/she is enrolled) may obtain the form for this purpose from the Registrar's Office. After completing the required form, the student must file it with the Registrar's Office in order to withdraw officially. Students who officially withdraw from The University during the first nine weeks of a semester or the first three weeks of a summer term, will receive a grade of "W." Students who officially withdraw after the first nine weeks of classes in a regular semester or the first three weeks of a summer term will receive a grade of "W" for each class they are passing at the time of withdrawal and a grade of "F" for each class in which they are not passing at the time of withdrawal. Students may not withdraw from The University later than the first day of the week preceding final examinations. Students who withdraw from all classes are subject to The University's academic probation and dismissal regulations. Students withdrawing should refer to the regulations on refunds of tuition and fees.

AUDITING OF COURSES

UT San Antonio students and non-students who wish to audit a course may do so with the approval of the instructor and the Dean of the College in which the course is offered, providing there is space in the classroom after all registered students have been accommodated. A course must achieve its minimum size without auditors. Auditing entitles a student to listen and observe. Participation of an auditor in class is at the discretion of the instructor. No UT San Antonio credit is granted for courses that are audited.

All auditors must submit the Request for Audit Form to the Registrar. A UT San Antonio student pays an auditing fee of $5.00 per course and auditors who are not registered UT San Antonio students must pay an auditing fee of $25.00 per course. Non-student auditors who wish library privileges may receive them by paying a non-student library deposit (Limited Borrower's Deposit) of $15.00 at the John Peace Library. Persons over 65 are permitted to audit without paying an auditing fee, if space is available.

Permission to audit may be obtained and fees paid only during the late registration period. No official record is made of enrollment in classes on an audit basis.

VERIFICATION OF ENROLLMENT

Following the add/drop period of each semester or summer session, a verification report is sent to each student indicating the schedule of classes in which he/she is officially enrolled. Any discrepancies between the courses shown on the notice and the courses the student is attending should be resolved immediately by the student in person with the Registrar's Office.
CHANGE OF MAJOR OR DEGREE

A student who wishes to change his/her major or degree objective must obtain the required forms at the Registrar's Office. The change is not official until the form has been completed and filed with the Registrar's Office. The Architecture and Engineering programs have specific requirements for admission. Students seeking to enter these programs should consult their program directors.

STUDENT CLASSIFICATION SYSTEM

Upper-division (junior and senior): A student who has earned 60 or more semester hours of credit.

Lower-division (freshman and sophomore): A student who has earned less than 60 semester hours of credit.

DEFINITION OF A FULL-TIME AND A PART-TIME UNDERGRADUATE STUDENT

A full-time undergraduate student is one enrolled in twelve or more semester hours of credit during a fall or spring semester or in six or more hours of credit during each summer term.

A part-time undergraduate student is one enrolled in less than twelve hours of credit during a fall or spring semester or less than six hours during each summer term.

COURSE NUMBERING SYSTEM

All courses are designated by four-digit numbers following a two or three-letter abbreviation of the subject field. The first digit indicates the level of the course. All courses with a first digit of 1 or 2 are lower-division (freshman or sophomore) courses, and all courses with a first digit of 3 or 4 are upper-division (junior or senior) courses. All course numbers starting with 5 or higher are graduate courses.

The second and third numbers are used within the Colleges by each Division to distinguish individual courses.

The fourth digit indicates the semester hour value of the course.

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

PREREQUISITES

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

GRADING SYSTEM

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

Hours earned. The hours earned by a student are the number of semester hours of credit earned in which grades of "A," "B," "C," "D," or "CR" have been received (see below).
General Academic Regulations / 61

Grade-point Average. The UT San Antonio grade-point average (GPA) is determined by dividing the number of grade points earned at UT San Antonio by the number of semester hours attempted at UT San Antonio.

Credits and grades for work completed at other institutions or credits earned by examinations are not included in the UT San Antonio grade-point average.

Grade symbols and grade points.

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>CR</td>
<td>0</td>
</tr>
<tr>
<td>EP</td>
<td>0</td>
</tr>
<tr>
<td>W</td>
<td>0</td>
</tr>
<tr>
<td>IN</td>
<td>0</td>
</tr>
<tr>
<td>NR</td>
<td>0</td>
</tr>
<tr>
<td>NC</td>
<td>0</td>
</tr>
</tbody>
</table>

EXPLANATION OF GRADE SYMBOLS

"A" through "F." A = Outstanding; B = Above average; C = Average; D = Below average but passing (See Credit-No Credit grading policy); F = Failure.

"CR" or "Credit." The symbol "CR" is used to indicate that satisfactory performance has been demonstrated by examination (see Credit by Examination section), or in a course taken under the Credit-No Credit grading option.

"NC" or "No Credit." The symbol "NC" is used to indicate unsatisfactory performance in a course taken under the Credit-No Credit grading option.

"EP" or "Postponement of Final Examination." The symbol "EP" is used to indicate that a student has been permitted to postpone a final examination. See "Postponement of Final Examinations Provisions," in this section of the catalog.

"W" or "Withdrawal." The symbol "W" is used to indicate that at the time of withdrawal from a course, the student's grade was passing.

"IN" or "Incomplete." The grade of "Incomplete" ("IN"), subject to the regulations of this section, may be assigned a student at the discretion of the instructor. The purpose of the "Incomplete" grade is to allow a student to complete a course without repetition of the regular work of a course. It may not be assigned when a definite grade can be given for the work done. The "Incomplete" grade is given to indicate that some part of the work of a student in the course has, for good reason, not been completed, while the rest has been satisfactorily completed. The student must have been in attendance at least three-fourths of the term. Incomplete work must be made up no later than the end of the final exam period, one year from the semester the incomplete was received, and before the student's graduation. If the work is not completed within this time the "Incomplete" changes to a grade of "F" or "NC."

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

"NR" or "No Report." The grade "No Report" ("NR") may be assigned a student only by the Registrar. This symbol is assigned only when in unusual circumstances it is not possible to obtain the student's proper grades by the deadline necessary for processing grades at the close of the term and is replaced with the official grade as soon as possible.
CREDIT BY EXAMINATION

A student at The University of Texas at San Antonio may normally satisfy general education and specific degree requirements through credit by examination. Except for one type of examination, credit earned by this means is not counted as satisfying minimum residence requirements. The exception noted pertains to credits earned by challenging UT San Antonio undergraduate courses; these credits are counted toward the minimum residence requirements but are not included in the calculation of the student's UT San Antonio grade-point average. Credit cannot be earned by examination for courses which are used to fulfill the statutory history and government General Education Requirements in excess of three semester hours in history and three semester hours in government or political science.

It is not necessary to be a UT San Antonio student to take credit by examination. Credit based on CEEB examinations, however, is not awarded until the individual is registered at UT San Antonio.

Unsuccessful attempts to earn credit by examination do not become part of the student's official academic record.

Credit cannot be earned by examination which would duplicate or repeat credit earned for college or university courses. Nor can a student receive credit for a course for which he or she has already received credit by examination.

A brochure on Credit by Examination at UT San Antonio is available from the Testing Center, Office of the Dean of Students, on the various tests which may be accepted for credit at The University. The brochure describes the tests available, when and where they are given, their costs, procedures for having test scores submitted for consideration for credit, the amount of credit that may be earned, and how to obtain additional information on each test.

The symbol "CR" (Credit) is awarded for all credit earned by examination.

CREDIT-NO CREDIT GRADING POLICY

A credit-no credit grading option is provided to encourage undergraduate students to expand their knowledge of fields outside their major area of interest.

A. Student Option

1. A maximum of four courses may be attempted on a credit-no credit basis.
2. Credit-no credit courses will appear on the permanent record with a grade of CR if the grade is A, B, or C; NC if the grade is D or F; neither grade will affect the GPA at UTSA. The credit-no credit grade cannot be changed to a regular grade once the credit has been awarded.
3. Students must choose to take the course on a credit-no credit basis at registration and may not change that decision after the add period.
4. Only free electives may be taken on a credit-no credit basis; i.e., no course to be applied to the general education requirements or degree requirements or support work can be taken on a credit-no credit basis.
5. Credit-no credit courses cannot be counted toward the 30-hour residency requirements by transfer students who transfer to UTSA for their last 30 hours.
6. The Registrar's Office shall require the student to affirm, by his/her signature, the he/she is aware of the policies on credit-no credit and is abiding by them. If it is later discovered that the affirmative was incorrect, the credit-no credit grade will be returned to its original letter grade.
Students will be required to complete a Credit-No Credit Option Request preferably at the time of Registration, but no later than the add period.

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

B. Mandatory Credit-No Credit Courses
Some academic divisions will require certain courses to be graded on mandatory credit-no credit basis. Enrollment in any of these courses will not affect the student's option to take up to four free elective courses on a credit-no credit option. Courses offered on a mandatory basis are so designated in this catalog.

UT SAN ANTONIO CHALLENGE EXAMINATIONS
Students enrolled at The University of Texas at San Antonio may "challenge," that is request an examination in, any UT San Antonio undergraduate course for which they have not already received credit. Not all courses, however, consist of materials in which comprehension can be evaluated by means of examination. The option of whether or not to grant the request rests with the instructor of the course.

To challenge a UT San Antonio undergraduate course by examination, the student must enroll in the course and within the first three weeks of the Fall or Spring semester and the first week of a summer term must request to complete it by examination. A charge of $15.00 is made for each course challenged by examination. If the student's performance on the examination is at the grade level of "C" or higher, a grade of "CR" is submitted at the end of the term by the instructor on the grade report for the course along with a credit by examination notation.

Unsuccessful attempts to earn credit by examination do not become part of the student's official academic record; the student may, however, elect to drop the course or complete the course on a regular basis following the evaluation of the examination(s) for the course(s) challenged.

Students admitted under the Provisional Admission Program may request to challenge by examination courses in those disciplines to which their enrollment is restricted. Credits earned by challenging UT San Antonio undergraduate courses by examination apply to degree requirements as though the courses had been completed in the normal manner, except that since a grade of "CR" is awarded, such courses are not included in the UT San Antonio grade-point average. These credits are also counted toward the minimum residence requirements. Students may challenge the same UT San Antonio course by examination only once.

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

GRADE REPORTS
The Registrar's Office mails final grades as soon as they are compiled after the close of each semester and each summer term. The grade report reflects the grade that appears on the instructor's final grade sheet; subsequent changes are not included. Grades are mailed to the address on file in the Registrar's Office. Only one grade report is mailed; additional copies are not available.
CHANGE OF Grades

Grade changes from “Incomplete” (“IN”) to a letter grade must be made within the time limit provision explained under “Explanation of Grade Symbols” in this catalog. A grade of “Incomplete” may be changed by the instructor by completing a Removal of Incomplete form and filing it with the Registrar’s Office no later than the end of the final exam period, one year from the semester the incomplete was received. Grade changes from “Postponement of Final Examination” (“EP”) to a letter grade should be made within 30 days after the student has taken the authorized postponed final examination. As explained under “Postponement of Final Examination Procedures” in this catalog, if a postponed final examination is not taken before the end of the fall or spring term following the one for which it was approved, the grade in the course is changed by the Registrar’s Office to “F.” Prior to that time the instructor may change the “EP” to another letter grade by completing a Change of Grade form and filing it with the Registrar’s Office.

Any other change of grade must be initiated by the instructor on the required form available in the Registrar’s Office and in the Offices of the College Deans. All requests for a change of grade should be accompanied by a statement explaining the requested change. It is the policy to change a grade (other than “Incomplete”) only in the case of error. Additional work performed by a student may not be used to raise a grade that has been reported to the Registrar’s Office. Requests for a change of grade require the approval of the Dean and the Director of the Division in which the course is offered before the Registrar will make the change on the student’s record.

CLASS PARTICIPATION POLICY

Regular attendance at and participation in all meetings of courses for which a student is registered is expected. It is the instructor’s responsibility to set and to communicate to students the participation requirements for each course. The degree to which classroom participation is required and whether or not work missed by a student during an absence may be made up is at the discretion of the instructor.

When, in the judgment of the instructor, a student has been absent excessively, the instructor may report the absences to the Dean of the College in which the course is offered and recommend that the student be dropped from the course with a grade of “F.” If the Dean approves the recommendation, he advises the Registrar, who in turn advises the instructor and student of the action taken.

A student who enrolls for a course and then does not attend is considered absent from class until he/she officially drops the course or until he/she has accumulated an excessive number of absences and is dropped from the class with a grade of “F.”

REPEATING COURSES

Only those courses in the catalog in which the course description specifically indicates “may be repeated for credit” may be repeated with both the units and grade points earned being counted. An undergraduate student may, however, repeat a course in which he/she received a grade of “D,” “F,” or “NC” in order to improve his/her grade but cannot receive credit for the course more than once.

If a student re-enrolls in a course in which a “D” has been received, only the highest grade earned is used in calculating the grade-point average. If another “D” or a lower grade is received the second time, the repeated course grade is not used in computing the cumulative UT San Antonio grade-point average, and the course is marked as “Duplication” on the student’s official records.

Re-enrollment in a course in which an “F” has been received cancels the credit hours charged against the student’s UT San Antonio grade-point average if a higher grade is
earned. If a second "F" is received, it is not charged against the student’s grade-point average and is marked as "Duplication" on the student’s official record.

A student may not repeat a course by correspondence, extension, or through work at another college or university for the purpose of raising his/her grade-point average at UTSA once the course has already been completed at UTSA.

Only undergraduate students may repeat courses for the purpose of raising the grade-point average, as described above.

POSTPONEMENT OF FINAL EXAMINATION PROCEDURES

A student who is compelled to be absent from a final examination because of illness or other imperative reason should petition his/her academic Dean for permission to postpone the examination. This request, which requires prior approval by the instructor, should be made to the Dean as soon as the student knows he/she will be compelled to be absent.

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

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

HONOR ROLL AND DEAN’S LIST

Undergraduate students who achieve scholastic distinction in a semester, as evidenced by a grade-point average of 3.50 or higher in at least 12 hours of credit, excluding grades of "CR," and receive no grades of "D," "F," "EP," "IN," or "NC" are included on the Honor Roll. Undergraduate students who complete at least 12 semester hours, excluding grades of "CR," and receive no grades of "D," "F," "EP," "IN," or "NC" and who achieve a grade-point average of 3.75 or higher for any semester are included on the Dean’s List. Neither the Honor Roll nor the Dean’s List are prepared for the summer terms. To determine eligibility for graduation with honors, see Graduation with Honors.

ACADEMIC STANDING

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

ACADEMIC PROBATION

Students whose cumulative UTSA grade-point average falls below 2.0 are placed on Academic Probation. These students will remain on Academic Probation as long as their cumulative UTSA grade-point average remains below 2.0 provided that they achieve AT LEAST a 2.0 each term. Academic Probation will be cleared when they achieve a 2.0 cumulative grade-point average. Failure to achieve a grade-point average of AT LEAST a 2.0 during any term while on academic probation will result in Academic Dismissal. (Students should be aware that they may not graduate while on Academic Probation.)
ACADEMIC DISMISSAL

Students on Academic Probation who achieve a grade-point average BELOW 2.0 during any term will be placed on Academic Dismissal. Students placed on Academic Dismissal must petition for reinstatement or readmission for future enrollment.

PETITION FOR REINSTATEMENT

1. Students placed on Academic Dismissal for the first time may be reinstated after not attending the UTSA for one long-term semester (Fall or Spring). [A student who is dismissed for the first time at the end of the Spring semester, however, may attend the UTSA first five-week summer session in an attempt to raise his or her grade-point average to a level which would permit reinstatement in the Fall semester. These students may not attend institutions other than UTSA for the purpose of raising their UTSA grade-point averages.] Students seeking reinstatement must file an application for Readmission by the appropriate deadline for admissions and applications listed on page of this catalogue. These applications are handled by the Admissions Office according to normal Readmission Application Procedures. Reinstated students must consult with the academic advisors prior to registration.

2. Students placed on Academic Dismissal for a second or subsequent time may petition for reinstatement to the Dean of the College in which they are majoring or intend to major after the student has not attended the UTSA for one calendar year. Petition forms may be obtained at the appropriate Dean's Office. Undeclared majors petition The University Committee on Probation and Reinstatement. Petition forms may be obtained at and should be returned to the Registrar's Office.

Petitions for reinstatement must be filed with the appropriate office by October 15 for reinstatement to the Spring semester, by March 15 for reinstatement to the Summer sessions, and by June 15 for reinstatement to the Fall semester.

If the Petition for Reinstatement is disapproved, a student may not file another petition until the following semester.

Appeal of a denial for reinstatement shall be made to the Office of the Vice President for Academic Affairs within two weeks after notice of the denial is mailed by the Registrar's Office. The decision of the Vice President for Academic Affairs is final.

SCHOLASTIC DISHONESTY

The integrity of a university degree depends on the integrity of the work done for that degree by each student. The University expects a student to maintain a high standard of individual honor in his/her scholastic work.

“Scholastic dishonesty” includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another’s work and the unacknowledged incorporation of that work in one’s own written work offered for credit), and collusion (the unauthorized collaboration with another person in preparing course work offered for credit).

Should a student be accused of scholastic dishonesty, the faculty member may initiate disciplinary proceedings through the Division Director, the Dean of the College, and the Dean of Students. The Dean of the College in which the student is enrolled may initiate formal disciplinary proceedings.
CANCELLATION OF ENROLLMENT

Any student who fails to fulfill admission, registration, or financial requirements or who otherwise fails to adhere to academic regulations is subject to having his/her enrollment for that term cancelled. Application for re-admission to a subsequent term may be considered, provided the deficiency which resulted in the cancellation has been removed.

TRANSCRIPTS

Official transcripts of all course work taken at The University of Texas at San Antonio are available in the Registrar’s Office. Requests for transcripts must be in writing and must bear the signature of the student whose record is requested. A fee is charged for each copy of the transcripts and must be paid in advance. Transcripts from other institutions submitted to UT San Antonio become the property of The University and are not reproduced and/or mailed to other institutions, agencies, or individuals as an official transcript. Requests for unofficial copies of transcripts from other institutions may be made in accordance with the open record laws by filling out the required forms in the Registrar’s Office and paying the fee.

Request for official transcript service will not be honored from students who have a financial obligation or other commitment outstanding to The University until the obligation is cleared.

RELEASE OF TRANSCRIPTS AND ACADEMIC RECORDS

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

All official certification with regard to the academic performance or status of a student or former student of The University of Texas at San Antonio are made by the Registrar’s Office.

CHANGE OF NAME

A student’s name on official records at UT San Antonio is the name under which the student applied for admission, unless a Change of Name form has been processed through the Registrar’s Office. Name change requests should be supported by appropriate legal documentation, except that upon marriage a student may declare the newly taken name.

CHANGE OF ADDRESS

Currently enrolled students who have changed their addresses should notify the Registrar’s Office by completing the appropriate form. Official notification of change of address is necessary for proper identification of students’ records and for accurate mailing of correspondence, grade reports, transcripts, registration instructions, and information pertaining to graduation requirements. Students who have a degree application on file in the Registrar’s Office should specify if the address change also affects the address to which the diploma is to be mailed.
VII. BACHELOR'S DEGREE REGULATIONS
Bachelor's Degree Regulations

DEGREE REQUIREMENTS

In order to receive a bachelor's degree from UT San Antonio, a student must comply with the following minimum requirements. Each course used for degree requirements at UTSA can be applied to only one of four categories: 1) general education requirements, 2) requirements for the major, 3) requirements for support work, 4) requirements for free electives.

1. Complete a minimum of 120 semester hours of credit, of which at least 39 must be in upper-division work.
2. Complete the university-wide general education requirements. (See immediately below.)
3. Complete the major and support-work requirements and the free elective requirements for the desired degree. Free electives, as used in this catalog are any semester hours of credit accepted by UT San Antonio in transfer or awarded by UT San Antonio which, for degree purposes, are not applied to general education, major, or support-work requirements. The only restrictions placed upon courses used as free electives are:
   1) that a specified number of free elective credits must be at the upper-division level for some degree programs;
   2) that a maximum of six hours of physical activities courses can be applied to the free electives allowed for any UT San Antonio degree program; and
   3) that a maximum of nine hours of military science credit can be applied to the free electives allowed for any UT San Antonio degree program.
4. Meet the residence requirements.
5. Achieve an overall 2.0 grade-point average in all work attempted at UT San Antonio, a 2.0 grade-point average in all work included in the major, and a cumulative 2.0 grade-point average (including all transfer work).
6. Be in good academic standing at UT San Antonio.
7. Apply formally for the degree before the deadline in the Registrar's Office and pay the required fee.

GENERAL EDUCATION REQUIREMENTS

All candidates for a bachelor's degree at The University of Texas at San Antonio must satisfy a total of 42 semester credit hours of university-wide general educational requirements incorporating the following areas:

I. Languages and Cultures 18 Semester Credit Hours
II. Sciences and Mathematics 9 Semester Credit Hours
III. Social Sciences 15 Semester Credit Hours
Total General Education Requirements 42 Semester Credit Hours

The requirements for each of the areas are to be selected according to the following:

1. Languages and Cultures 18 Semester Credit Hours

   A. English
   ENG 1013 Freshman Composition
   ENG 1023 Critical Reading and Writing I
   ENG 1033 Critical Reading and Writing II
   Entering students whose scores on the SAT verbal or ACT English sections indicate deficiencies in basic English skills are required to enroll in ENG 1003, Basic English. The course is offered on a credit/no-credit basis, and a student required to take ENG 1003 must receive credit for the course before being
permitted to enroll in ENG 1013. Cut-off scores are published in the Schedule of Classes for each semester and the summer session. Credit for 1003 cannot be used to satisfy any degree requirements.

B. Other Languages and Cultures

Entering students who have not completed two units (two years) of a single foreign language will follow Track 1. Entering students who have completed two units (two years) of a single foreign language will follow Track 2.

Track 1: 6 semester credit hours in a single foreign language equivalent to completion of UTSA's second semester (1023) in the given language, plus 3 semester credit hours from the following areas:

- foreign language
- foreign literature
- culture
- fine and applied arts
- classics and philosophy

(See Appendix B for list of Approved General Education Requirements Courses.)

Track 2: 9 semester credit hours in language and culture courses to be chosen from the following disciplines:

- Art History and Criticism (AHC)
- American Studies (AMS)
- Anthropology (ANT)
- Art (ART)
- Bicultural-Bilingual Studies (BBL)
- Comparative Studies in the Humanities (CSH)
- Classics (CLA)
- Communications (COM)
- English (ENG)
- Foreign Language (FL)
- French (FRN)
- Geography (GRG)
- German (GER)
- History (HIS)
- Humanities (HUM)
- Linguistics (LNG)
- Music (MUS)
- Philosophy (PHI)
- Political Science (POL)
- Psychology (PSY)
- Russian (RUS)
- Sociology (SOC)
- Social Sciences (SSC)
- Spanish (SPN)

(See Appendix B for list of Approved General Education Requirements Courses.)

(Courses which meet mandatory legislative requirements in History (HIS) and Political Science (POL) may not be used to fulfill the requirements for "Other Languages and Cultures").

II. Sciences and Mathematics

Required are nine semester credit hours of Sciences and Mathematics with no more than six hours in either area. Students may fulfill the requirement by com-
completing coursework from the courses appearing on the list of Approved General Education Requirements Courses in Appendix B.

Mathematics

Mathematics (MAT)
Statistics (STA)
Computer Science (CS)
Systems Design (SD)

Sciences

Allied Health Sciences (AHS)
Applied Science (AS)
Astronomy (AST)
Biology (BIO)
Chemistry (CHE)
Applied Geology (GEO)
Applied Physics (PHY)

III. Social Sciences

Students are required to complete the following:

A. History

Required are six semester credit hours in American History or three semester credit hours each in Texas and American History (see Appendix B for courses applicable to the General Education Requirements in History.)

B. Political Science

Required are three semester credit hours in United States government and three semester credit hours in Texas government (see Appendix B for courses applicable to the General Education Requirements in government.)

C. Other

Three semester credit hours in one of the following:

Economics (ECO)
Education (EDU)
Environmental Studies (ENV)
Urban Studies (URB)

(See Appendix B for the list of Approved General Education Requirements Courses.)

MINIMUM RESIDENCE REQUIREMENTS

The following minimum residence requirements at UT San Antonio are in accordance with requirements established for all institutions in The University of Texas System and are requirements for all bachelor's degrees:

1. A minimum of 30 semester hours of credit at UT San Antonio courses must be completed before a degree can be conferred.

2. Twenty-four of the last thirty semester hours must be completed in residence, with the exception that among the UT System components, a student may, with the approval of the appropriate Dean, transfer additional course work to his/her program at the degree-granting institution.

3. Of the minimum 39 upper-division hours required in all degree programs at UT San Antonio, 18 of these must be earned in UT San Antonio courses.

4. At least six hours of upper-division UT San Antonio course work in the major must be completed. Additional hours in the major sequence may be required under individual UT San Antonio degree plans.
TRANSFER OF CREDIT

To prevent unnecessary loss of time and credit, prospective transfer students are encouraged to inform themselves as early as possible of UT San Antonio’s admission policies and degree requirements in their areas of interest. Students attending community colleges should be guided as well by the core curricula designed and adopted by the Coordinating Board, Texas College and University System, to simplify the transfer of credit, copies of which are available through most community college counselors. Questions regarding the transferability of courses should be addressed to the UT San Antonio Admissions Office.

The Coordinating Board, Texas College and University System, has approved core curricula in the following areas: Arts and Sciences (including Mathematics and Natural Sciences), Business Administration, Engineering, Art, and Criminal Justice. Although the courses taken in these core curricula at various institutions may not be precisely equivalent to courses in the UT San Antonio Undergraduate Catalog, students who have successfully completed these core curricula at other institutions are given full credit toward the appropriate degree at UT San Antonio.

Undergraduate college credits completed at other institutions are evaluated for transfer to UT San Antonio by the office of Admissions and Registrar on the basis of UT San Antonio equivalency tables and according to the following guidelines:

1. All work transferred must be from a college or university accredited by a regional accrediting association (credits completed at foreign institutions are evaluated on an individual basis).

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

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

4. When a course has been repeated for credit only those courses where a grade of D or F was originally earned will be used in the acceptance of credit.

5. Credits for courses such as remedial courses, orientation, life experience, high school level courses, mathematics below the college algebra level, or vocational-technical courses are not accepted for transfer credit. Where vocational-technical courses support a student’s degree program, free elective credit may be approved by the Dean of the College in which the student is majoring upon the written request of the student. No transfer credit is granted for the General Education Development Tests.

6. Credit by examination awarded at another accredited college or university is transferred as though the student had completed the course(s) or general subject area(s) at the other institution and is evaluated the same as any other course(s) at that institution. Such credit is subject to all other provisions of this section.

7. Credit earned through accredited colleges and universities for college level academic courses by extension or correspondence (including USAFI or
DANTES courses) is evaluated and accepted for transfer if equivalent to UT
San Antonio courses, if applicable to the student’s degree program, and if all
other transfer provisions of this section are met. However, the maximum
credit accepted through a combination of extension and correspondence
courses is 30 hours (18-hour maximum by correspondence, including USAFI
or DANTES). No more than 6 hours of correspondence credit may be applied
to the major.

8. Transfer credit for junior college work may not exceed 66 semester hours.
Students who have completed more than 66 acceptable semester hours may
apply completed, transferable courses to specific course requirements and
thereby not have to repeat the courses. The semester hours for those additional
courses may not be applied toward the minimum semester hour require­
ments for a baccalaureate degree.

No upper-division credit may be earned at a junior college. All course require­
ments at UT San Antonio which are designated as upper-division may be
transferred to UT San Antonio only from senior-level institutions.

For credit to be transferred as an upper-division course, the institution where
credit was earned must be an accredited senior-level institution and the
course must be described in the institution’s catalog as being of upper­
division level.

If the equivalent of a required upper-division UT San Antonio course is com­
pleted at an accredited institution as a lower-division course, the course need
not be repeated, but another upper-division course, as approved by the stu­
dent’s Advisor, must be completed at UT San Antonio in substitution.

9. Transfer credit for military service training school courses is not granted by
UT San Antonio. A student having taken such courses may challenge by
examination those UT San Antonio courses which appear equivalent to those
already completed. (See the paragraph on UT San Antonio Challenge
Examinations in the Credit by Examination section of this catalog.) Credit for
ROTC or military science, when awarded by another accredited college or
university, will be accepted by UT San Antonio as free elective credit within
the limitations of the student’s degree program (normally a maximum of 9
semester hours).1

10. Credits earned for physical activities courses can be transferred, within the
provisions of this section, as free elective credit subject to a maximum of 6
semester hours.

11. Credits earned in colleges and universities which are candidates for accredi­
tation may be considered for transfer to UT San Antonio on an individual
basis and as applicable to the student’s degree program.

The University reserves the right to refuse recognition of credit from a non­
accredited institution. Any such credit accepted in transfer must be validated
by 30 semester hours of course work in residence at UT San Antonio, with a
grade-point average of 2.0 or higher in that work.

An official Evaluation of Transfer Credit is supplied to each new student as soon as
possible following admission. This evaluation shows the equivalency of courses com­
pleted elsewhere to courses at UT San Antonio and their applicability to the student’s
proposed baccalaureate degree at UT San Antonio.

Students who do not receive transfer credit for specific courses should review the
policies for credit by examination, or contact the Office of Admissions and Registrar.

1See Degree Requirements in this section of the catalog and the Army ROTC Program which contains specific information
on the maximum number of hours of military science that can be counted as free electives for the various degrees available at
UT San Antonio.
CORRESPONDENCE AND EXTENSION COURSES

The University of Texas at San Antonio does not offer correspondence or extension courses at this time. For UT San Antonio policies on transfer and credit limitations on such courses, see Transfer of Credit and Minimum Residence Requirements in this section of the catalog.

While enrolled at UT San Antonio, students normally are not permitted to transfer to UT San Antonio credit earned through correspondence or extension courses. Exceptions to this rule must be approved by the student’s Advisor and Dean, and such courses can be taken only in the event that the student about to graduate cannot obtain the course in residence.

MULTIPLE MAJORS

A student completing a baccalaureate degree at The University of Texas at San Antonio is not restricted in the number of majors he or she may complete for the degree. However, if a student wishes to pursue more than one major, all requirements for a single degree and major, plus the additional requirements for the other major(s) must be completed. In such cases, only one degree is awarded. It is unlikely that a student fulfilling more than one major can complete all requirements within the same number of semester credit hours required for a single major.

ADDITIONAL BACCALAUREATE DEGREES

A student holding a baccalaureate degree from The University of Texas at San Antonio or from another accredited institution may receive an additional bachelor’s degree in a different major from UT San Antonio. Such a student continues to be classified as an undergraduate and must:

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

ENROLLMENT IN GRADUATE COURSES FOR UNDERGRADUATE CREDIT

With approval of the student’s advisor, the instructor, the Division Director and the Dean of the College in which the course is offered, and the Vice President for Academic Affairs, an exceptional undergraduate student may enroll in a graduate course and apply the credit earned to his/her undergraduate degree. An approval form is available at the Registrar’s Office.

ENROLLMENT IN GRADUATE COURSES FOR GRADUATE CREDIT

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

1. All hours required for the degree must be completed in the term in which he/she is taking the additional course(s) for graduate credit.
2. Permission, on an approved form available at the Registrar’s Office, must be obtained from the student’s advisor, the Dean of the College in which the
Bachelor’s Degree Regulations

course(s) to be taken for credit is (are) offered, and the Vice President for
Academic Affairs. The approved form must be filed with the Registrar’s Office
by the end of the add/drop period of the term in which the registration is being
made.

3. In order to earn graduate credit, the student must graduate at the end of that
term; otherwise, the course(s) is (are) regarded as undergraduate credit. If
graduate credit is earned, the semester hours are not considered part of the
baccalaureate degree program.

4. Students are encouraged to begin seeking appropriate authorizations prior to
the registration period.

CATALOG OF GRADUATION

Students have seven years to complete a degree program under the catalog of initial
registration at UTSA. If a student drops out for one or more long semesters and returns
to UTSA as a former student, he/she may choose a subsequent catalog under which to
complete his/her graduation requirements, thereby beginning a new seven year time
limit. Students who graduate under one catalog and begin a second degree, must
begin the new degree under the catalog in effect at that time.

APPLICATION FOR THE DEGREE

Undergraduate students should apply for their degree at the Office of Admissions and
Registrar as soon as possible after completion of 90 semester hours of earned credit.
The Office of Admissions and Registrar is responsible for preparing a degree check for
The University to see that uniform requirements for each degree are met. The degree
check is usually prepared and issued one semester before graduation. It is not intended
to be used as a substitute for academic advisement. Students seeking information
about remaining degree requirements should consult with their academic advisor both
before and after the preparation of a degree check.

A degree candidate waiting until the final semester of enrollment to apply for graduation
must do so no later than October 1 for the Fall Semester; February 15 for the Spring
Semester; July 15 for the Summer Session. The application of any student applying for
graduation after the established deadlines for that semester will be processed for
graduation for the following semester. Students who apply for the degree in a given
term but who do not fulfill all requirements must file a new degree application (before
the deadline) for the next term in which they intend to graduate. An additional applica-
tion fee is required for the second and all subsequent degree applications.

GRADUATION WITH HONORS

Undergraduate students who complete degree requirements for a baccalaureate
degree and who have earned an overall grade-point average of 3.50 in all academic
college work attempted and have earned a grade-point average of 3.50 in all semester
hours attempted at The University of Texas at San Antonio are eligible for graduation
Magna Cum Laude. Those who have earned a grade-point average of 3.75 on an over-
all basis and at UT San Antonio are eligible for graduation Summa Cum Laude.

Candidates who have completed some portion of the requirements for the baccalau-
reate degree at other collegiate institutions may be graduated with honors when they
meet the requirements listed above in addition to completing a minimum of 45 semester
hours of credit at The University of Texas at San Antonio, excluding courses challenged
by examination or taken on a Credit-No Credit basis in which only the symbol “CR” is
recorded.

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

Degrees are conferred at the end of each semester and at the end of the summer session. Public commencement ceremonies are held only at the conclusion of the spring semester. Students who wish to participate in commencement ceremonies at the close of the spring semester and who have graduated during the previous summer or fall terms may do so. Information on the procedures to be followed is available in the Registrar's Office.
VIII. SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS AND SUPPORT AREAS FOR 1984-86
SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS

The following undergraduate degree programs are available during 1984-86.¹ Detailed requirements for each degree are found in Section IX of the present catalog.

Bachelor of Business Administration (BBA)

Accounting
Concentrations: (1) Accounting
(2) Business Data Systems

Economics
Finance
Management
Concentrations: (1) Business Management
(2) Industrial Management
(3) Marketing
(4) Personnel/Human Resources

Bachelor of Arts (BA)

American Studies
Anthropology
Criminal Justice
Early Childhood and Elementary Education
Economics
English
French
Geography
German
History
Humanities
Political Science
Psychology
Sociology
Spanish

Bachelor of Fine Arts (BFA)

Art and Design
Concentrations: (1) Art
(2) Architectural Design
(3) Interior Design

Bachelor of Music (BM)

Bachelor of Music Education (BME)

¹Course offerings in undergraduate degree programs may be postponed if enrollments or resource and space limitations do not warrant scheduling or continuation of a particular course.
Summary of Undergraduate Degree Programs

Bachelor of Science (BS)

- Biology
- Chemistry
- Civil Engineering
- Computer Science and Systems Design
  - Concentrations: (1) Computer Science
  - (2) Systems Design
- Electrical Engineering
- Geology
- Health Education
- Mathematics
  - Concentrations: (1) Mathematics
  - (2) Statistics
  - (3) Mathematics Education
- Mechanical Engineering
- Medical Technology
- Occupational Therapy
- Physical Education
- Physical Therapy
- Physics
  - Concentrations: (1) Applied Physics
  - (2) Physics

Summary of Undergraduate Support Areas

Additional undergraduate courses available in the following support areas during 1984-86.

- Art History and Criticism
- Astronomy
- Bicultural-Bilingual Studies
- Business Law
- Classics
- Comparative Studies in the Humanities
- Communication
- Curriculum and Instruction
- Educational Psychology (Special Education)
- English as a Second Language
- Environmental Management
- Foreign Language
- Hebrew
- Italian
- Linguistics
- Military Science
- Philosophy
- Russian
- Social Science
- Urban Studies

---

*Course offerings in undergraduate areas may be postponed if enrollments or resource and space limitations do not warrant scheduling or continuation of a particular course.*
IX. UNDERGRADUATE DEGREE PROGRAMS AND COURSE DESCRIPTIONS
82 / Bachelor of Business Administration Degree
in Accounting With a Concentration in Accounting

COLLEGE OF BUSINESS

All undergraduate degrees in the College of Business are accredited by the American Assembly of Collegiate School of Business and conform to its recommended guidelines.

DIVISION OF ACCOUNTING AND BUSINESS DATA SYSTEMS

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN ACCOUNTING WITH A CONCENTRATION IN ACCOUNTING

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 37 semester hours in the major, 30 of which must be at the upper-division level.
   1. 31 semester hours of required courses are:
      ACC 2011 Financial Accounting, Technical Skills
      ACC 2013 Financial Accounting
      ACC 2033 Managerial Accounting
      ACC 3023 Intermediate Financial Accounting I
      ACC 3033 Intermediate Financial Accounting II
      ACC 3043 Federal Income Tax Accounting
      ACC 3063 Advanced Financial Accounting I
      ACC 4013 Principles of Auditing
      ACC 4023 Cost Analysis
      ACC 4153 Corporate and Partnership Taxation
      BDS 3013 Accounting Information Systems
   2. 6 additional semester hours are required in accounting, as approved by the student’s Advisor.

B. 36 semester hours of support work.
   BLW 3013 Business Law
   BLW 3023 Business Organizations and Commercial Law
   ECO 2013 Introductory Macroeconomics
   ECO 2023 Introductory Microeconomics
   ECO 3033 Economics of the Firm
   FIN 3013 The Finance Function
   MGT 3013 Organization and Management Theory
   MGT 3023 Organizational Behavior
   MGT 3033 Quantitative Decision Analysis and Production
   MGT 3043 Business Communications
   MGT 4893 Business Policies and Management
   MKT 3013 Principles of Marketing

C. 13 semester hours to be taken as follows:
   COM 1043;
   STA 1064;
Bachelor of Business Administration Degree in Accounting / 83
With a Concentration in Business Data Systems

6 semester hours of electives which must be taken outside the College of Business;

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN ACCOUNTING WITH A
CONCENTRATION IN BUSINESS DATA SYSTEMS

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements is 128.
All candidates for the degree must complete:

A. 34 semester hours in the major, 21 of which must be at the upper-division level.
   1. 28 semester hours of required courses are:
      ACC 2011 Financial Accounting, Technical Skills
      ACC 2013 Financial Accounting
      ACC 2033 Managerial Accounting
      ACC 3023 Intermediate Financial Accounting I
      BDS 2013 Principles of Business Data Systems I
      BDS 2023 Principles of Business Data Systems II
      BDS 3063 Data Structures and Information Retrieval
      BDS 3073 Small Business Computer Applications
      BDS 4053 Business Systems Analysis
      BDS 4063 Advanced Topics in Business Data Systems
   2. 3 additional semester hours of upper-division computer related course work.
   3. 3 additional semester hours of an upper-division accounting course.

B. 33 semester hours of support work.
   BLW 3013 Business Law
   ECO 2013 Introductory Macroeconomics
   ECO 2023 Introductory Microeconomics
   ECO 3033 Economics of the Firm
   FIN 3013 The Finance Function
   MGT 3013 Organization and Management Theory
   MGT 3023 Organizational Behavior
   MGT 3033 Quantitative Decision Analysis and Production
   MGT 3043 Business Communications
   MGT 4893 Business Policies and Management
   MKT 3013 Principles of Marketing

C. 19 semester hours to be taken as follows:
   COM 1043;
   STA 1064;
   6 semester hours of free electives;
   6 semester hours of electives which must be taken outside the College of Business.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.
COURSE DESCRIPTIONS

ACCOUNTING

(ACC)

2011 Financial Accounting, Technical Skills
(1-0) 1 hours credit. Prerequisite: Concurrent enrollment in ACC 2013 required for all students. Problem solving workshop to complete the accounting cycle and make proper financial disclosures.

2013 Financial Accounting
(3-0) 3 hours credit. Prerequisite: MAT 1033 or consent of Division Director or Dean. An introduction to the basic concepts of financial accounting. A course to provide coverage of the fundamental aspects of the accounting discipline by focusing on significant financial issues.

2033 Managerial Accounting
(3-0) 3 hours credit. Prerequisite: ACC 2013 and 2011. A study of management's use of accounting to provide information for planning and controlling routine operations, long-range planning, inventory valuation and nonroutine decision making. Formerly ACC 3013. Credit cannot be earned for both 3013 and 2033.

3023 Intermediate Financial Accounting I
(3-0) 3 hours credit. Prerequisite: ACC 2013, 2011, and 2033. A study of accounting theory and concepts. Analysis of the special problems which arise in applying these concepts to financial accounting and reporting.

3033 Intermediate Financial Accounting II
(3-0) 3 hours credit. Prerequisite: ACC 3023. A continuation of the study of accounting theory and concepts of Financial Accounting II.

3043 Federal Income Tax Accounting
(3-0) 3 hours credit. Prerequisite: ACC 3023. Fundamentals of federal income tax accounting, with emphasis on individual income tax; income inclusions and exclusions; and statutory deductions in computing tax liability.

3063 Advanced Financial Accounting I
(3-0) 3 hours credit. Prerequisite: ACC 3023. A continuation of the study of accounting theory and concepts of Financial Accounting III.

3123 COBOL for Accounting Applications
(3-0) 3 hours credit. Prerequisite: BDS 3013, ACC 3033. A study of programming concepts related to the design and coding of accounting oriented computer programs using a common business programming language. Credit cannot be earned for both BDS 2023 and ACC 3123.

3133 EDP Auditing
(3-0) 3 hours credit. Prerequisites: ACC 3023 and either BDS 2023 or BDS 3013. A study of the concepts and techniques involved with evaluating internal control in an EDP environment. Topics will include internal controls and computer assisted auditing. Course is designed for both Accounting and BDS majors.

4013 Principles of Auditing
(3-0) 3 hours credit. Prerequisites: ACC 3063 and BDS 3013. A study of auditing theory, professional ethics, audit programs, evidential matter and professional reports.

4023 Cost Analysis
(3-0) 3 hours credit. Prerequisite: ACC 2033. A study of advanced cost accounting systems, including cost allocation, unit cost determination, variance analysis, capital budgeting, inventory control, and other related quantitative methods.

4033 Advanced Financial Accounting II
(3-0) 3 hours credit. Prerequisite: ACC 3063. A study of specialized areas of accounting, including partnerships, business combinations, and consolidated financial statements.
4043 **International Accounting**  
(3-0) 3 hours credit. Prerequisite: ACC 3033.  
A study of the accounting issues and problems of multi-national corporations.

4053 **Accounting for Governmental and Not-for-Profit Organizations**  
(3-0) 3 hours credit. Prerequisite: ACC 3033 or consent of instructor.  
A study of accounting, budgeting, fiscal procedures and financial records of governmental agencies and private not-for-profit organizations.

4083 **Budgeting, Planning and Forecasting**  
(3-0) 3 hours credit. Prerequisite: 12 semester hours of accounting.  
A study of the techniques of long-range budgeting, including methods and limits of accounting models used in forecasting.

4113 **Analysis of Financial Statements**  
(3-0) 3 hours credit. Prerequisite: ACC 3033.  
The theoretical foundations of financial statements and a study of the techniques for analyzing them.

4153 **Corporate and Partnership Taxation**  
(3-0) 3 hours credit. Prerequisites: ACC 3043 and ACC 3063.  
Taxation of corporate and partnership earnings and distributions. Includes corporate reorganizations, liquidations, personal holding companies, collapsible corporations and Subchapter S.

4173 **Estate and Gift Taxation**  
(3-0) 3 hours credit. Prerequisite: ACC 3043 or consent of instructor.  
Introduction to the Federal Estate and Gift Tax Laws with an emphasis on the applicable code sections and regulations.

4183 **Advanced Auditing Problems**  
(3-0) 3 hours credit. Prerequisite: ACC 4013.  
A continuation of ACC 4013 with in-depth emphasis on the Statements of Auditing Standards.

4193 **Seminar in Small Business Accounting**  
(3-0) 3 hours credit. Prerequisites: ACC 3033 and ACC 4013.  
A study of standards covering the compilation and review of financial statements, guidelines for preparing personal financial statements, standards governing unaudited financial statements from incomplete data.

4213 **Tax Research Methods**  
(3-0) 3 hours credit. Prerequisite: ACC 4153.  
A study of tax research methods and materials and the history of the Internal Revenue Code, Collection and appeals procedures in the Internal Revenue Service. Formerly 4073.  
Credit cannot be earned for both 4073 and 4213.

4293 **Seminar in Accounting Theory**  
(3-0) 3 hours credit. Prerequisite: 24 hours of accounting or consent of instructor.  

4911-3 **Independent Study**  
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 **Internship in Accounting**  
3 hours credit. Prerequisites: ACC 3033 and permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean.  
To offer students the opportunity to gain knowledge through experiential activities in professional life. Joint cooperation with business and governmental institutions in structuring and monitoring work experience aimed at supplementing the classroom learning process.
4951-3  Special Studies in Accounting
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not
often available as part of the regular course offerings. Special Studies courses may be
repeated for credit when the topics vary, but not more than 6 hours within any one disci­
pline will apply to a bachelor's degree.

COURSE DESCRIPTIONS
BUSINESS DATA SYSTEMS
  (BDS)

2013  Principles of Business Data Systems I
      (3-0) 3 hours credit. Prerequisite: CS 1043.
      Applications and impact of computers in the business environment. The development of
      programs for practical business-oriented problems using the COBOL programming
      language.

2023  Principles of Business Data Systems II
      (3-0) 3 hours credit. Prerequisites: BDS 2013, ACC 2013 and ACC 2011.
      Continuation of BDS 2013 for students concentrating in BDS or desiring additional special­
      ization in Data Processing. Extension of COBOL Programming to direct access media,
      variable format input and non-sequential access methods. Study of the use and place­
      ment of the data processing function in the current business environment.

3013  Accounting Information Systems
      (3-0) 3 hours credit. Prerequisites: ACC 2033 and CS 1043 or their equivalents.
      An in-depth study of computerized accounting systems including payroll, accounts
      receivable, accounts payable, inventory control, and general ledger. May not be applied
      for credit in the BDS concentration.

3063  Data Structures and Information Retrieval
      (3-0) 3 hours credit. Prerequisites: BDS 2023 and ACC 2033.
      Techniques of designing and implementing data management systems including data
      structures, file organization, file maintenance, data retrieval, and selection of commercial
      systems.

3073  Small Business Computer Applications
      (3-0) 3 hours credit. Prerequisites: BDS 2023 and ACC 2033 or consent of instructor.
      Use of computers in the small business environment. Emphasis on programming, applica­
      tions and management of minicomputers. Students will use typical small business com­
      puters in a hands-on, office environment for programming software applications.

4053  Business Systems Analysis
      (3-0) 3 hours credit. Prerequisites: BDS 3063 and ACC 2033.
      Tools and techniques of applications systems analysis. Case studies emphasizing problem
      definition, feasibility studies, analysis, design, development, documentation and imple­
      mentation of business data systems.

4063  Advanced Topics in Business Data Systems
      (3-0) 3 hours credit. Prerequisite: 12 hours of BDS or consent of instructor. Ordinarily
taken during semester of graduation.
      Survey of recent developments in data processing and computer technology. Analysis will
      focus on applications in the business community and theoretical developments which
      relate to those applications.

4073  Managing BDS Functions
      (3-0) 3 hours credit. Prerequisite: BDS 3063.
      Study of the problems and techniques involved with the planning, organizing and control­
      ling of data processing resources. Will include project development control, organizing
      and staffing, hardware control, and costs of data processing services.
4911-3  **Independent Study**  
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933  **Internship in Business Data Systems**  
3 hours credit. Prerequisites: 9 hours of BDS courses and permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean. To offer students the opportunity to gain knowledge through experiential activities in professional life. Joint cooperation with business and governmental institutions in structuring and monitoring work experience aimed at supplementing the classroom learning process.

4951-3  **Special Studies in Business Data Systems**  
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.
DIVISION OF ECONOMICS AND FINANCE

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN ECONOMICS

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 27 semester hours in the major, 21 of which must be at the upper-division level.
   1. 15 semester hours of required courses are:
      - ECO 2013 Introductory Macroeconomics
      - ECO 2023 Introductory Microeconomics
      - ECO 3013 Theory of Price
      - ECO 3063 Intermediate Macroeconomics
      - ECO 3113 Introduction to Mathematical Economics
   2. 12 additional semester hours are required in economics, as approved by the student's Advisor.

B. 34 semester hours of support work, 24 of which must be at the upper-division level.
   1. 31 semester hours of required courses:
      - ACC 2011 Financial Accounting, Technical Skills
      - ACC 2013 Financial Accounting
      - ACC 2033 Managerial Accounting
      - ACC 3023 Intermediate Financial Accounting I
      - BLW 3013 Business Law or ECO 3213 Government Regulation of Industry
      - FIN 3013 The Finance Function
      - MGT 3013 Organization and Management Theory
      - MGT 3023 Organizational Behavior
      - MGT 3043 Business Communications
      - MGT 4893 Business Policies and Management
      - MKT 3013 Principles of Marketing
   2. 3 additional semester hours in the College of Business;

C. 25 semester hours to be taken as follows:
   - COM 1043;
   - STA 1064;
   12 semester hours of free electives;
   6 semester hours of electives which must be taken outside the College of Business.

All students in the college of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

BACHELOR OF ARTS DEGREE IN ECONOMICS

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 125.¹

¹Thirty-nine of the total semester hours required for the degree must be at the upper-division level.
All candidates for the degree must complete:

A. 27 semester hours in the major, 21 of which must be at the upper-division level.
   1. 15 semester hours of required courses are:
      ECO 2013 Introductory Macroeconomics
      ECO 2023 Introductory Microeconomics
      ECO 3013 Theory of Price
      ECO 3063 Intermediate Macroeconomics
      ECO 3113 Introduction to Mathematical Economics
   2. 12 additional semester hours are required in economics, as approved by the student's Advisor.

B. 22 semester hours of support work.
   1. 4 semester hours of ACC 2013 Financial Accounting and ACC 2011 Financial Accounting, Technical Skills are required.
   2. 18 semester hours distributed as follows:
      6 additional semester hours in the College of Business; 
      12 additional semester hours of social science.

C. 34 semester hours to be taken as follows:
   COM 1043;
   STA 1064;
   27 semester hours of free electives, but no more than 9 semester hours of this group may be in additional economics courses.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

COURSE DESCRIPTIONS
ECONOMICS
(ECO)

2003 Introduction to Political Economy
(3-0) 3 hours credit.
A nontechnical introduction to economic analysis and its application to current economic issues such as inflation, unemployment, taxation, economic concentration and power, energy, health and welfare, and international commerce. May not be counted toward a major in economics but may be counted as an elective for College of Business students.

2013 Introductory Macroeconomics
(3-0) 3 hours credit. Prerequisite: MAT 1033 or consent of Division Director or Dean.
Economic analysis at the national level, including the determination of aggregate income and employment, operation of the monetary system, short-term income fluctuations, long-term income growth, public policy toward business, and problems of international trade and finance.

2023 Introductory Microeconomics
(3-0) 3 hours credit. Prerequisite: MAT 1033 or consent of Division Director or Dean.
The application of economic theory to decision-making by consumers and administrators; demand and cost analysis (including demand forecasts); price policy of the individual firm; production analysis; cost-benefit analysis for the public sector.

3013 Theory of Price
(3-0) 3 hours credit. Prerequisites: ECO 2013, 2023 and MAT 1033, or their equivalents.
Operations of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics.

3033 Economics of the Firm
(3-0) 3 hours credit. Prerequisites: ECO 2013, 2023 and MAT 1033, or their equivalents.
Review and extension of microeconomic analysis with applications in the area of admin-
Economics

... administrative problems; analysis of market systems and firm behavior; examination of public and private decision making and economic issues. May not be counted toward a major in economics.

3053 Aggregate Economic Analysis
(3-0) 3 hours credit. Prerequisites: ECO 2013 and ECO 2023 or their equivalents. Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment; short-term income fluctuations; long-term growth. Credit cannot be earned for both ECO 3053 and ECO 3063.

3063 Intermediate Macroeconomics
(3-0) 3 hours credit. Prerequisites: ECO 2013 and ECO 2023 or their equivalents. In-depth analysis of aggregate economic activity, inflation, employment, and economic growth; designed for economics majors. Credit cannot be earned for both ECO 3053 and ECO 3063.

3113 Introduction to Mathematical Economics
(3-0) 3 hours credit. Prerequisites: ECO 2013 and ECO 2023, and MAT 1033, or their equivalents, or consent of instructor. Mathematical formulations of economic theory; mathematical treatment of optimizing behavior; applications to consumer and business firm theory; emphasis on understanding of analytical techniques.

3123 Econometrics
(3-0) 3 hours credit. Prerequisite: ECO 3113 or the equivalent. Introduction to measurement in economics; numerical evaluation of mathematical models by statistical methods; survey of classical models; scope and method of econometric analysis.

3163 Development of Economic Thought
(3-0) 3 hours credit. Evolution of economic theory and doctrine, contributions to economic thought from ancient times to the present; emphasis on institutional forces shaping the continuum of economic thinking.

3173 Introduction to Comparative Systems
(3-0) 3 hours credit. Analysis of alternative economic systems of the industrialized and emerging nations; emphasis on the comparative study of the capitalist, socialist, and the communist economic systems of the modern world.

3183 Economic Development of the United States
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent. The growth of the American economy from colonial times to the present; special emphasis on the market forces, institutional arrangement, and policies contributing to this process.

3193 The International Economy
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent, or consent of instructor. Principles of international trade; significance of geographic, economic, social and political influences; current problems in international trade and payments; tariffs and commercial policy; role of international organizations.

3213 Government Regulation of Industry
(3-0) 3 hours credit. Prerequisite: ECO 2023 or the equivalent, or consent of instructor. A study of competition enforced by law, including the legal, social, and economic aspects of mergers, pricing policies, monopolization and market concentration.

3273 Public Choice and the Public Finances
(3-0) 3 hours credit. Prerequisite: ECO 3013 or ECO 3033 or the equivalent, or consent of instructor. Analysis of administrative and legislative decisions applicable to public goods and services; government expenditure policy, sources of revenue; public credit, fiscal policy, principles and methods of taxation and financial administration.

3283 Labor Economics and Collective Bargaining
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent, or consent of instructor.
Theories of wages and employment determination; U.S. labor history, labor legislation, and collective bargaining systems; comparative labor movements; contemporary labor problems.

3303 **Theories of Economic Progress**  
(3-0) 3 hours credit. Prerequisite: ECO 2013 or the equivalent, or consent of instructor. Dynamics of economic progress and change in industrialized and under-industrialized countries of the modern world; historical theories of growth; empirical case studies; formulation of development projects and programs.

3403 **Economic Aspects of Urbanization**  
(3-0) 3 hours credit. Prerequisite: ECO 2013 or ECO 2023 or the equivalent. Application of economic analysis to urban growth and the urban-regional environment; consideration of public services, transportation, ghetto problems, and urban organization; analysis of environmental protection problems and policies.

4263 **Labor Market Information and Analysis**  
(3-0) 3 hours credit. Prerequisite: ECO 3283 or the equivalent, or consent of instructor. Review of information needs and data sources for human resources management and planning, and for the delivery of training and other human resources development programs. Analysis and use of data for problem solving and decision making at the national and local levels are emphasized.

4273 **Environmental Economics**  
(3-0) 3 hours credit. ECO 2023 or the equivalent, or consent of instructor. Economic principles applied to environmental problems; relationship of market and non-market forces to environmental quality; development of tools for policy analysis.

4283 **Manpower Economics: Problems and Programs**  
(3-0) 3 hours credit. Prerequisite: ECO 2023 or equivalent. Economics of human resource development; examination of programs for training and upgrading of workers; barriers to skill development and job entry; formulation of public policies on human resources.

4293 **Economics of Discrimination and Poverty**  
(3-0) 3 hours credit. Prerequisite: ECO 2023 or the equivalent, or consent of instructor. Economic and non-economic implications of discrimination on the basis of race and sex; discrimination in the labor and commodity markets; problems of educational training, unemployment, and personal income distribution.

4303 **Economic Problems of Emerging Nations**  
(3-0) 3 hours credit. Prerequisite: ECO 2013 or the equivalent, or consent of instructor. Specific economic problems of emerging nations and national groupings; basic approaches to economic development; major proposals for accelerating development; role of planning; trade, aid and economic integration.

4313 **Monetary Theory and Policy**  
(3-0) 3 hours credit. Prerequisites: ECO 3053 and FIN 3313 or their equivalents. Relationship of money and interest rate to economic stabilization; consideration of federal reserve system, money market, and factors determining money supply and demand; neoclassical, Chicago, and radical policy views.

4363 **The Latin American Economies**  
(3-0) 3 hours credit. Prerequisite: ECO 2013 or the equivalent. Survey of economic status and problems of Latin American nations; analysis of economic and social forces at work in Latin American development. (When offered in Spanish, course schedule will so indicate.)

4463 **Medical and Health Economics**  
(3-0) 3 hours credit. Prerequisite: ECO 2023 or the equivalent. Economic analysis of medical and health services. Physician and dentist pricing; hospital supply; markets in health-related professions; drug and equipment markets; medical and health insurance; national priorities and policy for health service delivery.
4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in Economics
3 hours credit. Prerequisite: 12 hours of upper-division economics and permission in writing (form available) of instructor, the student's advisor, Division Director and Dean.
The opportunity for work experience in research or applied economics; may be undertaken either in private business or a public agency; opportunities developed in consultation with faculty Advisor and Division Director and require approval of both.

4951-3 Special Studies in Economics
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN FINANCE

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128.
All candidates for the degree must complete:

A. 21 semester hours in the major, all of which must be at the upper-division level.
   1. 9 semester hours of required courses:
      FIN 3013 The Finance Function
      FIN 3033 Principles of Investment
      FIN 3313 Money and Banking
   2. 12 additional semester hours are required in finance, as approved by the student’s Advisor.

B. 46 semester hours of support work, 30 of which must be at the upper-division level.
   1. 43 semester hours of required courses:
      ACC 2011 Financial Accounting, Technical Skills
      ACC 2013 Financial Accounting
      ACC 2033 Managerial Accounting
      ACC 3023 Intermediate Financial Accounting I
      ACC 3033 Intermediate Financial Accounting II
      BLW 3013 Business Law or
      ECO 3213 Government Regulation of Industry
      ECO 2013 Introductory Macroeconomics
      ECO 2023 Introductory Microeconomics
      ECO 3033 Economics of the Firm
      MGT 3013 Organization and Management Theory
      MGT 3023 Organizational Behavior
      MGT 3033 Quantitative Decision Analysis and Production
      MGT 3043 Business Communications
      MKT 3013 Principles of Marketing
   2. 3 additional semester hours in the College of Business;
C. 19 semester hours to be taken as follows:
  COM 1043;
  STA 1064;
  6 semester hours of free electives;
  6 semester hours of electives which must be taken outside the College of Business.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

COURSE DESCRIPTIONS

FINANCE
(FIN)

2003 Consumer Finance
(3-0) 3 hours credit.
A nontechnical course examining various aspects of budgeting, banking, real estate, insurance, consumer credit, and retirement plans from the individual's point of view. May not be counted toward a major in finance but may be counted as an elective for College of Business students.

3013 The Finance Function
(3-0) 3 hours credit. Prerequisites: ACC 2013, ACC 2011, and MAT 1033 or their equivalents.
Introduction to analytical financial management with emphasis on the management of the short-term uses and sources of funds; capital investment and management of long-term sources.

3023 Corporate Finance
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.
A continuation of FIN 3013 with discussion of subjects essential to financial asset management, including short-term credit policies, capital budgeting, risk, sources of long-term funds, financial leverage, and the cost of capital. Special topics such as mergers, bankruptcy, and reorganization will also be considered.

3033 Principles of Investment
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.
Introduction to securities markets; analysis of securities issued by corporations in various industries by intermediaries, and by federal, state, and municipal governments; investment management in the light of tax considerations, timing, and selected portfolio needs.

3313 Money and Banking
(3-0) 3 hours credit. Prerequisite: ECO 2013 or the equivalent.
Elements of monetary theory; relationships between money, prices, production and employment; factors determining money supply; operation of capital markets with reference to the United States.

3403 Cases in Financial Management
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.
Advanced analysis of financial cases based on actual business problems and the application of financial theory and technique are used to illustrate the process required to formulate financial decisions.

3413 Management of Financial Institutions
(3-0) 3 hours credit. Prerequisite: FIN 3313 or the equivalent.
Analysis of financial management principles, theories, and techniques as they apply to the peculiarities of the financial firm, emphasis on asset and liability management in a changing environment of regulation, competition and financial intermediation.

3423 Security Analysis
(3-0) 3 hours credit. Prerequisite: FIN 3033 or the equivalent.
Advanced financial analysis: examination of statements and supplementary data of industrial, commercial, financial intermediary, and public enterprises; preparation of reports relevant to achieving an understanding of financial management policies.
3433 **Principles of Real Estate**  
(3-0) 3 hours credit.  
General introduction to the subject matter and terminology of real estate as a business and profession; federal, state, and local laws governing housing discrimination, equal credit opportunity, and community reinvestment.

4313 **Commercial Bank Management**  
(3-0) 3 hours credit. Prerequisite: FIN 3313 or the equivalent.  
Direction and coordination of the various functions of the commercial bank, including money position, lending, capital management, trust and auxiliary functions.

4323 **Financial Markets**  
(3-0) 3 hours credit. Prerequisite: FIN 3413 or the equivalent.  
Theory and analysis of equilibrium in the financial markets and the changing structure of financial intermediation; capital asset pricing, efficient markets, portfolio theory, direct and indirect finance, disintermediation competition, structural reform.

4403 **Capital Structure and Budgeting**  
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.  
Application of long-term economic decision analysis to financial planning in both profit and non-profit institutions; development of allocation criteria for sources and uses of scarce financial resources.

4423 **Investment Portfolio Management**  
(3-0) 3 hours credit. Prerequisite: FIN 3033 or the equivalent.  
Application of investment principles to management of investment portfolios of individuals and institutions; consideration of business cycles, investment constraints, portfolio construction, investment timing, and securities selection.

4523 **Management of Risk**  
(3-0) 3 hours credit. Prerequisite: FIN 3033 or the equivalent.  
Application and evaluation of quantitative tools of analysis in the risk-management decision process; nature of risk and risk-aversion; insurance as a major mechanism for spreading risk.

4613 **Introduction to International Finance**  
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.  
Study of underlying forces in international financial relations and the unique problems of international trade, investments, and operations; examination of multi-national business finance and its economic, legal, and political dimensions.

4713 **Mortgage Banking and Real Estate Finance**  
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.  
Planning, structure, and analysis of real estate financing from the viewpoints of both the users and suppliers of funds; examination of various techniques and legal instruments; institutional constraints and their effects on real estate lending activities; federal, state and local laws governing housing discrimination, equal credit opportunity, and community reinvestment.

4813 **The Insurance Function**  
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.  
Analysis of insurance as a principal method of handling risk; types of insurance and contracts; determinants of premiums and resources; applicable legal principles.

4823 **Financing Insurance Operations**  
(3-0) 3 hours credit. Prerequisite: FIN 3013 or the equivalent.  
Organization of insurance enterprises and related businesses; examination of underwriting function and practices; coverage supplied by the individual firm; insurance company investments and their management.

4911-3 **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, Division Director and Dean.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.
4933 Internship in Finance
3 hours credit. Prerequisites: 12 hours of upper-division finance courses and permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean.
The opportunity for work experience in research of financial operations, including real estate and insurance; may be undertaken in either private business or a public agency; opportunities developed in consultation with faculty Advisor and Division Director and requires approval of both.

4951-3 Special Studies in Finance
3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4973 Proseminar in Financial Theory
(3-0) 3 hours credit. Prerequisite: FIN 3403 or consent of instructor.
Examination of the recent theoretical developments in the various areas of finance. Analysis will focus on the techniques and procedures by which new theoretical developments evolve. A seminar approach will be used to provide a high degree of student-instructor interaction.

COURSE DESCRIPTIONS
BUSINESS LAW
(BLW)

3013 Business Law
(3-0) 3 hours credit. Prerequisite: ECO 2023 or consent of Division Director or Dean.
Origin and development of law, judicial procedure, tort law, contracts, and wills, with emphasis on consumer-business rights and responsibilities. Discussion of ethical and political environment of contemporary commercial law, including impact on business practices and policies.

3023 Business Organizations and Commercial Law
(3-0) 3 hours credit. Prerequisite: BLW 3013 or the equivalent.
Agency, partnership, corporations, sales, commercial paper, creditors' rights, bankruptcy, secured transactions under the Uniform Commercial Code, and insurance.

3523 Real Estate Law
(3-0) 3 hours credit. Prerequisite: BLW 3013 or the equivalent.
Legal environment of real property ownership, transfer and legal brokerage; estates in land, sales contracts; mortgage transactions; title conveyances; landlord and tenant; restrictions and zoning; eminent domain, federal, state, and local laws governing housing discrimination, equal opportunity and community reinvestment.
DIVISION OF MANAGEMENT AND MARKETING

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN MANAGEMENT WITH A CONCENTRATION IN BUSINESS MANAGEMENT

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 24 semester hours in the major, all of which must be at the upper-division level.

1. 18 semester hours of required courses are:
   - MGT 3013 Organization and Management Theory
   - MGT 3023 Organizational Behavior
   - MGT 3033 Quantitative Decision Analysis and Production
   - MGT 3043 Business Communications
   - MGT 4893 Business Policies and Management
   - MGT 3343 Production Management Applications or
   - MGT 4213 Advanced Organization Theory

2. 6 additional semester hours are required in management, as approved by the student's Advisor.

B. 37 semester hours of support work, 24 of which must be at the upper-division level.

1. 31 semester hours of required courses:
   - ACC 2011 Financial Accounting, Technical Skills
   - ACC 2013 Financial Accounting
   - ACC 2033 Managerial Accounting
   - ACC 3023 Intermediate Financial Accounting I
   - BLW 3013 Business Law or
   - ECO 3213 Government Regulation of Industry
   - ECO 2013 Introductory Macroeconomics
   - ECO 2023 Introductory Microeconomics
   - ECO 3033 Economics of the Firm
   - ECO 3053 Aggregate Economic Analysis
   - FIN 3013 The Finance Function
   - MKT 3013 Principles of Marketing

2. 6 semester hours of required electives are to be selected as follows:
   - 3 additional semester hours in finance;
   - 3 additional semester hours in marketing;

C. 25 semester hours to be taken as follows:
   - COM 1043;
   - STA 1064;
   - 12 semester hours of electives;
   - 6 semester hours of electives which must be taken outside the College of Business.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.
Bachelor of Business Administration Degree in Management
With a Concentration in Industrial Management
and Concentration in Marketing

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN MANAGEMENT WITH A
CONCENTRATION IN INDUSTRIAL
MANAGEMENT

The minimum number of semester hours required for this degree, including the 42
hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 21 semester hours in the major, all of which must be at the upper-division
   level.
   1. 12 semester hours of required courses are:
      MGT 3033 Quantitative Decision Analysis and Production
      MGT 3343 Production Management Applications
      MGT 4323 Simulation Application in Business
      MGT 4333 Management Information Systems
   2. 9 additional semester hours in management, as approved by the student's
      Advisor.

B. 40 semester hours of support work, 24 of which must be at the upper-division
   level.
   1. 37 semester hours of required courses:
      ACC 2011 Financial Accounting, Technical Skills
      ACC 2013 Financial Accounting
      ACC 2033 Managerial Accounting
      BLW 3013 Business Law or
      ECO 3213 Government Regulation of Industry
      ECO 2013 Introductory Macroeconomics
      ECO 2023 Introductory Microeconomics
      ECO 3033 Economics of the Firm
      FIN 3013 The Finance Function
      MGT 3013 Organization and Management Theory
      MGT 3023 Organizational Behavior
      MGT 3043 Business Communications
      MKT 4893 Business Policies and Management
      MKT 3013 Principles of Marketing
   2. 3 additional semester hours in the College of Business:

C. 25 semester hours to be taken as follows:
   COM 1043;
   STA 1064;
   12 semester hours of electives;
   6 semester hours of electives which must be taken outside the College of
   Business.

All students in the College of Business must take an Anthropology, Sociology,
or Psychology course and a course in art or music as approved by the advisor.

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN MANAGEMENT WITH A
CONCENTRATION IN MARKETING

The minimum number of semester hours required for this degree, including the 42
hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 21 semester hours in the major, all of which must be at the upper-division
   level.
Bachelor of Business Administration Degree in Management With a Concentration in Personnel/Human Resources

1. 12 semester hours of required courses are:
   - MKT 3013 Principles of Marketing
   - MKT 4083 Marketing Research
   - MKT 4113 Marketing Analysis for Decision Making
   - MKT 4893 Advanced Marketing

2. 9 additional semester hours in marketing, as approved by the student's Advisor.

B. 40 semester hours of support work, 24 of which must be at the upper-division level.

1. 37 semester hours of required courses:
   - ACC 2011 Financial Accounting, Technical Skills
   - ACC 2013 Financial Accounting
   - ACC 2033 Managerial Accounting
   - BLW 3013 Business Law or
   - ECO 3213 Government Regulation of Industry
   - ECO 2013 Introductory Macroeconomics
   - ECO 2023 Introductory Microeconomics
   - ECO 3033 Economics of the Firm
   - FIN 3013 The Finance Function
   - MGT 3013 Organization and Management Theory
   - MGT 3023 Organizational Behavior
   - MGT 3033 Quantitative Decision Analysis and Production
   - MGT 3043 Business Communications
   - MGT 4893 Business Policies and Management

2. 3 additional semester hours in the College of Business:

C. 25 semester hours to be taken as follows:
   - COM 1043;
   - STA 1064;
   - 12 semester hours of electives;
   - 6 semester hours of electives which must be taken outside the College of Business.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN MANAGEMENT WITH A CONCENTRATION IN PERSONNEL/HUMAN RESOURCES

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128.

All candidates for the degree must complete:

A. 21 semester hours in the major, all of which must be at the upper-division level.

1. 15 semester hours of required courses are:
   - MGT 3013 Organization and Management Theory
   - MGT 3613 Personnel Administration
   - MGT 3623 Wage and Salary Administration
   - MGT 4633 Labor Relations or
   - MGT 4653 Collective Bargaining in Public Employment
   - MGT 4803 Human Resources Management
Bachelor of Business Administration Degree in Management / 99
With a Concentration in Building Development

2. 6 additional semester hours in personnel/human resources, as approved by the student's Advisor.

B. 40 semester hours of support work, 24 of which must be at the upper-division level.
1. 37 semester hours of required courses are:
   ACC 2011 Financial Accounting, Technical Skills
   ACC 2013 Financial Accounting
   ACC 2033 Managerial Accounting
   BLW 3013 Business Law or
   ECO 3213 Government Regulation of Industry
   ECO 2013 Introductory Macroeconomics
   ECO 2023 Introductory Microeconomics
   ECO 3033 Economics of the Firm
   FIN 3013 The Finance Function
   MGT 3023 Organizational Behavior
   MGT 3033 Quantitative Decision Analysis and Production
   MGT 3043 Business Communications
   MGT 4893 Business Policies and Management
   MKT 3013 Principles of Marketing

2. 3 additional semester hours in the College of Business:
C. 25 semester hours to be taken as follows:
   COM 1043;
   STA 1064;
   12 semester hours of electives;
   6 semester hours of electives of which at least 6 must be taken outside the College of Business.

All students in the College of Business must take an Anthropology, Sociology, or Psychology course and a course in art or music as approved by the advisor.

BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN MANAGEMENT WITH A
CONCENTRATION IN BUILDING DEVELOPMENT

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 140*. The degree is offered with joint support of the architecture program. Architecture courses are described under the Division of Art and Design.

All candidates for the degree must complete:

A. 15 semester hours in the major:
   MGT 3013 Organization and Management
   MGT 3023 Organizational Behavior
   MGT 3033 Quantitative Decision Analysis and Production
   MGT 3043 Business Communications
   MGT 4983 Business Policies and Management

B. 63 semester hours of support work:
   ACC 2013 Financial Accounting
   ACC 2011 Financial Accounting, Technical Skills
   ACC 2033 Managerial Accounting
   ARC 1213 Architectural Design I
   ARC 1223 Architectural Design II

*PHY 1603, PHY 1623, and CS 1043 may be used to satisfy the GER for nine hours of Science and Mathematics.
Bachelor of Business Administration Degree in Management
With a Concentration in Building Development

ARC 1312 Architectural Graphics I
ARC 2203 Housing and Land Development
ARC 2214 Construction I
ARC 2224 Construction II
ARC 3234 Construction III
ARC 3313 Environmental Control Systems I
ARC 3413 Architectural Documents I
ARC 4013 Building Construction Estimating
ARC 4613 Construction Management
BLW 3013 Business Law or
ECO 3213 Government Regulation of Industry
ECO 2013 Introductory Macroeconomics
ECO 2023 Introductory Microeconomics
ECO 3033 Economics of the Firm
FIN 3013 The Finance Function
MKT 3013 Principles of Marketing
URB 3723 Urban Planning and Design

C. 9 semester hours of Sciences and Mathematics:
   PHY 1603 General Physics I
   PHY 1623 General Physics II
   CS 1043 Computer Programming for Business Applications

D. 9 semester hours of required business courses:
   BLW 3523 Real Estate Law
   FIN 3433 Principles of Real Estate
   FIN 4713 Mortgage Banking and Real Estate Finance

E. 11 semester hours as follows:
   COM 1043 Introduction to Communication
   STA 1064 Basic Statistics for Business and Economics
   MAT 1214 Calculus I

COURSE DESCRIPTIONS
MANAGEMENT
(MGT)

3013 Organization and Management Theory
(3-0) 3 hours credit. Prerequisites: ECO 2023 and STA 1064, or consent of Division Director or Dean.
Opportunity for study of the various organizations and management theory (empirical, behavioral, quantitative) process. Builds base for identification analysis, and synthesis of managerial concepts as related to complex organizations.

3023 Organizational Behavior
(3-0) 3 hours credit. Prerequisite: MGT 3013 or the equivalent.
Behavioral theory and empirically-derived knowledge as it relates to the functioning of individuals, pairs, and groups in organizations. Investigation of organization as a complex of tasks, structures, tools, and people in states of continuous change.

3033 Quantitative Decision Analysis and Production
(3-0) 3 hours credit. Prerequisites: MGT 3013, MAT 1033, STA 1064, and CS 1043 or their equivalents.
Basic techniques of decision analysis applied to problems in business and economics with an emphasis on production problems. Techniques include modeling and optimization of deterministic and non-deterministic systems in the applied areas of business and economics.
3043 Business Communications
(3-0) 3 hours credit. Prerequisite: MGT 3013 or consent of Division Director or Dean. With the aim of offering the opportunity for developing business writing proficiency, the course stresses general techniques of report writing, report organization and make-up, and graphic presentation and documentation. Special emphasis is given to the research methodology which precedes report preparation.

3123 Organizational Communications
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their equivalents. A course stressing the importance of and problems in effective communication within the organizational setting. Special emphasis will be given to problems of horizontal and vertical communication, communication blockages, informal communication channels, and the effects of organizational structure and leadership pattern on communication. The course will also stress the means of evaluating organizational communication effectiveness.

3253 Interpersonal Communication
(3-0) 3 hours credit. Prerequisite: MGT 3043 or the equivalent. A course aimed at the dynamics of interpersonal communication. The course stresses the social context of communication and gives emphasis to the effects of status, rank, culture, group affiliation, attraction, etc., on the communicating parties. Both verbal and non-verbal interaction is explored in terms of consequences on the communication process.

3313 Statistical Applications in Business
(3-0) 3 hours credit. Prerequisites: ECO 2023 and MGT 3033 or their equivalents. Examples and procedures for experimental design, data collection and display, data interpretation, hypothesis testing, and forecasting in business and economic systems.

3343 Production Management Applications
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3033 or their equivalents. A study of traditional production functions including scheduling, materials management, quality assurance, facility planning, and human resource utilization together with a survey of modern production technology including robotics, CAD/CAM, and high technology materials and processes.

3353 Logistics Management
(3-0) 3 hours credit. Prerequisite: MGT 3033 or the equivalent. A study of procurement needs, acquisition methods, and transportation and distribution structures. Techniques for analysis of logistics system alternatives.

3613 Personnel Administration
(3-0) 3 hours credit. Prerequisite: MGT 3023 or consent of Division Director or Dean. Analysis of the management of personnel systems with special focus on policy and planning considerations. Designed to provide a comprehensive understanding of the functional areas of personnel and the integration of these functions into an effective and efficient personnel system.

3623 Wage and Salary Administration
(3-0) 3 hours credit. Prerequisite: MGT 3613 or the equivalent. Development and administration of wage and salary programs for organizations. Emphasis upon objectives, policies, organization, and control of compensation systems.

4203 Business and Society
(3-0) 3 hours credit. Prerequisite: Upper-division standing or consent of instructor. A study of the impact of societal influences on the managerial decision-making process. Special attention given to business-government relationships and the role of the organization in the community.

4213 Advanced Organization Theory
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their equivalents. Advanced study of the structure and process of organizations. Emphasis upon such topics as typologies of organizational complexity and formalization, communication and decision-making processes, and organizational development and change. Contingency views of organizations are stressed.
4223 **Career Development**  
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3023 or their equivalents. Focus is on developmental processes of executive talent in organizations. Emphasis is placed on topics such as effects of stress, routes to the executive suite, socialization processes, managerial styles, the success ethic, career crises, and political realities in the organization.

4323 **Simulation Applications in Business**  
(3-0) 3 hours credit. Prerequisites: FIN 3013 and MGT 3033 or their equivalents. Examples of computer simulation in financial, marketing, management, and economic systems. Techniques for modeling and for analyzing models within business environments. Formerly MGT 3323. Credit cannot be earned for both 3323 and 4323.

4333 **Management Information Systems**  
(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3033 or their equivalents. A study of the information needs of business and automated methods of acquiring, storing, updating, and retrieving useful information. Formerly MGT 3333. Credit cannot be earned for both 3333 and 4333.

4593 **Advanced Quantitative Decision Analysis**  
(3-0) 3 hours credit. Prerequisites: MGT 3313, MGT 3343, and MGT 4323, or their equivalents. Detailed study of applications of quantitative decision analysis to policy and planning systems. Designed to provide a comprehensive understanding of the state of the art in quantitative decision analysis techniques of use in developing effective and efficient management systems.

4633 **Labor Relations**  
(3-0) 3 hours credit. Prerequisite: MGT 3613 or the equivalent. A contemporary analysis of the union-management relationship in both business and non-business organizations. Topics include union organizing activities, collective bargaining, and agreement administration.

4643 **Labor Law**  
(3-0) 3 hours credit. Prerequisite: MGT 3613 or the equivalent. An analysis of historical and contemporary labor law in the United States. Integration of the evolution of labor law with the social and economic forces shaping the current labor-management environment.

4653 **Collective Bargaining in Public Employment**  
(3-0) 3 hours credit. Prerequisites: MGT 3613, or POL 3703, or consent of instructor. History and current status of collective bargaining practices, contract administration, and governmental policies in the public sector.

4663 **Training and Safety**  
(3-0) 3 hours credit. Prerequisite: MGT 3613. A study of the process of attaining effective work performance. The course exposes students to training techniques which may be used to improve work performance and to the legal requirements in providing a safe work environment.

4673 **Appraisal and Interviewing**  
(3-0) 3 hours credit. Prerequisite: MGT 3613. A study of performance appraisal and personnel interviewing from the perspective of the administration of the personnel function. The course examines and evaluates performance appraisal systems and methods. It evaluates interviewing techniques and emphasizes interviewing skills.

4803 **Human Resources Management**  
(3-0) 3 hours credit. Prerequisites: MGT 3613, 3623, and MGT 4633, or their equivalents. Focuses on federal legislation applicable to selection and promotion decisions, methods of validating selection procedures, implementation of affirmative action programs, and methods of forecasting future human resource requirements. Emphasis is placed upon integrating these functions and others into an overall personnel policy.
4863 Ethical and Social Issues in Management
(3-0) 3 hours credit. Prerequisite: Upper-division standing or consent of instructor. Students challenged to order thought, values, and behavior in operational, directional, and constitutional contexts. Develops a moral frame of reference offering the opportunity for both individual and operational guidance contributing to social justice.

4883 Small Business Management
(3-0) 3 hours credit. Prerequisites: Senior standing and completion of at least 42 semester hours of B.B.A. work. Focuses on the operation of small businesses. Analysis of the accounting, finance, production, and marketing functions as they pertain to entrepreneurial endeavors. Develops overall managerial awareness and analytical skills in small business problem solving. Provides an opportunity to work with a small business as a student consultant.

4893 Business Policies and Management
(3-0) 3 hours credit. Prerequisite: Semester of graduation and minimum completion of at least 42 semester hours of B.B.A. work or consent of instructor. Capstone integration of marketing, finance, accounting, production, procurement, personnel policies emphasized through case studies and business simulations.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, Division Director and Dean. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4933 Internship in Management
3 hours credit. Prerequisites: 9 hours of management and permission in writing (form available) of the instructor, the student’s advisor, Division Director and Dean. The opportunity for work experience in research or operations, including personnel. May be undertaken in either private business or a public agency. Opportunities developed in consultation with faculty Advisor and Division Director and requires approval of both.

4951-3 Special Studies in Management
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

COURSE DESCRIPTIONS
MARKETING (MKT)

3013 Principles of Marketing
(3-0) 3 hours credit. Prerequisites: ECO 2023 and STA 1064, or consent of Division Director or Dean. Introduction to the basic components of marketing including product policy, promotion, consumer behavior and pricing. Emphasis on current marketing practices.

3033 Promotion
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent. Emphasis is placed on the coordination of advertising, personal selling, and sales promotion into a promotional-mix and the integration of this program into the total marketing-mix of the firm.

3043 Advertising
(3-0) 3 hours credit. Prerequisites: MKT 3013 and MKT 3033 or their equivalents. A specialized course covering the theory and practice of advertising. The course stresses planning advertising strategy, developing advertising messages, selecting advertising media, and testing advertising effectiveness. Also, the course explores the theory and history of advertising, the social and economic aspects of advertising, and the problems of ethics and truth in advertising.
104 Marketing

3053 Sales Management
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
An examination of managerial strategies, goals, and tools of analysis in the administration of an effective sales force.

3063 Persuasive Communication in Marketing
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Professional salesmanship is the primary focus of this course. Fundamentals of persuasive interpersonal communication and buyer motivation are stressed as the foundation to effective selling.

3073 Transportation
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Analysis of shipper's transportation needs and the transportation systems available; operation and regulation of rates and services by the Interstate Commerce Commission and state commissions.

3093 Product Management
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Basic product and strategy concepts are examined including the management of innovation and product-market integration; product development, modification and elimination strategies are studied.

3113 Retailing
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Examination of retailing as a specialized economic and social institution within the distribution process. Emphasis is on strategy and resource management for the retail firm; critical variables, forces, and processes are examined from a managerial perspective.

3133 Distribution
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
An examination of channels of distribution considering behavioral, social, and economic aspects of the distribution system. Also, the course explores such topics as franchising, logistics, power and conflict roles, and trends in distributive costs.

4073 International Marketing
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Comparative analysis of cultural, legal, political, economic, and technological environments as they affect marketing strategy in the international marketplace. Special emphasis on problems of the multi-national corporation and its role in the current world economy.

4083 Marketing Research
(3-0) 3 hours credit. Prerequisites: MKT 3013 and STA 1064 or their equivalents.
Offers the opportunity for practical experience in conducting and interpreting marketing research. Includes problem definition, questionnaire design, sampling procedures, data analysis and presentation of results.

4093 Consumer Behavior
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
An interdisciplinary approach to the processes of purchase decisions from the standpoint of both consumers and marketers. Consideration is given to implications for marketing from social science theory and methodology, public policy decisions and the consumerist movement.

4103 Current Topics in Marketing
(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.
Analysis of current trends in marketing problems and policies. Critical analysis of marketing, consideration of current developments in theory; activities of regulatory agencies; analysis of ethical, social, and public policy aspects of marketing changes.

4113 Marketing Analysis for Decision Making
(3-0) 3 hours credit. Prerequisite: MKT 4083 or the equivalent.
A focus on the more sophisticated analytical tools used in marketing for decision making. The intent is to integrate models from accounting, finance, and marketing to analyze market information and market opportunities.
4893  **Advanced Marketing**  
(3-0) 3 hours credit. Prerequisites: MKT 3013 and MKT 4113 or their equivalents. Designed to offer the opportunity for a comprehensive understanding of the functional areas of marketing and the integration of these functions into an effective and efficient marketing strategy for the firm.

4911-3  **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean. Independent reading, research, discussion and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933  **Internship In Marketing**  
3 hours credit. Prerequisites: 9 hours of marketing and permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean. Knowledge gained through the experiential activities of organizational life. Joint cooperation with business, government, and health science institutions in structuring and monitoring work experience aimed at supplementing the learning process. Opportunities developed in consultation with faculty Advisor and Division Director and requires approval of both.

4951-3  **Special Studies In Marketing**  
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.
106 / Bachelor of Fine Arts Degree in Art and Design
With a Concentration in Art

COLLEGE OF FINE ARTS AND HUMANITIES
DIVISION OF ART AND DESIGN
BACHELOR OF FINE ARTS DEGREE IN ART AND DESIGN
WITH A CONCENTRATION IN ART

The Division of Art and Design offers a program leading to the Bachelor of Fine Arts Degree in Art. The Bachelor of Fine Arts Degree Program in Art is fully accredited by the National Association of Schools of Art and Design and conforms to their recommended guidelines. The degree is awarded in recognition of successful completion of prolonged and intensive studio course work with supportive studies in Art History and Criticism. The final two years of study include a specialization in one of the following areas: Drawing, Ceramics, Painting, Photography, Printmaking, or Sculpture.

Transfer students should present a portfolio of work to the Division of Art and Design prior to the registration period. This portfolio should consist of 10 original examples or 2 x 2 slides of work from courses taken at another institution.

Applicants seeking a broader program of studies with emphasis on Art History and Criticism or a less intensive studio art program should refer to the Bachelor of Arts Degree in Humanities (page ).

The minimum number of semester hours required for this degree is 129, including 69 semester hours of Art, 18 semester hours of Art History and Criticism, and 42 semester hours General Education Requirements.

All candidates for the degree must complete:

A. 21 semester hours of art courses are required:
   ART 1003 Design: Two Dimensional
   ART 1013 Design: Three Dimensional
   ART 1213 Drawing: Articulation
   ART 1223 Drawing: Structure
   ART 2213 Drawing: Figure
   ART 4903 Senior Studio Problems
   ART 4923 Bachelor of Fine Arts Exhibition

B. 12 additional semester hours must be selected from the following lower-division art courses:
   ART 2113 Painting: Basic
   ART 2213 Drawing: Figure
   ART 2413 Printmaking: Basic
   ART 2513 Photography: Basic
   ART 2613 Sculpture: Basic
   ART 2713 Ceramics: Basic

C. 15 semester hours are required in upper-division art courses, in one of the following specializations: Drawing, Painting, Photography, Sculpture, Ceramics, Printmaking.

D. 21 additional semester hours are required in art courses. No less than 12 semester hours must be in upper-division art courses.

E. 18 semester hours are required in Art History and Criticism courses, including 6 semester hours in upper-division courses and 9 semester hours as follows:
   AHC 1113 Art & Architecture I: Ancient through Medieval
   AHC 1123 Art & Architecture II: Renaissance through Eighteenth Century
   AHC 1133 Art & Architecture III: Nineteenth and Twentieth Centuries
COURSE DESCRIPTIONS

ART

(ART)

1003 Design: Two Dimensional
(0-6) 3 hours credit.
Exploration of shape, pattern, texture, color, organization and structural principles of two dimensional surfaces.

1013 Design: Three Dimensional
(0-6) 3 hours credit.
Exploration of shape, pattern, texture, organization and structural principles of multi-dimensional surfaces.

1153 Painting for Non-Art Majors
(0-6) 3 hours credit.
An introduction to the fundamentals of painting. Credit not applicable to BFA degree.

1163 Drawing for Non-Art Majors
(0-6) 3 hours credit.
An introduction to the fundamentals of drawing. Credit not applicable to BFA degree.

1173 Photography for Non-Art Majors
(0-6) 3 hours credit.
Techniques and basic methods of creative photography. Students are expected to provide their own cameras. Credit not applicable to BFA degree.

1183 Ceramics for Non-Art Majors
(0-6) 3 hours credit.
An introduction to the techniques and concepts of ceramics. Credit not applicable to BFA degree.

1193 Sculpture for Non-Art Majors
(0-6) 3 hours credit.
An introduction to the techniques and concepts of sculpture. Credit not applicable to BFA degree.

1213 Drawing: Articulation
(0-6) 3 hours credit.
Development of drawing skills for descriptive analysis of objects and modes of form representation.

1223 Drawing: Structure
(0-6) 3 hours credit.
Emphasis on organizational and conceptual principles in drawing.

2113 Painting: Basic
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, 1223.
Instruction in basic painting concepts and materials.

2213 Drawing: Figure
(0-6) 3 hours credit. Prerequisites: ART 1213, 1223.
Study of the human figure and its anatomical and structural dynamics. May be repeated once for credit.

2413 Printmaking: Basic
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, 1223.
Introduction to printmaking processes, concepts and materials.

2513 Photography: Basic
(0-6) 3 hours credit. Prerequisites: Either ART 1003, 1013, 1213 and 1223 or ARC 1213, 1223 and ART 1213.
Introduction to photographic image making, technical principles and laboratory procedures. Students are expected to provide their own cameras.

2613 Sculpture: Basic
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, 1223.
Instruction in basic sculptural concepts and materials.
2713 **Ceramics: Basic**  
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, 1223.  
Instruction in basic ceramic concepts and techniques.

3013 **Color**  
(2-2) 3 hours credit.  
Study of color properties and interactions, including the processes and theories of color perception.

3113 **Painting: Intermediate**  
(0-6) 3 hours credit. Prerequisite: ART 2113.  
Concepts and methods of painting with an emphasis on the synthesis of idea and means. May be repeated once for credit.

3213 **Drawing: Intermediate**  
(0-6) 3 hours credit. Prerequisites: ART 1213, 1223, 2213.  
Concepts and methods of drawing with an emphasis on the synthesis of idea and means. May be repeated once for credit.

3413 **Printmaking: Intermediate**  
(0-6) 3 hours credit. Prerequisite: ART 2413.  
Concepts and methods of intaglio and lithographic printmaking. May be repeated once for credit.

3513 **Photography: Intermediate**  
(0-6) 3 hours credit. Prerequisite: ART 2513.  
Concentration on the concepts and methods of photography and its aesthetic premises. Students are expected to provide their own cameras. May be repeated once for credit.

3653 **Sculpture: Intermediate**  
(0-6) 3 hours credit. Prerequisite: ART 2613.  
Development of formal concerns in three dimensional terms using a variety of materials and procedures. May be repeated once for credit.

3733 **Ceramics: Intermediate**  
(0-6) 3 hours credit. Prerequisite: ART 2713.  
Development of complex formal and technical concerns of firing and glazing. May be repeated once for credit.

4133 **Painting: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3113.  
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.

4233 **Drawing: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3213.  
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.

4433 **Printmaking: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3413.  
An emphasis on the development of a personal vision and individual approach to the use of the medium including experimentation in multiple processes. May be repeated for credit.

4533 **Photography: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3513.  
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.

4673 **Sculpture: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3653.  
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.

4753 **Ceramics: Advanced**  
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3733.  
An emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated for credit.
4833 Graphic Design
(0-6) 3 hours credit. Prerequisite: Upper Division standing in Art.
A course for Art majors intended to introduce them to problems in printing, typography,
and book and folio design.

4903 Senior Studio Problems
(0-6) 3 hours credit. Prerequisite: 12 semester hours completed in area of specialization
and consent of instructor.
An organized course with advanced art concepts through individual class critiques and
discussions of formal problems in art using projects executed by the students in their
areas of specialization. Required of all BFA candidates. May be repeated once for credit.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the
student’s advisor, Division Director and Dean.
Independent reading, research, discussion, and/or writing under the direction of a faculty
member. May be repeated for credit, but not more than 6 hours of independent study,
regardless of discipline, will apply to a bachelor's degree.

4933 Bachelor of Fine Arts Exhibition
3 hours credit. Prerequisites: Approval of Division Director and Application for Degree.
With faculty supervision the student will complete a body of work in the area of specializa­tion
representing the culmination of the course of studies for the BFA degree. A selection
of this work will be presented in an exhibition. Required of all BFA degree candidates.

4951-3 Special Studies in Art
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not
often available as part of the regular course offerings. Special Studies courses may be
repeated for credit when the topics vary, but not more than 6 hours within any one
discipline will apply to a bachelor's degree.

COURSE DESCRIPTIONS
ART HISTORY AND CRITICISM
(AHC)

1033 Masterworks in Art
(3-0) 3 hours credit.
A study of key works in art and architecture of the Western World.

1113 Art and Architecture I: Ancient through Medieval
(3-0) 3 hours credit.
A study of art and architecture of Egypt, the near East and Europe (Western Civilization)
from prehistoric times to 1400 A.D.

1123 Art and Architecture II: Renaissance through Eighteenth Century
(3-0) 3 hours credit.
A study of art and architecture in Europe and the U.S. from 1400 to 1800.

1133 Art and Architecture III: Nineteenth and Twentieth Centuries
(3-0) 3 hours credit.
A study of art and architecture in Europe and the U.S. from 1800 to the present.

2213 Art and Architecture of the Americas I
(3-0) 3 hours credit.
A study of art and architecture in North and South America from ancient times to 1500.

2223 Art and Architecture of the Americas II
(3-0) 3 hours credit.
A study of art and architecture of North and South America from 1500 to 1850.

3123 Northern European Art: Fifteenth and Sixteenth Centuries
(3-0) 3 hours credit.
A study of fifteenth and sixteenth century art of Northern Europe. Emphasis is placed on
the development of the arts primarily in Flanders and Germany.
3133 Southern European Art: Fifteenth and Sixteenth Centuries  
(3-0) 3 hours credit.  
A study of painting, sculpture and architecture in Southern Europe in the fifteenth and sixteenth centuries, with primary emphasis on Renaissance Italy.

3143 European Art: Seventeenth through Eighteenth Centuries  
(3-0) 3 hours credit.  
A study of the Baroque and Rococo art of Europe in the seventeenth and eighteenth centuries.

3223 Spanish Art  
(3-0) 3 hours credit.  
Art and architecture in the Iberian Peninsula primarily from the seventh century to the nineteenth century.

3363 European and United States Art: Nineteenth Century  
(3-0) 3 hours credit.  
Painting, sculpture, and the graphic arts in Europe and the United States from 1790 to 1900. Credit cannot be received for both AHC 3363 and 3323.

3373 European and United States Art: Twentieth Century  
(3-0) 3 hours credit.  
Painting, sculpture, and the graphic arts in Europe and the United States from 1900 to the present. Credit cannot be received for both AHC 3373 and 3333.

3423 Pre-Columbian Art and Architecture of Mesoamerica  
(3-0) 3 hours credit.  
A study of art and architecture in ancient Guatemala, Mexico, Belize and Honduras.

3453 New World Hispanic Art and Architecture  
(3-0) 3 hours credit.  
A study of art and architecture of North and South America from the Colonial periods to the nineteenth century.

3813 History of Photography  
(3-0) 3 hours credit.  
The history of photography from its inception to the present.

4113 Contemporary Art of the United States  
(3-0) 3 hours credit.  
A study of the major movements in the visual arts in the United States from 1940 to the present.

4423 Contemporary Art of Latin America  
(3-0) 3 hours credit.  
A study of twentieth century art in Latin America.

4813 Art Criticism  
(3-0) 3 hours credit. Prerequisite: AHC 1133 or consent of instructor.  
An examination of the principles and methods of critical analysis of works of art, as well as the role and influence of the art critic.

4911-3 Independent Study  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, Division Director and Dean.  
Independent reading, research, discussion, and/or writing under direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Art Gallery and Museum Internship  
3 hours credit. Prerequisite: Consent of instructor.  
Supervised experience related to preparation and installation of exhibitions in gallery and museum settings.

4951-3 Special Studies in Art History and Criticism  
1-3 hours credit. Prerequisite: Consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.
BACHELOR OF FINE ARTS DEGREE IN ART AND DESIGN WITH A CONCENTRATION IN ARCHITECTURAL DESIGN

The Bachelor of Fine Arts Degree with a concentration in Architectural Design is a four-year degree. The minimum number of semester hours required for the degree, including 42 hours of General Education Requirements, is 137.

All candidates for the degree must complete:

A. 91 semester hours in the major, 54 of which must be at the upper-division level.
   1. 37 semester hours of required lower-division architectural courses are:
      - ARC 1213 Architectural Design I
      - ARC 1223 Architectural Design II
      - ARC 1312 Architectural Graphics I
      - ARC 1322 Architectural Graphics II
      - ARC 1413 Architects and Society
      - ARC 2113 Architectural Design III
      - ARC 2123 Architectural Design IV
      - ARC 2214 Construction I
      - ARC 2224 Construction II
      - ARC 2312 Architectural Rendering I
      - ARC 2322 Architectural Rendering II
      - ARC 2413 History of Architecture I
      - ARC 2423 History of Architecture II

   2. 54 semester hours of upper-division architectural courses are:
      - ARC 3115 Architectural Design Studio I
      - ARC 3125 Architectural Design Studio II
      - ARC 3234 Construction III
      - ARC 3244 Construction IV
      - ARC 3313 Environmental Control Systems I
      - ARC 3323 Environmental Control Systems II
      - ARC 3413 Architectural Documents I
      - ARC 3423 Architectural Documents II
      - ARC 3613 History of Modern Architecture
      - ARC 4113 Construction V
      - ARC 4136 Architectural Design Studio III
      - ARC 4146 Architectural Design Studio IV
      - ARC 4513 Architectural Practice
      - ARC 4633 Site Planning and Landscaping

B. 4 semester hours of support work are:
   - URB 3723 Introduction to Urban Planning
   - One hour of Calculus (in addition to that used to satisfy the General Educational Requirement).

C. Third-Year Brochure Requirement.
   Upon completion of the third-year course work, each student must obtain written authorization to enter the fourth-year advanced architecture design courses. Such authorization is gained by submission of a satisfactory brochure of work during the third year of design. This brochure will show all work undertaken in previous and current design and visual communication classes. In addition, students may include any supplementary material which they feel will provide useful information for the review committee to evaluate their progress toward the Bachelor of Fine Arts degree with a concentration in Architectural Design.
The review committee may, at its discretion, require a student to take additional course work before the student is permitted to register for the fourth-year courses, or may require a student to undertake specific courses in the fourth year.

**BACHELOR OF FINE ARTS DEGREE IN ART AND DESIGN WITH A CONCENTRATION IN INTERIOR DESIGN**

The Bachelor of Fine Arts Degree with a concentration in Interior Design is a four-year degree. The minimum number of semester hours required for the degree, including 42 hours of General Education Requirements, is 131.

All candidates for the degree must complete:

A. 74 semester hours in the major, 45 of which must be at the upper-division level.
   1. 29 semester hours of required lower-division interior design courses:
      - ARC 1213 Architectural Design I
      - ARC 1223 Architectural Design II
      - ARC 1312 Architectural Graphics I
      - ARC 1322 Architectural Graphics II
      - ARC 1413 Architects and Society
      - ARC 2113 Architectural Design III
      - ARC 2123 Architectural Design IV
      - ARC 2214 Construction I
      - ARC 2413 History of Architecture I
      - ARC 2423 History of Architecture II
   2. 45 semester hours of upper-division interior design courses:
      - ARC 3143 Interior Materials I
      - ARC 3153 Interior Materials II
      - ARC 3166 Interior Design Studio I
      - ARC 3176 Interior Design Studio II
      - ARC 3213 History of Furniture
      - ARC 3313 Environmental Control Systems I
      - ARC 3613 History of Modern Architecture
      - ARC 4156 Advanced Interior Design Studio I
      - ARC 4166 Advanced Interior Design Studio II
      - ARC 4213 Furniture Design
      - ARC 4513 Architectural Practice

B. 15 semester hours of support work:
   1. 12 semester hours of required courses.
      - ART 1213 Drawing: Articulation
      - ART 1223 Drawing: Structure
      - ART 2513 Photography: Basic
      - ART 3013 Color
   2. 3 semester hours of approved electives.

C. Second-Year Brochure Requirement.
   Upon completion of the second-year course work, each student must obtain written authorization to enter the third-year advanced interior design courses. Such authorization is gained by submission of a satisfactory brochure of work during the second year of design. This brochure will show all work undertaken in previous and current design and visual communication classes. In addition, students may include any supplementary material which they feel will provide useful information for the review committee to evaluate their progress toward the Bachelor of Fine Arts degree with a concentration in Interior Design.
The review committee may, at its discretion, require a student to take additional course work before the student is permitted to register for the third-year courses, or may require a student to undertake specific courses in the third or fourth years.

COURSE DESCRIPTIONS

ARCHITECTURAL DESIGN

(ARC)

1213 Architectural Design I
(0-6) 3 hours credit.
Study of the visual elements and organization of two and three dimensional space as related to architectural form.

1223 Architectural Design II
(0-6) 3 hours credit. Prerequisite: ARC 1213.
A continuation of ARC 1213.

1312 Architectural Graphics I
(0-4) 2 hours credit.
Introduction to architectural graphic communication and the use of drafting materials and equipment.

1322 Architectural Graphics II
(0-4) 2 hours credit. Prerequisite: ARC 1312.
Introduction to the principles of descriptive geometry, perspective drawing, light and shadow.

1413 Architects and Society
(3-0) 3 hours credit.
Introduction to the history, theory and practice of architecture.

2113 Architectural Design III
(0-6) 3 hours credit. Prerequisites: ARC 1223, 1322.
A series of basic architectural design problems with the emphasis on solving structural, aesthetic and functional requirements.

2123 Architectural Design IV
(0-6) 3 hours credit. Prerequisite: ARC 2113.
A continuation and expansion of ARC 2113.

2203 Housing and Land Development
(3-0) 3 hours credit. Prerequisites: ARC 1223, ARC 1312.
Analysis of the purchase and development of land for residential uses. Residential and site design considerations in terms of codes, zoning ordinance, utility needs, and engineering problems are examined.

2214 Construction I
(4-0) 4 hours credit. Prerequisites: ARC 1213, 1312.
Introduction to building systems and materials.

2224 Construction II
(4-0) 4 hours credit. Prerequisites: ARC 2214, MAT 1214, PHY 1603 and 1623 or consent of instructor.
A study of statics and strength of materials.

2312 Architectural Rendering I
(0-4) 2 hours credit. Prerequisites: ARC 1223, 1322.
The study of architectural rendering concepts and techniques, with practice in various media.

2322 Architectural Rendering II
(0-4) 2 hours credit. Prerequisite: ARC 2312.
The study of color theory and its application in buildings and architectural renderings.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2413</td>
<td>History of Architecture I</td>
<td>3</td>
<td>(0)</td>
<td>A survey of architecture from ancient history through 1750.</td>
</tr>
<tr>
<td>2423</td>
<td>History of Architecture II</td>
<td>3</td>
<td>(0)ARC 2413 or consent of instructor.</td>
<td>A survey of architecture from 1750 to the present.</td>
</tr>
<tr>
<td>3115</td>
<td>Architectural Design Studio I</td>
<td>5</td>
<td>(1-8)</td>
<td>The study of the process of researching, programming, and developing physical design solutions.</td>
</tr>
<tr>
<td>3125</td>
<td>Architectural Design Studio II</td>
<td>5</td>
<td>(1-8)ARC 3115 with a grade of at least C.</td>
<td>Continuation of the study of the process of researching, programming, and developing physical design solutions.</td>
</tr>
<tr>
<td>3143</td>
<td>Interior Materials I</td>
<td>3</td>
<td>(0)ARC 2123</td>
<td>Study of materials used in interior spaces: selection, use, and care.</td>
</tr>
<tr>
<td>3153</td>
<td>Interior Materials II</td>
<td>3</td>
<td>(0)ARC 3143</td>
<td>A continuation of ARC 3143.</td>
</tr>
<tr>
<td>3166</td>
<td>Interior Design Studio I</td>
<td>6</td>
<td>(1-10)</td>
<td>Introduction to the functional and aesthetic uses of interior spaces and programming to meet user's needs.</td>
</tr>
<tr>
<td>3176</td>
<td>Interior Design Studio II</td>
<td>6</td>
<td>(1-10)</td>
<td>A continuation of ARC 3166.</td>
</tr>
<tr>
<td>3213</td>
<td>History of Furniture</td>
<td>3</td>
<td>(0)ARC 2123</td>
<td>A history of periods of furniture design from antiquity to the present.</td>
</tr>
<tr>
<td>3244</td>
<td>Construction IV</td>
<td>4</td>
<td>(3-2)</td>
<td>The study of the design and behavior of structural steel and timber systems, including the application of building specifications.</td>
</tr>
<tr>
<td>3313</td>
<td>Environmental Control Systems I</td>
<td>3</td>
<td>(0)ARC 2123</td>
<td>Qualitative and quantitative study of heating, ventilating, cooling, plumbing, and mechanical movement systems, and their integration into a building system.</td>
</tr>
<tr>
<td>3323</td>
<td>Environmental Control Systems II</td>
<td>3</td>
<td>(0)ARC 3313</td>
<td>A qualitative and quantitative study of acoustical, electrical, and illumination systems, and their integration into a building system.</td>
</tr>
<tr>
<td>3413</td>
<td>Architectural Documents I</td>
<td>3</td>
<td>(2-2)</td>
<td>An introduction to the technical documents of building construction, their preparation and use in communication between the architect and other professional consultants.</td>
</tr>
</tbody>
</table>
3423 Architectural Documents II  
(2-2) 3 hours credit. Prerequisite: ARC 3413.  
A continuation of the study of technical documents of building construction, their preparation and use in communication between the architect and other professional consultants, with emphasis on working drawings, specifications, and building codes.

3613 History of Modern Architecture  
(3-0) 3 hours credit.  
A study of modern architecture — its origin, technological and philosophical evolution from the nineteenth century to the present.

4013 Building Construction Estimating  
(3-0) 3 hours credit. Prerequisite: ARC 2224.  
Introduction to estimating procedures related to quantity surveying and cost of materials and labor in light construction.

4113 Construction V  
(3-0) 3 hours credit. Prerequisite: ARC 3244.  
Study of construction processes and the selection and specification of finish materials.

4123 Architecture of the Southwest  
(3-0) 3 hours credit.  
A study of the architecture of the American Southwest and Mexico.

4136 Architectural Design Studio III  
(1-10) 6 hours credit. Prerequisite: ARC 3125 with a grade of at least C.  
Further development of design problems integrating structural and mechanical systems for complete design solutions to various building types.

4146 Architectural Design Studio IV  
(1-10) 6 hours credit. Prerequisite: ARC 4136 with a grade of at least C.  
Continuation of the development of design problems integrating structural and mechanical systems for complete design solutions to various building types. May be repeated for credit when the topics vary.

4156 Advanced Interior Design Studio I  
(1-10) 6 hours credit. Prerequisite: ARC 3176.  
A problems course in the advanced design of interior spaces.

4166 Advanced Interior Design Studio II  
(1-10) 6 hours credit. Prerequisite: ARC 4156.  
A continuation of ARC 4156. May be repeated for credit when the topics vary.

4213 Furniture Design  
(1-4) 3 hours credit. Prerequisites: ARC 3213, ARC 3166.  
A studio course in the design, detailing and construction of furniture.

4513 Architectural Practice  
(3-0) 3 hours credit. Prerequisite: ARC 3125.  
A study of the standards of architectural practice, professional responsibilities, contracts, bonds and ordinances, architectural partnerships, and other considerations of professional practice.

4613 Construction Management  
(3-0) 3 hours credit. Prerequisite: Upper-division standing or consent of instructor.  
The study of the process of construction and its management.

4623 Historic Preservation  
(3-0) 3 hours credit. Prerequisite: Upper-division standing.  
A study of the preservation of old structures and their re-use in terms of legal, technical, and aesthetic factors, with special emphasis on regional architecture.

4633 Site Planning and Landscaping  
(3-0) 3 hours credit. Prerequisite: ARC 3125.  
A study of the form and organization of natural and constructed sites with emphasis on landscaping and the placement of buildings and other site considerations.
4911-3  Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s Advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, may apply to a bachelor’s degree.

4951-6  Special Studies in Architecture
1-6 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.
DIVISION OF ENGLISH, CLASSICS, AND PHILOSOPHY

BACHELOR OF ARTS DEGREE IN ENGLISH

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.¹

All candidates for the degree must complete:

A. 30 semester hours in English (in addition to the 9 hours of English in the General Education Requirements), 21 of which must be at the upper-division level.
   1. 15 semester hours of required courses are:
      ENG 2223 Major British Writers I
      ENG 2233 Major British Writers II
      ENG 2263 Major American Writers
      ENG 3223 Shakespeare: The Early Plays or
      ENG 3233 Shakespeare: The Later Plays
      ENG 4973 Seminar For English Majors
   2. 15 additional semester hours are required in English.

B. 12 semester hours of approved support work, at least 6 hours of which must be at the upper-division level, in one of the following categories:
   1. foreign languages, literature (including foreign literatures in translation), and culture and civilization
   2. linguistics (including linguistics courses designated ENG provided that they have not been counted toward the required 30 semester hours in English)
   3. communication
   4. history, anthropology, political science, and American studies
   5. classics, philosophy, and humanities
   6. history and theory of art and of music
   7. other subjects as may be individually justified by the student and approved by the Undergraduate Advisor.

Students who select a support category other than number 5 may apply 6 semester hours of upper-division humanities courses or classics courses toward the English major.

C. 36 semester hours of electives.

A student whose grade-point average in English prior to the beginning of his or her final year at UT San Antonio is 3.5 or above may petition the English advisor for permission to work for honors in English. A student seeking honors in English must complete ENG 4973 during his or her final year; a project beyond the normal requirements of the course must be submitted and approved by the Honors Committee. To graduate with honors in English, a student must have a final grade-point average of 3.5 or above in the major. The 3.5 grade-point average required for honors shall be based on all transfer work as well as work taken at UT San Antonio.

¹Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
1003 Basic English
(3-1) 3 hours credit.
Review of the elements of Standard English with emphasis on principles of grammar, syntax, usage, punctuation, and spelling. The course is offered on a credit/no-credit basis, and a student required to take ENG 1003 must receive credit for the course before being permitted to enroll in ENG 1013. Placement in 1003 is determined by SAT verbal or ACT English scores. Credit cannot be used to satisfy any degree requirements.

1013 Freshman Composition
(3-0) 3 hours credit.
Practical instruction in the principles and methods of clear and effective writing. (This course or the equivalent is required of all undergraduates in fulfilling the General Education Requirements and must be taken during the first semester of the freshman year.)

1023 Critical Reading and Writing I
(3-0) 3 hours credit. Prerequisite: ENG 1013 or the equivalent.
Close reading and discussion of literary and philosophical works. Writing assignments will stress critical analysis of humanistic issues. (This course or the equivalent is required of all undergraduates in fulfilling the General Education Requirements and should be taken as the continuation of ENG 1013.)

1033 Critical Reading and Writing II
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Close reading and discussion of literary and philosophical works. Writing assignments will stress critical analysis of humanistic issues. (This course or the equivalent is required of all undergraduates in fulfilling the General Education Requirements and should be taken as the continuation of 1023.)

2223 Major British Writers I
(3-0) 3 hours credit. Prerequisite: ENG 1033 or the equivalent.
Study of representative works of major British writers from Chaucer to Milton, exclusive of Shakespeare.

2233 Major British Writers II
(3-0) 3 hours credit. Prerequisite: ENG 1033 or the equivalent.
Study of representative works of major British writers from Pope to the early twentieth century.

2263 Major American Writers
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Study of representative work of major American writers.

2273 Topics In Popular Literature
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Critical readings in a popular mode such as Science Fiction, Gothic Fiction, Western Fiction, Detective Fiction, or Fantasy. May be repeated for credit when topics vary.

2283 Literary Themes and Motifs
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Study of a particular literary theme or motif such as visions of utopia, magic and myth, the nature of evil, technology and the arts, the commercial and the natural world. May be repeated for credit when topics vary.

2323 Creative Writing: Prose
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Offers the opportunity for intensive practice and development of techniques in the writing of creative prose.

2333 Creative Writing: Poetry
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Offers the opportunity for intensive practice and development of techniques in the writing of poetry.
2413 Technical Writing  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Techniques of expository writing, particularly adapted to students in technological and scientific subjects.

2513 The Bible as Literature  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Offers the opportunity to survey major themes, stories, and motifs in the Old and New Testament with emphasis on those elements fundamental to the western literary and humanistic tradition. Major issues may include the nature of Biblical narrative, history, prophecy, character, and vision.

2613 Introduction to Literary Forms  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Opportunity to read and discuss classic and contemporary selections from a single literary form: fiction, poetry, or drama. May be repeated for credit when topics vary.

2813 The Latin and Greek Element in English  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Study of the Latin and Greek origins of English vocabulary, including common Latin and Greek prefixes, suffixes, and roots. Attention to the changes in meaning of selected words. Formerly ENG 3353. Credit cannot be earned for both 3353 and 2813.

3033 Contemporary American Literature  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Critical study of major American writers of the past three decades.

3043 Black Literature in America  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Survey of the works of Black writers in America from the eighteenth century to the present.

3053 Classic American Literature  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Study of the major American writers of the nineteenth century, with emphasis on Irving, Cooper, Hawthorne, Poe, Whitman, and Melville.

3063 Modern American Literature  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Study of the major American writers of the late nineteenth and early twentieth centuries, including Twain, Eliot, Hemingway, and Faulkner.

3113 Studies in Individual Authors  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Study of the works of an individual British or American author, or of several authors studied in relation to one another. May be repeated for credit when authors vary.

3123 Modern Fiction  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Critical survey of American, British, and Continental fiction of the twentieth century studied intensively in relation to the development of characteristically modern techniques.

3133 Women in Literature  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Critical study of the presentation of women and feminist issues in various literary forms.

3143 Modern Drama  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Study of representative plays in the modern dramatic tradition, from the time of Ibsen and Strindberg through contemporary dramatists, with an emphasis on British and American playwrights.

3213 Chaucer  
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent. 
Critical study of the Canterbury Tales and other poems read in Middle English.

3223 Shakespeare: The Early Plays  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent. 
Critical study of comedies, histories, and tragedies from the earlier period (1590-1601).
120 / English

3233 **Shakespears: The Later Plays**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical study of comedies, tragedies, and romances from the later period (1602-1613).

3243 **The English Novel**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical survey of English novels selected chiefly from the eighteenth and nineteenth centuries.

3253 **The American Novel**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Reading and discussion of representative American novels from the beginnings to the present.

3303 **Composition for Teachers**  
(3-0) 3 hours credit. Prerequisite: ENG 1033 or the equivalent.  
Study of theory and research in composition, with emphasis on application to the teaching of writing.

3313 **Advanced Composition**  
(3-0) 3 hours credit. Prerequisite: ENG 1033 or the equivalent.  
Study of the principles and procedures of expository and argumentative prose. Emphasis on coherence, liveliness, persuasiveness, and originality. Extensive writing practice.

3323 **History of the English Language**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Historical survey of the development of the English language.

3333 **Structure of Modern English**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Description of English syntax; the concept of Standard English; the variety (both regional and social) of modern English. Attention to the pedagogical and social questions raised concerning bidialectalism.

3343 **Introduction to English Linguistics**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Introduction to the goals and procedures of modern linguistics, emphasizing the description of English phonology, morphology, and semantics. Discussion of such topics as language acquisition and the foundations of language ability.

3373 **Children's Literature**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Survey from a literary perspective of the kinds of reading available for children and young adolescents; poetry, drama, fairy tale, myth, biography, science fiction, mystery, fantasy, modern realism. Both the traditional "classics" and the current trends in children's literature will be considered.

4023 **The Romantic Poets**  
(3-0) 3 hours credit. Prerequisite: ENG 2233 or the equivalent.  
Intensive study of the chief British romantic poets with emphasis on Blake, Wordsworth, Coleridge, Byron, Keats, and Shelley.

4033 **Literary Modes and Genres**  
(3-0) 3 hours credit. Prerequisite: ENG 2223 or 2233 or the equivalent.  
Intensive study of a single mode or genre such as comedy, tragedy, allegory, satire, or epic. May be repeated for credit when topics vary.

4053 **Modern British and American Poetry**  
(3-0) 3 hours credit. Prerequisite: ENG 2263 or the equivalent.  
Offers the opportunity for an intensive study of the chief modern poets with emphasis on Yeats, Eliot, Pound, Auden, Stevens, Williams, and Lowell.

4063 **Medieval English Literature**  
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent.  
Study of the major English writings from the Anglo-Saxon and Middle English periods, excluding Chaucer, with special emphasis on Beowulf and Chaucer's contemporaries. Some works in translation, but original texts wherever possible.
Bachelor of Arts Degree in Humanities

4113 **Renaissance Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent.
Selected readings from major writers of the sixteenth and seventeenth centuries (exclusive of Shakespeare) with emphasis on Spenser, Donne, Herbert, Milton, and Marvell.

4143 **Victorian Literature**
(3-0) 3 hours credit. Prerequisite: ENG 2233 or the equivalent.
Selected readings in the fiction, poetry, and non-fiction prose of major Victorian writers with emphasis on Tennyson, Browning, Eliot, Dickens, Hardy, and Hopkins.

4513 **Writer's Workshop: Advanced Creative Writing**
(3-0) 3 hours credit. Prerequisite: ENG 2323, 2333, or consent of instructor.
Designed for students who have already demonstrated their potential as poets or fiction writers. The workshop will aim at developing advanced creative writing skills. May be repeated once for credit.

4911-3 **Independent Study**
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 **Internship**
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Supervised experience relevant to English. May be repeated once for credit.

4951-3 **Special Studies in English**
1-3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4973 **Seminar for English Majors**
(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent.
This undergraduate seminar, limited to English majors in their final year, offers the opportunity to study a genre, author, or period in English or American literature. Content varies with each instructor; may be repeated once for credit when topics vary.

**BACHELOR OF ARTS DEGREE IN HUMANITIES**

The Bachelor of Arts Degree in Humanities is an interdisciplinary degree program consisting of courses drawn from a number of academic disciplines.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.

All candidates for the degree must complete:

A. 42 semester hours in an interdisciplinary major, consisting of:
   1. 9 semester hours of core courses:
      - CLA 2013 Introduction to Ancient Greece or
      - CLA 2023 Introduction to Ancient Rome
      - HUM 2013 Theory of Literature
      - HUM 3413 Man and the Cosmos
   2. 12 semester hours of upper-division work in Humanities, including HUM 4973, Seminar for Humanities Majors.

*Thirty-nine of the total semester hours required for the degree must be at the upper-division level.*
3. 21 semester hours, at least 12 hours of which must be at the upper-division level, in the following areas:
   (a) classics
   (b) philosophy
   (c) art history and criticism
   (d) a modern literature (Spanish, French, German, Russian, or English); including foreign language literature courses in translation, and culture and civilization courses.

   The student must take 3 semester hours in each of these 4 areas. The remaining 9 hours may be selected from these 4 areas (no more than 6 additional hours in any one) or, with the approval of the Undergraduate Advisor, may be selected from other relevant areas such as history, music history, or the social sciences. The whole group should form an interdisciplinary course of study developed in conjunction with the Undergraduate Advisor and designed to aid the student's integration of his or her program in terms of central themes, focal problems, or fields of historical interest.

B. 36 semester hours of electives.

A student whose grade-point average in the Humanities major prior to the beginning of his or her final year is 3.5 or above may petition the Humanities advisor for permission to work for honors in Humanities. A student seeking honors must complete HUM 4973 during his or her final year; a project beyond the normal requirements of the course must be submitted and approved by the Honors Committee. To graduate with honors in Humanities, a student must have a grade-point average of 3.5 or above in the major. The 3.5 grade-point average required for honors shall be based on all transfer work as well as work taken at UT San Antonio.

COURSE DESCRIPTIONS

HUMANITIES
(HUM)

1011-3  Topics in the Humanities
   1-3 hours credit.
   Introductory study of a topic or issue in the humanities. May be repeated for credit when topics vary, but no more than 3 hours will apply to a bachelor's degree.

2013 Theory of Literature
   (3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
   Critical study of the nature and function of literature and the relationship of literature to philosophy, history, and the other arts, attention to such topics as stylistics, genres, and literary history.

2643 Introduction to Film
   (3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
   Viewing and discussion of classic and contemporary film, selected to illustrate specific film techniques and themes.

3013 History of Ideas
   (3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
   Survey of the development and influence of major philosophical, ethical, and aesthetic conceptions in Western civilization from ancient times to the present.

3023 The Medieval World
   (3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
   Interdisciplinary investigation of medieval thought and culture as exemplified in major works of literature, philosophy, theology, and history.

3033 The Renaissance Idea of Man
   (3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
   Interdisciplinary investigation of Renaissance thought and culture as exemplified in major works of literature, philosophy, theology, and history; emphasis on the fundamental changes in the Western man's view of his world and of himself.
3043 **Classicism and Enlightenment**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Interdisciplinary investigation of European thought and culture in the later seventeenth and the eighteenth centuries, as exemplified in major works of philosophy, literature, and the fine arts.

3053 **The Romantic Age**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Interdisciplinary investigation of the development of ideas in literature, philosophy, art, politics, and society at the end of the eighteenth and beginning of the nineteenth century. Such figures as Rousseau, Kant, Wordsworth, Goethe, and Goya will be considered.

3073 **Oriental Literature**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Study of classic literary works of the Near and Far East, with emphasis on China, India, and Japan. Readings will be supplemented by some study of corresponding representations in the fine arts.

3113 **The Hero in Fiction**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical study of the changing conception of the hero from classical antiquity to modern times; the impact of society on the metamorphosis of the hero as archetype, image, and symbol.

3213 **The Christian Classics**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
The opportunity for an intensive survey of selected works of such writers as Augustine, Dante, Milton, Bunyan, Pascal, Hopkins, and Eliot, studied in the context of Christian thought.

3263 **Modern European Novel**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical study of selected Continental novelists of the last hundred years.

3313 **The Humanistic Impact of Scientific Revolutions**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical, interdisciplinary study of one or more major scientific revolutions — e.g., the Copernican, Galilean-Newtonian, Darwinian, or Einsteinian Revolutions — and of humanistic responses to such emergent scientific world-views. May be repeated for credit when topics vary.

3413 **Man and the Cosmos**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Critical interdisciplinary study of man’s search for his place in the universe; the impact of scientific and philosophical inquiry on man’s world-view as expressed in literature.

3433 **Topics in the Popular Arts**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Interdisciplinary study of the popular arts of particular historical periods and cultural traditions. Topics include specific trends, issues, or forms of popular culture. May be repeated for credit when topics vary.

3513 **Topics In Fiction, Drama, and Film**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Interdisciplinary study of thematic, stylistic, technical, and formal interactions and correlations in literary, dramatic, and cinematic art. May be repeated for credit when topics vary.

3523 **Interactions In the Arts**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
Interdisciplinary study of historical or thematic interactions and correlations in the literary, visual, and performing arts. Topics include specific themes in art within a national artistic expression, across cultural traditions and within particular periods. May be repeated for credit when topics vary.

3623 **Topics in National Cultures and Civilizations**  
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.  
The cultural life of the respective geographic regions and social strata of individual nations of Europe and America as reflected in, and interpreted by their artistic production. Individ-
124 / Humanities
Classics
Communications

Any topics may focus on a single nation or several nations. May be repeated for credit when topics vary.

4911-3  Independent Study
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4951-3  Special Studies in Humanities
1-3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4973 Seminar for Humanities Majors
(3-0) 3 hours credit.
Undergraduate seminar limited to Humanities majors in their final year. Content varies with each instructor. May be repeated once for credit when topics vary.

COURSE DESCRIPTIONS
CLASSICS
(CL)

2013 Introduction to Ancient Greece
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Introduction to the civilization and cultural achievements of ancient Greece, including highlights of history, religion, philosophy, literature, and art.

2023 Introduction to Ancient Rome
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Introduction to the civilization and cultural achievements of ancient Rome, including highlights of history, religion, philosophy, literature, and art.

3023 Classical Mythology
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Critical survey of ancient Greek and Roman mythology, both religious and secular; attention to current theories of myth and to the use of myth in ancient literature.

3033 Homer and the Tragic Vision
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Critical study of the tragic literature of ancient Greece with emphasis on the iliad and the dramas of Aeschylus, Sophocles, and Euripides.

3043 Classical Comedy
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Critical study of the comic literature of ancient Greece and Rome with emphasis on the works of Aristophanes, Menander, Plautus and Terence, Petronius, and Apuleius.

COURSE DESCRIPTIONS
COMMUNICATION
(COM)

1043 Introduction to Communication
(3-0) 3 hours credit.
Survey of communication theory including intrapersonal, small group, and mass media. Practice in oral communication through classroom exercises in public speaking and small group discussion. (Formerly ENG 1043. Credit cannot be earned for both ENG 1043 and COM 1043.)

2113 Public Speaking
(3-0) 3 hours credit. Prerequisite: COM 1043 or consent of instructor.
Communications / 125
Philosophy


2343 Introduction to Mass Communication
(3-0) 3 hours credit.
Survey of mass communication media, including print and broadcast media.

2383 Relational Communication
(3-0) 3 hours credit.
A focus on research and theory concerning the role and effects of communication in the creation and maintenance of human relationships such as friendships, marriage, and family. (Formerly COM 3213. Credit cannot be earned for both COM 2383 and COM 3213.)

2801 Forensic Activities
(1-0) 1 hour credit. Prerequisite: Consent of instructor.
Opportunity to study the preparation and presentation of oral argument or speaking in competitive situations. May be repeated for credit. Does not count toward major requirements.

3013 Oral Interpretation
(3-0) 3 hours credit.
Theory and practice of oral delivery of readings. Selection and organization of materials for various audiences and consideration of presentational techniques.

3083 Language and Communication Theory
(3-0) 3 hours credit. Prerequisite: COM 1043 or consent of instructor.
An overview of concepts, literature, and research concerning the role of language as approached from general semantics, information theory, psycho- and sociolinguistics with emphasis on the interpretive and motivational effects of language.

3113 Argumentation and Debate
(3-0) 3 hours credit. Prerequisite: COM 1043 or consent of instructor.
Offers the opportunity to train in the preparation, construction, and critical analysis of argumentation. Exercises in oral communication in adversary situations.

3243 Persuasion
(3-0) 3 hours credit. Prerequisite: COM 1043 or consent of instructor.
The study of the use of oral communication to secure social cooperation through change of belief, attitude, and opinion with emphasis on application of theory to message construction and design and execution of persuasive campaigns.

3523 Public Relations
(3-0) 3 hours credit. Prerequisite: COM 1043 or consent of instructor.
An introduction to principles and practices of public relations including consideration of interviewing and conference methods.

COURSE DESCRIPTIONS
PHILOSOPHY
(Phi)

2013 Basic Philosophical Problems I
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Introduction to philosophy through general problems in metaphysics, epistemology, ethics, political philosophy, and philosophy of religion; emphasis on the writings of philosophers of various historical periods, especially as these doctrines apply to contemporary problems.

2023 Introduction to Ancient Philosophy
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Introduction to ancient philosophy through the study of Plato, Aristotle, Epicurus, and others; emphasis on the Greek contribution to the moral and political ideas of the Western world.

2033 Introduction to Modern Philosophy
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Introduction to modern philosophy, from the Renaissance to the present, through the study of Descartes, Locke, Hume, Leibniz, Kant, Kierkegaard, and others; emphasis on
the relations of philosophy to the development of modern science, the social and political history of the Western world, and man's attempt to achieve a satisfactory world-view.

2043 Introductory Logic
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Study of the principles of valid argument: definition, deductive and inductive inference, fallacies.

2053 Moral Issues in Contemporary America
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Examination of ethical issues facing American society with emphasis on business ethics, medical ethics, and social ethics.

3003 Basic Philosophical Problems II
(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.
Continuation of PHI 2013 Basic Philosophical Problems I; reinforces and extends the analytic and critical skills fostered in the introductory course through the study of problems in metaphysics, epistemology, ethics, political philosophy, and philosophy of religion, especially as these problems are dealt with in primary sources.

3013 Philosophy of Religion
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Examination of traditional religious beliefs and such concepts as faith and knowledge, mysticism and theology, existence and the nature of God, and the relation of religion to experience and social life.

3033 Philosophy of Science
(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.
Examination of major issues in the philosophical foundations of the natural and social sciences, including scientific explanation, laws and theories, probability and induction, and the relation of scientific inquiry to the Western philosophical tradition.

3053 Philosophy of Art
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Examination of major philosophical theories of art, beauty, and aesthetic judgment with emphasis on such problems as form and structure, communication in art, and meaning in aesthetic judgment.

3063 World Religions
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
Examination of the origins, teachings, and development of the world's chief religious movements, including Hinduism, Buddhism, Shinto, Confucianism, Taoism, Sikhism, Jainism, Islam, Zoroastrianism, Judaism, and Christianity.

3073 Oriental Philosophy
(3-0) 3 hours credit. Prerequisite: ENG 1023 or PHI 2013 or the equivalent.
Examination of the philosophical and religious traditions of the East, with emphasis on China, India, and Japan.

3213 Ethics
(3-0) 3 hours credit. Prerequisite: ENG 1023 or PHI 2013 or the equivalent.
Examination of ethical theory and of the nature and scope of ethical discourse with emphasis upon the concepts of the good, human happiness, self-realization, virtue, duty, responsibility, and the means-ends relationship; reading of selected classical and contemporary texts.

3223 Approaches to Knowledge and Reality
(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.
Examination of the interrelations between theory of knowledge and theory of reality with emphasis on: the nature and scope of human knowledge, sensation and understanding, truth and error, change and causality, possibility and actuality, meaning and existence; reading of selected classical and contemporary texts.

3313 Contemporary Philosophy
(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.
Offers the opportunity for an intensive study of one or more of the major branches of twentieth-century thought: analytic philosophy, phenomenology, existentialism, and process philosophy. May be repeated for credit when topics vary.
3343 Issues in Contemporary Philosophy
(3-0) 3 hours credit. Prerequisite: PHI 2013 or the equivalent.
In-depth study of contemporary works with focus on specific issues in one or more of the following areas: philosophy of language; philosophy of mind; logic; philosophy of religion; philosophy of science; epistemology; political philosophy; or ethics, including medical and legal ethics. May be repeated for credit when topics vary.
DIVISION OF FOREIGN LANGUAGES

The Division of Foreign Languages provides skills development courses and courses leading to Bachelor of Arts degree programs in French, German and Spanish and offers skills development courses in other languages including Hebrew, Italian and Russian. Skills development courses facilitate speaking, reading, writing and understanding the target language and assist students to use language as a tool in their major field of study and/or future profession as well as meet General Education Requirements. Coursework in linguistics focuses on general concepts of structure and meaning in expression and relates linguistic development to other areas of human understanding. Courses in Comparative Studies in the Humanities relate literatures, literature and the other arts, and general themes of culture and humanistic thought. The major in French, German and Spanish is designed broadly to develop general knowledge of the culture, literature and language in each of the respective areas. Support work for the major, chosen in consultation with the undergraduate advisor, broadens the student's perspective in these areas. Through a careful selection of elective courses, students may combine their foreign language major with another language and/or with other areas in the Colleges of Fine Arts and Humanities, Business, Sciences and Mathematics or Social and Behavioral Sciences.

BACHELOR OF ARTS DEGREE IN FRENCH

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120. All candidates for the degree must complete:

A. 24 semester hours in the major, all of which must be at the upper-division level, as follows:
   1. 9 semester hours of required courses:
      FRN 3023 Advanced Composition and Conversation
      FRN 3413 French Literature and Culture until 1700
      FRN 3423 French Literature and Culture since 1700
   2. 15 additional semester hours are required in French.

B. 12 semester hours of support work, as follows:
   1. 6 semester hours of required courses:
      CSH 3313 Introduction to Literary Studies
      LNG 3813 Introduction to Linguistics
   2. 6 additional semester hours outside the major in (1) another foreign language or (2) a related area including other literature, culture or linguistics courses, to be chosen in consultation with the Undergraduate Advisor.

C. 42 semester hours of electives.

COURSE DESCRIPTIONS

FRENCH (FRN)

1006 Elementary French Accelerated
(4-4) 6 hours credit.
A one-semester course offering the student the opportunity for developing abilities in understanding, speaking, reading, and writing French. Equivalent to FRN 1013 and FRN 1023.

---

*Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the undergraduate Certification Programs in Education brochure for information.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1013</td>
<td><strong>Elementary French I</strong></td>
<td>(2-2) 3</td>
<td>Fundamentals of French, aimed at offering the opportunity for developing abilities in understanding, speaking, reading, and writing.</td>
</tr>
<tr>
<td>1023</td>
<td><strong>Elementary French II</strong></td>
<td>(2-2) 3</td>
<td>Fundamentals of French, aimed at offering the opportunity for developing abilities in understanding, speaking, reading, and writing.</td>
</tr>
<tr>
<td>1101</td>
<td><strong>Intensive Skill Development I</strong></td>
<td>(0-3) 1</td>
<td>Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with FRN 1013. Credit not applicable.</td>
</tr>
<tr>
<td>1201</td>
<td><strong>Intensive Skill Development II</strong></td>
<td>(0-3) 1</td>
<td>Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with FRN 1023. Credit not applicable.</td>
</tr>
<tr>
<td>2006</td>
<td><strong>Intermediate French Accelerated</strong></td>
<td>(4-4) 6</td>
<td>A one-semester course offering the student continued opportunity for developing abilities in understanding, speaking, reading, and writing French.</td>
</tr>
<tr>
<td>2013</td>
<td><strong>Intermediate French I</strong></td>
<td>(2-2) 3</td>
<td>Continued practice in developing abilities in understanding, speaking, reading, and writing French. Review of French grammar, and exposure to French culture.</td>
</tr>
<tr>
<td>2023</td>
<td><strong>Intermediate French II</strong></td>
<td>(2-2) 3</td>
<td>Continued practice in developing abilities in understanding, speaking, reading, and writing French. Review of French grammar, and exposure to French culture.</td>
</tr>
<tr>
<td>2101</td>
<td><strong>Intensive Skill Development III</strong></td>
<td>(0-3) 1</td>
<td>Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with FRN 2013. Credit not applicable.</td>
</tr>
<tr>
<td>2201</td>
<td><strong>Intensive Skill Development IV</strong></td>
<td>(0-3) 1</td>
<td>Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with FRN 2023. Credit not applicable.</td>
</tr>
<tr>
<td>3013</td>
<td><strong>French Phonetics and Pronunciation</strong></td>
<td>(3-1) 3</td>
<td>Articulatory description of the sounds of standard French. Exercises in sound discrimination, pronunciation, intonation and phonetic transcription.</td>
</tr>
<tr>
<td>3023</td>
<td><strong>Advanced Composition and Conversation</strong></td>
<td>(3-0) 3</td>
<td>Conversation correlated with readings, reports, and expository writing aimed at increasing oral and written fluency by vocabulary expansion and the active formation and use of grammatical sentences. May be repeated once for credit.</td>
</tr>
<tr>
<td>3033</td>
<td><strong>Advanced Grammar and Stylistics</strong></td>
<td>(3-0) 3</td>
<td>A study of selected syntactic characteristics of the language with special attention to subordination and the verb system. Grammatical and stylistic analysis of literary and expository prose, formal and informal speech.</td>
</tr>
<tr>
<td>3053</td>
<td><strong>French Business and Business Language</strong></td>
<td>(3-0) 3</td>
<td>Introduction to the basic workings of the French economy and business world. Offers the opportunity to develop practical language skills to deal with matters such as commercial correspondence, documents, government regulations, reports, telephone conversations,</td>
</tr>
</tbody>
</table>
interviews, and conferences. Attention to vocabulary and style specific to French business. Practice in translation on business related topics.

3113 Introduction to French Linguistics
(3-D) 3 hours credit. Prerequisites: FRN 2023 and LNG 3813 or consent of instructor. Application to French of the basic principles of analysis and description of language structure. Attention given to structural regularities at the levels of sound, word formation, and syntax; also to the relationship between some irregularities and historical change and to dialectal variation.

3123 Applied French Linguistics
(3-D) 3 hours credit. Prerequisites: FRN 2023 and LNG 3813 or consent of instructor. Practical application of linguistic principles to the teaching of French. Attention given to problems involving the contrasting structure of French and English.

3333 French Literature in English Translation
(3-D) 3 hours credit. A study in English of major works of French literature. Themes, genres, movements. May not be applied to a major in French.

3413 French Literature and Culture until 1700
(3-D) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor. Selections from literature, historical writings and documents, and the arts are studied as reflections and interpretations of central moments in French literary and cultural history until 1700. The course examines the development of France’s literary, philosophical, and artistic heritage in relation to social, political, and economic forces.

3423 French Literature and Culture since 1700
(3-D) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor. Selections from literature, historical writings and documents, and the arts are studied as reflections and interpretations of central moments in French literary and cultural history since 1700. The course examines the development of France’s literary, philosophical, and artistic heritage in relation to social, political, and economic forces.

3513 The French Middle Ages
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Literature and society: the aristocratic and bourgeois ethics. The origins of literary genres. Readings in modern French translation of works and authors such as La Chanson de Roland, Le Roman de Renart, Chretien de Troyes, and Villon.

3523 French Renaissance and Baroque
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Examination of the Renaissance, ideal. Readings from authors such as Rabelais and Montaigne and the poets of the Ecole Lyonnaise, the Pleiade, the Baroque.

3533 French Classicism
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Definition of French Classicism. Examination of its style and major themes. Study of major and minor genres. Role of the court and saion life. Selected texts from such authors as Corneille, Molieøre, Racine, La Fontaine, Pascal, La Bruyère.

3543 The French Enlightenment
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Literature and philosophy. The philosophes and the Encyclopedie. The rise of the novel. Readings from such authors as Prevost, Montesquieu, Voltaire, Diderot, Rousseau.

3553 The French Nineteenth Century
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Definition and history of literary and cultural movements: romanticism, realism, naturalism, symbolism. Analysis of representative works by authors such as Chateaubriand, Hugo, Balzac, Flaubert, Baudelaire, Zola, Rimbaud.

3563 The Belle Epoque: 1885-1914
(3-D) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor. Study of major figures and the principal literary and cultural movements of French modernism at the turn of the century.
3573 The Francophonie: The World
(3-0) 3 hours credit. Prerequisite: FRN 3413 or FRN 3423 or consent of instructor.
A study of literary movements and cultural issues in French-speaking societies outside of
France: selected topics such as Negritude in Africa, the Caribbean, and Haiti or bicultural
issues in Quebec and Louisiana.

3813 Contemporary French Culture and Society
(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.
Social, political, economic, and cultural characteristics of contemporary France as seen
mainly through essays and informational publications, newspapers and magazine articles,
and radio and television broadcasts. Attention to current national and regional problems
and conflicts.

4413 Genre Studies
(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423 or consent of instructor.
Study of the history, characteristics, and major achievements in a particular French
literary genre: novel, short narrative; lyric, drama, or film. May be repeated for credit
when topics vary.

4513 The French Twentieth Century
(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423 or consent of instructor.
Literary and cultural developments of the period since the early twentieth century.
Changes and experiments in literary style and genre. Readings from authors such as

4813 Major French Authors
(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423 or consent of instructor.
Offers the opportunity for an intensive study of one or more French literary or intellectual
figures such as Voltaire, Baudelaire, Saint-Simon, Proust, Rabelais, Montaigne, Sartre.
May be repeated for credit when topics vary.

4823 Great Themes in French Literature and Culture
(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423 or consent of instructor.
This course brings together important texts about some central theme, such as love, evil,
utopias, the vision of society, the role of women, the spiritual quest. May be repeated for
credit when topics vary.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the
student's advisor, and the Division Director and Dean of the College in which the course
is offered.
Independently reading, research, discussion and/or writing under the direction of a faculty
member. May be repeated for credit, but not more than 6 hours of independent study,
regardless of discipline, will apply to a bachelor's degree.

4933 Internship In French
3 hours credit. Prerequisite: Permission of Division Director.
Supervised experience in a setting which provides the opportunity to integrate theory and
practice in language usage. May be repeated once for a maximum of 6 credit hours.

4951-3 Special Studies In French
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not
often available as part of the regular course offerings. Special Studies courses may be
repeated for credit when the topics vary, but not more than 6 hours within any one
discipline will apply to a bachelor's degree.

BACHELOR OF ARTS DEGREE IN GERMAN

The minimum number of semester hours required for this degree, including the 42
hours of General Education Requirements, is 120.4

---

4Thirty-nine of the total semester hours required for the degree must be at the upper-division level.
Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure
for information.
All candidates for the degree must complete:

A. 24 semester hours in the major, all of which must be at the upper-division level, as follows:
   1. 9 semester hours of required courses:
      GER 3023 Advanced Composition and Conversation
      GER 3413 German Literature and Culture I: Middle Ages to 1700
      GER 3423 German Literature and Culture II: 1700 to the Present
   2. 15 additional semester hours are required in German, 6 of which must be at the 4000 level, exclusive of Independent Study.

B. 12 semester hours of support work, as follows:
   1. CSH 2313 Introduction to Literary Studies
      LNG 3813 Introduction to Linguistics
   2. CSH 1103 Literary Masterpieces of World Culture I
      CSH 1113 Literary Masterpieces of World Culture II

C. 42 semester hours of electives.

COURSE DESCRIPTIONS

GERMAN (GER)

1013 Elementary German I
(2-2) 3 hours credit.
Fundamentals of German aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1023 Elementary German II
(2-2) 3 hours credit. Prerequisite: GER 1013 or the equivalent.
Fundamentals of German, aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

2013 Intermediate German I
(2-2) 3 hours credit. Prerequisite: GER 1023 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing German. Review of German grammar and exposure to German culture.

2023 Intermediate German II
(2-2) 3 hours credit. Prerequisite: GER 2013 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing German. Review of German grammar and exposure to German culture.

3013 German Phonetics
(3-1) 3 hours credit. Prerequisites: GER 2023 and LNG 3813 or consent of instructor.
Articulatory description of the sounds of standard German. Exercises in sound discrimination, pronunciation, intonation and phonetic transcription. Description of the phonological grammar of German. Problems in analysis.

3023 Advanced Composition and Conversation
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor.
Conversation correlated with readings, reports and expository writing, aimed at increasing oral and written fluency by vocabulary expansion and formation of grammatical sentences. Attention given to individual student’s pronunciation, word choice, and syntax. Readings deal with contemporary social, political, intellectual and artistic interests and issues. May be repeated once for credit when topics vary.

3053 Advanced German Grammar and Stylistics
(3-0) 3 hours credit. Prerequisite: GER 3023 or consent of instructor.
A study of selected syntactic characteristics of the language with special attention to grammatical categories, subordination and verb systems including verbal aspects. May be repeated once for credit when topics vary.
3113 **Introduction to German Linguistics**  
(3-0) 3 hours credit. Prerequisites: GER 2023 and LNG 3813 or consent of instructor. Analysis of ambiguity and paraphrase relations leading to description of underlying structures for simple and complex sentences with identification of principles of derivation. News Value rules; time phrases and tense usage. General emphasis on questions of syntax.

3123 **Applied German Linguistics**  
(3-0) 3 hours credit. Prerequisites: GER 2023 and LNG 3813 or consent of instructor. Contrastive analysis of underlying representations and derivational principles of English and German phonology and syntax. Techniques for pedagogical presentation and drill. Resource materials and associations for the professional German teacher.

3333 **German Literature in English Translation**  
(3-0) 3 hours credit. Major works of German literature. Themes, genres, and movements. May not be applied to a major in German.

3413 **German Literature and Culture I: Middle Ages to 1700**  
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor. Selected works from the medieval period to 1700 are studied as examples of central moments in German culture and literary history. The course presents the shape of German civilization emphasizing the major periods, styles, literary movements, and generations, the economic, social, political and philosophical trends in each epoch, and the major figures.

3423 **German Literature and Culture II: 1700 to the Present**  
(3-0) 3 hours credit. Prerequisite: GER 2023 or consent of instructor. Selected works from 1700 to the present are studied as examples of central moments in German culture and literary history. The course presents the shape of German civilization, emphasizing the major periods, styles, literary movements and generations, the economic, social, political and philosophical trends in each epoch, and the major figures.

3513 **Medieval German Studies**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. Critical survey of medieval German literature in the context of feudal society in Central Europe. The Nibelungenlied and oral tradition, Minnesang and other varieties of lyric poetry, the romances. Readings in modern translation.

3523 **Renaissance, Reformation and Baroque Studies**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. German literary, religious, philosophical and polemical writings from 1400 to 1700 in the European framework of transition from the feudal to the earliest bourgeois structures of society. Selected humanists, Luther and his critics, Meistersang, the Faust chapbook, the emblem books, religious poetry and drama of the Reformation and Counterreformation.

3533 **Eighteenth Century Studies**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. Presentation of the literature and related writings of the eighteenth century in their artistic and ideological diversity. Discussion of the concepts of Pietism, Rococo, Enlightenment, Empfindsamkeit, Sturm und Drang, and Classicism. Emphasis on literary debates, and reception of English and French literature, rise of national consciousness, responses to the French Revolution.

3543 **Nineteenth Century Studies I**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. German literature and related writings from 1800 to 1830. Emphasis on literary theory and the ideological implications of literary practice in the Romantic schools.

3553 **Nineteenth Century Studies II**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. Vormarz, Realism and Naturalism as literary and sociopolitical phenomena. Epigones and literary rebels. Major figures from Büchner and Grillparzer to Meyer and Fontane.

3563 **Twentieth Century Studies I: Modernism, 1890-1918**  
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor. Study of such major figures of German literary modernism at the turn of the century as
134 / German
Bachelor of Arts Degree in Spanish

Thomas Mann, Kafka, Musil, George, Hofmannsthal, Rilke, Trakl. Impressionism, symbolism, expressionism as literary historical concepts.

3573 Twentieth Century Studies II: Between the Wars
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor.
Study of the major figures and movements developing in the German language area between World War I and World War II, such as Benn, Brecht, Thomas Mann, Heinrich Mann, Horvath, Broch. Neue Sachlichkeit, exile literature, fascist literature and the beginnings of a socialist literary tradition.

3583 Twentieth Century Studies III: Contemporary Culture
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor.
Selected works of post-war German literature by Austrian, East and West German, and Swiss authors are read in the context of the economic, social, political, artistic and ideological developments in the four countries of the German-speaking world. Trümmerliteratur, Gruppe 47, Bitterfeld Weg, Gruppe 61, Wiener Gruppe, other groups and major figures.

4013 Genre Studies
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor.
Study of a single genre or sub-genre in German culture such as lyric, drama, novel, and film. May be repeated for credit when topics vary.

4133 Major German Authors
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor.
Study of one or several German literary or intellectual figures, such as Luther, Goethe, Nietzsche, Brecht. May be repeated for credit when topics vary.

4213 German Studies
(3-0) 3 hours credit. Prerequisite: GER 3413 or GER 3423 or consent of instructor.
Course focuses on selected topics of literary and cultural history such as the rise of aesthetic theory in the eighteenth century, Vienna 1890-1914, Expressionism in literature and the plastic arts. May be repeated for credit when topics vary.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933 Internship in German.
1-6 hours credit. Prerequisite: Permission of Division Director.
Supervised experience in a setting which provides the opportunity to integrate theory and practice in language usage. A maximum of 6 credit hours may be earned through internships.

4951-3 Special Studies in German
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

BACHELOR OF ARTS DEGREE IN SPANISH

The minimum number of semester hours required for this degree, including 42 hours of General Education Requirements, is 120.*

*Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
Bachelor of Arts Degree in Spanish / 135

All candidates for the degree must complete:

A. 27 semester hours in the major, all of which must be at the upper-division level, as follows:
   1. 18 semester hours of required courses:
      - SPN 3023 Advanced Composition or SPN 3033 Advanced Conversation
      - SPN 3113 Introduction to Spanish Linguistics
      - SPN 3413 Spanish Literature to 1700 or SPN 3423 Spanish Literature since 1700
      - SPN 3463 Spanish-American Literature to Modernism or SPN 3473 Spanish-American Literature since Modernism
      - SPN 3613 Spanish Culture and Civilization
      - SPN 3623 Spanish-American Culture and Civilization
   2. 9 additional semester hours of Spanish.

B. 9 additional semester hours outside the major in (1) another foreign language or (2) in one of the areas including literature, culture or linguistics to be chosen in consultation with the Undergraduate Advisor.

C. 42 semester hours of electives.

**COURSE DESCRIPTIONS**

**SPANISH (SPN)**

1006 **Elementary Spanish — Accelerated**
   (4-4) 6 hours credit.  
   A one-semester course offering the student the opportunity for developing abilities in understanding, speaking, reading, and writing Spanish. Equivalent to SPN 1013 and SPN 1023.

1013 **Elementary Spanish I**
   (2-2) 3 hours credit.  
   Fundamentals of Spanish, offering the opportunity for developing abilities in understanding, speaking, reading, and writing.

1023 **Elementary Spanish II**
   (2-2) 3 hours credit. Prerequisite: SPN 1013 or the equivalent.  
   Fundamentals of Spanish, offering the opportunity for developing abilities in understanding, speaking, reading, and writing.

1101 **Intensive Skill Development I**
   (0-3) 1 hour credit. Prerequisite: Consent of instructor.  
   Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with SPN 1013. Credit not applicable to General Education Requirements.

1201 **Intensive Skill Development II**
   (0-3) 1 hour credit. Prerequisite: Consent of instructor.  
   Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with SPN 1023. Credit not applicable to General Education Requirements.

2006 **Intermediate Spanish-Accelerated**
   (4-4) 6 hours credit.  
   A one-semester course offering the student continued opportunity for developing abilities in understanding, speaking, reading, and writing Spanish. Includes grammar review and culture. Equivalent to SPN 2013 and SPN 2023.

2013 **Intermediate Spanish I**
   (2-2) 3 hours credit. Prerequisite: SPN 1023 or the equivalent.  
   Continued practice in developing abilities in understanding, speaking, reading, and writing Spanish. Review of Spanish grammar and exposure to Hispanic culture.
2023 Intermediate Spanish II
(2-2) 3 hours credit. Prerequisite: SPN 2013 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Spanish. Review of Spanish grammar and exposure to Hispanic culture.

2043 Spanish for the Health Care Fields
(2-2) 3 hours credit. Prerequisite: SPN 1023 or consent of instructor.
Foreign language skills relevant to the health care profession. Emphasis on vocabulary building and developing conversational ability in situations germane to the health care fields. Intended for students with some background in Spanish.

2101 Intensive Skill Development III
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with SPN 2013. Credit not applicable to General Education Requirements.

2201 Intensive Skill Development IV
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with SPN 2023. Credit not applicable to General Education Requirements.

2223 Spanish for Spanish Speakers
(2-2) 3 hours credit. Prerequisite: Consent of instructor.
Offers the opportunity for development of the language proficiency of Spanish speakers building on existing abilities through in-depth practice in speaking, reading, and writing Spanish. Consideration given to stylistic variation.

3013 Spanish Phonetics and Pronunciation
(3-1) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
Offers the opportunity for intensive patterned pronunciation drill and exercises in sound discrimination and transcription, based on detailed articulatory description of various dialects of Spanish.

3023 Advanced Composition
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223.
Selected grammar review. Offers the opportunity for perfection of skill in writing Spanish through practice. Development of an awareness of style, levels of usage, and the difference between written and spoken language.

3033 Advanced Conversation
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223.
Offers the opportunity for development of oral and aural language skills through free and directed class conversation and individually prepared oral presentations.

3053 Creative Writing
(3-0) 3 hours credit. Prerequisite: SPN 3023 or consent of instructor.
Offers the opportunity to learn fundamentals and guided practice in creative writing of poetry, prose, or drama. May be repeated for credit when topics vary, but only 3 hours may count toward the major.

3113 Introduction to Spanish Linguistics
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
Offers the opportunity for application to Spanish of the basic principles of analysis and description of language structure. Attention given to structural regularities at the levels of sound, word formation, and syntax; also to the relationship between some irregularities and historical change and to dialectal variation.

3123 Applied Spanish Linguistics
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
Practical application of linguistic principles to the teaching of Spanish. Attention given to problems involved with the contrast between the structures of Spanish and English.

3133 Advanced Spanish Grammar
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or equivalent.
An opportunity for intensive study of Spanish grammar with special emphasis on problem areas such as mood, aspect, and word order. Attention will also be given to problems of usage. (Formerly SPN 4133. Credit cannot be earned for both SPN 3133 and 4133.)
3143 Spanish for Bilingual Educators
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
A skills development course for professionals in bilingual or Spanish-language education
with emphasis on specialized terminology, reading development, and writing style. Attention
to orthography, syntactic structures, and general lexical expansion, using regional
Spanish as a point of departure.

3153 Spanish for the Business/Management Fields
(2-2) 3 hours credit. Prerequisite: Consent of instructor.
Foreign language skills relevant to careers in business fields. Emphasis on reading skills
and simple conversations on business topics. Exposure to terminology from contracts,
financial statements, business law, marketing, banking, etc. Intended for students with
some background in Spanish. May be repeated once for credit when topics vary.

3333 Hispanic Literature in English Translation
(3-0) 3 hours credit.
Major works in Hispanic literatures: themes, genres, movements. May not be applied to a
major in Spanish.

3413 Spanish Literature to 1700
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
The literature of Spain from the Middle Ages to 1700. Readings of selections and com­
plete works. Practice in critical analysis through papers and examinations.

3423 Spanish Literature Since 1700
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
The literature of Spain from 1700 to the present. Reading of selections and complete
works. Practice in critical analysis through papers and examinations.

3463 Spanish-American Literature to Modernism
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
The literature of Spanish America, from Pre-Columbian times to Modernism. Readings of
selections and complete works. Practice in critical analysis through papers and examina­
tions.

3473 Spanish-American Literature Since Modernism
(3-0) 3 hours credit. Prerequisite: SPN 2023 or SPN 2223 or consent of instructor.
The literature of Spanish America from Modernism to the present. Readings of selections and complete
works. Practice in critical analysis through papers and examinations.

3613 Spanish Culture and Civilization
(3-0) 3 hours credit. Prerequisite: SPN 2023, or SPN 2223, or consent of instructor.
Emergence of the Spanish peoples from pre-Roman times to the present. The reflection in
literature of cultural traditions, myths, values, and life-view.

3623 Spanish-American Culture and Civilization
(3-0) 3 hours credit. Prerequisite: SPN 2023, or SPN 2223, or consent of instructor.
The cultural life of the respective geographic regions and social strata of Spanish
America from before the Conquest to the present as reflected in and interpreted by its
literature and arts.

3653 Contemporary Spain
(3-0) 3 hours credit. Prerequisite: SPN 2023, or SPN 2223, or consent of instructor.
Problems and conflicts determining the cultural development of contemporary Spain.
Social, political, economic and cultural characteristics as seen through intellectual cur­
rents and the role of intellectual leaders in forming Spain's cultural expression.

3663 Contemporary Spanish America
(3-0) 3 hours credit. Prerequisite: SPN 2023, or SPN 2223, or consent of instructor.
Problems and conflicts determining the cultural development of contemporary Spanish
America. Ethnic, social, political, economic and cultural characteristics. Intellectual cur­
rents and the role of the intellectual leaders in forming the cultural expression of Spanish
America.

4123 The Spanish of The Mexican American
(3-0) 3 hours credit. Prerequisite: SPN 3113 or consent of instructor.
A description of the Spanish language as used by Mexican Americans. Particular atten­
tion placed on its historical ties with other Hispanic dialects, including other varieties spoken in the United States.

**4313 Medieval Hispanic Literature**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Literary languages, genres, and themes in Spain from 850 to 1450. Readings from works such as Poema del Cid, Libro de Buen Amor and the romances.

**4323 Cervantes' Don Quijote**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
A reading of Don Quijote; analysis of the novel's structure and themes with special consideration of its stylistic patterns, ideological framework, and symbolic meanings.

**4333 Golden Age Literature**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
The flourishing of Spanish prose, poetry, and drama between 1450 and 1700. Readings from authors such as Fernando de Rojas, Garcilaso de la Vega, Fray Luis de Leon, San Juan de la Cruz, Gongora, Quevedo, Lope de Vega, Tirso de Molina, Calderon, and Cervantes.

**4343 Spanish Literature of the Nineteenth Century**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Major movements and authors. Themes, genres, relationships to other European literatures. Includes "costumbrismo," Romanticism, Realism and Naturalism.

**4353 The Generation of 1898 to the Civil War**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Spanish literature from the generation of 1898 to the Civil War. Readings from authors such as Unamuno, Azorin, Antonio and Manuel Machado, Benavente, Baroja, Valle-Inclan, Ortega y Gasset, and Garcia Lorca.

**4363 Spanish Literature of the Post Civil War Period**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Spanish literature in the aftermath of the Civil War to the present. Readings from such authors as Alberti, Sender, Cela, Delibes, Hernandez, Blas de Otero, and Celaya.

**4423 Spanish-American Renaissance and Baroque**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Repetition and innovation in the literature originating in the New World. Its themes, forms, style and functions. Particular emphasis on the "cronistas," on Ercilla's La Araucana and on Sor Juana Ines de la Cruz.

**4433 Spanish-American Literature of the 19th Century**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  

**4443 Spanish-American Modernism**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
The modernist movement as begun by Marti and Dario, and continued by other Latin American authors. French influences and contacts with Spanish and other literatures.

**4453 Spanish-American Prose and Poetry After Modernism to 1940**  
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.  
Literary movements, authors, and works. Focus on "vanguardista" poetry and early twentieth century novel, short story, and essay.
Comparative Studies in the Humanities

4463 Contemporary Spanish-American Poetry and Drama
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.
Literary themes and structures, poets (Neruda, Borges, Paz) and dramatists (Usigli, Gorostiza, Heiremans).

4473 Contemporary Spanish-American Prose
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.
The novel, short story, and essay: Asturias, Carpentier, Cortazar, Fuentes, Garcia-Marquez, Paz, Reyes, Rulfo, Sabato, Vargas-Llosa, and Yanez.

4483 National Literatures of Spanish America
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or consent of instructor.
Representative works from the national literatures of Spanish America. May be repeated for credit when topics vary.

4493 Mexican-American Literature
(3-0) 3 hours credit. Prerequisite: An upper-division course in literature in Spanish or BBL 3023 or BBL 3033 or consent of instructor.
Readings and discussion of works by Mexican-American writers. The expression through poetry, the novel, the short story and the theater, of the Mexican-American cultural experience as well as universal themes and literary concerns. Selections from popular literature including the oral tradition. May be repeated for credit when topics vary.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4933 Internship in Spanish
3 hours credit. Prerequisite: Permission of Division Director.
Supervised experience in a setting which provides the opportunity to integrate theory and practice in language usage. A maximum of 6 credit hours may be earned through internships.

4951-3 Special Studies in Spanish
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

COURSE DESCRIPTIONS
COMPARATIVE STUDIES IN THE HUMANITIES
(CSH)

1103 Literary Masterpieces of World Culture I
(3-0) 3 hours credit.
Representative masterworks of world literature in translation. An examination of major texts from antiquity to the Renaissance which have shaped and expressed our cultural traditions. Situation of literary works in the context of the development of civilization.

1113 Literary Masterpieces of World Culture II
(3-0) 3 hours credit.
Representative masterworks of world literature in translation. An examination of major texts from the Renaissance to the present which have shaped and expressed our cultural traditions. Situation of literary works in the context of the development of civilization.
1013 Elementary Hebrew I
(2-2) 3 hours credit.
Fundamentals of Hebrew aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1023 Elementary Hebrew II
(2-2) 3 hours credit. Prerequisite: HBR 1013 or the equivalent.
Fundamentals of Hebrew aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.
1101 Intensive Skill Development I
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with HBR 1013. Credit not applicable to General Education Requirements.

1201 Intensive Skill Development II
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with HBR 1023. Credit not applicable to General Education Requirements.

2013 Intermediate Hebrew I
(2-2) 3 hours credit. Prerequisite: HBR 1023 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Hebrew. Review of Hebrew grammar and exposure to Hebrew culture.

2023 Intermediate Hebrew II
(2-2) 3 hours credit. Prerequisite: HBR 2013 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Hebrew. Review of Hebrew grammar and exposure to Hebrew culture.

2101 Intensive Skill Development III
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with HBR 2013. Credit not applicable to General Education Requirements.

2201 Intensive Skill Development IV
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with HBR 2023. Credit not applicable to General Education Requirements.

COURSE DESCRIPTIONS
ITALIAN
(Itl)

1013 Elementary Italian I
(2-2) 3 hours credit.
Fundamentals of Italian aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1023 Elementary Italian II
(2-2) 3 hours credit. Prerequisite: ITL 1013 or the equivalent.
Fundamentals of Italian aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1101 Intensive Skill Development I
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with ITL 1013. Credit not applicable to General Education Requirements.

1201 Intensive Skill Development II
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with ITL 1023. Credit not applicable to General Education Requirements.

2013 Intermediate Italian I
(2-2) 3 hours credit. Prerequisite: ITL 1023 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Italian. Review of Italian grammar and exposure to Italian culture.

2023 Intermediate Italian II
(2-2) 3 hours credit. Prerequisite: ITL 2013 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Italian. Review of Italian grammar and exposure to Italian culture.

2101 Intensive Skill Development III
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken
Concurrently with ITL 2013. Credit not applicable to General Education Requirements.

2201 Intensive Skill Development IV
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with ITL 2023. Credit not applicable to General Education Requirements.

COURSE DESCRIPTIONS
LINGUISTICS
(LNG)

2023 Theory and Practice of Translation
(3-0) 3 hours credit. Prerequisite: At least two semesters of a single foreign language.
Introduction to the linguistic, cultural, and literary issues involved in the act of translation.
Study of the history of translation and translation theory with a view toward practical application. Students will undertake their own translation projects.

3813 Introduction to Linguistics
(3-0) 3 hours credit.
Basic principles of analysis and description of the structure of language. Attention given to the various levels: sound, syntax, and semantics.

3823 Phonological Analysis
(3-1) 3 hours credit. Prerequisite: LNG 3813 or consent of instructor.
Introduction to the analysis of sound systems in language. Emphasis on the differences between structural and generative approaches. Distinctive feature theory and phonological universals are also explored.

3833 Sociology of Language
(3-0) 3 hours credit.
Societal patterns regarding language variation and their implications for language maintenance and shift. Degree of mutual interrelations between language and culture. The study of language in its social context. Language variation and linguistic change.

3843 Psychology of Language
(3-0) 3 hours credit. Prerequisite: LNG 3813 or consent of instructor.
The acquisition of language and the developmental changes in use, particularly syntax. Topics include the psychological evaluation of linguistic theories, the relationship between language and the mind, and language disorders.

3853 Languages of Mexican Americans
(3-0) 3 hours of credit. Prerequisite: LNG 3813.
A linguistic description of English and Spanish as spoken by bilingual Mexican Americans. Study of topics such as code-switching, linguistic domains, and registers.

3863 Introduction to Transformational Analysis
(3-0) 3 hours credit. Prerequisite: LNG 3813 or consent of instructor.
Introduction to the machinery of transformational grammar through syntactic analysis. The development of Chomsky's theory of language and his formulation of transformational generative principles are also examined. Some consideration given to generative semantics.

4213 The Contribution of Linguistics to Literary Studies
(3-0) 3 hours credit. Prerequisites: Completion of required foreign language courses for a major in French, German, or Spanish.
Background and application of linguistics to literature. Definitions, terminology, etc., of linguistics are compared and contrasted. The functions of phonology, semantics, stylistics and semiotics. Readings from: Saussure, Hjelmslev, Chomsky, Jakobson, Greimas, Beneviste, Eco. and others.
COURSE DESCRIPTIONS
RUSSIAN
(RUS)

1013 Elementary Russian I
(2-2) 3 hours credit.
Fundamentals of Russian, aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1023 Elementary Russian II
(2-2) 3 hours credit. Prerequisite: RUS 1013 or the equivalent.
Fundamentals of Russian, aimed at offering the opportunity for developing abilities in speaking, understanding, reading, and writing.

1101 Intensive Skill Development I
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with RUS 1013. Credit not applicable to General Education Requirements.

1201 Intensive Skill Development II
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with RUS 1023. Credit not applicable to General Education Requirements.

2013 Intermediate Russian I
(2-2) 3 hours credit. Prerequisite: RUS 1023 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Russian. Review of Russian grammar and exposure to Russian culture.

2023 Intermediate Russian II
(2-2) 3 hours credit. Prerequisite: RUS 2013 or the equivalent.
Continued practice in developing abilities in understanding, speaking, reading, and writing Russian. Review of Russian grammar and exposure to Russian culture.

2101 Intensive Skill Development III
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with RUS 2013. Credit not applicable to General Education Requirements.

2201 Intensive Skill Development IV
(0-3) 1 hour credit. Prerequisite: Consent of instructor.
Emphasis on perfecting language skills through additional practice and drill. Must be taken concurrently with RUS 2023. Credit not applicable to General Education Requirements.

3333 Russian Literature in English Translation
(3-0) 3 hours credit.
Major works of Russian literature: themes, genres, movements.
DIVISION OF MUSIC

The Division of Music is authorized to award a Bachelor of Music and a Bachelor of Music Education Degree. Students may select one of three emphases in the Bachelor of Music program: music performance, music theory-composition, or music marketing. Students may select one of four emphases in the Bachelor of Music Education program: secondary choral, all-level choral, secondary instrumental, or all-level instrumental.

Diagnostic examinations in music theory and music history are given to music majors entering UTSA for the first time. These examinations are given at the beginning of each semester and are used as an aid in counseling.

Auditions are required of all music majors for placement into ensembles.

A student may be awarded Honors in Music in special recognition of outstanding achievement in his or her area of specialization. To qualify for the award, the student must (1) have an overall university GPA of at least 3.0 and a GPA of at least 3.5 in music courses; and (2) successfully complete MUS 4983, Honors Seminar, including a lecture or lecture-recital appearance in which Seminar research is presented.

BACHELOR OF MUSIC DEGREE

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 128, in all except the music marketing emphasis, where it is 135.

All candidates for the Bachelor of Music degree, regardless of emphasis, must complete the following 32 semester hours of required music courses:

- MUS 1102 Aural Skills I
- MUS 1112 Basic Skills of Music I
- MUS 1122 Aural Skills II
- MUS 1132 Basic Skills of Music II
- MUS 1251 Basic Repertoire
- MUS 2102 Aural Skills III
- MUS 2112 Aural Skills IV
- MUS 2152 Basic Skills of Music III
- MUS 2162 Basic Skills of Music IV
- MUS 2253 Introduction to Music Literature
- MUS 2403 Conducting I
- MUS 3113 Analysis
- MUS 3213 Music in Western Civilization I
- MUS 3223 Music in Western Civilization II

Special degree requirements. All students pursuing the Bachelor of Music degree are required (a) to make one recital appearance during the last semester of required study on their principal instrument; (b) to perform in an assigned university ensemble a minimum of eight semesters; (c) to meet music performance proficiency standards established for principal instruments (students not meeting those standards must repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence as a full-time student. Performance majors are required to make a minimum of one recital appearance each semester on their principal instrument.

In addition, a candidate for the Bachelor of Music degree must complete the course requirements for the emphasis declared by the candidate.
MUSIC PERFORMANCE EMPHASIS

A. 28 semester hours of music performance are required from the following courses some of which may be repeated for credit to fulfill the 28-hour requirement. Students must satisfy either the Keyboard Principal Instrument requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument:

Principal Instrument:
MUS 1542 Music Performance-Private Instruction I (2 semesters)
MUS 2542 Music Performance-Private Instruction II (2 semesters)
MUS 3544 Music Performance-Private Instruction IV (2 semesters)
MUS 4544 Music Performance-Private Instruction V (2 semesters)

Secondary Instrument(s):
MUS 1552 Functional Piano for Keyboard Principals
Two semester hours from the following:
MUS 1511 Music Performance-Secondary Instrument
MUS 1531 Class Voice
MUS 1542 Music Performance-Private Instruction I

Non-Keyboard Principal Instrument:

Principal Instrument:
MUS 1542 Music Performance-Private Instruction I (2 semesters)
MUS 2542 Music Performance-Private Instruction II (2 semesters)
MUS 3544 Music Performance-Private Instruction IV (2 semesters)
MUS 4544 Music Performance-Private Instruction V (2 semesters)

Secondary Instrument(s):
MUS 1532 Functional Piano for Non-Keyboard Principals
Two semester hours from the following:
MUS 1511 Music Performance-Secondary Instrument
MUS 1522 Class Piano
MUS 1531 Class Voice
MUS 1542 Music Performance-Private Instruction I

B. 6 semester hours of music theory are required and may be fulfilled by selecting from the following courses:
MUS 3013 Choral Arranging
MUS 3143 Orchestration
MUS 4113 Counterpoint

(Exception: a student whose principal instrument is an orchestral instrument is required to take MUS 3143 Orchestration.)

C. 3 semester hours of music literature are required as follows:
MUS 3253 Advanced Studies in Music Literature and Analysis
History of Song required of voice principals.
History and Literature of the Guitar required of classical guitar principals.
Literature of the Pianoforte required of piano principals.
Organ Literature required of organ principals.
Orchestral Literature or Wind Literature required of instrumental principals.

D. Piano principals are required to complete 4 semester hours of accompanying.
MUS 2501 Accompanying may be repeated for credit to fulfill this requirement.

E. All music performance majors are required to complete 2 semester hours of MUS 4532 Music Pedagogy.
F. Voice principals are required to complete 6 semester hours of diction. MUS 3503 Diction for Singers and Conductors may be repeated for credit to fulfill this requirement.

G. All music performance majors are required to complete MUS 4561 Senior Recital.

H. Free electives are required depending upon principal instrument: 10 semester hours for piano principals, 8 semester hours for voice principals, 14 semester hours for other music performance principals.

I. A qualifying recital of approximately 30 minutes in length must be presented and approved by the appropriate Qualifying Recital Committee before the student can be approved as a major in music performance at the upper-division level. A senior recital of approximately one hour in length must be presented and approved by the appropriate Recital Committee.

MUSIC THEORY-COMPOSITION EMPHASIS

A. 16 semester hours of music performance courses are required from the following courses some of which may be repeated for credit to fulfill the 16-hour requirement. Students must satisfy either the Keyboard Principal Instrument requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument:

Principal Instrument:
- MUS 1542 Music Performance-Private Instruction I (2 semesters)
- MUS 2542 Music Performance-Private Instruction II (2 semesters)
- MUS 3532 Music Performance-Private Instruction III (2 semesters)

Secondary Instrument(s):
- MUS 1552 Functional Piano for Keyboard Principals

Two semester hours from the following:
- MUS 1511 Music Performance-Secondary Instrument
- MUS 1531 Class Voice
- MUS 1542 Music Performance-Private Instruction I

Non-Keyboard Principal Instrument:

Principal Instrument:
- MUS 1542 Music Performance-Private Instruction I (2 semesters)
- MUS 2542 Music Performance-Private Instruction II (2 semesters)
- MUS 3532 Music Performance-Private Instruction III (2 semesters)

Secondary Instrument(s):
- MUS 1532 Functional Piano for Non-Keyboard Principals

Two semester hours from the following:
- MUS 1511 Music Performance-Secondary Instrument
- MUS 1522 Class Piano
- MUS 1531 Class Voice
- MUS 1542 Music Performance-Private Instruction I

B. 16 additional semester hours of music theory and composition are required. This requirement may be fulfilled by the following:

- MUS 2142 Composition I
- MUS 3143 Orchestration
- MUS 3162 Composition II
- MUS 3313 Microcomputer Programming Applications in Music
- MUS 4113 Counterpoint
- MUS 4142 Composition III (may be repeated for credit)
Bachelor of Music Degree / 147
Music Marketing Emphasis

C. 6 semester hours of MUS 3253 Advanced Studies in Music Literature and
Analysis are required in the following topics: Music Since 1950 and Advanced
Analytical Techniques.

D. MUS 4561 Senior Recital is required of all students in the theory-composition
emphasis.

E. 3 semester hours of MUS 3123 Introduction to Electronic Music.

F. 12 semester hours of electives.

G. Students electing the theory-composition emphasis must interview with the
Theory-Composition Committee for approval to pursue the theory-composition
emphasis at the upper-division level.

H. The student's Senior Recital (MUS 4561) shall include a selection of the stu-
dent's compositions totaling a minimum of 20 minutes. The student will submit
completed scores representing a majority of the proposed recital program to
an examining committee the semester prior to that of the recital.
The examining committee shall determine the acceptability of the recital pro-
gram.

MUSIC MARKETING EMPHASIS

A. 16 semester hours of music performance courses are required from the fol-
lowing courses some of which may be repeated for credit to fulfill the 16-hour
requirement. Students must satisfy either the Keyboard Principal Instrument
requirements or the Non-Keyboard Principal Instrument requirements.

Keyboard Principal Instrument:
Principal Instrument:
MUS 1542 Music Performance-Private Instruction I (2 semesters)
MUS 2542 Music Performance-Private Instruction II (2 semesters)
MUS 3532 Music Performance-Private Instruction III (2 semesters)
Secondary Instrument(s):
MUS 1552 Functional Piano for Keyboard Principals
Two semester hours from the following:
MUS 1511 Music Performance-Secondary Instrument
MUS 1531 Class Voice
MUS 1542 Music Performance-Private Instruction I

Non-Keyboard Principal Instrument:
Principal Instrument:
MUS 1542 Music Performance-Private Instruction I (2 semesters)
MUS 2542 Music Performance-Private Instruction II (2 semesters)
MUS 3532 Music Performance-Private Instruction III (2 semesters)
Secondary Instrument(s):
MUS 1532 Functional Piano for Non-Keyboard Principals
Two semester hours from the following:
MUS 1511 Music Performance-Secondary Instrument
MUS 1522 Class Piano
MUS 1531 Class Voice
MUS 1542 Music Performance-Private Instruction I

B. 3 additional semester hours of music education are required. This require-
ment may be fulfilled by the following:
MUS 3413 Introduction to Music Education
MUS 3401 Brass Techniques: Elementary School
BACHELOR OF MUSIC EDUCATION DEGREE

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 129.*

All candidates for the Bachelor of Music Education Degree, regardless of emphasis, must complete the following 32 semester hours of required music courses:

MUS 1102 Aural Skills I
MUS 1112 Basic Skills of Music I
MUS 1122 Aural Skills II
MUS 1132 Basic Skills of Music II
MUS 1251 Basic Repertoire
MUS 2102 Aural Skills III
MUS 2112 Aural Skills IV

---

*Thirty-nine of the total semester hours required for the degree must be at the upper-division level. 30 semester hours of music courses must be at the upper-division level.

Students entering the Bachelor of Music Program after the beginning of the Fall 1985 semester may be required to satisfy additional certification requirements. Students are advised to consult the Undergraduate Certification Programs in Education brochure.

Music Education students who qualify and elect to pursue Track 2 of the General Education Requirement will be required to complete an additional 3 semester credit hours of math or science.
Bachelor of Music Education Degree / 149
Secondary Choral Emphasis

MUS 2152 Basic Skills of Music III
MUS 2162 Basic Skills of Music IV
MUS 2253 Introduction to Music Literature
MUS 2403 Conducting I
MUS 3113 Analysis
MUS 3213 Music in Western Civilization I
MUS 3223 Music in Western Civilization II

In addition, all candidates for the Bachelor of Music Education degree, regardless of emphasis, must complete the following 12 hours of private instruction in a principal instrument:

MUS 1542 Music Performance-Private Instruction I (2 semesters)
MUS 2542 Music Performance-Private Instruction II (2 semesters)
MUS 3532 Music Performance-Private Instruction III (2 semesters)

Special degree requirements. All students pursuing the Bachelor of Music Education degree are required (a) to make one recital appearance during the last semester of required study on their principal instrument; (b) to perform in an assigned university ensemble a minimum of eight semesters; (c) to meet music performance proficiency standards established for principal instruments (students not meeting those standards must repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence as a full-time student; (e) to interview with the Music Education Committee for approval as a music education major at the upper-division level.

SECONDARY CHORAL EMPHASIS
(Grades 6-12)

A. 19 semester hours in music.
   1. 15 semester hours of music education courses:
      MUS 2413 Conducting II: Secondary Schools
      MUS 3253 Advanced Studies in Music Literature and Analysis (Choral Literature topic)
      MUS 3413 Introduction to Music Education
      MUS 3463 General Music in the Junior High School
      MUS 3503 Diction for Singers and Conductors
   2. 4 semester hours of additional music performance study:
      MUS 1532 Functional Piano for Non-Keyboard Principals
      or
      MUS 1552 Functional Piano for Keyboard Principals
      MUS 4532 Music Pedagogy (Vocal Pedagogy topic)

B. 21 semester hours in professional education courses (including 6 hours of student teaching):
   EDU 2001 Introduction to the School Environment
   EDU 3003 Educational Sociology
   EDP 3013 Growth, Development and Learning Theories
   EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
   EDU 4056 Student Teaching: Secondary
   EDU 4072 Individualized Clinical Experiences
   EDU 4093 Teaching in the Secondary Schools

C. 3 semester hours of COM 1043 Introduction to Communication are required.
ALL-LEVEL CHORAL EMPHASIS
(Grades K-12)

A. 19 semester hours in music.
   1. 15 semester hours of music education courses:
      MUS 2413 Conducting II: Secondary Schools
      MUS 3253 Advanced Studies in Music Literature and Analysis (Choral Literature topic)
      MUS 3413 Introduction to Music Education
      MUS 3463 General Music in the Junior High School
      MUS 4423 The Eclectic Curriculum in the Elementary School
   2. 4 semester hours of additional music performance study:
      MUS 1532 Functional Piano for Non-Keyboard Principals
      or
      MUS 1552 Functional Piano for Keyboard Principals
      MUS 4532 Music Pedagogy (Vocal Pedagogy topic)

B. 21 semester hours in professional education courses (including 6 hours of student teaching):
   EDU 2001 Introduction to the School Environment
   EDU 3003 Educational Sociology
   EDP 3013 Growth, Development and Learning Theories
   EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
   EDU 4043 Student Teaching: Elementary
   EDU 4053 Student Teaching: Secondary
   EDU 4072 Individualized Clinical Experiences
   EDU 4093 Teaching in the Secondary Schools

C. 3 semester hours of COM 1043 Introduction to Communication are required.

SECONDARY INSTRUMENTAL EMPHASIS
(Grades 6-12)

A. 19 semester hours in music.
   1. 15 semester hours of music education courses:
      MUS 2413 Conducting II: Secondary Schools
      MUS 3253 Advanced Studies in Music Literature and Analysis (Wind Literature topic)
      MUS 3401 Brass Techniques: Elementary School
      MUS 3413 Introduction to Music Education
      MUS 3451 Woodwind Techniques: Elementary School
      MUS 3471 String Techniques: Elementary School
      MUS 3481 Percussion Techniques: Elementary School
      MUS 4452 Marching Band Techniques
   2. 4 semester hours of additional music performance study:
      MUS 1532 Functional Piano for Non-Keyboard Principals
      or
      MUS 1552 Functional Piano for Keyboard Principals
      MUS 1511 Music Performance-Secondary Instrument (two semester hours required from two of the following instrumental families: woodwind, brass, percussion, strings)

B. 21 semester hours in professional education courses (including 6 hours of student teaching):
EDU 2001 Introduction to the School Environment
EDU 3003 Educational Sociology
EDP 3013 Growth, Development and Learning Theories
EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
EDU 4056 Student Teaching: Secondary
EDU 4072 Individualized Clinical Experiences
EDU 4093 Teaching in the Secondary Schools

C. 3 semester hours of COM 1043 Introduction to Communication are required.

**ALL-LEVEL INSTRUMENTAL EMPHASIS**
(Grades K-12)

A. 19 semester hours in music.
   1. 15 semester hours of music education courses:
      MUS 2413 Conducting II: Secondary Schools
      MUS 3253 Advanced Studies in Music Literature and Analysis (Wind Literature topic)
      MUS 3401 Brass Techniques: Elementary School
      MUS 3413 Introduction to Music Education
      MUS 3451 Woodwind Techniques: Elementary School
      MUS 3471 String Techniques: Elementary School
      MUS 3481 Percussion Techniques: Elementary School
      MUS 3463 General Music in the Junior High School
      or
      MUS 4452 Marching Band Techniques
   2. 4 semester hours of additional music performance study:
      MUS 1532 Functional Piano for Non-Keyboard Principals
      or
      MUS 1552 Functional Piano for Keyboard Principals
      MUS 1511 Music Performance-Secondary Instrument (two semester hours required from two of the following instrumental families: woodwind, brass, percussion, strings)

B. 21 semester hours in professional education courses (including 6 hours of student teaching):
   EDU 2001 Introduction to the School Environment
   EDU 3003 Educational Sociology
   EDP 3013 Growth, Development and Learning Theories
   EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
   EDU 4043 Student Teaching: Elementary
   EDU 4053 Student Teaching: Secondary
   EDU 4072 Individualized Clinical Experiences
   EDU 4093 Teaching in the Secondary Schools

C. 3 semester hours of COM 1043 Introduction to Communication are required.

**COURSE DESCRIPTIONS**

**MUSIC (MUS)**

1102 Aural Skills I
(2-1) 2 hours credit.
Offers the opportunity for training in sight singing, aural skills, and keyboard application.
Should be taken concurrently with MUS 1112.
1112 Basic Skills of Music I
(2-0) 2 hours credit.
A survey of fundamentals and concepts of music. Emphasis on rudiments and melody with an introduction to harmony. Materials from a variety of style periods are studied. Should be taken concurrently with MUS 1102.

1122 Aural Skills II
(2-1) 2 hours credit. Prerequisite: MUS 1102 or the equivalent.
Offers the opportunity to continue training in sight singing, aural skills, and keyboard with emphasis on harmonic skills and twentieth century materials. Should be taken concurrently with MUS 1132.

1132 Basic Skills of Music II
(2-0) 2 hours credit. Prerequisite: MUS 1112 or the equivalent.
Offers the opportunity for development of harmonic analytical and writing skills. Analytical techniques applied to music from a variety of style periods.

1251 Basic Repertoire
(1-0) 1 hour credit. A listening-discussion course covering principal works from the current concert repertoire. As far as possible, works studied will coordinate with programs of the San Antonio Symphony and other major civic series.

1511 Music Performance-Secondary Instrument
1 hour credit.
Private instruction for students desiring or required to study as secondary instrument the following: baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, harpsichord, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

1522 Class Piano
(2-1) 2 hours credit.
For students with little or no piano background. Basic musical and technical skills of hand position, tone production, memorization, sight-reading, and musical style are introduced through the study of technical exercises and solo literature.

1531 Class Voice
(1-0) 1 hour credit. Prerequisite: Placement examination.
For students with no previous vocal training. Offers the opportunity for development of fundamentals of voice technique through in-class performances of suitable songs. May be repeated for credit.

1532 Functional Piano for Non-Keyboard Principals
(2-0) 2 hours credit. Prerequisite: 2 semesters of MUS 1511 or audition.
For non-keyboard majors to have the opportunity to develop score-reading, transposition, and multiple-part reading.

1542 Music Performance-Private Instruction I
2 hours credit. Prerequisite: Placement by examination.
Private instruction for students desiring or required to study the following instruments: baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

1552 Functional Piano for Keyboard Principals
(2-0) 2 hours credit.
Offers the opportunity for development of keyboard skills, harmonization, transposition, and improvisation of accompaniments to melodies, sight-reading, score-reading, and multiple-part reading.

2001 Concert Music
(1-0) 1 hour credit. Enrollment limited to students enrolled in music degree program. Required attendance at a selected number of approved music concerts and recitals as determined by the Division of Music. May be repeated for credit.

2102 Aural Skills III
(2-1) 2 hours credit. Prerequisite: MUS 1122 or the equivalent.
Sight singing, aural skills, and keyboard techniques applied to literature and theory drawn from MUS 2152. Should be taken concurrently with MUS 2152.
2112 Aural Skills IV
(2-1) 2 hours credit. Prerequisites: MUS 2102 and MUS 2152 or the equivalents.
Application of skills to materials drawn from MUS 2162. Should be taken concurrently
with MUS 2162.

2132 Improvisation
(2-0) 2 hours credit. Prerequisite: MUS 1132 or consent of instructor.
Offers the opportunity for development of creative skills applied to melodic, rhythmic and
harmonic elaboration techniques adapted to the student's instrument. Stylistic elements
according to the section offered: Jazz Improvisation, Improvisation in Traditional Styles.

2142 Composition I
2 hours credit. Prerequisites: MUS 1102, 1112, and consent of instructor.
Fundamentals of composition through small forms.

2152 Basic Skills of Music III
(2-0) 2 hours credit. Prerequisite: MUS 1132 or equivalent.
A survey of the chromatic materials of music with emphasis on writing and analytical
skills. Includes an introduction to Schenkerian concepts of structural analysis. Should be
taken concurrently with MUS 2102.

2162 Basic Skills of Music IV
(2-0) 2 hours credit. Prerequisite: MUS 2152 or equivalent.
The continued study of chromatic materials of music and of Schenkerian concepts of
analysis. Includes a survey of form as well as an introduction to analytical techniques for
early twentieth-century music. Should be taken concurrently with MUS 2112.

2253 Introduction to Music Literature
(2-0) 3 hours credit. Prerequisite: MUS 1132 or permission of instructor.
A study of music literature and the concepts associated with the principal performance
genres. Includes biography, style analysis, and social and aesthetic backgrounds.

2403 Conducting I: Elementary Schools
(3-1) 3 hours credit. Prerequisite: MUS 1132 or the equivalent.
Fundamentals of beat patterns, score mechanics and score-reading, regular and irregular
meters, gesture design, left hand cueing, and rehearsal techniques.

2413 Conducting II: Secondary Schools
(3-1) 3 hours credit. Prerequisite: MUS 2403 or the equivalent.
Offers the opportunity for continued training in conducting emphasizing score-reading,
rehearsal techniques, expressive conducting, score interpretation, and repertoire.

2501 Accompanying
(0-2) 1 hour credit.
The study of the skills and aesthetic principles needed to accompany vocal and instru­
mental music. Practical experience may be accomplished through accompanying activi­
ties. May be repeated for credit.

2542 Music Performance Private Instruction II
2 hours credit. Prerequisite: MUS 1542 or placement by examination.
Private instruction for students desiring or required to study the following instruments:
baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, horn, oboe, organ,
percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice.
May be repeated for credit.

2603 Beginning Guitar
(3-0) 3 hours credit.
An introductory course primarily for the non-music major. Offers the opportunity to study
tuning, hand positions, chords, accompaniment patterns, strumming, finger-picking, bar
technique, and introductory music reading.

2613 Intermediate Guitar
(3-0) 3 hours credit. Prerequisite: MUS 2603 or equivalent.
Primarily for the non-music major, the course includes the opportunity for development of
accompaniment style, scales, music reading, melody playing and solo guitar techniques.
2623 **Music Reading and Notation for the Non-Music Major**  
(3-0) 3 hours credit.  
Basic elements of reading pitch, rhythm and meter in traditional music notation. Application of these principles to writing melodic lines and harmonizations.

2653 **Jazz and Rock Music**  
(3-0) 3 hours credit.  
A survey of the evolution of style, contributions of important performers, and techniques involved in creating these American art forms.

3013 **Choral Arranging**  
(3-0) 3 hours credit. Prerequisites: MUS 2162 and 2253 or the equivalents.  
Practical studies in arranging for choral ensembles with emphasis on successful writing for secondary school choirs.

3113 **Analysis**  
(3-0) 3 hours credit. Prerequisites: MUS 2112, MUS 2162 and MUS 2253 or the equivalents.  
Analytical techniques applied to all parameters in selected works from a variety of style periods. Structural analysis of musical forms.

3123 **Introduction to Electronic Music**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
A conceptual and practical introduction to synthesizers, tape recorders, mixers, and outboard devices such as equalizers and reverberation chambers. Includes a survey of electronic music history and literature.

3143 **Orchestration**  
(3-0) 3 hours credit. Prerequisites: MUS 2112, 2162, 2253.  
Applied instrumentation, emphasizing idiomatic scoring for various orchestral and wind combinations with an approach to writing for full orchestra and symphonic band.

3162 **Composition II**  
2 hours credit. Prerequisites: MUS 2112, 2142, 2162, 2253 and consent of instructor.  
Private study in applied composition with emphasis on expansion of musical materials to larger forms.

3213 **Music in Western Civilization I**  
(3-0) 3 hours credit. Prerequisites: MUS 2162 and MUS 2253 or the equivalents.  
A study of musical styles and literature in the Medieval, Renaissance, and Baroque periods.

3223 **Music in Western Civilization II**  
(3-0) 3 hours credit. Prerequisites: MUS 2162 and MUS 2253 or the equivalents.  
A study of musical styles and literature in the Classic, Romantic and Contemporary periods.

3253 **Advanced Studies in Music Literature and Analysis**  
(3-0) 3 hours credit. Prerequisite: Upper-division standing and consent of instructor.  
Topics include: Chamber Music; Wind Literature (Secondary Schools); History of Song; Orchestral Literature; History and Literature of the Guitar; Choral Literature (Secondary Schools); Literature of the Pianoforte; Organ Literature; The Operatic Tradition; Advanced Analytical Techniques; Music Since 1950; and The Instrumental Concerto. Two or more topics may be taken concurrently. May be repeated for credit when topics vary.

3313 **Microcomputer Programming Applications in Music**  
(3-0) 3 hours credit. Prerequisite: CS 1133 or permission of instructor.  

3401 **Brass Techniques: Elementary School**  
(1-1) 1 hour credit. Prerequisite: MUS 1132 or the equivalent.  
A study of the playing and teaching techniques, selection of materials, and maintenance care for brass instruments. Designed for the public school instrumental teacher.

3413 **Introduction to Music Education**  
(3-1) 3 hours credit. Prerequisites: MUS 2162 and MUS 2253 or the equivalents and upper-division standing in music.
A general orientation to the music education profession. Philosophy of music education, methods of music instruction, and materials for music learning in the elementary and secondary schools.

3451 Woodwind Techniques: Elementary School  
(1-1) 1 hour credit. Prerequisite: MUS 1132 or the equivalent.  
A study of the playing and teaching techniques, selection of materials, and maintenance care for woodwind instruments. Designed for the public school instrumental teacher.

3463 General Music in the Junior High School  
(3-0) 3 hours credit. Prerequisite: Upper-division standing in music.  
The objectives, contents and methods in the teaching of general music in the middle or junior high school. Special attention is given to problems related to the changing voice.

3471 String Techniques: Elementary School  
(1-1) 1 hour credit. Prerequisite: MUS 1132 or the equivalent.  
A study of the playing and teaching techniques, selection of materials, and maintenance care for string instruments. Designed for the public school instrumental teacher.

3481 Percussion Techniques: Elementary School  
(1-1) 1 hour credit. Prerequisite: MUS 1132 or the equivalent.  
A study of the playing and teaching techniques, selection of materials, and maintenance care for percussion instruments. Designed for the public school instrumental teacher.

3503 Diction for Singers and Conductors  
(3-0) 3 hours credit.  
A study of English and foreign language pronunciation as applied to public performance. Topics include: English and French; Italian and German. May be repeated for credit when topics vary.

3532 Music Performance-Private Instruction III  
2 hours credit. Prerequisite: MUS 2542 or placement by examination.  
Private instruction for students desiring or required to study the following instruments: baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

3544 Music Performance-Private Instruction IV  
4 hours credit. Prerequisite: Upper-division standing and consent of instructor. Limited to students accepted to upper-division standing in the performance emphasis of the Bachelor of Music Degree program. Private instruction at an advanced level in baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

3613 Music in Contemporary Life  
(3-0) 3 hours credit.  
Designed to offer the opportunity to increase the non-music major’s awareness of the varied functions of music in our society. Film and television music; environmental music; the recording industry; the publishing industry; music in the schools; ceremonial music; and concert life.

3623 Music of the Americas  
(3-0) 3 hours credit.  
Study of the indigenous and borrowed traditions in the music of the Americas from the Colonial period to the present.

3643 Masterpieces of Music  
(3-0) 3 hours credit.  
A study of individual works selected from and representative of the musical traditions of the Western world. Background information on social setting and function, historical importance, aesthetics, and composers’ biographies.

3653 Music for the Classroom Teacher  
(3-1) 3 hours credit.  
Development of the classroom music program in the elementary school, including techniques and materials.
3701 Madrigal Singers
(0-3) 1 hour credit. Prerequisite: Consent of instructor by audition.
An ensemble specializing in the performance of outstanding chamber choral music from
the Middle Ages to the present. Previous musical experience and reading ability required.
The ensemble performs on and off campus. May be repeated for credit.

3712 Concert Choir
(0-5) 2 hours credit. Prerequisite: Consent of instructor by audition.
A select ensemble open to all students by audition. The group performs a variety of reperto­
aire from all historical periods. May be repeated for credit.

3721 UTSA Chorus
(0-2) 1 hour credit.
This choral ensemble is open to all students without audition. No previous choral ex­
perience is necessary. Many types of music are studied, and the repertoire is moderate in
difficulty. May be repeated for credit.

3742 UTSA Wind Ensemble
(0-5) 2 hours credit. Prerequisite: Consent of instructor.
The wind ensemble studies, rehearses and performs the repertoire for various combina­
tions of wind instruments. May be repeated for credit.

3751 Symphonic Band
(0-3) 1 hour credit. Open to all students by audition.
Ensemble performs traditional repertoire for the full symphonic band. May be repeated for
credit.

3761 Orchestra
(0-3) 1 hour credit. Open to all students by audition.
The UTSA orchestra studies, rehearses and performs literature from the basic orchestral
repertoire. May be repeated for credit.

3771 Jazz Ensemble
(0-3) 1 hour credit. Open to all students by audition.
An ensemble specializing in the performance of the various streams of jazz and other
music appropriate to stage bands and jazz ensembles. May be repeated for credit.

3781 UTSA Roadrunner Band
(0-3) 1 hour credit. Open to all students by audition.
An instrumental ensemble performing contemporary popular literature at UTSA athletic
events and other university-related functions. May be repeated for credit.

4113 Counterpoint
(3-0) 3 hours credit. Prerequisites: MUS 2112, 2162, 2253.
Contrapuntal techniques of the 16th, 18th, and 20th centuries developed through writing
and analysis.

4142 Composition III
2 hours credit. Prerequisites: MUS 3113, 3162, or consent of instructor.
Writing in the larger forms for small and large ensembles and electronic media. May be
repeated for credit.

4423 The Eclectic Curriculum in the Elementary School
(3-1) 3 hours credit. Prerequisite: MUS 3653 or MUS 3413 or consent of instructor.
Examination of current and historical methodologies such as Kodaly, Orff, and CMP.
Classroom instruments will be studied.

4452 Marching Band Techniques
(2-0) 2 hours credit. Prerequisites: MUS 2162 and MUS 2253.
Techniques for the development of a marching band are presented for prospective band
directors.

4532 Music Pedagogy
(2-0) 2 hours credit. Prerequisite: Upper-division standing in music.
Survey of techniques, practices and materials of teaching the orchestral and solo in­
struments. Review of materials for beginning, intermediate, and advanced students.
Topics include Strings, Brass, Woodwinds, Percussion, Guitar, Piano, Organ, and Voice.
May be repeated for credit when topics vary.
4544 Music Performance-Private Instruction V
4 hours credit. Prerequisites: MUS 3544 or equivalent and consent of instructor. Limited to students accepted to upper-division standing in the performance emphasis of the Bachelor of Music degree program.
Private instruction at an advanced level in baritone, bassoon, clarinet, contrabass, cornet, flute, classical guitar, horn, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, voice. May be repeated for credit.

4561 Senior Recital
1 hour credit. Prerequisite: Consent of instructor.
A public performance presented as a culmination of the student’s private instruction.

4581 Chamber Music
(0-3) 1 hour credit. Prerequisite: Upper-division standing in music.
Designed to offer students the opportunity to gain knowledge of chamber music literature and to perform this repertoire. Instruction in brass ensemble, woodwind ensemble, percussion ensemble, string ensemble, mixed ensemble. May be repeated for credit.

4803 Seminar in Music Marketing
(3-0) 3 hours credit. Prerequisite: MUS 3613 or consent of instructor.
An intensive study of music markets, channels of distribution, strategies and musical product management.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4951-3 Special Studies in Music
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

4983 Honors Seminar
3 hours credit. Prerequisites: Overall university GPA of 3.0 and GPA of 3.5 in music courses, and consent of instructor.
An undergraduate seminar limited to music majors in one of their last two semesters who qualify to graduate with Division honors in Music. Intensive study of a topic within each student’s area of concentration. Students present research in the form of a lecture or lecture-recital.
COLLEGE OF SCIENCES AND MATHEMATICS

COLLEGE HONORS

The College of Sciences and Mathematics designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for admission to the College Honors Program is based on: 1) the student’s academic performance, and 2) recommendation by the faculty of the student’s major discipline. To be eligible for the program, students must have a minimum grade-point average of 3.00 overall at UTSA and a minimum grade-point average of 3.00 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the College Honors Committee and the discipline faculty. Students admitted to the Honors program are expected to enroll in the appropriate Honors Research course during the final two semesters in residence. The completed research paper must be approved by the supervising faculty sponsor and another college faculty member. Students interested in this program should contact their faculty advisors for additional information.

DIVISION OF EARTH AND PHYSICAL SCIENCES

The degree programs offered by this Division reflect its policy of offering the opportunity for a comprehensive education of the highest quality, individualized to the needs and interests of the student. Completion of a core curriculum allows the student to apply for entry into one of several highly specialized areas in Chemistry, Geology, or Physics. A student who has majored in any of these degree programs is eligible to apply for positions in industry and government as well as apply for entry into professional and graduate schools.

BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

The Bachelor of Science Degree in Chemistry provides opportunities for preparation for careers in industry, government agencies, environmental studies, preprofessional programs, medical technology, and for graduate study in chemistry or other related fields.

The minimum number of semester hours required for this degree, including the 42 semester hours of General Education Requirements, is 130. All candidates for the degree must complete:

A. 44 semester hours of required courses in Chemistry,

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 1103</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>CHE 2003</td>
<td>Chemical Principles</td>
</tr>
<tr>
<td>CHE 2012</td>
<td>Inorganic Qualitative and Quantitative Analysis</td>
</tr>
<tr>
<td>CHE 2203</td>
<td>Organic Chemistry I</td>
</tr>
<tr>
<td>CHE 2242</td>
<td>Organic Chemistry I Laboratory</td>
</tr>
<tr>
<td>CHE 3003</td>
<td>Organic Chemistry II</td>
</tr>
<tr>
<td>CHE 3022</td>
<td>Organic Chemistry II Laboratory</td>
</tr>
<tr>
<td>CHE 3103</td>
<td>Analytical Chemistry</td>
</tr>
<tr>
<td>CHE 3203</td>
<td>Physical Chemistry I</td>
</tr>
<tr>
<td>CHE 3212</td>
<td>Physical Chemistry Laboratory</td>
</tr>
</tbody>
</table>
CHE 3223 Physical Chemistry II
CHE 3232 Instrumental Analysis
CHE 4243 Organic Chemistry III
CHE 4253 Physical Chemistry III
CHE 4263 Inorganic Chemistry
CHE 4923 Special Project in Chemistry or CHE 4913 Independent Study
CHE 4971 Proseminar

B. 9 additional semester hours of approved elective Chemistry at the upper-division level are required.

C. 26 semester hours of support work in Science and Mathematics.
   1. Required courses are:
      MAT 1214 Calculus I
      MAT 1223 Calculus II
      MAT 2213 Calculus III or CS 1723 Data Structures I
      PHY 1904 Technical Physics I
      PHY 1911 Technical Physics I Laboratory
      PHY 1924 Technical Physics II
      PHY 1931 Technical Physics II Laboratory
   2. 6 additional hours of elective work are required in courses in the College of Sciences and Mathematics, as approved by the Advisor.

D. Three (3) semester hours minimum in computer science.
   CS 1073 Introductory Computer Programming for Scientific Applications or
   CS 1713 Introduction to Computer Science and
   CS 1711 Introduction to Computer Science Laboratory

E. 6 semester hours of electives.

COURSE DESCRIPTIONS

CHEMISTRY

(CHE)

1003 General Chemistry for Allied Health Sciences
   (3-0) 3 hours credit. Prerequisite: Concurrent enrollment in CHE 1111.
   Introduction to atomic structure, chemical bonding, stoichiometry, states of matter, inorganic chemical reactions, acids and bases. For majors in occupational therapy, prenursing, and dental hygiene. May not be applied to a major in chemistry, biology, or medical technology.

1103 Introductory Chemistry
   (3-0) 3 hours credit. Concurrent enrollment in CHE 1122 and MAT 1013 is recommended.
   An introduction to descriptive inorganic chemistry and atomic-molecular structure. Including such fundamental concepts as the periodic system of elements, valency, chemical bonding, reactions and reaction mechanisms, stoichiometry, equilibria, acids and bases, thermochemistry, molecular-kinetic theory, and states of matter.

1111 General Chemistry Laboratory for Allied Health Sciences
   (0-4) 1 hour credit. Prerequisite: Concurrent enrollment: CHE 1003.
   Introduction to chemical laboratory techniques. For majors in occupational therapy, prenursing, and dental hygiene. May not be applied to a major in chemistry, biology, or medical technology.

1122 Introductory Chemistry Laboratory Workshop
   (1-4) 2 hours credit. Prerequisite or concurrent enrollment: CHE 1103.
   An introduction to chemical problem solving and the basic operations of the chemical laboratory; and a survey of inorganic chemical reactions. This course consists of problem sessions, lecture-demonstrations, and/or laboratory experience.
2003 **Chemical Principles**  
(3-0) 3 hours credit. Prerequisite: CHE 1103. Primarily for science majors.  
Elementary inorganic and physical chemistry: descriptive inorganic chemistry, coordination chemistry, solutions and electrolytes, redox processes, elementary thermodynamics, chemical kinetics, and elementary electrochemistry.

2012 **Inorganic Qualitative and Quantitative Analysis**  
(1-5) 2 hours credit. Prerequisite or concurrent enrollment: CHE 2003.  
Techniques of qualitative and quantitative chemical analysis, illustrated primarily via inorganic chemical systems and their reactions.

2103 **Elementary Organic and Biochemistry**  
(3-0) 3 hours credit. Prerequisites: CHE 1003 and 1111. May not be applied to a major in chemistry.  
A survey of the structures and reactions of some important functional groups of organic chemistry. The relationship of these functional groups to the chemistry of lipids, carbohydrates, nucleic acids and proteins.

2111 **Organic and Biochemistry Laboratory**  
(0-4) 1 hour credit. Prerequisite or concurrent enrollment: CHE 2103. May not be applied to a major in chemistry.  
Laboratory examination of the properties of some simple organic and biological chemicals; solubility, crystallization, organic reactions, titration, enzyme action, sugars and vitamins.

2123 **Fundamentals of Organic Chemistry**  
(3-0) 3 hours credit. Prerequisites: CHE 2003 and 2012. Concurrent enrollment in CHE 2131 is required. May not be applied to a major in chemistry.  
A one semester course designed to provide elementary study of the structure of organic compounds and the reactions of organic functional groups.

2131 **Fundamentals of Organic Chemistry Laboratory**  
(0-5) 1 hour credit. Prerequisite: CHE 2123. May not be applied to a major in chemistry.  
Laboratory study of the physical properties, various methods of separations and syntheses of selected organic compounds.

2203 **Organic Chemistry I**  
(3-0) 3 hours credit. Prerequisites: CHE 2003 and 2012. Primarily for chemistry, pre-med and science majors.  
An elementary study of structure, stereochemistry, reactions, and reaction mechanisms associated with organic compounds.

2242 **Organic Chemistry I Laboratory**  
(1-5) 2 hours credit. Prerequisite or concurrent enrollment: CHE 2203.  
Qualitative analysis and determination of the physical constants of organic compounds. Separation, identification and elementary synthesis of organic compounds. Laboratory techniques (crystallization, distillation, chromatographic) and spectroscopic techniques (IR, NMR, MS) are emphasized.

3003 **Organic Chemistry II**  
(3-0) 3 hours credit. Prerequisite: CHE 2203; Prerequisite or concurrent enrollment: CHE 2242.  
Continuing study of fundamentals of structure, reactions and reaction mechanisms of phosphorus and sulphur; poly-functional organic compounds. A continuation of CHE 2203.

3022 **Organic Chemistry II Laboratory**  
(1-5) 2 hours credit. Prerequisite: CHE 2242. Prerequisite or concurrent enrollment: CHE 3003 or consent of instructor.  
Quantitative and continuing qualitative study of organic reactions and molecular structure through functional group interactions and spectroscopic techniques. Simple and multi-step syntheses of organic compounds.

3103 **Analytical Chemistry**  
(2-5) 3 hours credit. Prerequisites: CHE 2003 and 2012.  
A detailed study of wet chemical and basic instrumental analysis including gravimetric, volumetric, and spectrophotometric determinations.
3203 Physical Chemistry I
(3-0) 3 hours credit. Prerequisites: CHE 2003, 2012, MAT 1223, PHY 1924, and 1931; at least one semester of organic chemistry is also recommended.
States of matter, gas laws, equations of state, inter-molecular interactions; thermodynamics and physical equilibria, elements of molecular-kinetic theory and statistical mechanics; physico-chemical properties of solutions, chemical equilibria, phase equilibria, and changes of state.

3212 Physical Chemistry Laboratory
(0-6) 2 hours credit. Prerequisite: Concurrent enrollment: CHE 3203.
Experimental study of thermodynamics and electrochemistry, spectroscopy, and reaction kinetics.

3223 Physical Chemistry II
(3-0) 3 hours credit. Prerequisite: CHE 3203.
Chemical kinetics, electrolytes and electrochemistry, elements of quantum mechanics, chemical bonds, spectroscopy, and photo-chemistry. A continuation of CHE 3203.

3232 Instrumental Analysis
(0-6) 2 hours credit. Prerequisites or concurrent enrollment: CHE 3022, 3212, and 3223.
Electrochemical methods; use of modern spectrometric and chromatographic instrumentation in separation, purification, and/or quantitative characterization of chemical systems.

3301 Physical Chemistry Problem Solving I
(1-0) 1 hour credit. Concurrent enrollment: CHE 3203. May not be applied to a major in chemistry.
Development of problem solving skills in physical chemistry.

3311 Physical Chemistry Problem Solving II
(1-0) 1 hour credit. Concurrent enrollment: CHE 3223. May not be applied to a major in chemistry.
A continuation of CHE 3301.

3603 Polymer Science
(3-0) 3 hours credit. Prerequisite: CHE 2203.
Basic principles of polymer science; kinetics and mechanisms of polymerization and copolymerizations; methods of polymerization; molecular weight determinations and characterization of polymers; solution properties, polymer reactions, cross-linking, graft and block copolymerizations; and polymer degradation and stabilization.

3612 Polymer Science Laboratory
(0-6) 2 hours credit. Prerequisite or concurrent enrollment: CHE 3603.
Laboratory projects illustrating and extending the concepts discussed in CHE 3603.

4223 Advanced Biochemistry
(3-0) 3 hours credit. Prerequisites: BIO 3513, 3522 and CHE 3003, 3022.
Chemical aspects of regulation and control mechanisms; membrane-related phenomena; oxidative phosphorylation and photosynthesis; transport mechanisms; and contractility of muscle.

4231 Advanced Biochemistry Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: CHE 4223.
Applications of UV-visible and NMR spectroscopy, electrophoresis, gas chromatography, mass spectrometry and other physical techniques to biochemistry.

4243 Organic Chemistry III
(3-0) 3 hours credit. Prerequisites: CHE 3003 and 3022; CHE 3203 or consent of instructor.

4253 Physical Chemistry III
(3-0) 3 hours credit. Prerequisites: CHE 3003, 3223 and 3232; or consent of instructor.
Relations between structure of molecules and physico-chemical properties of gases, liquids and solids — quantum mechanical and statistico-thermodynamical approach.
4263 **Inorganic Chemistry**  
(3-0) 3 hours credit. Prerequisite: CHE 3203.  
A study of the elements and their periodic properties; acid-base theory, crystalline state, coordination chemistry, non-aqueous solvents and other advanced topics.

4272 **Advanced Organic Laboratory**  
(0-6) 2 hours credit. Prerequisites: CHE 3223, 3232, and concurrent enrollment in CHE 4243 or consent of the instructor.  
Functional group analysis of organic compounds, structure analysis and proof, multistep synthesis involving functional group modifications, and separation and identification of complex organic mixtures.

4293 **Nuclear Chemistry and Physics**  
(3-0) 3 hours credit. Prerequisites: CHE 3203 and 3223.  
A study of nuclear reactions, radiation detection and measurement, and chemical applications.

4301 **Nuclear Chemistry and Physics Laboratory**  
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: CHE 4293 and consent of instructor.  
A laboratory study of nuclear reactions, radiation detection and measurement, and chemical applications.

4373 **Spectral Studies**  
(3-0) 3 hours credit. Prerequisite: CHE 3022.  
Identification of functional groups and the determination of the structure of compounds by spectral techniques including IR, NMR, mass spectroscopy and UV-Vis absorption spectroscopy; basic theory of spectral measurements with emphasis on practical applications.

4403 **Chemistry of Heterocyclic Compounds**  
(3-0) 3 hours credit. Prerequisite: CHE 3003 or consent of instructor.  
The chemistry of nitrogen, oxygen, and sulfur heterocycles. Five-membered and six-membered ring systems with one and more than one heteroatom. Applications in the field of synthetic drugs.

4603 **Synthesis and Biosynthesis of Natural Products**  
(3-0) 3 hours credit. Prerequisites: CHE 4373, 4243, and/or BIO 3513 are recommended.  
Comparison of chemical and biochemical formations and transformations for several classes of naturally occurring compounds such as steroids, terpenoids, alkaloids, and other natural products of chemical or biological importance.

4911-3 **Independent Study**  
1-3 hours credit. Prerequisite: Permission in writing (form available).  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4923 **Special Project in Chemistry**  
3 hours credit. Prerequisite: Consent of Division Director.  
A special laboratory research or library readings project under the direction of a faculty member, resulting in a report, limited to students in their final year of undergraduate study.

4931-3 **Internship in Applied Chemical Operations**  
1-3 hours credit. Prerequisites: CHE 3232, 3252, and consent of Division Director.  
Practical introduction to industrial and/or similar applied chemistry operations, via supervised extracollegiate internship, resulting in a report. This course is taught on a credit/no credit basis only. Students completing this course will receive a grade of CR or NC.

4951-3 **Special Studies in Chemistry**  
1-3 hours credit. Prerequisite: Upper division standing and consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies Courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.
Bachelor of Science Degree in Geology / 163

4971 Proseminar
(0-3) 1 hour credit. Prerequisites: CHE 3003 and CHE 3203.
Oral reports and current publications in chemistry and chemical technology and the utilization of important chemical reference materials and periodicals. May be repeated for credit when topics vary, with consent of the Division Director.

4993 Honors Research
3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during the last two semesters; approval by the College Honors Committee.
Supervised research and preparation of an honors thesis. May be repeated only once with approval.

BACHELOR OF SCIENCE DEGREE IN GEOLOGY

The Bachelor of Science Degree in Geology provides opportunities for preparation for careers in petroleum, mining, water resources, environmental studies, governmental agencies, engineering geology, geochemistry, geophysics, and natural resources.

The minimum number of semester hours required for this degree, including the 42 semester hours of General Education Requirements, is 136.

All candidates for the degree must complete:

1. Division of Earth and Physical Science Requirements
   58 semester hours in Geology minimum, 38 of which must be at the upper-division level.
   1. Specific Requirements: 45 Semester hours
      GEO 1003 Introduction to Geology
      GEO 1011 Introduction to Geology Laboratory
      GEO 1023 Earth History
      GEO 1031 Earth History Laboratory
      GEO 2003 Mineralogy
      GEO 2011 Mineralogy Laboratory
      GEO 2023 Optical Mineralogy
      GEO 2031 Optical Mineralogy Laboratory
      GEO 2063 Paleontology
      GEO 2071 Paleontology Laboratory
      GEO 3043 Petrology
      GEO 3052 Petrology Laboratory
      GEO 3083 Stratigraphy
      GEO 3103 Structural Geology
      GEO 3111 Structural Geology Laboratory
      GEO 3123 Sedimentary Geology
      GEO 3131 Sedimentary Geology Laboratory
      GEO 3943 Field Methods in Geology
      GEO 4946 Field Geology

   2. Additional Requirements: any 13 semester hours (maximum of 3 hours from GEO 4911-3, 4923, or 4951-3).
      GEO 3143 Economic Geology
      GEO 3151 Economic Geology Laboratory
      GEO 3163 Oceanography
      GEO 3182 Geology of Energy Resources
      GEO 3191 Geology of Energy Resources Laboratory
      GEO 3373 Geochemistry
      GEO 3383 General Geophysics
      GEO 4023 Engineering Geology
Bachelor of Science Degree in Geology

GEO 4063 Principles of Environmental Geology
GEO 4113 Geomorphology
GEO 4121 Geomorphology Laboratory
GEO 4383 Exploration Geophysics
GEO 4391 Exploration Geophysics Laboratory
GEO 4401 Seismic Data Processing Laboratory
GEO 4413 Seismic Data Processing
GEO 4623 Groundwater Hydrology
GEO 4911-3 Independent Study
GEO 4951-3 Special Studies in Geology
GEO 4993 Honors Research

II. Requirements within the College of Sciences and Mathematics (excluding Geology): 33 semester hours.

1. Specific Requirements: 18 semester hours minimum

   CHE 1103 Introductory Chemistry
   CHE 2003 Chemical Principles
   CHE 2012 Inorganic Qualitative and Quantitative Analysis
   CS 1073 Introductory Computer Programming for Scientific Applications, or
   CS 1713 Introduction to Computer Science and
   CS 1711 Introduction to Computer Science Laboratory
   MAT 1223 Calculus II
   PHY 1924 Technical Physics II, or PHY 1623 General Physics II
   PHY 1931 Technical Physics II Laboratory, or PHY 1631 General Physics II Laboratory

2. Additional Requirements: any 15 semester hours minimum with consent of advisor

   CHE 2203 Organic Chemistry I
   CHE 2242 Organic Chemistry I Laboratory
   CHE 3003 Organic Chemistry II
   CHE 3022 Organic Chemistry II Laboratory
   CHE 3203 Physical Chemistry I
   CHE 3212 Physical Chemistry Laboratory
   CHE 3223 Physical Chemistry II
   CHE 3301 Physical Chemistry Problem Solving I
   CHE 3311 Physical Chemistry Problem Solving II
   CHE 4263 Inorganic Chemistry
   PHY 2103 Techniques of Solving Problems in Science
   PHY 2403 Electronics
   PHY 2412 Electronics Laboratory
   PHY 3103 Modern Physics I
   PHY 3113 Modern Physics II
   PHY 3203 Classical Mechanics
   PHY 3283 Thermal Physics
   PHY 3423 Electricity and Magnetism I
   MAT 2213 Calculus III
   MAT 2233 Linear Algebra
   MAT 3243 Calculus for Applications
   MAT 3613 Differential Equations I
   MAT 3623 Differential Equations II
   STA 1053 Basic Statistics
   STA 3513 Probability and Statistics
   EGR 2203 Statics
III. Additional Requirements: 3 semester hours

ENG 2413 Technical Writing

COURSE DESCRIPTIONS

GEOLOGY
(GEO)

1003 Introduction to Geology
(3-0) 3 hours credit. Concurrent enrollment in GEO 1011 recommended.
The Earth as a dynamic planet; relation of Earth's present day processes to its materials,
structure and internal constitution. Nature of minerals and rocks, the hydrosphere, tec­
tonics, and surface features of Earth.

1011 Introduction to Geology Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: GEO 1003.
Relation of Earth's present day processes to its materials, structure and internal constitu­
tion. Field trips and laboratory study of minerals, rocks, maps and air and satellite photos.

1023 Earth History
(3-0) 3 hours credit. Concurrent enrollment in GEO 1031 recommended.
Formation and evolution of the Earth, its life forms, and the major features of its surface.

1031 Earth History Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: GEO 1023.
Laboratory study of fossils and rock sequences; interpretation of Earth history.

2003 Mineralogy
(3-0) 3 hours credit. Prerequisites: GEO 1003 and 1011, CHE 1103. Concurrent enroll­
ment: GEO 2011.
Crystallography, chemistry, physical properties and origin of minerals.

2011 Mineralogy Laboratory
(0-2) 1 hour credit. Prerequisite: Concurrent enrollment: GEO 2003.
Laboratory study of crystal models, crystals and minerals.

2023 Optical Mineralogy
(3-0) 3 hours credit. Prerequisites: GEO 2003 and 2011. Concurrent enrollment: GEO 2031.
Principles and methods of optical crystallography and optical properties of minerals.

2031 Optical Mineralogy Laboratory
Use of the petrographic microscope for the identification of minerals in immersion liquids
and in thin sections.

2063 Paleontology
(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, 1023 and 1031. Concurrent enroll­
ment: GEO 2071.
Study of fossil animals and plants. Emphasis on invertebrate animals. Systematics, bio­
stratigraphy, paleoecology, and evolution of fossil organisms. Field trips required.

2071 Paleontology Laboratory
(0-3) 1 hour credit. Prerequisites: GEO 1003, 1011, 1023 and 1031. Concurrent enroll­
ment: GEO 2063.
Study of fossil specimens, collections and preparation techniques.
3023 **Engineering Geology**  
(3-0) 3 hours credit. Prerequisites: PHY 1904 and 1911 and consent of instructor.  
Geologic factors in the construction of large structures and excavations. Physical properties of natural minerals. Case studies.

3043 **Petrology**  
(3-0) 3 hours credit. Prerequisites: GEO 2023 and 2031. Concurrent enrollment: GEO 3052.  
Description, classification, occurrence, and origin of igneous, metamorphic, and sedimentary rocks. Field trips required.

3052 **Petrology Laboratory**  
(0-4) 2 hours credit. Prerequisites: GEO 2023 and 2031. Concurrent enrollment: GEO 3043.  
Laboratory study of rocks in hand specimen and thin section.

3083 **Stratigraphy**  
(3-0) 3 hours credit. Prerequisites: GEO 2063 and 2071.  
Application of geologic principles to the interpretation of rocks formed at or near the surface of the earth. Field trips required.

3103 **Structural Geology**  
(3-0) 3 hours credit. Prerequisites: GEO 3043 and 3052. Concurrent enrollment: GEO 3111.  
Response of earth materials to natural stresses. Description and origin of geologic structures.

3111 **Structural Geology Laboratory**  
(0-2) 1 hour credit. Concurrent enrollment: GEO 3103.  
Laboratory study of geologic structures using maps, cross-sections, air photos, and descriptive geometric and stereographic methods.

3123 **Sedimentary Geology**  
(3-0) 3 hours credit. Prerequisites: GEO 3043, 3052, and 3083. Concurrent enrollment: GEO 3111.  
Processes of erosion, transportation and deposition that transform the surface of the continents and form bodies of sedimentary rock and their primary structures. Depositional systems and modeling are a significant area of study. Field trips required.

3131 **Sedimentary Geology Laboratory**  
(0-3) 1 hour credit. Prerequisites: GEO 3043 and 3052. Concurrent enrollment: GEO 3123.  
Field trips and laboratory studies of sedimentary processes and their products. Hand specimens, sedimentary structures and interpretation of depositional environments are studied.

3143 **Economic Geology**  
(3-0) 3 hours credit. Prerequisites: GEO 2003 and 2011. Concurrent enrollment in GEO 3151.  
Ore and industrial mineral genesis. Description and distribution of the major mineral deposits.

3151 **Economic Geology Laboratory**  
(0-2) 1 hour credit. Prerequisites: GEO 2003 and 2011. Concurrent enrollment in GEO 3143.  
Laboratory study of ore and industrial minerals. Study of rock and mineral suites from important ore localities.

3163 **Oceanography**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
General oceanography, with emphasis on marine geology and especially the continental margins.

3182 **Geology of Energy Resources**  
(2-0) 2 hours credit. Prerequisites: GEO 3103, 3111, 3123, and 3131. Concurrent enrollment: GEO 3191.  
Geology of petroleum, natural gas, coal, uranium; geothermal energy sources.
3191 Geology of Energy Resources Laboratory
(0-3) 1 hour credit. Prerequisites: GEO 3103, 3111, 3123, and 3131. Concurrent enrollment: GEO 3182.
Laboratory studies of samples, maps and logs. Preparation of sample logs and subsurface maps.

3373 Geochemistry
(3-0) 3 hours credit. Prerequisite: CHE 2003 or consent of instructor.
A survey of geochemical processes and the distribution of elements in the earth. Application of chemical methods and data to the solution of geologic problems.

3383 General Geophysics
(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, PHY 1924 and consent of instructor.
Physics of the earth's interior, plate tectonics, geomagnetism, gravity and heat flow.

3943 Field Methods in Geology
(0-9) 3 hours credit. Prerequisite or concurrent enrollment in GEO 3123, 3131, 3103, 3111, and consent of instructor.
Use of surveying methods and topographic and air photo bases for geologic mapping. Description, recording, and interpretation of field relationships. Field trips required.

3951-3 Special Interests Topics
1-3 hours credit. Prerequisite: Consent of the instructor.
Special interest geology courses including topics such as geology of Texas, volcanoes and their activity, crystals and gems, geology of Mexico and Central America, and geological investigation of the moon and planets. May be repeated for credit when the topics vary to a maximum of six hours.

4063 Principles of Environmental Geology
(3-0) 3 hours credit. Prerequisites: GEO 1003 and 1011.
Geologic factors important to city and regional planning. Land capability studies; geologic hazards.

4113 Geomorphology
(3-0) 3 hours credit. Prerequisites: GEO 3083, 3103, and 3111 or concurrent enrollment; and concurrent enrollment: GEO 4121.
Interpretation of landforms using geologic techniques. Field trips required.

4121 Geomorphology Laboratory
(0-3) 1 hour credit. Prerequisites: GEO 3083, 3103, and 3111. Concurrent enrollment: GEO 4113.
Interpretation of maps and aerial photographs.

4383 Exploration Geophysics
(3-0) 3 hours credit. Prerequisite: GEO 3383. Concurrent enrollment: GEO 4391.
Principles of geophysical prospecting. Magnetic, gravity and seismic methods.

4391 Exploration Geophysics Laboratory
(0-3) 1 hour credit. Prerequisite: Concurrent enrollment: GEO 4383.
Laboratory and field studies of seismic methods. Seismic instrumentation.

4401 Seismic Data Processing Laboratory
(0-3) 1 hour credit. Prerequisite: Concurrent enrollment: GEO 4413.
Computer processing of seismic data.

4413 Seismic Data Processing
(3-0) 3 hours credit. Prerequisites: GEO 4383 and CS 1073 or CS 1713 and 1711. Concurrent enrollment: GEO 4401.
Introduction to computer methods, filtering, correlating, analysis, and display of seismic records. Wave propagation analysis for stratified media.

4623 Groundwater Hydrology
(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, and PHY 1904.
Hydrologic cycle and the theory of underground water. Recharge and discharge of aquifers; water quality; exploration and development of ground water supplies. Field trips required.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the
BACHELOR OF SCIENCE DEGREE IN PHYSICS

The Bachelor of Science Degree in Physics is offered with two options.

I. Physics Option
   For students planning graduate study toward a professional career in Physics, Astronomy, or other related fields.

   The minimum number of semester hours required for this degree option, including the 42 semester hours of General Education Requirements, is 136.
   All candidates for the degree must complete:

   A. Division of Earth and Physical Sciences Requirements: 52 semester hours required.
      1. 31 semester hours of required courses are:
         
         PHY 1904 Technical Physics I
         PHY 1911 Technical Physics I Laboratory
         PHY 1924 Technical Physics II
         PHY 1931 Technical Physics II Laboratory
         PHY 2103 Techniques of Solving Problems in Science
         PHY 3103 Modern Physics I
         PHY 3203 Classical Mechanics
         PHY 3283 Thermal Physics or CHE 3203 Physical Chemistry I
         PHY 3423 Electricity and Magnetism I
         PHY 3443 Optics
         PHY 4263 Introduction to Quantum Mechanics

      2. Additional Requirements: any 21 semester hours (maximum of 3 hours from PHY 4911-3, 4923, 4951-3) with consent of advisor.
         
         PHY 2403 Electronics
         PHY 2412 Electronics Laboratory
B. Requirements within the College of Sciences and Mathematics (excluding Physics): 39 semester hours required.

1. Specific Requirements: 24 semester hours.
   - MAT 1214 Calculus I
   - MAT 1223 Calculus II
   - MAT 2213 Calculus III
   - MAT 3613 Differential Equations I
   - CHE 1103 Introductory Chemistry
   - CHE 2003 Chemical Principles
   - CHE 2012 Inorganic Qualitative and Quantitative Analysis
   - CS 1073 Introductory Computer Programming for Scientific Applications

2. Additional Requirements: any 15 semester hours minimum with consent of advisor.
   - MAT 2233 Linear Algebra
   - MAT 3213 Foundations of Analysis
   - MAT 3223 Complex Variables
   - MAT 3233 Modern Algebra
   - MAT 3243 Calculus for Applications
   - MAT 3623 Differential Equations II
   - MAT 3633 Numerical Analysis I
   - MAT 3643 Numerical Analysis II
   - CHE 3223 Physical Chemistry II
   - CHE 4253 Physical Chemistry III

C. Additional Requirements: 3 semester hours
   - ENG 2413 Technical Writing

II. Applied Physics Option.

The Applied Physics option stresses basic scientific and engineering principles in order to prepare the student in the design, development, and construction of new high technology equipment. For students planning to enter positions in industry upon graduation.

The minimum number of semester hours required for this degree option, including the 42 semester hours of General Education Requirements, is 136. All candidates for the degree must complete:
A. Division of Earth and Physical Science Requirements: 53 semester hours required.

1. 35 semester hours of required courses are:

   PHY 1904 Technical Physics I
   PHY 1911 Technical Physics I Laboratory
   PHY 1924 Technical Physics II
   PHY 1931 Technical Physics II Laboratory
   PHY 3103 Modern Physics I
   PHY 3203 Classical Mechanics
   PHY 3423 Electricity and Magnetism I
   PHY 3443 Optics
   EGR 3203 Dynamics
   ME 3293 Thermodynamics I
   EE 2113 Introduction to Electronics
   EE 2424 Network Theory I

2. Additional Requirements: any 18 semester hours (maximum of 3 hours from PHY 4911-3, 4923, 4951-3) with consent of advisor.

   PHY 2403 Electronics
   PHY 2412 Electronics Laboratory
   PHY 3113 Modern Physics II
   PHY 3313 Materials Physics
   PHY 3321 Materials Physics Laboratory
   PHY 3433 Introduction to the Theory of Solid State Electronics
   PHY 3452 Optics Laboratory
   PHY 4403 Electricity and Magnetism II
   PHY 4911-3 Independent Study
   PHY 4951-3 Special Studies in Physics
   PHY 4993 Honors Research
   EE 3213 Electromagnetic Engineering
   EE 3313 Electronic Circuits I
   EE 3423 Network Theory II
   EE 4313 Electronic Circuits II
   ME 3663 Fluid Mechanics
   ME 4293 Thermodynamics II

B. Requirements within the College of Sciences and Mathematics (excluding Physics and Engineering): 38 semester hours required.

1. Specific Requirements: 31 semester hours

   MAT 1214 Calculus I
   MAT 1223 Calculus II
   MAT 2213 Calculus III
   MAT 3613 Differential Equations I
   CHE 1103 Introductory Chemistry
   CHE 2003 Chemical Principles
   CS 1713 Introduction to Computer Science
   CS 1711 Introduction to Computer Science Laboratory
   SD 2812 Digital Circuits Design I Laboratory
   SD 2813 Digital Circuits Design I
   SD 3823 Data Acquisition and Distribution

2. Additional Requirements: any 7 semester hours minimum with consent of advisor.

   MAT 2233 Linear Algebra
   MAT 3213 Foundations of Analysis
MAT 3223 Complex Variables
MAT 3233 Modern Algebra
MAT 3243 Calculus for Applications
MAT 3623 Differential Equations II
MAT 3633 Numerical Analysis I
MAT 3643 Numerical Analysis II
CS 1723 Data Structures I
CS 2743 Data Structures II
CS 3233 Discrete Mathematical Structures
CS 4323 Analysis of Algorithms
SD 3812 Digital Circuits Design II Laboratory
SD 3813 Digital Circuits Design II
SD 3843 Small Systems Architecture and Interfacing

C. Additional Requirements: 3 semester hours.
ENG 2413 Technical Writing

COURSE DESCRIPTIONS

PHYSICS

PHY

1013 Introduction to Physical Sciences
(3-0) 3 hours credit. Prerequisites: Freshman standing, first semester transfer student, or consent of instructor.
This course is designed to present primarily a nonmathematical overview of the physical sciences for students who have had little or no previous experience with the physical sciences; course should be of particular interest to elementary education majors. The general principles of physics and specifically atomic theory are utilized to explain commonly observed phenomena. Students majoring in the degrees granted by the College of Sciences and Mathematics may not apply this course toward a degree.

1603 General Physics I
(3-0) 3 hours credit. Prerequisite: Knowledge of high school algebra, trigonometry, and geometry.
Motion, forces, conservation of energy and momentum, fluids, wave motion, and heat. For architectural, life sciences, and other interested students.

1611 General Physics I Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1603.
Laboratory to accompany PHY 1603.

1623 General Physics II
(3-0) 3 hours credit. Prerequisite: PHY 1603. Concurrent enrollment in PHY 1631 recommended.
Continuation of General Physics I. Electromagnetism, light, sound, atomic and nuclear physics.

1631 General Physics II Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1623.
Laboratory to accompany PHY 1623.

1703 Energy and the Environment
(3-0) 3 hours credit.
The topics considered, and some of their inter-relations, are: common sources of energy, nuclear, solar and geothermal energy, other possible sources of energy, energy-related materials; and air, water and noise pollution. Use of mathematics is limited.

1904 Technical Physics I
(4-0) 4 hours credit. Prerequisite: MAT 1214. Concurrent enrollment: PHY 1911 is recommended.
The basic concepts and methods of physics. Mechanics, heat, and fluids.
1911 Technical Physics I Laboratory  
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1904. 
Laboratory to accompany PHY 1904.

1924 Technical Physics II  
(4-0) 4 hours credit. Prerequisite: PHY 1904. Prerequisite or concurrent enrollment: MAT 1223. Concurrent enrollment in PHY 1931 is recommended. 
A continuation of PHY 1904. Electricity and magnetism, wave phenomena and elements of modern physics.

1931 Technical Physics II Laboratory  
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1924. 
Laboratory to accompany PHY 1924.

2103 Techniques of Solving Problems in Science  
(1-4) 3 hours credit. Prerequisites: PHY 1924 and CS 1073 or CS 1713 and 1711. 
Numerical methods and computer applications in solving fundamental problems in science.

2223 Musical Acoustics  
(3-0) 3 hours credit. One year Music Theory desirable. 
Vibrating systems, sound waves, sound phenomena, musical instruments, and basic concepts of audio electronics.

2403 Electronics  
(3-0) 3 hours credit. Prerequisite: PHY 1924. Concurrent enrollment in PHY 2412 is strongly recommended. 
AC circuits. The properties and application of diodes, transistors, digital and analog integrated circuits. Practical applications to electronic circuits are stressed.

2412 Electronics Laboratory  
(0-6) 2 hours credit. Prerequisite or concurrent enrollment: PHY 2403. 
Laboratory to accompany PHY 2403. Construction and testing of electronic circuits and devices. Provides the opportunity to develop electronic skills.

3103 Modern Physics I  
(3-0) 3 hours credit. Prerequisite: PHY 1924. Prerequisite or concurrent enrollment: MAT 2213. 
Special relativity, Planck’s Radiation Law, elements of quantum mechanics, atomic and molecular structures and spectra.

3113 Modern Physics II  
(3-0) 3 hours credit. Prerequisite: PHY 3103. 
The atomic nucleus, nuclear reactions, and an introduction to elementary particles.

3203 Classical Mechanics  
(3-0) 3 hours credit. Prerequisite: PHY 1924. Prerequisite or concurrent enrollment: MAT 2213. 
Kinematics and dynamics of systems of particles, rigid body motion. Applications are emphasized.

3213 Mechanics of Solids  
(3-0) 3 hours credit. Prerequisite: PHY 3313. 
Molecular models of the bulk mechanical properties of crystalline, polymeric and amorphous solids. Polymer theories and thermal effects on mechanical properties.

3241 Mechanics of Solids Laboratory  
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 3213. 
Laboratory study of Mechanics of Solids to accompany PHY 3213.

3283 Thermal Physics  
(3-0) 3 hours credit. Prerequisites: PHY 1924, CHE 2003 and MAT 1223. 

3293 Statistical Mechanics  
(3-0) 3 hours credit. Prerequisites: PHY 1924, CHE 3203 or PHY 3283 and MAT 2213. 
3313 Materials Physics
(3-0) 3 hours credit. Prerequisite: PHY 3103.
Crystalline structures, the electron and phonon conditions to the thermal, electrical and
optical properties of crystalline materials. Superconductivity.

3321 Materials Physics Laboratory
(0-3) 1 hour credit. Prerequisite: PHY 3313.
Determination and methods of evaluating the electrical, thermal, and optical properties of
crystalline materials.

3423 Electricity and Magnetism I
(3-0) 3 hours credit. Prerequisite or concurrent enrollment: MAT 2213.
Vector calculus, Electrostatics, Magnetostatics, Faraday’s Law, and Ohm’s Law.

3433 Introduction to the Theory of Solid State Electronics
(3-0) 3 hours credit. Prerequisites: PHY 2403 and PHY 3313 or consent of instructor.
Principles of intrinsic and extrinsic semiconductors. The theory of solid state devices.

3443 Optics
(3-0) 3 hours credit. Prerequisite: PHY 3423. Concurrent enrollment in PHY 3452 recom-
mended.
The reflection, refraction, absorption, polarization, and diffraction of light. Filters and
lasers.

3452 Optics Laboratory
(0-6) 2 hours credit. Prerequisite or concurrent enrollment: PHY 3443.
Laboratory application of geometric optics. Laser techniques, scattering and diffraction
of light.

3663 Fluid Physics
(3-0) 3 hours credit. Prerequisite: PHY 3203.
Molecular models of the mechanical and thermal properties of fluids. Continuum
mechanics and rheology. Diffusion and transport mechanisms and theory.

3953 Electronics for Scientists
(2-3) 3 hours credit. Prerequisite: one year of college Physics.
Application of various basic electronic instruments, devices, and components widely used
in biology, chemistry, geology, engineering, and physics. Emphasis on the functional use
of these devices.

4203 Advanced Classical Mechanics
(3-0) 3 hours credit. Prerequisite: PHY 3203.
Advanced methods in mechanics, Lagrangian and Hamiltonian formulations.

4223 Acoustics
(3-0) 3 hours credit. Prerequisites: PHY 3203 and MAT 2213. Concurrent enrollment in
PHY 4231 is recommended.
Acoustic waves propagation and the interaction of sound with matter.

4231 Acoustics Laboratory
(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 4223.
Experimental techniques in acoustics. The study of acoustical properties and acoustic
phenomena in materials.

4263 Introduction to Quantum Mechanics
(3-0) 3 hours credit. Prerequisites: PHY 3203, 3253, and 3423, or consent of instructor.
The Schrodinger equation, operators, and perturbation methods. Applications to the har-
monic oscillator and the hydrogen atom.

4303 Advanced Materials Physics
(3-0) 3 hours credit. Prerequisite: PHY 3313.
Diamagnetic, paramagnetic, ferromagnetic and dielectric properties of materials. The ex-
perimental methods by which these phenomena are studied.

4403 Electricity and Magnetism II
(3-0) 3 hours credit. Prerequisite: PHY 3423.
Theory and applications of electromagnetic fields; Maxwell’s equations.
Independent Study

1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.

Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 3 hours will apply to the bachelor's degree.

Special Project

3 hours credit. Prerequisite: Consent of Division Director.

A special studies laboratory research or readings project resulting in a report. Limited to students in their final year of undergraduate study.

Special Studies in Physics

1-3 hours credit. Prerequisite: Consent of instructor.

An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 3 hours will apply to the bachelor's degree.

Honors Research

3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during the last two semesters; approval by the College Honors Committee.

Supervised research and preparation of an honors thesis. May be repeated only once with approval.

COURSE DESCRIPTIONS

ASTRONOMY

(AST)

1013 Introduction to Astronomy I

(3-0) 3 hours credit.

A descriptive course including the development of astronomy, and its methods, the motions, laws and evolution of the solar system. Occasional evening viewing sessions are held.

1023 Introduction to Astronomy II

(3-0) 3 hours credit. Prerequisite: AST 1013 or consent of instructor.

The general properties and types of stars, unusual stellar objects such as quasars and black holes, galaxies, evolution and cosmology. Occasional evening viewing sessions are held.

1031 Introduction to Astronomy Laboratory

(0-2) 1 hour credit. Prerequisite: AST 1013 or consent of instructor.

Exercises in the use of the telescope and certain other astronomical instruments to include simple observations, measurement and photography.

COURSE DESCRIPTIONS

ENVIRONMENTAL - NATURAL RESOURCES

(ENV)

2013 Introduction to Environmental Systems

(3-0) 3 hours credit.

An introduction to the principles and challenge of man-machine-community interrelationships within the natural and built environments. General attention is given to the concepts "growth", "process", and "change" in both ecosystem and social contexts for the insights they lend to an understanding of environmental system dynamics and related public policy formulation.
3023  Man and His Natural Resources  
(3-0) 3 hours credit.  
An in-depth analysis of man's dependency upon the major natural resources of the earth such as water, air, soils, forests, grasslands, minerals, fuels and wildlife, and the environmental problems that arise through societal mismanagement.

4023  Environment, Energy and Society  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
A review of the sources and application of energy in the United States, its communities and its industries including agriculture, transportation and utilities. National, state, and local governmental energy planning.
DIVISION OF ENGINEERING

The Division of Engineering offers a Bachelor of Science Degree in Civil Engineering, a Bachelor of Science Degree in Electrical Engineering, and a Bachelor of Science Degree in Mechanical Engineering. Each of these degree programs is designed to provide students with a strong foundation in science and mathematics coupled with a strong program in engineering analysis, design, synthesis, and evaluation.

Entering lower division students who intend to pursue an engineering degree enroll as Pre-Engineering majors and complete the Pre-Engineering requirements. The Pre-Engineering requirements include those courses listed in IIA below plus ENG 1013, ENG 1023 and ENG 1033 and nine additional hours of approved General Education courses. Students who complete the Pre-Engineering requirements with a GPA of 2.5 and who have an overall GPA of 2.5 may apply to become Civil, Electrical or Mechanical Engineering majors.

DEGREE REQUIREMENTS

I. General Education Requirements

All students in the Division of Engineering must satisfy the 42 semester hour General Education Requirements established by The University of Texas at San Antonio.

II. General Engineering Requirements

All degree candidates in the Division of Engineering must complete the following 53 semester hours.\(^1\)

A. Pre-Engineering Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHE 1103</td>
<td>Introductory Chemistry</td>
</tr>
<tr>
<td>CHE 2003</td>
<td>Chemical Principles</td>
</tr>
<tr>
<td>CS 2073</td>
<td>Programming with Engineering Applicaations</td>
</tr>
<tr>
<td>EGR 1801</td>
<td>Introduction to Engineering</td>
</tr>
<tr>
<td>EGR 1802</td>
<td>Engineering Graphics</td>
</tr>
<tr>
<td>MAT 1214</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MAT 1223</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MAT 2213</td>
<td>Calculus III</td>
</tr>
<tr>
<td>PHY 1904</td>
<td>Technical Physics I</td>
</tr>
<tr>
<td>PHY 1911</td>
<td>Technical Physics I Lab</td>
</tr>
<tr>
<td>PHY 1924</td>
<td>Technical Physics II</td>
</tr>
<tr>
<td>PHY 1931</td>
<td>Technical Physics II Lab</td>
</tr>
</tbody>
</table>

B. Advanced Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 3073</td>
<td>Graphics and Numerical Techniques</td>
</tr>
<tr>
<td>EGR 4713</td>
<td>Engineering Economic Analysis</td>
</tr>
<tr>
<td>ENG 2413</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>MAT 3253</td>
<td>Engineering Analysis I</td>
</tr>
<tr>
<td>MAT 3263</td>
<td>Engineering Analysis II</td>
</tr>
<tr>
<td>STA 3513</td>
<td>Probability and Statistics</td>
</tr>
</tbody>
</table>

3 hours Approved Science Elective

BACHELOR OF SCIENCE DEGREE IN CIVIL ENGINEERING

The minimum number of semester hours required for this degree is 140.

\(^{1}\)CHE 1103, MAT 1214, and PHY 1904 may be used to satisfy the General Education Requirement for nine hours of Sciences and Mathematics.
A. Required Courses (48 hours)

CE 2103 Civil Engineering Measurements
CE 3113 Structural Analysis
CE 3213 Reinforced Concrete Design
CE 3233 Steel Design
CE 3243 Properties and Behavior of Engineering Materials
CE 4113 Transportation Systems
CE 4213 Soil Mechanics
CE 4313 Computer-Aided Design in Civil Engineering
CE 4413 Foundation Engineering
CE 4603 Hydraulic Engineering
CE 4633 Water and Wastewater Treatment
CE 4813 Civil Engineering Design
EGR 2203 Statics
EGR 3203 Dynamics
EGR 3213 Mechanics of Solids
ME 3663 Fluid Mechanics

B. Approved Technical Electives (6 hours)

BACHELOR OF SCIENCE DEGREE IN ELECTRICAL ENGINEERING

The minimum number of semester hours required for this degree is 139.

A. Electrical Engineering Core

The following 39 semester hours are required for a Bachelor of Science degree in Electrical Engineering.

EE 2113 Introduction to Electronics
EE 2424 Network Theory I
EE 3113 Electrical Engineering Lab I
EE 3213 Electromagnetic Engineering
EE 3313 Electronic Circuits I
EE 3423 Network Theory II
EE 4113 Electrical Engineering Lab II
EE 4313 Electronic Circuits II
EE 4413 Introduction to Automatic Control
EE 4813 Electrical Engineering Design
SD 2813 Digital Circuits Design I
SD 2812 Digital Circuits Design I Lab

Engineering Science Elective (3 hours)*

B. Options

Electrical Engineering students may choose either of the following options:

1) General Electrical Engineering Option (15 hours)

EE 3513 Electromechanical Systems
EE 4613 Communications Systems
SD 3823 Data Acquisition

Engineering Science Elective (3 hours)*

Approved Technical Elective (3 hours)

(2) Computer Engineering Option (14 hours)

CS 2733 Computer Organization
SD 3813 Digital Systems Design II

*Choose from EGR 2203, EGR 3203, EGR 3213, ME 3243, ME 3293, or ME 3663.
BACHELOR OF SCIENCE DEGREE IN MECHANICAL ENGINEERING

The minimum number of semester credit hours required for this degree is 140.

A. Required Courses (51 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 2213</td>
<td>Electric Circuits and Electronics</td>
</tr>
<tr>
<td>EE 3502</td>
<td>Electronics and Electromechanical Systems Lab</td>
</tr>
<tr>
<td>EE 3513</td>
<td>Electromechanical Systems</td>
</tr>
<tr>
<td>EGR 2203</td>
<td>Statics</td>
</tr>
<tr>
<td>EGR 3203</td>
<td>Dynamics</td>
</tr>
<tr>
<td>EGR 3213</td>
<td>Mechanics of Solids</td>
</tr>
<tr>
<td>ME 3243</td>
<td>Materials Engineering</td>
</tr>
<tr>
<td>ME 3263</td>
<td>Materials Processing</td>
</tr>
<tr>
<td>ME 3293</td>
<td>Thermodynamics I</td>
</tr>
<tr>
<td>ME 3313</td>
<td>Measurements and Instrumentation</td>
</tr>
<tr>
<td>ME 3663</td>
<td>Fluid Mechanics</td>
</tr>
<tr>
<td>ME 4213</td>
<td>Machine Design</td>
</tr>
<tr>
<td>ME 4293</td>
<td>Thermodynamics II</td>
</tr>
<tr>
<td>ME 4301</td>
<td>Fluid Flow and Thermal Science Lab</td>
</tr>
<tr>
<td>ME 4313</td>
<td>Heat Transfer</td>
</tr>
<tr>
<td>ME 4813</td>
<td>Mechanical Engineering Design</td>
</tr>
<tr>
<td>SD 3823</td>
<td>Data Acquisition</td>
</tr>
<tr>
<td>SD 3833</td>
<td>Real-Time Digital Control</td>
</tr>
</tbody>
</table>

B. Approved Technical Electives (3 hours)

COURSE DESCRIPTIONS

ENGINEERING (EGR)

1101 Introduction to Engineering
(1-0) 1 hour credit.
Engineering as a career. Approaches to engineering problem solving and design through the use of engineering principles.

1203 Introduction to Science and Technology
(3-0) 3 hours credit.
This course examines the current state and future directions of science and technology. Topics for discussion will be drawn from the biological sciences, earth and physical sciences, computer science, and engineering.

1802 Engineering Graphics
(1-3) 2 hours credit.
Freehand and instrument drawing; shape and size description; pictorial methods; freehand lettering; charts and graphs. Credit may not be obtained for both AS 1802 and EGR 1802.

2203 Statics
(3-0) 3 hours credit. Prerequisites: PHY 1904 and MAT 1223.
Vector algebra, force systems, free body diagrams. Engineering applications of equilibrium, centroids, moments of inertia. Credit may not be obtained for both AS 2203 and EGR 2203.

3203 Dynamics
(3-0) 3 hours credit. Prerequisite: PHY 1924. Prerequisite or concurrent enrollment: MAT 2213.
Study of motion of particles and rigid bodies. Kinetics and kinematics: force and acceleration, work and energy, impulse and momentum; vibrations. Engineering applications are emphasized.
### Civil Engineering

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3213</td>
<td>Mechanics of Solids</td>
<td>3</td>
<td>EGR 2203</td>
<td>Internal forces and deformations in solids; stress, strain in elastic and plastic solids; application to engineering problems.</td>
</tr>
<tr>
<td>4713</td>
<td>Engineering Economic Analysis</td>
<td>3</td>
<td>Senior standing in Division of Engineering</td>
<td>Techniques of economic analysis for engineering decisions, economic evaluation, and risk assessment.</td>
</tr>
<tr>
<td>4993</td>
<td>Honors Research</td>
<td>3</td>
<td>Enrollment limited to candidates for College Honors during the last two semesters; approval by the College Honors Committee. Supervised research. May be repeated once with approval only.</td>
<td></td>
</tr>
</tbody>
</table>

### Course Descriptions

**Civil Engineering (CE)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2103</td>
<td>Civil Engineering Measurements</td>
<td>3</td>
<td>CS 2073 and MAT 2213</td>
<td>Computations, error analysis, basic principles of surveying, and introduction to the use of surveying equipment.</td>
</tr>
<tr>
<td>3113</td>
<td>Structural Analysis</td>
<td>3</td>
<td>EGR 3213</td>
<td>Forces and deflections in structural systems considering stationary and moving loads, exact and approximate methods.</td>
</tr>
<tr>
<td>3213</td>
<td>Reinforced Concrete Design</td>
<td>3</td>
<td>Credit or registration for CE 3113</td>
<td>Ultimate strength theory and design for reinforced concrete members.</td>
</tr>
<tr>
<td>3233</td>
<td>Steel Design</td>
<td>3</td>
<td>CE 3113</td>
<td>Analysis and design of tension members, beams, columns and bolted or welded connections.</td>
</tr>
<tr>
<td>3243</td>
<td>Properties and Behavior of Engineering Materials</td>
<td>3</td>
<td>EGR 3213</td>
<td>Structure, properties, and behavior of engineering materials including concrete and metals. Laboratory exercises illustrate mechanical behavior of typical materials and demonstrate selected principles of mechanics.</td>
</tr>
<tr>
<td>3673</td>
<td>Municipal and Rural Sanitation</td>
<td>3</td>
<td>CHE 2003 and upper-division standing</td>
<td>An examination of sanitation practices in rural and urban environments including insect and rodent control, swimming pool sanitation, rural water supply, food sanitation, and disease transmission. Credit cannot be earned for any two of AS 3673, BIC 3233, and CE 3673.</td>
</tr>
<tr>
<td>4113</td>
<td>Transportation Systems</td>
<td>3</td>
<td>STA 3513 and credit or registration for EGR 4713</td>
<td>Planning, design, construction, operation and maintenance of transportation systems; concepts of various modes of transportation.</td>
</tr>
<tr>
<td>4213</td>
<td>Soil Mechanics</td>
<td>3</td>
<td>EGR 3213</td>
<td>Engineering properties of soils, settlement of embankments and foundations of structures, bearing capacity of foundations, and laboratory measurements.</td>
</tr>
<tr>
<td>4313</td>
<td>Computer-Aided Design in Civil Engineering</td>
<td>3</td>
<td>Senior standing in Civil Engineering</td>
<td>Organization and programming of civil engineering problems for computer solutions. Application of commercially available design software.</td>
</tr>
</tbody>
</table>
180 / Civil Engineering
Electrical Engineering

4413 Foundation Engineering
(3-0) 3 hours credit. Prerequisite: CE 4213. Design of foundations and earth retaining structures; study of earth-pressure theories.

4513 Advanced Structural Analysis
(3-0) 3 hours credit. Prerequisite: CE 3113. Energy methods; deflection of structures. Structural analysis of forces and deflections using energy methods and computer methods.

4603 Hydraulic Engineering
(2-3) 3 hours credit. Prerequisite: ME 3663. Flow in open channels and natural streams, sediment movement, hydrology, urban drainage, and water resources.

4513 Advanced Structural Analysis
(3-0) 3 hours credit. Prerequisite: CE 3113. Energy methods; deflection of structures. Structural analysis of forces and deflections using energy methods and computer methods.

4813 Civil Engineering Design
(1-6) 3 hours credit. Prerequisites: CE 3213, CE 3233, CE 4313, CE 4603, and credit or registration for CE 4413. Analysis and design of systems involving civil engineering principles.

4911-3 Independent Study
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4951-3 Special Studies in Civil Engineering
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when topics vary, but not more than 6 hours will apply to a bachelor's degree.

COURSE DESCRIPTIONS
ELECTRICAL ENGINEERING
(EE)

2113 Introduction to Electronics
(3-0) 3 hours credit. Prerequisites: CHE 2003 and credit or registration for EE 2424. Electrical properties of materials, conduction processes with emphasis on semiconductors, diode circuits, transistor models, and elementary amplifiers.

2213 Electric Circuits and Electronics
(3-0) 3 hours credit. Prerequisites: PHY 1924, PHY 1931, and credit or registration for MAT 3253. Electric, magnetic, and electronic circuits; transients, transforms, phasors, solid state devices; analog and digital circuits.

2424 Network Theory I
(3-3) 4 hours credit. Prerequisites: PHY 1924, PHY 1931, and credit or registration for MAT 3253. Basic network principles; steady state response to DC and AC signals; simple transient response; nodal and loop analysis. Credit may not be obtained for both PHY 2424 and EE 2424.
3113 **Electrical Engineering Laboratory I**
(1-4) 3 hours credit. Prerequisites: CS 2073 and credit or registration for EE 3313 and EE 3423.
Basic experimental methods, theory and practice of measurements, limitation of theoretical models, digital computer applications.

3213 **Electromagnetic Engineering**
(3-0) 3 hours credit. Prerequisites: EE 2424 and MAT 3263.
Analysis and design of electromagnetic systems; utilization of conductive, dielectric and magnetic materials in components; engineering applications of Maxwell's equations to electrical and electromagnetic wave systems.

3313 **Electronic Circuits I**
(3-0) 3 hours credit. Prerequisites: EE 2113 and credit or registration for EE 3423.
Electronic devices in analog and digital circuits, power circuits, frequency response, tuned circuits, modulation and detection systems.

3423 **Network Theory II**
(3-0) 3 hours credit. Prerequisites: EE 2424 and MAT 3253, and credit or registration for MAT 3263.
Transient response of networks by Fourier and Laplace transform methods, frequency domain techniques and time domain techniques.

3502 **Electronics and Electromechanical Systems Laboratory**
(0-6) 2 hours credit. Prerequisites: EE 2213 and credit or registration for EE 3513.
Basic experiments in analog and digital circuits, electronic instrumentation, and electromechanical devices.

3513 **Electromechanical Systems**
(3-0) 3 hours credit. Prerequisites: EE 2213, or EE 3213 and EE 3423.
Principles of electromechanical energy conversion; magnetic circuits, polyphase circuits; dynamic analysis of energy-transfer devices.

4113 **Electrical Engineering Lab II**
(1-4) 3 hours credit. Prerequisites: EE 3113 and credit or registration for EE 3213 and EE 4313.
Experimental solution of engineering problems including design, optimization, evaluation, and simulation; measurements in pulsed, UHF, and modulation systems.

4313 **Electronic Circuits II**
(3-0) 3 hours credit. Prerequisites: SD 2813 and EE 3313.
Feedback principles, operational amplifier circuits, oscillators, pulse and switching circuits.

4413 **Introduction to Automatic Control**
(3-0) 3 hours credit. Prerequisite: Credit or registration for EE 4313.
Analysis of linear automatic control systems in frequency and time domains; stability analysis; state variable analysis; root laws; frequency plots; sensitivity, lead and lag compensation.

4613 **Communications Systems**
(3-0) 3 hours credit. Prerequisites: EE 3423 and MAT 3263.
Modulation and detection, theory and circuit implementations, baseband and RF spectra; analog and digital transmission; information theory and coding techniques.

4623 **Digital Filtering and Signal Processing**
(3-0) 3 hours credit. Prerequisites: EE 3423 and MAT 3263 or consent of instructor.
Discrete signals, discrete Fourier transform, z-transform, recursive and non-recursive filters, and power spectrum estimation.

4633 **Optical Communications**
(3-0) 3 hours credit. Prerequisites: EE 2113 or PHY 3113, and MAT 3263.
Fiber and integrated optics, Fourier optics, optical signal processing, and principles of visible and IR sources and detectors.

4813 **Electrical Engineering Design**
(1-6) 3 hours credit. Prerequisites: EE 4113, EE 4313, and credit or registration for EE 4413.
Analysis and design of systems involving electrical engineering principles.
4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4951-3 Special Studies in Electrical Engineering
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when topics vary, but not more than 6 hours will apply to a bachelor's degree.

COURSE DESCRIPTIONS
MECHANICAL ENGINEERING
(ME)

3243 Materials Engineering
(2-3) 3 hours credit. Prerequisites: CHE 1103, MAT 2213, and credit or registration for EGR 3213.
Fundamental aspects of the structure, properties and behavior of engineering materials.

3263 Materials Processing
(2-3) 3 hours credit. Prerequisites: ME 3243 and EGR 3203.
Casting, joining, forming and machining; effects of processing on materials.

3293 Thermodynamics I
(3-0) 3 hours credit. Prerequisites: CHE 2003, PHY 1924, and MAT 2213.
Heat, kinetic theory of gases, laws of thermodynamics and their practical applications to thermodynamic devices including engines.

3313 Measurements and Instrumentation
(2-3) 3 hours credit. Prerequisites: EE 2213, MAT 3253 and STA 3513.
Fundamentals of measurement systems; standards, treatment of data; transducers, signal conditioning; strain, force, acceleration, pressure, temperature, fluid flow.

3503 Alternative Energy Sources
(3-0) 3 hours credit. Prerequisite: ME 3293.

3663 Fluid Mechanics
(3-0) 3 hours credit. Prerequisites: EGR 2203 and MAT 2213.
Fluid properties; fluid statics, concepts and equations of fluid flow; similitude; viscous effects; compressible fluid flow.

4213 Machine Design
(3-0) 3 hours credit. Prerequisites: EGR 3213, MAT 3263, ME 3263, and STA 3513.
The theoretical and practical aspects of the design of machine elements and simple systems; stress analysis and the theory of fatigue.

4293 Thermodynamics II
(3-0) 3 hours credit. Prerequisites: ME 3293, and credit or registration for ME 3663.
Nonreactive and reactive mixtures, vapor and gas power cycles, refrigeration, and compressible flow.

4301 Fluid Flow and Thermal Science Laboratory
(0-3) 1 hour credit. Prerequisites: ME 3313 and credit or registration for ME 4313.
An experimental laboratory concerned with the analysis of the fundamental principles of fluid statics, fluid flow, and heat transfer.
4313 Heat Transfer and Rate Processes
(3-0) 3 hours credit. Prerequisites: MAT 3253, ME 3293 and credit or registration for ME 3663.
Generalized potential distribution and gradients; transient and steady heat conduction; forced and free convection; radiation, energy, and momentum transfers.

4813 Mechanical Engineering Design
(1-6) 3 hours credit. Prerequisites: ME 3313, ME 4213, and ME 4313.
Analysis and design of systems involving mechanical, thermal, hydraulic, and electrical engineering principles.

4911-3 Independent Study
1-3 hours credit. Prerequisite: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4951-3 Special Studies in Mechanical Engineering
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when topics vary, but not more than 6 hours will apply to a bachelor's degree.
DIVISION OF LIFE SCIENCES

The Division offers a Bachelor of Science in Biology, with emphasis in molecular cell biology and neurobiology, as well as joint degree programs with The University of Texas Health Science Center at San Antonio, leading to the Bachelor of Science Degree in Medical Technology, Occupational Therapy, or Physical Therapy. Degrees in these three Allied Health programs are awarded jointly by both institutions. Also available are pre-professional courses which offer the students the opportunity to prepare for admission to medical, dental, nursing, and other professional schools.  

The B.S. Degree in Biology is structured around a comprehensive core curriculum and related offerings in chemistry, physics, and mathematics which lead to more highly specialized areas in the life sciences, such as biochemistry, cellular biology, developmental biology, ecology, neurobiology, genetics, microbiology, molecular biology, and physiology.  

The B.S. Degree in Medical Technology is a joint degree between The University of Texas at San Antonio and The University of Texas Health Science Center. The pre-clinical curriculum includes general education requirements and basic science lecture and laboratory courses. The Joint Degree Program is a four year program of study offered by UTSA and The University of Texas Health Science Center and the degree is awarded jointly by both institutions. Medical technology concepts are introduced throughout the curriculum, ending in a senior year clinical rotation at the Health Science Center. Upon completion of all requirements the student is eligible to take the medical technology national board examinations of the American Society of Clinical Pathologists.  

The Bachelor of Science Degree in Occupational Therapy offers the opportunity for the student to gain a strong background in the life sciences, behavioral sciences, humanities, and special skill areas. Specific application of occupational therapy skills in laboratory and clinical settings occurs in the last two years of a student’s program and includes a minimum of six months approved field work experience. Students who have completed all degree requirements and their field work are eligible to take the national examination for registration with the American Occupational Therapy Association. An additional fieldwork placement course (OCCT 40876) is optional.  

The B.S. Degree in Physical Therapy offers the opportunity for students to emphasize the basic sciences necessary to understand human response during illness and disability, as well as during the rehabilitation process. Clinical observation and field work experiences are integrated into the academic preparation during the professional phase of the program. This program is fully accredited by the American Physical Therapy Association and students are eligible to take the Physical Therapy licensure examination following successful completion of this joint degree program.

BACHELOR OF SCIENCE DEGREE IN BIOLOGY

The minimum number of semester hours required for the Bachelor of Science Degree in Biology, including the 42 hours of General Education Requirements, is 126.2 All candidates for the degree must complete:

A. 48 semester hours in the major, 28 of which must be at the upper-division level.

1. 30 semester hours in the Biology Core Curriculum are required:

---

2 Specific premedical, preental, and prenursing programs are not offered at UT San Antonio. Admission requirements for these professional schools are outlined in the Appendix of this catalog. Additional information can be obtained from the Office of the Division of Life Sciences and through the Chairman of the Health Related Professions Advisory Committee of The University of Texas at San Antonio.

2 Thirty-nine of the total semester hours required for the degree must be at the upper-division level.
BIO 1103, 1112 Principles of Biology and Laboratory  
BIO 2313, 2322 Genetics and Laboratory  
BIO 3413, 3422 General Physiology and Laboratory  
BIO 3513, 3522 Biochemistry and Laboratory  

and two of the following with laboratories:  
BIO 3143, 3152 Developmental Biology  
BIO 3283, 3292 Principles of Ecology  
BIO 3713, 3722 Microbiology  
BIO 3813, 3822 Cellular Biology  
BIO 4433, 4442 Neurobiology

2. 18 additional semester hours of Biology electives are required, 12 of which must be at the upper-division level.

B. 24 semester hours minimum of support work.  
1. 13 semester hours are required in Chemistry:  
CHE 1103 Introductory Chemistry  
CHE 2003 Chemical Principles  
CHE 2012 Inorganic Qualitative and Quantitative Analysis  
CHE 2203 Organic Chemistry I  
CHE 2242 Organic Chemistry I Laboratory  

2. 3 semester hours minimum in addition to the 3 semester hours required under the General Education Requirements are required in Mathematics:  
MAT 1214 Calculus I  

or  
STA 1993 Statistical Methods for the Life and Social Sciences

3. 8 semester hours are required in Physics:  
PHY 1603, 1611 General Physics I and Laboratory  
PHY 1623, 1631 General Physics II and Laboratory

C. 12 semester hours of electives, 7 of which must be at the upper-division level.

UTSA/UTHSC JOINT BACHELOR OF SCIENCE DEGREE IN MEDICAL TECHNOLOGY

Certain specific physical skills and abilities are required to successfully participate in the Medical Technology Program. Students may wish to inquire regarding these physical requirements before seeking admission to the program or registering for specific courses in the program.

In the Joint Degree Program, medical technology courses are offered throughout the course of study, culminating in a concentrated clinical hospital experience at the Health Science Center. Participation in medical technology courses does not guarantee acceptance into the Medical Technology Program. The student must complete a separate application form which may be obtained from the Registrar's Office at The University of Texas Health Science Center at San Antonio. This application should be submitted at the completion of the student's sophomore year by May 15. Admission to the Joint Degree Program and successful continuation in the program provide the student with a clinical position at the Health Science Center for continuation of medical technology training.
Upon successful completion of this joint degree program the student is eligible to take the national examination for registration with the Board of Registry of the American Society of Clinical Pathologists. All students are encouraged to be counseled by either the Medical Technology Program Director or a member of the Medical Technology faculty to ensure enrollment in appropriate course work. The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 142.

All candidates for the degree must complete:

A. 79 semester hours in the major.

1. 22 semester hours are required in the biological sciences:
   - BIO 1103, 1112 Principles of Biology and Laboratory
   - BIO 2313 Genetics
   - BIO 3513, 3522 Biochemistry and Laboratory
   - BIO 3713, 3722 Microbiology and Laboratory
   - BIO 4743, 4751 Immunology and Laboratory

2. 11 semester hours are required in Allied Health Sciences:
   - AHS 1883 Introduction to Medical Technology
   - AHS 3463 Human Physiology
   - AHS 4783, 4792 Pathogenic Microorganisms and Laboratory

3. *46 semester hours are required in Medical Technology:
   a. These courses are taken prior to the hospital clinical rotation:
      - *MEDT 20351, 20252 Hematology and Laboratory
      - *MEDT 20301, 20202 Parasitology and Urinalysis and Laboratory
      - *MEDT 30361, 30262 Immunohematology and Serology and Laboratory
      - *MEDT 30381, 30282 Clinical Chemistry and Laboratory
   b. These courses are the hospital clinical rotation:
      - *MEDT 40333 Advanced Clinical Microbiology
      - *MEDT 40383 Advanced Clinical Chemistry
      - *MEDT 40353 Advanced Clinical Hematology
      - *MEDT 40365 Advanced Clinical Immunohematology and Serology
      - *MEDT 40671 Clinical Field Work Experience I
      - *MEDT 40672 Clinical Field Work Experience II
      - *MEDT 40192 Education Techniques for the Medical Technologist
      - *MEDT 40193 Management Techniques for Medical Technologists

B. 21 semester hours of support work.

1. 10 semester hours are required in Chemistry:
   - CHE 2003 Chemical Principles
   - CHE 2012 Inorganic Qualitative and Quantitative Analysis
   - CHE 2203 Organic Chemistry I
   - CHE 2242 Organic Chemistry I Laboratory

2. 8 semester hours are required in Physics:
   - PHY 1603, 1611 General Physics I and Laboratory
   - PHY 1623, 1631 General Physics II and Laboratory

*Courses to be taken at The University of Texas Health Science Center at San Antonio.*
UTSA/UTHSC Joint Bachelor of Science Degree in Occupational Therapy

3. 3 semester hours (in addition to the 3 semester hours required under the General Education Requirements) are required in Mathematics.

STA 1053 Basic Statistics

UTSA/UTHSC JOINT BACHELOR OF SCIENCE DEGREE IN OCCUPATIONAL THERAPY

Certain specific physical skills and abilities are required to successfully participate in the Occupational Therapy Program. Students may wish to inquire regarding these physical requirements before seeking admission to the program or registering for specific courses in the program.

All students must be accepted for admission to The University of Texas at San Antonio prior to application for the professional phase of the Occupational Therapy Program. This admission, however, does not assure admission into the Occupational Therapy Program.

All students are encouraged to be counseled by either the Occupational Therapy Program Director or a member of the Occupational Therapy faculty to ensure enrollment in appropriate course work. Appointments may be scheduled by calling (512) 691-7555.

Each student must make application for admission to the professional phase of the Occupational Therapy Program by February 1st of the year they wish to be admitted. The application process can be initiated by writing to: Admissions Committee, Occupational Therapy Program, The University of Texas Health Science Center at San Antonio, San Antonio, Texas, 78284. Students who apply must be at least in the first semester of their Sophomore year. It is the responsibility of the applicant to submit official transcripts to the UTSA Office of Admissions prior to February 1st. It is also the applicant's responsibility to have three letters of reference submitted to the Occupational Therapy Admissions Committee with their application form.

Each student is expected to complete all General Education Requirements for graduation from UTSA, as well as program prerequisites for Occupational Therapy by June of the year of admission to the professional phase of the Occupational Therapy Program. The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 135.

All candidates for the degree must complete:

A. 86 semester hours in the major, 80 of which must be at the upper-division level.
   1. 4 semester hours are required in the biological sciences:
      BIO 2123, 2131 Comparative Anatomy of Vertebrates and Laboratory
      or
      AHS 2083, 2091 Human Biology: Anatomy and Laboratory
   2. 2 semester hours are required in Allied Health Sciences:
      **AHS 1871 Allied Health Sciences
      AHS 1891 Survey of Physical Medicine and Rehabilitation

**UTSA Students only.
UTSA/UTHSC Joint Bachelor of Science Degree in Physical Therapy

3. 80 semester hours are required at the University of Texas Health Science Center at San Antonio:

*OCCT 30200  Principles of Practice
*OCCT 30321  Occupational Therapy Media I
*OCCT 30322  Occupational Therapy Media II
*OCCT 30475  Dynamics of Motion
*OCCT 30331  Occupational Therapy Theory I
*OCCT 30391  Occupational Therapy Skills Laboratory I
*OCCT 40392  Occupational Therapy Skills Laboratory II
*OCCT 40393  Occupational Therapy Skills Laboratory III
*OCCT 40223  Occupational Therapy Media III
*OCCT 40332  Occupational Therapy Theory II
*OCCT 40150  Seminar in Rehabilitation
*OCCT 40333  Occupational Therapy Theory III
*OCCT 40382  Allied Health Management and Consultation
*OCCT 40394  Special Project
*PATH 30311  Introductory Pathology
*ANAT 30816  Human Anatomy
INDT 30212  Intro to Computers for Health Professions
*PHYL 30013  Human Physiology
*INDT 30471  Human Neurosciences
*MEDI 30311  Clinical Medicine I
*MEDI 40212  Clinical Medicine II
*MEDI 40313  Clinical Medicine III
*OCCT 30271  Fieldwork Level I (Physical Dysfunction)
*OCCT 30272  Fieldwork Level I (Psychosocial Dysfunction)
*OCCT 30273  Fieldwork Level I (Pediatrics)
*OCCT 40874  Fieldwork Level IIA

B. 7 semester hours of support work.

1. 4 semester hours are required in Chemistry:
   CHE 1003, 1111  General Chemistry for Allied Health Sciences and Laboratory
   or
   CHE 1103, 1122  Introductory Chemistry and Laboratory Workshop

2. 3 semester hours are required in Psychology:
   PSY 2513  Abnormal Psychology

UTSA/UTHSC JOINT BACHELOR OF SCIENCE DEGREE IN PHYSICAL THERAPY

Certain specific physical skills and abilities are required to successfully participate in the Physical Therapy Program. Students may wish to inquire regarding these physical requirements before seeking admission to the program or registering for specific courses in the program.

All students must be accepted for admission to The University of Texas at San Antonio prior to application for the professional phase of the Physical Therapy Program. This admission, however, does not assure admission into the Physical Therapy Program.

Incoming or first semester freshmen students may apply for a guaranteed position within the professional phase of the Physical Therapy Program if they have met the specified requirements during their high school preparation. For information on early

*Courses to be taken at The University of Texas Health Science Center at San Antonio.
UTSA/UTHSC Joint Bachelor of Science Degree in Physical Therapy

admission contact: Early Admission Program, Physical Therapy Program, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284. All other applicants are expected to make application during the fall semester of their sophomore year. For information on the application process contact: Admission Committee, Physical Therapy Program, The University of Texas Health Science Center at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284.

All Physical Therapy majors are expected to seek academic counseling from the Physical Therapy faculty. Appointments can be made in the Division of Life Sciences Office, 4.02.32SB.

All qualified students are expected to have an interview with Physical Therapy Faculty after the close of application on December 15th and prior to announcement of student selections on April 1st. Each student is expected to complete all General Education Requirements for graduation from UTSA, as well as program prerequisites for Physical Therapy, by June of the year of admission to the professional phase of the Physical Therapy Program.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 150.

All candidates for the degree must complete:

A. 95 semester hours in the major, 80 of which must be at the upper-division level.

1. 12 semester hours are required in the biological sciences:
   - BIO 1103, 1112 Principles of Biology and Laboratory
   - BIO 2123, 2131 Comparative Anatomy of Vertebrates and Laboratory
   - AHS 2083, 2091 Human Biology: Anatomy and Laboratory
   - BIO 3413 General Physiology

2. 2 semester hours are required in Allied Health Sciences:
   - AHS 1871 Allied Health Sciences
   - AHS 1891 Survey of Physical Medicine and Rehabilitation

3. 81 semester hours are required at The University of Texas Health Science Center at San Antonio:
   - PATH 30311 Introductory Pathology
   - ANAT 30816 Human Anatomy
   - PHYL 30612 Mammalian Physiology

Courses in the Physical Therapy Curriculum

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ANAT</td>
<td>30816</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>*INDT</td>
<td>30471</td>
<td>Human Neurosciences</td>
</tr>
<tr>
<td>*MEDI</td>
<td>30311</td>
<td>Clinical Medicine I</td>
</tr>
<tr>
<td>*MEDI</td>
<td>40313</td>
<td>Clinical Medicine III</td>
</tr>
<tr>
<td>*PATH</td>
<td>30311</td>
<td>Pathology</td>
</tr>
<tr>
<td>*PHYL</td>
<td>30613</td>
<td>Mammalian Physiology</td>
</tr>
<tr>
<td>*PHYT</td>
<td>30101</td>
<td>Directed Clinical Experience I</td>
</tr>
<tr>
<td>*PHYT</td>
<td>30102</td>
<td>Clinical Observation I</td>
</tr>
<tr>
<td>*PHYT</td>
<td>30103</td>
<td>Clinical Observation II</td>
</tr>
<tr>
<td>*PHYT</td>
<td>30122</td>
<td>Therapeutic Exercise II</td>
</tr>
</tbody>
</table>

*Courses to be taken at The University of Texas Health Science Center at San Antonio.
**UTSA Students only.
COURSE DESCRIPTIONS

ALLIED HEALTH SCIENCES (AHS)

1053 Introductory Microbiology
(3-0) 3 hours credit. Prerequisite: BIO 1103 with BIO 1112 strongly recommended, or BIO 1013, or consent of instructor. May not be applied to a B.S. in Biology. Concurrent enrollment: AHS 1061.
A general study of microorganisms, their characteristics, isolation, growth, and importance in nature, industry, public health and human disease.

1061 Introductory Microbiology Laboratory
(0-3) 1 hour credit. May not be applied to a B.S. in Biology. Concurrent enrollment: AHS 1053.

1871 Allied Health Sciences
(1-0) 1 hour credit.
Nature of the various allied health science programs and their interrelation. On-site hospital visits to the various programs. This course is taught on a credit/no credit basis only. Students completing this course will receive a grade of CR or NC.

1883 Introduction to Medical Technology
(3-0) 3 hours credit. Prerequisite: CHE 1103 is recommended.
Overview of the profession of medical technology including the clinical laboratory and its functions, relationship of physiological and pathological material to body systems, and medical terminology and medical laboratory calculations.

*Courses to be taken at The University of Texas Health Science Center at San Antonio.
1891 Survey of Physical Medicine and Rehabilitation
(1-0) 1 hour credit. Prerequisite: AHS 1871.
The role of each therapeutic discipline working within the process of rehabilitation. Topics include medical terminology, ethics, and effects of illness on the patient.

2011 Introduction to Physical Therapy
(1-0) 1 hour credit. Prerequisites: AHS 1891 and the consent of the Program Director.
Fundamental concepts of basic patient care and management utilization in Physical Therapy.

2021 Physical Therapy History
(1-0) 1 hour credit. Prerequisites: AHS 2011 and the consent of the Program Director.
History and philosophy of the profession including presentation on the various aspects of Physical Therapy.

2043 Nutrition
(3-0) 3 hours credit. Prerequisites: BIO 1103, 1112, or AHS 2103.
An examination of human nutritional needs from infancy to adulthood.

2083 Human Biology: Anatomy
(3-0) 3 hours credit. Prerequisite: BIO 1103 with BIO 1112 strongly recommended, or BIO 1013 or consent of instructor. Concurrent enrollment: AHS 2091. May not be applied to B.S. in Biology.
The structure of human muscular, skeletal, nervous and organ systems.

2091 Human Biology: Anatomy Laboratory
(0-3) 1 hour credit.
Concurrent enrollment: AHS 2083. May not be applied to a B.S. in Biology.

2103 Human Biology: Physiology
(3-0) 3 hours credit. Prerequisite: BIO 1113 with BIO 1112 strongly recommended, or BIO 1013 or consent of instructor. Concurrent enrollment: AHS 2111. May not be applied to a B.S. in Biology.
Physiological processes in human systems.

2111 Human Biology: Physiology Laboratory
(3-0) 1 hour credit.
Concurrent enrollment: AHS 2103.

3113 Kinesiology
(3-0) 3 hours credit. Prerequisite: AHS 2083 or 2103 or consent of instructor. Primarily designed for students majoring in physical education.
A study of the principles of human motion.

3463 Human Physiology
(3-0) 3 hours credit. Prerequisites: BIO 1103, 1112, CHE 2103 or 2203 or consent of instructor.
Physiological processes in human systems.

3471 Human Physiology Laboratory
(0-3) 1 hour credit.
Concurrent enrollment: AHS 3463.

3812 Clinical Seminar
(2-0) 2 hours credit.
Analysis of treatment modalities related to clinical treatment.

4783 Pathogenic Microorganisms
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722. Concurrent enrollment: AHS 4792.
A consideration of medically important microorganisms and their interaction with animal and human hosts.

4792 Pathogenic Microorganisms Laboratory
(0-6) 2 hours credit.
Concurrent enrollment: AHS 4783.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For student needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

**COURSE DESCRIPTIONS**

**BIOLOGY**

**(BIO)**

**1013 Introduction to Life Sciences**
(3-0) 3 hours credit. May not be applied to a B.S. in Biology.
An introduction to the life sciences emphasizing general principles, diversity of life forms, reproduction and interrelationships between living things. Credit cannot be earned for both BIO 1013 and BIO 1103.

**1103 Principles of Biology**
(3-0) 3 hours credit. Concurrent enrollment: BIO 1112.
An introduction to living organisms emphasizing fundamentals of organization, reproduction, growth and interrelationships between various forms of life, including a brief survey of the plant and animal groups. Required for students majoring in Biology. Credit cannot be earned for both BIO 1013 and BIO 1103.

**1112 Principles of Biology Laboratory**
(0-6) 2 hours credit. Concurrent enrollment: BIO 1103.

**2003 Human Sex and Reproduction**
(3-0) 3 hours credit. Prerequisite: BIO 1013 or 1103 or consent of instructor. May not be applied to a major in Biology.
Human reproductive anatomy and physiology, fertility control, reproductive disease, and parameters influencing fertility patterns.

**2063 Invertebrate Biology**
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112. Concurrent enrollment: BIO 2071.
A course offering the opportunity for a comprehensive study of the invertebrate animals with emphasis on their taxonomy, morphology, ecology, and evolution.

**2071 Invertebrate Biology Laboratory**
(0-3) 1 hour credit. Concurrent enrollment: BIO 2063.

**2123 Comparative Anatomy of Vertebrates**
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112. Concurrent enrollment: BIO 2131.
A detailed study of anatomical differences and similarities of vertebrates with reference to evolutionary changes.

**2131 Comparative Anatomy of Vertebrates Laboratory**
(0-3) 1 hour credit. Concurrent enrollment: BIO 2123.

**2313 Genetics**
(3-0) 3 hours credit. Prerequisites: BIO 1103, 1112, CHE 1103, 2003, and MAT 1063 or equivalent. Concurrent enrollment: BIO 2322.
Principles governing transmission of hereditary factors in plants and animals with emphasis on molecular, biochemical and population genetics.

**2322 Genetics Laboratory**
(0-6) 2 hours credit. Concurrent enrollment: BIO 2313. Optional for non-majors.

**3003 Introduction to Oceanography**
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112, or BIO 1013 or consent of instructor.
General oceanography with emphasis on biological aspects and living marine resources.

**3013 Introductory Pathology**
(3-0) 3 hours credit. Prerequisites: BIO 1103, 1112 or BIO 1013 or AHS 2103. Concepts of disease and diagnosis of pathological conditions.

**3023 Drugs and Society**
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112, or BIO 1013 or consent of instructor.
An examination of drugs and their biosocial effects.
Biology 3083  Biosocial Genetics
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
A study of human heredity and social issues with emphasis on inherited diseases, genetic
problems and evolutionary change in relation to culture, diversity and mating systems.

3143  Developmental Biology
(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422. Concurrent enrollment: BIO 3152.
Sequential analysis of development in vertebrates and the factors which effect fertili­
ization, organogenesis and implantation.

3152  Developmental Biology Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3143.

3163  Histology and Cytology
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112. Concurrent enrollment: BIO 3172.
The cytological and histological aspects of cellular organization.

3172  Histological and Cytological Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3163.

3213  Animal Behavior
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112.
A detailed study of animal behaviors and their biological determinants.

3273  Biology of Flowering Plants
(2-3) 3 hours credit. Prerequisites: BIO 1103 or consent of instructor.
A study of the wild flowers of Texas, emphasizing identification of the more common wild
flowers, as well as family characteristics, flower anatomy, and plant morphology. Plant
collecting techniques and wild flower photography will be included. Lecture, laboratory
and field work will be included as part of the course.

3283  Principles of Ecology
(3-0) 3 hours credit. Prerequisites: BIO 1103 and BIO 1112. Concurrent enrollment: BIO
3292.
The opportunity to study the interaction of organisms with their environment, ecological
principles, adaptations of organisms, environmental pollution and principles of conserva­
tion.

3292  Principles of Ecology Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3283.
A field-oriented course emphasizing modern ecological techniques, including examina­
tions of plant and animal populations, and measurement of selected chemical and
physical parameters.

3323  Evolution
(3-0) 3 hours credit. Prerequisite: BIO 2313.
A discussion of theories and possible mechanisms for evolutionary changes at various
levels of organization.

3343  Plant Sciences
(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112. Concurrent enrollment: BIO 3351.
A course offering the opportunity to study the life histories and phylogenetic relationships of
vascular and non-vascular plants.

3351  Plant Sciences Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 3343.

3413  General Physiology
(3-0) 3 hours credit. Prerequisites: BIO 1103, CHE 2003 and PHY 1823; recommended:
MAT 1093. Concurrent enrollment: BIO 3422.
Fundamental properties and processes in living systems.

3422  General Physiology Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3413.

3513  Biochemistry
(3-0) 3 hours credit. Prerequisites: CHE 2203, 2242; BIO 2313 recommended. Concurrent
enrollment: BIO 3522.
Introduction to biochemistry; amino acids; protein structures; enzyme action; lipids and
saccharides; metabolism; nucleic acids and molecular biology.
Biochemistry Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3513.
Basic biochemical laboratory techniques: titration, protein purification, enzyme kinetics, chromatography, electrophoresis and centrifugation.

Radiation Biology
(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522. Concurrent enrollment: BIO 3541.
The course offers the opportunity to study the interactions of ionizing, ultraviolet, and visible radiations with matter; biological effects; and cellular repair of radiation damage.

Radiation Biology Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 3533.

Microbiology
(3-0) 3 hours credit. Prerequisites: BIO 2313 and CHE 2203. Concurrent enrollment: BIO 3722.
A comprehensive study of microorganisms including their composition, morphology, growth, metabolism, classification, ecology and significance in disease.

Microbiology Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3713.

Industrial Microbiology
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722. Concurrent enrollment: BIO 3741.
A study of fermentations of industrial importance, food processing, and quality control.

Industrial Microbiology Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 3733.

Cellular Biology
(3-0) 3 hours credit. Prerequisite: BIO 3413 or 3513. Concurrent enrollment: BIO 3822. A study of cellular function with relation to structure from the microscopic to molecular level.

Cellular Biology Laboratory
(0-6) 2 hours credit. Concurrent enrollment: BIO 3813.

Environmental Toxicology
(3-0) 3 hours credit. Prerequisite: BIO 3413 or 3513.
Environmental toxicants will be studied in terms of bioavailability, bioaccumulation, biodegradation, toxicity and physiological processes.

Desert Biology
(2-3) 3 hours credit. Prerequisites: BIO 3283 and 3292.
A study of the deserts of the world with an emphasis on U.S. Deserts. Adaptations of plants and animals and their responses to desert conditions will be included, as well as examinations of desert climatic patterns, geology, and natural history. Lecture, laboratory and field work will be included.

Law, Ethics and the Life Sciences
(3-0) 3 hours credit. Prerequisites: BIO 1013 or BIO 1103 and 1112, or consent of instructor.
An examination of the ethical, philosophical and social implications of studies in those areas of the life sciences which affect public policy or action, e.g., incentives to slow population growth; psychology of consciousness and definitions of life and death.

Plant Ecology
(3-0) 3 hours credit. Prerequisite: BIO 3283, 3292, or consent of instructor. Concurrent enrollment: BIO 4221.
A study of the major biomes of North America and Texas, including the chemical, physical and biological factors that influence the development of these biomes.

Plant Ecology Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 4203.
A course providing the opportunity for field-oriented study to examine qualitative and quantitative methods to evaluate plant communities.
4233 **Field Biology**  
(3-0) 3 hours credit. Prerequisites: BIO 1013, or BIO 1103, 1112, or consent of instructor. Concurrent enrollment: BIO 4241.  
A study of the natural history of plants and animals in their native environment. Techniques for the identification of birds, mammals, reptiles, amphibians, insects, and the dominant flowering plants will be discussed.

4241 **Field Biology Laboratory**  
(0-3) 1 hour credit. Concurrent enrollment: BIO 4233.  
A field-oriented course offering the opportunity for practical experience observing, collecting and identifying Texas plants and animals.

4333 **Population Genetics**  
(3-0) 3 hours credit. Prerequisites: BIO 2313 and 2322.  
A quantitative approach to the study of genetics systems in populations, including mutations, selection, polymorphism and mating systems.

4343 **Molecular Genetics**  
(3-0) 3 hours credit. Prerequisites: BIO 2313, 2322, 3513 and 3522.  
Molecular approach to structure, replication, mutation and phenotypic expression of genetic material.

4353 **Comparative Animal Physiology**  
(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422. Concurrent enrollment: BIO 4361.  
A phylogenetic study of physiologic adaptation in animals.

4361 **Comparative Animal Physiology Laboratory**  
(0-3) 1 hour credit. Concurrent enrollment: BIO 4353.  
A laboratory course illustrating the principles presented in BIO 4353.

4433 **Neurobiology**  
(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422.  
Anatomy and physiology of nervous systems, the mechanisms of neuronal functions.

4442 **Neurobiology Laboratory**  
(0-6) 2 hours credit. Concurrent enrollment: BIO 4433.  
A laboratory course emphasizing principles presented in BIO 4433.

4453 **Endocrinology**  
(3-0) 3 hours credit. Prerequisites: BIO 3413, 3422, 3513 and 3522.  
A consideration of the physiological effects of hormones on the organism in health and disease, together with a study of the gross and microscopic morphology of the glands of internal secretion.

4462 **Endocrinology Laboratory**  
(0-6) 2 hours credit. Concurrent enrollment: BIO 4453.  
A laboratory course emphasizing principles presented in BIO 4453.

4523 **Intermediary Metabolism**  
(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522.  
A detailed consideration of metabolic pathways, energy metabolism and their regulation.

4603 **Plant Physiology**  
(3-0) 3 hours credit. Prerequisites: BIO 3343, 3351, CHE 2203 and 2242. Concurrent enrollment: BIO 4611.  
Principles of organization of cellular activity and molecular structure of protoplasm; nutrition, translocation, mineral metabolism, respiration and photosynthesis.

4611 **Plant Physiology Laboratory**  
(0-3) 1 hour credit. Concurrent enrollment: BIO 4603.  
A course providing qualitative and quantitative experiments in the study of plant physiology.

4723 **Virology**  
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722. Concurrent enrollment: BIO 4731.  
A study of the diversity of viruses and biochemical mechanisms for their replication.

4731 **Virology Laboratory**  
(0-3) 1 hour credit. Concurrent enrollment: BIO 4723.
4743 Immunology
(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522, or 3713, and 3722. Concurrent enrollment: BIO 4751.
A study of the properties of antigens and antibodies, current concepts of humoral and cell-mediated immunity and the cells involved.

4751 Immunology Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 4743.

4763 Parasitology
(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722. Concurrent enrollment: BIO 4771.
A study of the animal parasites of humans and related hosts with emphasis on their epidemiology, life cycles, pathology and control.

4771 Parasitology Laboratory
(0-3) 1 hour credit. Concurrent enrollment: BIO 4763.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4951-3 Special Studies in Biology
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4963 Seminar in Biology
(1-0) 1 hour credit. Prerequisite: Junior or senior standing with a minimum of 20 hours in biological sciences.
An undergraduate seminar limited to biology majors, which provides an opportunity to survey selected biological topics through presentation and discussion of relevant contemporary research and literature. May not be repeated for credit.

4993 Honors Research
3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during their last two semesters; approval by the College Honors Committee.
Supervised research and preparation of an honors thesis. May be repeated once with approval.
DIVISION OF MATHEMATICS, COMPUTER SCIENCE, AND SYSTEMS DESIGN

The division offers a Bachelor of Science Degree in Computer Science and Systems Design in which the student may select a concentration in Computer Science or a concentration in Systems Design. The division also offers a Bachelor of Science Degree in Mathematics in which the student may select a concentration in Mathematics, a concentration in Statistics or a concentration in Mathematics Education.

BACHELOR OF SCIENCE DEGREE IN COMPUTER SCIENCE AND SYSTEMS DESIGN

The Bachelor of Science Degree in Computer Science and Systems Design is offered with two concentrations.

Concentration 1. Computer Science
Concentration 2. Systems Design

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 126.

All candidates for the Bachelor of Science degree in Computer Science and Systems Design, regardless of concentration, must complete the following 37 semester hours of required courses (which includes the 3 hours of General Education Requirements in Mathematics, Computer Science and Systems Design):

The student who is not prepared to begin MAT 1214 must take MAT 1093, Pre-calculus.

MAT 1214 Calculus I
MAT 1223 Calculus II
MAT 2213 Calculus III
MAT 2233 Linear Algebra
STA 3513 Probability and Statistics
STA 3523 Statistical Methods
CS 1711 Introduction to Computer Science Laboratory
CS 1713 Introduction to Computer Science
CS 1723 Data Structures I
CS 2733 Introduction to Computer Organization
CS 2743 Data Structures II
SD 2812 Digital Circuits Design I Laboratory
SD 2813 Digital Circuits Design I

In addition, a candidate for the Bachelor of Science in Computer Science and Systems Design degree must complete the course requirements for one of the concentrations declared by the candidate.

1. Concentration in Computer Science
   A. Required courses: 15 semester hours.
      CS 3233 Discrete Mathematical Structures
      CS 3723 Introduction to Programming Languages
      CS 3733 Operating Systems
      CS 3773 Programming Methodology
      CS 4753 Computer Architecture
   B. Any 12 additional semester hours of approved elective courses in the Division of Mathematics, Computer Science, and Systems Design with a course number of 2000 or above.
198 / Bachelor of Science Degree in Computer Science and Systems Design
Bachelor of Science Degree in Mathematics

C. Electives, 23 semester hours.

2. Concentration in Systems Design
A. Required courses: 14 semester hours.
   SD 3812 Digital Circuits Design II Laboratory
   SD 3813 Digital Circuits Design II
   SD 3833 Real Time Digital Control
   SD 3843 Small Systems Architecture and Interfacing
   SD 4803 Microprocessor Laboratory I

B. An additional 9 semester hours chosen from the following courses:
   CS 3723 Programming Languages
   CS 3743 Data Base Management
   CS 3773 Programming Methodology
   CSD 4911-3 Independent Study
   CSD 4953 Special Problems
   SD 3853 Instrumentation Circuits Design
   SD 3863 Real Time Operating Systems for Minicomputers
   SD 4813 Microprocessor Laboratory II
   SD 4823 Systems Analysis
   SD 4833 Optimal Control
   SD 4853 Computer Interfaces
   SD 4873 Computer Networks
   MAT 3613 Differential Equations I
   MAT 3633 Numerical Analysis I
   MAT 3643 Numerical Analysis II

C. Any 3 upper-division hours of approved elective courses in the Division

D. Electives, 24 semester hours.

BACHELOR OF SCIENCE DEGREE IN MATHEMATICS

The Bachelor of Science Degree in Mathematics is offered with three concentrations:

Concentration 1.         Mathematics
Concentration 2.         Statistics
Concentration 3.         Mathematics Education

The minimum number of semester hours required for this degree, including the 42
hours of General Education Requirements, is 126. Students choosing Concentration 3,
should satisfy the General Education Requirements consistent with the Texas Certifi-
cation Program.

All candidates for the Bachelor of Science degree in Mathematics, regardless of con-
centration, must complete the following 29 semester hours of required courses (which
includes the 3 hours of General Education Requirements in Mathematics, Computer
Science and Systems Design):

The student who is not prepared to begin MAT 1214 must take MAT 1093, Pre-
calculus.

MAT 1214 Calculus I
MAT 1223 Calculus II
MAT 2213 Calculus III

Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the Undergraduate Certificate Programs in Education brochure for in-
formation.
Bachelor of Science Degree in Mathematics / 199

MAT 2233 Linear Algebra
MAT 3213 Foundations of Analysis
STA 3513 Probability and Statistics
STA 3523 Statistical Methods
CS 1711 Introduction to Computer Science Laboratory
CS 1713 Introduction to Computer Science
CS 1723 Data Structures I

In addition, a candidate for the Bachelor of Science in Mathematics degree must complete the course requirements for the concentration declared by the candidate.

1. Concentration in Mathematics
   A. Required Courses: 24 semester hours.
      MAT 2243 Foundation of Mathematics
      MAT 3223 Complex Variables
      MAT 3243 Calculus for Application
      MAT 3613 Differential Equation I
      MAT 3633 Numerical Analysis I
      MAT 4213 Real Analysis I
      MAT 4223 Real Analysis II
      MAT 4233 Modern Abstract Algebra I
   B. Any 6 additional hours of approved courses in the division with course numbers of 3000 or above.
   C. Electives, 28 semester hours.

2. Concentration in Statistics
   A. Required Courses: 21 semester hours.
      MAT 3633 Numerical Analysis I
      MAT 4213 Real Analysis I
      STA 3013 Multivariate Analysis for the Life and Social Sciences
      STA 3313 Introduction to Sample Survey Theory and Methods
      STA 3433 Applied Non-Parametric Statistics
      STA 4713 Applied Regression Analysis
      STA 4723 Design and Analysis of Experiments
   B. Any 9 additional hours of approved courses in the division with course numbers of 2000 or above with at least 6 hours with course numbers of 3000 or above.
   C. Electives, 28 semester hours.

3. Concentration in Mathematics Education.
   A. Required Courses: 12 semester hours.
      COM 1043 Introduction to Communication
      MAT 3233 Modern Algebra
      MAT 4263 Geometry
      Any 3 additional hours taken in the Division of Mathematics, Computer Science and Systems Design with course number of 3000 or above.
   B. 24 hours in a second teaching field.
      NOTE: If the second teaching field is chosen to be Computer Science, the student will have completed 7 of these 24 hours from the Mathematics core. This in turn would allow 7 hours of free elective.
   C. Professional Education, 4 semester hours.
      EDU 2001 Introduction to the School Environment
EDP 3013 Growth, Development and Learning Theories
D. Education Professional Semester and Student Teaching, 15 semester hours.
EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
EDU 4031 Media Technology
EDU 4056 Student Teaching: Secondary
EDU 4072 Individualized Clinical Experiences
EDU 4093 Teaching in the Secondary School

NOTE: These courses are taken concurrently in the first or second semester of the senior year. Math majors may student teach only in the Spring semester.

E. Elective, 3 semester hours.

COURSE DESCRIPTIONS

COMPUTER SCIENCE (CS)

1043 Computer Programming for Business Applications
(3-0) 3 hours credit. Prerequisite: STA 1064.
An introduction to computers and programming in the business professions. Topics will be practical in nature and include solutions to equations, searching and sorting, inventory control, table look-up, and the vocabulary involved in working with computer professionals.

1073 Introductory Computer Programming for Scientific Applications
(3-0) 3 hours credit. Prerequisite: MAT 1013 or MAT 1183.
Introductory programming. Sorting and ranking; plotting; numerical taxonomy. Solution of non-linear equations; linear regression. Solution of linear systems. Students majoring in the Division of Mathematics, Computer Science, and Systems Design receiving credit for CS 1073 may not also receive credit for CS 1063 nor for CS 1043.

1711 Introduction to Computer Science Laboratory
(0-2) 1 hour credit. Prerequisite or concurrent enrollment: Mat 1214. Concurrent enrollment: CS 1713.
Laboratory to accompany CS 1713. Credit cannot be earned for both CS 1711 and CS 1714.

1713 Introduction to Computer Science
(3-0) 3 hours credit. Prerequisite or concurrent enrollment: MAT 1214. Concurrent enrollment: CS 1711.
Introduction to basic concepts of computer science. Functional components of computers, data representation, problem solving methods, algorithm development, and programming using a high-level programming language. Credit cannot be earned for both CS 1713 and CS 1714.

1723 Data Structures I
(3-0) 3 hours credit. Prerequisites: CS 1711 and 1713, or 1714, and MAT 1214.
Common data structures, operations and alternate methods of data representation. Pointers, linear structures (lists, queues, stacks, strings), arrays and array address calculations, and trees.

2033 Fundamentals of Computer Concepts I
(3-0) 3 hours credit. Prerequisites: Sophomore or higher classification. Credit cannot be earned for both CS 1043 and CS 2033.
An introduction to computers and information processing for those with no previous background; a study of the computer, its uses and social impact; introduction to computer programming. May not be applied to a major in Mathematics, Computer Science, and Systems Design.
2073 **Computer Programming With Engineering Applications**  
(3-0) 3 hours credit. Prerequisite: MAT 1223.  
Algorithmic approaches to problem solving and computer program design for engineers. Engineering and mathematically-oriented problem sets will be emphasized, including non-numeric applications. Searching, sorting, linked-lists, and data typing will be introduced. May not be applied to a major in Mathematics, Computer Science, and Systems Design.

2083 **Microcomputer Programming For Teachers**  
(3-0) 3 hours credit. Prerequisite: EDU 2001.  
An introduction to the uses of microcomputers. Students will investigate instructional uses of the computer in the classroom and will write their own computer-generated instructional materials. Instruction will be in the BASIC programming language.

2133 **Fundamentals of Computer Concepts II**  
(3-0) 3 hours credit. Prerequisite: CS 2033.  
Advanced programming topics in BASIC; special emphasis on microcomputers in home and business applications. May not be applied to a major in Mathematics, Computer Science, and Systems Design.

2733 **Introduction to Computer Organization**  
(3-0) 3 hours credit. Prerequisite: CS 1723 or 2073.  
An examination of the basic architecture of a conventional computer and an introduction to the assembly language of such a computer. Several assembly language programs will be required of each student.

2743 **Data Structures II**  
(3-0) 3 hours credit. Prerequisite: CS 1723.  
An introduction to data file management. Storage device characteristics, files (access, file types), searching and sorting (hash coding, tables, directories).

3073 **Computer Graphics and Numerical Techniques**  
(3-0) 3 hours credit. Prerequisites: CS 2073 or CS 1723 and enrollment in MAT 3253 or MAT 3613.  
Computer graphics, numerical analysis, and advanced programming techniques with applications to engineering problems.

3133 **Computers and Society**  
(3-0) 3 hours credit. Prerequisite: Any one of the following courses: CS 1043, 1063, 1073, 1133, or 1713, or consent of instructor.  
Examination of some of the major issues faced by the use of computers in society including computers and the law, computers in business, computers in education, computers in science and engineering, and electronic fund-transfer and communications.

3233 **Discrete Mathematical Structures**  
(3-0) 3 hours credit. Prerequisites: CS 1723 and MAT 2213.  
Survey and development of theoretical tools suitable for describing algorithmic applications. Propositional logic, predicate calculus, induction, proofs, finite state automata, and boolean algebra.

3321 **Topics In Problem Solving Using High Level Languages**  
(1-0) 1 hour credit. Prerequisite: CS 1723.  
Problem solving techniques using a high-level language. Languages will vary and include COBOL, FORTRAN, BASIC, PL/I, LISP, and SNOBOL. May be repeated for credit when topics vary, but not more than 3 hours will apply to the major.

3723 **Programming Languages**  
(3-0) 3 hours credit. Prerequisites: MAT 2213, CS 2733 and 2743.  
An introduction to the philosophy and features of high-level programming language families; elementary aspects of computer and run-time considerations, problem solving ability, syntax, and examples. Students will write programs in several language families.

3733 **Operating Systems**  
(3-0) 3 hours credit. Prerequisites: CS 2733 and 2743.  
An introduction to the functions and major techniques of a modern multi-programming operation system. Includes exposure to the fundamentals of processor management, process synchronization, memory management, and peripheral management.
202 / Computer Science  
Mathematics  

3743 Data Base Management  
(3-0) 3 hours credit. Prerequisites: MAT 2213, CS 2743.  
Study of systems for management of large amounts of related data. Basic concepts,  
implementation approaches, user data models, commercially available systems.  

3773 Programming Methodology  
(3-0) 3 hours credit. Prerequisites: MAT 2213, CS 2743.  
Discussion of modular (structured) programming methods, programming style and pro¬  
gram verification techniques.  

3793 Introduction to Artificial Intelligence  
(3-0) 3 hours credit. Prerequisites: CS 2743 and 3233 and a knowledge of LISP.  
Discussion of theorem proving by machine, computational linguistics, psychological  
modeling and computer games.  

4133 Survey of Computer System Concepts  
(3-0) 3 hours credit. Prerequisite: Programming experience or familiarity with the basics of  
computing.  
A survey of some essential concepts of information structures and file systems, operating  
systems, programming languages, and architecture from a user’s point of view. May not  
be applied to a major in Computer Science and Systems Design or Mathematics.  

4313 Automata, Computability and Formal Languages  
(3-0) 3 hours credit. Prerequisite: CS 3233.  
Discussion of abstract machines (finite state automata, pushdown automata and turing  
machines), formal grammars (regular, context-free and type 0) and the relationships  
between them.  

4323 Analysis of Algorithms  
(3-0) 3 hours credit. Prerequisites: CS 2743 and CS 3233.  
Analysis of the performance of algorithms and discussion of programming techniques  
and data structures used in the writing of effective algorithms.  

4383 Computer Graphics  
(3-0) 3 hours credit. Prerequisites: CS 3773 and MAT 2233.  
An introduction to two- and three-dimensional generative computer graphics. Display  
devices, data structures, mathematical transformations, and algorithms used in picture  
generation, manipulation, and display.  

4713 Compiler-Writing Laboratory  
(3-0) 3 hours credit. Prerequisite: CS 3723.  
An introduction to implementation of translators. Topics include formal grammars, scan¬  
ners, parsing techniques, symbol table management, code generation, and code optimi¬  
zation.  

4753 Computer Architecture  
(3-0) 3 hours credit. Prerequisite: CS 3733.  
An investigation of the major concepts of computer architecture including the central pro­  
cessing unit, main memory, and peripheral devices.  

COURSE DESCRIPTIONS  
MATHEMATICS  
(MAT)  

1013 Algebra  
(3-0) 3 hours credit.  
Real numbers, linear equations and inequalities, absolute inequalities, factorization of  
polynomials rational expressions, negative and rational exponents, scientific notation,  
radicals, quadratic equations and inequalities, cartesian coordinates, relations, functions  
and graphing of functions.  

1023 Calculus for the Social Sciences  
(3-0) 3 hours credit. Prerequisite: MAT 1013 or 1183 or the equivalent.  
A general introduction to differential and integral calculus for non-science majors:  
graphing and analyzing polynomial, logarithmic and exponential functions.
1033 Algebra with Calculus for Business
(3-0) 3 hours credit. Prerequisite: MAT 1013 or 1183 or the equivalent.
An introduction to business calculus with an emphasis on the algebra of functions. Concentration is on the algebraic manipulations of functions and includes volume and profit functions, both linear and quadratic; root finding and graphical analysis; differentiation and integration.

1063 Algebra for Scientists and Engineers
(3-0) 3 hours credit. Prerequisite: MAT 1013 or the equivalent.
Algebraic expressions; equations, relations, functions; exponential and logarithmic functions; systems of linear equations and inequalities; matrices and determinants; complex numbers; polynomials, sequences, series, binomial expansion; mathematical induction; permutations, combinations.

1093 Precalculus
(3-0) 3 hours credit. Prerequisite: MAT 1063 or the equivalent.
Polynomial and rational functions, exponential functions, logarithmic functions, trigonometric functions. Formerly MAT 1092. Credit cannot be earned for both 1092 and 1093.

1103 Consumer Mathematics
(3-0) 3 hours credit.
A course designed to offer the student the opportunity to gain the necessary mathematical tools for coping with modern technological society. Linear equations and inequalities, ratios, proportion and variation, mathematics of finance.

1113 Mathematics for Elementary Teachers I
(3-0) 3 hours credit. Open only to declared majors in Elementary Education.
Areas of study from arithmetic and geometry; number systems.

1123 Mathematics for Elementary Teachers II
(3-0) 3 hours credit. Prerequisite: MAT 1113 or equivalent. Open only to declared majors in Elementary Education.
Areas of study include logic and algebra.

1214 Calculus I
(4-0) 4 hours credit. Prerequisite: MAT 1093 or the equivalent.
An introduction to the concepts of limit, continuity and derivative, mean value theorem, and applications of derivatives such as velocity, acceleration maximization and curve sketching; introduction to the Riemann integral and the fundamental theorem of calculus.

1223 Calculus II
(3-0) 3 hours credit. Prerequisite: MAT 1214.
Methods of integration, inverse trigonometric functions, applications of the integral, multiple integrals.

1993 Topics in Mathematics
(3-0) 3 hours credit. Consent of instructor.
Introductory study of a topic or topics in mathematics. May be repeated for credit when topics vary, but no more than 3 hours will apply to a bachelor's degree.

2213 Calculus III
(3-0) 3 hours credit. Prerequisite: MAT 1223.
Special areas of differential and integral calculus. Taylor series, power series, convergence tests, vectors, functions of several variables, partial derivatives.

2233 Linear Algebra
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Vector spaces and matrix algebra, matrices and determinants, characteristic values of matrices and reduction to canonical forms. Emphasis on applications.

2243 Foundations of Mathematics
(3-0) 3 hours credit. Prerequisite: MAT 1214.
Development of theoretical tools for rigorous mathematics. Topics may include; mathematical logic, propositional and predicate calculus, set theory, functions and relations, cardinal and ordinal numbers, Boolean algebras, and construction of the natural numbers, integers and rational numbers. Emphasis on theorem proving.
3113 Algebra for Elementary Teachers
(3-0) 3 hours credit. Prerequisite: MAT 1123. Open only to declared Elementary Education majors.
Areas of study from college algebra including linear and quadratic equations and inequalities, systems of equations, graphical methods.

3123 Geometry for Elementary Teachers
(3-0) 3 hours credit. Prerequisite: MAT 1123. Open only to declared Elementary Education majors.
A survey course encompassing topics from plane geometry, including an axiomatic development of proofs, coordinate geometry, non-euclidean geometry, 3-dimensional geometry and topology.

3213 Foundations of Analysis
(3-0) 3 hours credit. Prerequisite: MAT 2213.
An opportunity for rigorous development of the foundations of real analysis; basic point set topology in $\mathbb{R}$ and $\mathbb{R}^n$, compactness; connectedness; convergence; cardinality. Emphasis on theorem proving and mathematical rigor.

3223 Complex Variables
(3-0) 3 hours credit. Prerequisite: MAT 2213.
An introduction to complex variables including elementary functions, line integrals, power series, residues and poles and conformal mappings.

3233 Modern Algebra
(3-0) 3 hours credit. Prerequisite: MAT 2213.
An introduction to the concepts of modern algebra by way of the integers. Emphasis on theorem proving and mathematical rigor.

3243 Calculus for Applications
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Line integrals, Green's theorem, Stokes' theorem, Fourier series, Laplace transforms.

3253 Engineering Analysis I
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Linear Algebra, differential equations, Fourier analysis, and boundary value problems.

3263 Engineering Analysis II
(3-0) 3 hours credit. Prerequisite: MAT 3253.
Vector calculus, complex variables, and Laplace transforms.

3613 Differential Equations I
(3-0) 3 hours credit. Prerequisite or concurrent enrollment in MAT 2233.
Basic notions of differential equations, solution of first order equations and linear equations with constant coefficients, $n^{th}$ order initial value problems, power series solutions of differential equations.

3623 Differential Equations II
(3-0) 3 hours credit. Prerequisite: MAT 3613.
Continuation of MAT 3613. Stability, partial differential equations and boundary value problems.

3633 Numerical Analysis I
(3-0) 3 hours credit. Prerequisites: MAT 2233 and either CS 1073 or 1713.
Solution of linear and non-linear equations, curve-fitting, eigenvalue problems.

3643 Numerical Analysis II
(3-0) 3 hours credit. Prerequisite: MAT 3633.
Numerical solution of ordinary and partial differential equations.

3923 Finance Mathematics
(3-0) 3 hours credit. Prerequisite: MAT 1214.
Analysis of the time value of money; preparation for parts of the actuarial examinations; determining the evaluation of flows of money, mortgage payments, bond amortization schedules, annuities, and related areas.

3933 Mathematics of Life Insurance
(3-0) 3 hours credit. Prerequisite: STA 3513.
Probability theory applied to problems of life insurance. Measurement of mortality; annuity
and insurance benefits; reserve liabilities; expenses; gross premiums, asset shares, modified reserves, cash values; nonforfeiture options; distribution of surplus.

4113 **Mathematical Subjects for Elementary Teachers**  
(3-0) 3 hours credit. Prerequisite: MAT 3113. Open only to declared Elementary Education majors.  
Selected mathematical subjects of an advanced nature relevant to the modern elementary mathematics curriculum.

4123 **History of Mathematics for Teachers**  
(3-0) 3 hours credit. Prerequisite: MAT 2213 or both MAT 3113 and MAT 3123 or consent of instructor. Open only to preservice and inservice teachers.  
Selected subjects in mathematics developed through historical perspectives and biographies.

4213 **Real Analysis I**  
(3-0) 3 hours credit. Prerequisite: MAT 3213 recommended.  
An in-depth study of the calculus of functions of a single real variable; pointwise convergence; continuity; uniform convergence; differentiation; functions of bounded variation; Riemann-Stieltjes integration; interchange of limits.

4223 **Real Analysis II**  
(3-0) 3 hours credit. Prerequisites: MAT 2233 and 4213.  
An in-depth study of the calculus of functions of several real variables; differentiation; Jacobians; non-linear transformations; integration.

4233 **Modern Abstract Algebra I**  
(3-0) 3 hours credit. Prerequisite: MAT 2243 and MAT 3233.  
An in-depth study of groups and rings.

4243 **Modern Abstract Algebra II**  
(3-0) 3 hours credit. Prerequisite: MAT 4233.  
Topics in field theory and vector spaces.

4253 **Number Theory**  
(3-0) 3 hours credit. Prerequisite: MAT 2213.  
The theory of primes, congruences and related subjects.

4263 **Geometry**  
(3-0) 3 hours credit. Prerequisite: MAT 2213.  
Projective, affine and non-Euclidean geometry.

4273 **Topology**  
(3-0) 3 hours credit. Prerequisite: MAT 2243.  
Set theory including cardinal and ordinal numbers. Topological properties of the real line and metric spaces.

4911-3 **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's Advisor, and the Division Director and Dean of the College in which the course is offered.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work. May be repeated for credit, but not more than 6 hours will apply to the bachelor's degree.

4951-3 **Special Studies in Mathematics**  
1-3 hours credit. Prerequisite: Consent of instructor.  
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours will apply to a bachelor's degree.

4993 **Honors Research**  
3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during the last two semesters; approval by the College Honors Committee.  
Supervised research and preparation of an honors thesis. May be repeated one time only with approval.
COURSE DESCRIPTIONS

STATISTICS

(STA)

1053 Basic Statistics
(3-0) 3 hours credit. Prerequisite: MAT 1013, 1033 or 1183.

1064 Basic Statistics for Business and Economics
(4-0) 4 hours credit. Prerequisite: MAT 1033.
Fundamental concepts and procedures of statistics and probability with business applications: descriptive and inferential statistics, regression and correlation, time series, index numbers. Use of computer library programs.

1993 Statistical Methods for the Life and Social Sciences
(3-0) 3 hours credit. Prerequisite: STA 1053 or 1064.
Point estimator properties, inference about the means and variances of two or more populations, categorical data analysis, linear regression, analysis of variance, nonparametric tests. Open to students of all disciplines.

3013 Multivariate Analysis for the Life and Social Sciences
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.
Linear algebra preliminaries, the multivariate normal distribution, tests on means, discrimination analysis, cluster analysis, principal components, factor analysis. Use of computer library programs. Open to students of all disciplines.

3313 Introduction to Sample Survey Theory and Methods
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3513.
Basic tools, simple random sampling, stratified random sampling, ratio and regression estimates, systematic sampling, cluster sampling, unequal probability sampling, two-stage and multistage sampling, non-sampling errors.

3433 Applied Non-Parametric Statistics
(3-0) 3 hours credit. Prerequisite: STA 1993 or concurrent enrollment: STA 3523.

3513 Probability and Statistics
(3-0) 3 hours credit. Prerequisite or concurrent enrollment; MAT 2213.
Axioms of probability, probability functions and density functions, random variables, functions of random variables and their sampling distributions.

3523 Statistical Methods
(3-0) 3 hours credit. Prerequisite: STA 3513.

3813 Discrete Data Analysis and Bioassay
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3523.

4643 Introduction to Stochastic Processes
(3-0) 3 hours credit. Prerequisite: STA 3513.
Finite Markov chains including transition probabilities, classification of states, limit theorems; queuing theory, birth and death processes.

4713 Applied Regression Analysis
(3-0) 3 hours credit. Prerequisite: STA 1993 or 3513.
An introduction to regression analysis with emphasis on practical aspects, fitting a straight line, examination of residuals, matrix treatment of regression analysis, fitting and evaluation of general linear models, non-linear regression.
Statistics / 207
Systems Design

4723 Design and Analysis of Experiments
(3-0) 3 hours credit. Prerequisite: STA 1993 or concurrent enrollment: STA 3523.
General concepts in the design and analysis of experiments; response variable, factors to be varied, quantitative and qualitative factors, fixed and random factors and how the factors are to be combined. The method of randomization to be used in the design, the order of experimentation, the mathematical model used to describe the experiment, computation of the test statistics and the interpretation of the results.

4733 Statistical Design and Model Building
(3-0) 3 hours credit. Prerequisite: STA 1993 and 3523.
Elements of model building. Fitting linear models to data. Factorial designs. Response surface methodology.

4903 Reliability In Engineering Design
(3-0) 3 hours credit. Prerequisite: STA 3513 or equivalent.

COURSE DESCRIPTIONS
SYSTEMS DESIGN
(SD)

2812 Digital Circuits Design I Laboratory
(0-4) 2 hours credit. Prerequisite: Concurrent enrollment in SD 2813.
Laboratory to accompany SD 2813, concentrating on TTL technology. Credit cannot be earned for both SD 2812 and SD 2815.

2813 Digital Circuits Design I
(3-0) 3 hours credit. Prerequisites: CS 1723 and MAT 1214, concurrent enrollment: SD 2812.

3812 Digital Circuits Design II Laboratory
(0-4) 2 hours credit. Prerequisite: Concurrent enrollment in SD 2833.
Laboratory to accompany SD 2833. Credit cannot be earned for both SD 2832 and SD 2835.

3813 Digital Circuits Design II
(3-0) 3 hours credit. Prerequisite: SD 2813; concurrent enrollment: SD 3812.
A continuation of SD 2813. Advanced design techniques using MSI and LSI circuits. Credit cannot be earned for both SD 2833 and SD 2835.

3823 Data Acquisition and Distribution
(2-2) 3 hours credit. Prerequisites: CS 2073 or both CS 1711 and 1713.
Fundamentals of assembly language for a minicomputer. Programming techniques used to interface a minicomputer to scientific laboratory instrumentation. Analog and digital data formats and characteristics. Credit may not be earned for both SD 3823 and SD 3843.

3833 Real-Time Digital Control
(2-2) 3 hours credit. Prerequisite: SD 3823.
Principles of real-time minicomputer operating systems. Programming techniques for on-line interactive data acquisition and control. Efficient and reliable system designs.

3843 Small Systems Architecture and Interfacing
(2-2) 3 hours credit. Prerequisites: CS 2733, SD 2813, SD 2812.
Programming techniques used to interface minicomputers and microcomputers to scientific laboratory instrumentation. Analog and digital data formats and characteristics. Hardware organization and systems architecture of state-of-the-art minicomputer systems.
Systems Design

3853 Instrumentation Circuits Design
(3-0) 3 hours credit. Prerequisites: SD 2812, 2813, 3823 and PHY 1923.
Functional characteristics of state-of-the-art integrated operational amplifiers, regulated
power supplies, digital-to-analog and analog-to-digital converters, isolation amplifiers,
serial transmitters, design of hardware configurations to interface scientific and industrial
instrumentation to a minicomputer.

3863 Real-Time Operating Systems for Minicomputers
(3-0) 3 hours credit. Prerequisite: SD 3823 or CS 3733.
A study in the design of real-time operating systems for minicomputers. Memory manage­
ment. Task scheduling in a multitask environment, input/output scheduling, and spooling.

4613 Operations Research I
(3-0) 3 hours credit. Prerequisite: MAT 2213 and MAT 2233.
Introduction to analytical methods and models of operations research, with emphasis on
optimization. Linear, integer and non-linear programming. Network analysis, including
PERT and CPM. Introduction to dynamic programming.

4623 Operations Research II
(3-0) 3 hours credit. Prerequisite: STA 3513 or equivalent.
Introduction to probabilistic analysis and models in operations research. Decision anal­
ysis, Markov chains, queuing models.

4633 Simulation
(3-0) 3 hours credit. Prerequisite or concurrent enrollment: CS 1723.
Construction and use of simulation models on a digital computer. Monte Carlo techniques
and associated statistical methods.

4803 Microprocessor Laboratory I
(1-4) 3 hours credit. Prerequisite: SD 3843.
Principles of large-scale integration and very large-scale integration. The organization and
systems architecture of state-of-the-art microprocessors. The integration of micro­
processors with random-access memory, programmable read-only memory, peripheral
controllers and 1/0 devices. Assemblers, compilers and operating systems for micropro­
cessors.

4813 Microprocessor Laboratory II
(1-4) 3 hours credit. Prerequisite: SD 4803.
Students execute projects dealing with the design and implementation of microprocessor
software for selected applications in the area of systems design.

4823 System Analysis
(3-0) 3 hours credit. Prerequisite: MAT 2213.
Mathematical concepts relevant to the formulation of models for physical systems. Initial
value problems. Laplace transforms and the concept of transfer function. Detailed analy­
sis of simple control systems for position and velocity tracking. Stability. The course deals
mainly with linear systems.

4833 Optimal Control
(3-0) 3 hours credit. Prerequisite: SD 4823.
Stability and Liapunov's method. Formulation of state equations for continuous and dis­
crete systems. Formulation of the optimal control problem. Pontryagin’s maximum prin­
ciple. Dynamic programming; adaptive control systems.

4853 Computer Interfaces
(3-0) 3 hours credit. Prerequisite: SD 4803.
Basic characteristics and design considerations of printer, tape, disk controllers, multi­
plexers and other devices for computer communications and teleprocessing.

4873 Computer Networks
(3-0) 3 hours credit. Prerequisites: SD 2813, SD 2812, CS 2733.
Discussion of standard network layers including issues of topology, error detection and
recovery, congestion control, and hardware interfacing.
COURSE DESCRIPTIONS

COMPUTER SCIENCE/SYSTEMS DESIGN
(CSD)

4901 Seminar in Computer Sciences and Systems Design
(1-0) 1 hour credit. Prerequisite: Upper-division classification.
Scheduled and impromptu presentations on subjects of interest presented by division
faculty and visiting lecturers. May be repeated for credit but no more than 3 hours will
apply toward the major.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the
student’s Advisor, and the Division Director and Dean of the College in which the course
is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty
member. For students needing specialized work. May be repeated for credit, but not more
than 6 hours will apply to the bachelor’s degree.

4951-3 Special Studies in Computer Science or Systems Design
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not
often available as part of the regular course offerings. Special Studies courses may be
repeated for credit when topics vary, but not more than 6 hours will apply to a bachelor’s
degree.

4993 Honors Research
3 hours credit. Prerequisite: Enrollment limited to candidates for College Honors during
the last two semesters; approval by the College Honors Committee.
Supervised research and preparation of an honors thesis. May be repeated one time with
approval.
COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

DIVISION OF BEHAVIORAL AND CULTURAL SCIENCES

The Division of Behavioral and Cultural Sciences offers bachelor of arts degrees in American Studies (offered jointly with the Division of English, Classics, and Philosophy), Anthropology, History, and Psychology. American Studies is an interdisciplinary examination of the interrelationships among the diverse elements of American culture. Anthropology is the study of man's cultural behavior. History is the study of the past of human society. Psychology is the study of animal and human behavior and of cognitive processes and thought. Each major combines a specialization in one of these sciences with support work in a related area. The support work area involves a specific number of hours outside the major discipline which forms a cohesive whole and is approved by the student's advisor.

INTERNERNSHIP STUDY

Internship entails supervised experience within selected organizations in the San Antonio area. Placement is arranged with the Internship Coordinator of the College of Social and Behavioral Sciences. Supervision and grading of the internship experience is normally done by Division faculty members. The various degree plans within the Behavioral and Cultural Sciences place different restrictions on whether an internship must be taken on a credit-no credit basis and on whether an internship may be counted toward major requirements. Up to 6 semester hours may be counted toward baccalaureate requirements. Students from majors other than the social sciences are welcome to participate but should consult with their faculty advisors regarding the role of the internship within their own degree programs. Further information can be obtained from the Internship Coordinator.

DIVISIONAL HONORS

The Division of Behavioral and Cultural Sciences designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for admission to the Division Honors Program is based on: 1) the student's academic performance, and 2) recommendation by the faculty of the student's major discipline. To be eligible for the program students must have a minimum grade-point average of 3.00 overall at UTSA and a minimum grade-point average of 3.50 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students admitted to the Honors program are expected to enroll in the appropriate Honors Thesis course during the final two semesters in residence. The completed thesis must be approved by the supervising faculty sponsor and another Divisional faculty member. Students interested in this program should contact their faculty advisors for additional information.

BACHELOR OF ARTS DEGREE IN AMERICAN STUDIES

American Studies is an interdisciplinary program which examines society and culture in the United States. This approach provides a broad view of the nation's life by examining not only politics and economics but also customs, art, literature, and thought and by using materials and methodologies from several disciplines. The major in this field allows the students latitude of study to develop, in close consultation with the
American Studies advisor, a course of study adapted to their own interests and post-graduate needs and is especially appropriate for students choosing careers in law, urban studies, the military, public relations, historic conservation, museum and archival management, and community organizations.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.10

All candidates for the degree must complete:

A. 36 semester hours in courses approved by the American Studies advisor, 21 of which must be at the upper-division level.

1. 18 semester hours of required courses are:
   a. AMS 2013 Basic Issues in American Culture
   b. AMS 3013 Early American Culture
   c. AMS 3023 Modern American Culture
   d. 3 semester hours from
      AMS 3033 Topics in Regional American Cultures
      or
      AMS 3043 Topics in Ethnic American Cultures
   e. 6 semester hours of AMS 4823 Topics in American Culture

2. 18 semester hours of support work are:
   a. 12 semester hours of courses on American society and culture from at least two disciplines. Must have the approval of the American Studies Advisor and constitute a unified area of interest. 3 semester hours of AMS 4933-6 Internship in American Studies may be taken as partial fulfillment of this requirement.
      Areas of interest may include: Urban Studies, Mexican-American Studies, Women's Studies, The American Legal System, Nineteenth Century America, Modern America, and Contemporary America. Other areas or courses may be chosen with the consent of the American Studies Advisor.
   b. 6 semester hours in a second support area taken with the consent of the American Studies Advisor.

B. 42 semester hours of electives.

COURSE DESCRIPTIONS

AMERICAN STUDIES
(AMS)

2013 Basic Issues In American Culture
(3-0) 3 hours credit.
Introduces the student to present-day American civilization through the interdisciplinary American Studies approach. Examines the concept of culture and such topics as politics, the media, art, architecture, music, literature, race relations, and education.

3013 Early American Culture
(3-0) 3 hours credit.
Examines the major influences which shaped American culture in the pre-industrial era. Topics may include the impact of colonialism, the enlightenment, the frontier and other factors upon the development of a distinctive society.

3023 Modern American Culture
(3-0) 3 hours credit.
Examines major trends in American culture during and after the industrial revolution, with special attention to the consequences of urbanization, industrialization, and secularization upon American society.

10Thirty-nine of the total semester hours required for the degree must be at the upper-division level.
212 / American Studies
Bachelor of Arts Degree in Anthropology

3033 Topics in Regional American Cultures
(3-0) 3 hours credit.
A study of the culture(s) of a distinct region or regions within the United States. Emphasis will be given to works that analyze the region's culture, literature by authors from that particular area, history, and folk traditions. Topics may include Southern, Western, Mid-Western, or other identifiable regional cultures. May be repeated for credit when topics vary.

3043 Topics in Ethnic American Cultures
(3-0) 3 hours credit.
A study of the cultural expressions of a particular racial or ethnic group or groups in the United States. Topics may include Native American, Black, Hispanic, Jewish, or other cultural groups. May be repeated for credit when topics vary.

4823 Topics in American Culture
(3-0) 3 hours credit.
Topics vary and may include: American reform movements and political change, Mark Twain's America, politics and law of American education, the American novel, American counter-culture, political behavior and expression in America, and cultural currents in various periods of American history. Two or more topics may be taken concurrently. May be repeated for credit when topics vary.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered prior to registration.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933-6 Internship in American Studies
3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator prior to registration.
Supervised experience relevant to American Studies within selected community organizations. A maximum of 6 credit hours may be earned through Internship in American Studies. Must be taken on a credit-no credit basis.

BACHELOR OF ARTS DEGREE IN ANTHROPOLOGY

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.

All candidates for the degree must complete:

A. 30 semester hours in the major, 21 of which must be at the upper-division level.

1. 12 semester hours of required courses are:
   a. ANT 1013 Man in Adaptation
   b. ANT 2013 Introduction to Archaeology and Physical Anthropology
       or
       ANT 2023 Introduction to Cultural Anthropology and Linguistics
   c. ANT 3293 Research Methods in Anthropology
   d. ANT 4973 Anthropology Senior Seminar

2. 9 semester hours are required in cultural anthropology, physical anthropology, and archaeology, with at least 3 hours in each, chosen in consultation with the student's advisor.

3. 9 additional semester hours of anthropology electives (not ANT 4911-3 Independent Study) chosen in consultation with the student's advisor. The following courses may be used to satisfy all or part of this requirement.

---

11Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking certification should consult the Undergraduate Certification Programs in Education brochure for information.
HIS 3113 The American Indian
LNG 3833 Sociology of Language
PSY 3053 Cross-Cultural Psychology
PSY 3633 Aggression
SOC 3013 Social Stratification
SOC 3133 Sociology of Pluralism in the Southwest
SSC 3003 Social Research Methods
SSC 3103 Major Theories of the Social Sciences
STA 3013 Multivariate Analysis for the Life and Social Sciences

B. 6 semester hours of courses in the social sciences outside the major chosen with the consent of the advisor.

C. 9 upper-division semester hours of work from another discipline which supports the study of anthropology. The Support Area must form a cohesive program of study and must be chosen in consultation with the student's advisor after the completion of 12 semester hours of Anthropology. A statement of intent and the list of courses to be taken in the Support Area must be filed with the Undergraduate Advisor of Record.

D. 33 semester hours of electives.

COURSE DESCRIPTIONS

ANTHROPOLOGY

(ANT)

1013 Man in Adaptation
(3-0) 3 hours credit.
The study of man's culture, past and present; its origin, development, and contemporary change; and the explorations of man's physical and cultural differences, using the paradigm of adaptation.

2013 Introduction to Archaeology and Physical Anthropology
(3-0) 3 hours credit. Prerequisite: ANT 1013.
A problem-solving approach to classic and contemporary questions in archaeology and physical anthropology. Stress is on the nature of anthropological inquiry as reflected in these two fields.

2023 Introduction to Cultural Anthropology and Linguistics
(3-0) 3 hours credit. Prerequisite: ANT 1013.
A problem-solving approach to classic and contemporary questions in cultural anthropology and linguistics. Stress is on the nature of anthropological inquiry as reflected in these two fields.

3103 Social Organization
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
Comparative analysis of family and social organization, primarily among non-literate peoples.

3113 World Ethnography
(3-0) 3 hours credit.
A survey of peoples and cultures around the world, selected to illustrate the range of human social variation. (Formerly ANT 2113; credit cannot be earned for both 2113 and 3113.)

3123 Ecological Perspectives on Health and Disease
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
Consideration of the interrelated processes of health and disease, the ecological aspects of disease in the evolution of human culture, and the individual as a biocultural unit in interaction with the environment.

3133 Native Peoples of North America
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
Native cultures of the North American continent, the effects of European expansion, and contemporary problems of American Indians.
3143 **Peoples and Societies of Latin America**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.  
Contemporary peoples of indigenous, Mediterranean, and African origin inhabiting the Caribbean, Middle and South America.

3153 **Indians of the Great Plains**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.  
An examination of the fundamental cultural transformation and florescence of Native American societies of the Great Plains following the introduction of the horse. Attention is given also to the subsequent retreatment under the imposition of Anglo-American dominance, and the recent emergence of new forms of cultural expression within tribal and urban areas.

3173 **Ethnomedicine: Theory and Applications**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.  
Integration of socio-cultural and medical approaches to health maintenance based on cross-cultural and contemporary urban research. Evidence for the efficacy of non-Western medical practices, the interaction of medical systems in bi-ethnic social situations, cross-cultural studies of mental health and the analysis of cross-ethnic programs of medical care receive attention.

3183 **Peasant Societies and Modernization**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 or consent of instructor.  
Anthropological theory, models, and findings relative to peasants distributed world-wide and viewed as a socio-cultural type.

3223 **Cultural Ecology**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.  
Man's adaptation to environment and his interaction with it, comparing simple and complex societies in various environmental contexts.

3253 **The Archaeology of South America**  
(3-0) 3 hours credit. Prerequisite: ANT 1013.  
The origins and development of the native cultures of South America, and their relationships to the cultural areas of Central America and the Caribbean. Emphasis on the variety of cultural forms and cultural evolution. The roles of demography, subsistence systems, militarism, religion and other factors in the rise of South American cultures will be discussed.

3263 **Archaeology of North America**  
(3-0) 3 hours credit. Prerequisite: ANT 1013.  
Survey of prehistoric cultures in North America from earliest times to historic contact; chronology; settlement and subsistence patterns; technology.

3273 **Ancient Civilizations of Mexico, Guatemala, and Central America**  
(3-0) 3 hours credit. Prerequisite: ANT 1013.  
Examination of the development of the ancient civilizations of Mexico and Central America: Olmec, Teotihuacan, Maya, Toltec, Aztec.

3283 **Native Cultures of the American Southwest**  
(3-0) 3 hours credit. Prerequisite: ANT 1013.  
The native American Indian cultures of the Southwestern United States are studied from various perspectives; prehistoric development; ethnography; ethnohistory.

3293 **Research Methods in Anthropology**  
(3-0) 3 hours credit. Prerequisite: ANT 1013 and any one of the following: MAT 1013, MAT 1023, MAT 1033, MAT 1063, CS 1043, CS 1063, CS 1073, CS 1173, or CS 1713.  
Quantitative analysis and computer applications as used in anthropological research preparation.

3403-6 **Field Course in Archaeology**  
3 or 6 hours credit. Prerequisites: Upper-division standing, consent of instructor, and at least one previous anthropology or archaeology course.  
Offers the opportunity to gain intensive training in archaeological field methods: excavation, site survey, mapping, sampling, interpretation. Additional fees are required. May be repeated for credit with advisor's permission, but not more than 6 hours may be applied to the major.
3503 Human Origins
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
The fossil record of human emergence, comparative studies of human evolution. Evolution
of social organization, technology, and language development to the end of the Ice Age.

3603 Sex, Gender, and Culture
(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.
Examination of the biological and cultural sources of differences between men and
women.

3623 Primate Behavior
(3-2) 3 hours credit. Prerequisite: ANT 1013 or consent of instructor.
Analysis of learning, development, social and abnormal behavior among the various
primate species. Observational projects at the San Antonio Zoo are part of this course.

3643 Archaeometry
(3-0) 3 hours credit. Prerequisite: ANT 1013.
Application of the physical and chemical sciences to archaeological problems; examination
of selected topics: trade, technology, dating, settlement patterns, seasonality of
occupations.

3653 Primitive Technology
(3-0) 3 hours credit. Prerequisite: ANT 1013.
Lectures and demonstrations illustrating the technology of ancient and contemporary
pre-industrial peoples: tool manufacture and use; making artifacts of wood, stone, and
metals; social and economic aspects of primitive technologies; craft specialization; subsis­tence and settlement technology.

3663 Hunters and Gatherers
(3-0) 3 hours credit. Prerequisite: ANT 1013.
A study of the lifeways of hunting and gathering peoples around the world. Emphasis is
placed on prehistoric hunters and gatherers, leading to an examination of archaeological
data, and problems in interpretation. Contemporary hunting and gathering populations are
also studied.

3673 Ancient Civilizations of the Near East, Egypt, and Europe
(3-0) 3 hours credit. Prerequisite: ANT 1013.
Development of agriculture and village life, beginnings of civilization in the Near East and
Mediterranean; comparisons with Mesoamerica, India, and China; rise of civilization in the
Nile Valley.

4113 Archaeology of Texas
(3-0) 3 hours credit. Prerequisite: ANT 3263.
Detailed review of prehistoric and historic aboriginal cultures of Texas and adjacent
areas: current trends in Texas archaeology; examination of artifacts and field trips to local
prehistoric sites.

4253 Cultural Dynamics
(3-0) 3 hours credit. Prerequisite: ANT 1013.
An examination of anthropological thought on the causes, nature, and consequences of
cultural change and continuity. Case studies are used to illustrate both long-term civiliza­tion processes in cultural transformation and shorter-range innovation and change.

4403 Laboratory Analysis in Anthropology
(2-4) 3 hours credit. Prerequisites: ANT 3403 or ANT 3406 and consent of instructor.
Supervised analysis of field data; methods of analysis; research techniques; preparation of
reports. May be repeated for an additional three hours of credit with consent of instructor.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the
student's advisor, and the Division Director and Dean of the College in which the course
is offered prior to registration.
Independent reading, research, discussion, and/or writing under the direction of a faculty
member. May be repeated for credit, but not more than 6 hours of independent study,
regardless of discipline, will apply to a bachelor's degree.
216 / Anthropology
Bachelor of Arts Degree in History

4933-6 Internship in Anthropology
3 or 6 hours credit. Prerequisite: Consent of internship coordinator prior to registration. Supervised experience relevant to anthropology within selected community organizations. A maximum of 6 credit hours may be earned through Internship in Anthropology.

4951-3 Special Studies in Anthropology
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4973 Anthropology Senior Seminar
(3-0) 3 hours credit. Prerequisite: Senior standing as an anthropology major. A seminar reserved to anthropology majors during their senior year. Areas of significant new research in each subfield of the discipline will be reviewed in conjunction with individualized research projects.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in anthropology during their last two semesters; completion of honors examination and approval by the Honors Program coordinator. Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

BACHELOR OF ARTS DEGREE IN HISTORY

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.\(^{12}\)

All candidates for the degree must complete:

A. 27 semester hours in the major, 18 of which must be at the upper-division level.
   1. 6 semester hours from courses numbered HIS 2503-2693 covering different continental areas.
   2. 18 additional semester hours of history electives chosen in consultation with the student's advisor, 15 of which must be at the upper-division level. Of the upper-division hours, at least six must be taken in each of two different continental areas. A maximum of 6 semester hours may be applied to the major and to the corresponding areas from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMS 3013</td>
<td>Early American Culture</td>
</tr>
<tr>
<td>AMS 3023</td>
<td>Modern American Culture</td>
</tr>
<tr>
<td>ANT 3673</td>
<td>Ancient Civilizations of the Near East, Egypt, and Europe</td>
</tr>
<tr>
<td>ECO 3163</td>
<td>Development of Economic Thought</td>
</tr>
<tr>
<td>ECO 3183</td>
<td>Economic Development of the United States</td>
</tr>
<tr>
<td>ECO 3303</td>
<td>Theories of Economic Progress</td>
</tr>
<tr>
<td>POL 3133</td>
<td>Political Philosophy: Ancient and Medieval</td>
</tr>
<tr>
<td>POL 3143</td>
<td>Political Philosophy: Modern</td>
</tr>
<tr>
<td>POL 3323</td>
<td>Constitutional Law</td>
</tr>
<tr>
<td>PSY 4003</td>
<td>History of Psychology</td>
</tr>
<tr>
<td>SSC 3533</td>
<td>Inter-American Relations</td>
</tr>
</tbody>
</table>

3. HIS 4973 Seminar in History

B. 9 semester hours at the upper-division level in approved support work outside History in Social and Behavioral Sciences, Research Methodology, or Cultural Studies.

\(^{12}\)Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
The student must consult with his/her advisor in order to define a coherent support area.

C. 42 semester hours of electives

COURSE DESCRIPTIONS

HISTORY

(HIS)

1013 United States History 1807-1789
(3-0) 3 hours credit.
American history from colonization through the Constitution, with emphasis on the development of political and social systems and the impact of social change on political events. Applies to the legislative requirement for United States history.

1023 United States History 1789-1896
(3-0) 3 hours credit.
The social, economic, and political development of the new American nation into a mature industrial society. Applies to the legislative requirement for United States history.

1033 United States History 1896 to the Present
(3-0) 3 hours credit.
Domestic politics and foreign affairs in the twentieth century are examined in relation to socio-economic developments. Topics include the Progressive Reform, World War I and post-war problems, the Twenties, the Depression and the New Deal, World War II and the Cold War and the American Society since 1945. Applies to the legislative requirement for United States history.

2053 History of Texas Since 1836
(3-0) 3 hours credit.
A consideration of the regional history of the Southwest, with particular attention to the history of Texas during the period of independence and afterward, the annexation of the Southwest by the United States, and the political and economic development of the region in the late nineteenth and twentieth centuries. Applies to the legislative requirement for Texas history.

2063 History of American Foreign Policy
(3-0) 3 hours credit.
An examination of the emergence of America as a world power and its subsequent activities in the affairs of nations. Particular emphasis is placed on the domestic roots of American diplomacy. Applies to the legislative requirement for United States history.

2103 Introduction to World Civilization I
(3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates in The University Honors Program.
An interdisciplinary examination of the origins, growth and development of representative major world cultures and civilizations, with emphasis on the political, social, economic, intellectual, and artistic legacies of each.

2113 Introduction to World Civilization II
(3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates in The University Honors Program.
Continuation of HIS 2103.

2533 Latin America Since 1492
(3-0) 3 hours credit.
An introduction to Latin American civilization through an analysis of pre-Hispanic civilization, the Spanish Conquest, colonialism, race relations, and political ideologies. (Formerly HIS 2543; credit cannot be earned for both 2533 and 2543.)

2553 The Far East: History and Civilization
(3-0) 3 hours credit.
A survey of Far Eastern history and culture, with emphasis on China and Japan.
2573 **Survey of African History**  
(3-0) 3 hours credit.  
An introduction to African cultures emphasizing the impact of colonialism and independence.

2603 **Western Civilization to 1648**  
(3-0) 3 hours credit.  
A survey of the social, cultural, political, and economic development of Europe from its beginnings to upheavals of the seventeenth century. (Formerly HIS 2503. Credit cannot be earned for both 2503 and 2603.)

2613 **Western Civilization Since 1648**  
(3-0) 3 hours credit.  
A survey of the development of modern Europe with an emphasis on social, political, and economic transformation and the growth of new ways of understanding relationships of people to each other and to the natural world. Some attention will also be given to relationships between Europe and the Americas. (Formerly HIS 2513. Credit cannot be earned for both 2513 and 2613.)

3003 **Colonial America and the Formation of American Society**  
(3-0) 3 hours credit.  
An examination of the development and transformation of colonial societies in the seventeenth and eighteenth centuries, with special emphasis on family and community studies as a measure of social change. Applies to the legislative requirement for United States history.

3023 **American Independence and National Unity, 1760-1820**  
(3-0) 3 hours credit. Prerequisite: HIS 1013 or consent of instructor.  
Origins of the American Revolution, the Revolutionary War, the struggle for unity, and the early years of nationhood. Applies to the legislative requirement for United States history.

3033 **American Reform**  
(3-0) 3 hours credit.  
An analysis and comparison of the origins and development of American reform from 1730 to the New Deal, such as the Great Awakening, anti-slavery, temperance, abolitionism, Populism, Progressivism, and the New Deal. Applies to the legislative requirement for United States history.

3063 **The Spanish Borderlands 1521-1821**  
(3-0) 3 hours credit.  
Spanish exploration and colonization of the northern frontiers of New Spain. The introduction of Hispanic institutions and the development of a frontier society.

3073 **The Mexican Borderlands/The American Southwest**  
(3-0) 3 hours credit.  
The American Westward Movement into the Southwest, the settlement and development of the area as well as its political history are considered in relation to national trends. Attention is given to the area as a meeting place of various European, American and Asian ethnic and racial groups and to their cultural institutions and expressions as reflections of the development of the area within United States history.

3083 **History of the American West**  
(3-0) 3 hours credit.  
An examination of the American Westward Movement in the 19th and 20th centuries. Topics may include the conquest and settlement of the territory, the relationship of the new territory to the nation, patterns of economic development, community-building, population diversity, and the symbol of the frontier.

3093 **United States Constitutional History**  
(3-0) 3 hours credit.  
Constitutional developments from the formation of the state and federal constitutions to Watergate. Particular attention is paid to the context of judicial decision-making at the Supreme Court level and the impact of those decisions on American life. Complements POL 3323, Constitutional Law. Applies to the legislative requirement for United States history.
3113 The American Indian
(3-0) 3 hours credit.
A history of the American Indian since European contact to the present. Attention is given to the internal cultural, economic and political developments within the different Indian groups as well as to the European and American developments and policies affecting the Indian.

3123 History of Texas: The Colonial and Mexican Periods and the War of Independence
(3-0) 3 hours credit.
Texas history from the seventeenth century through the War of Independence of 1836, emphasizing the Spanish and Mexican backgrounds of Texas and the changes which preceded Texas’ independence. Applies to the legislative requirement in Texas history.

3153 The City in the Making of America
(3-0) 3 hours credit.
A study of urban growth since 1625. The course examines the social, economic, and political life of three phases in United States urbanization: the colonial city, the industrial city, and the modern metropolis. The effects of urban changes on the lives of city dwellers and on the ways in which cities have influenced national development.

3163 The Stranger In America
(3-0) 3 hours credit.
An examination of immigrants and their reception in American society from the eighteenth century to the present, including the immigrants’ motives for moving to the United States, the problems they encountered in adjusting to their new surroundings, and the contributions they made to the nation’s development.

3173 Modern America
(3-0) 3 hours credit.
Modern America since the onset of the Great Depression is examined in relation to the socio-economic forces and the political trends of the twentieth century. Topics include social change, evolving political functions and structures, and the new American role in the world order. Applies to the legislative requirement for United States history.

3183 Law and American Development
(3-0) 3 hours credit.
The impact of law from colonial times to the present. Particular attention will be paid to the impact of law on social change, economic growth, and political development. Applies to the legislative requirement for United States history.

3193 The South In American History
(3-0) 3 hours credit.
Development of Southern identity, slavery, Civil War and Reconstruction, Jim Crowism, the Black experience, and the Civil Rights Movement, with emphasis on the period since 1815.

3203 Britain Since 1760
(3-0) 3 hours credit.
A survey of modern British history, emphasizing political, social and intellectual factors in Britain’s past.

3213 France Since 1750
(3-0) 3 hours credit.
Introduction to the culture, politics and life of France. Intensive examination of a central event in European history, the French Revolution, and its role in the formation of modern France.

3233 Germany Since 1806
(3-0) 3 hours credit.
The history of Germany since the Battle of Jena, emphasizing the crisis of the Prussian state, the effects of industrialization, the rise of German culture, Germany’s unification and attainment of world power, and Germany’s history since World War I.

3263 Seventeenth and Eighteenth Century Europe
(3-0) 3 hours credit.
A survey of European history under the Ancien Régime, to 1789. Examination of the devel-
opment of and the limits to Absolutism, the "crisis" of the seventeenth century and the Baroque, the rise of science, and the culture of the Enlightenment.

3273 **Medieval Europe**  
(3-0) 3 hours credit.  
A study of European society from the fall of the Roman empire to the eve of the Renaissance. Attention to the growth of Christianity in Europe, changing forms of political, economic and social organization, and intellectual and cultural developments.

3293 **Imperial Spain**  
(3-0) 3 hours credit.  
Iberian history from the evolution of the northern kingdoms to the early 19th century. Topics may include the growth and development of Castile and Aragon, Hapsburg imperialism, the Bourbon reformers, and the collapse of the monarchy and the rise of the Carlist movement. (Formerly HIS 3243; credit cannot be earned for both 3243 and 3293.)

3303 **History of Mexico**  
(3-0) 3 hours credit.  
The development of the Mexican nation and culture from the Aztecs to the present.

3343 **Modern Central America and the Caribbean**  
(3-0) 3 hours credit.  
The course will emphasize the nineteenth and twentieth centuries and may include the following topics: the breakdown of colonialism; the problems of independence; the rise and decline of slavery; the impact of foreign capital and imperialism; and the importance of nationalism, socialism, fascism, communism, and revolution in the contemporary era.

3353 **Modern South America**  
(3-0) 3 hours credit.  
The course will emphasize the nineteenth and twentieth centuries and may include the following topics: the breakdown of colonialism; the problems of independence; neocolonial development; the impact of the Depression; industrialization and urbanization; and the importance of nationalism, socialism, fascism, communism, and revolution in the contemporary era.

3403 **Pre-Hispanic and Colonial Latin America**  
(3-0) 3 hours credit.  
A study of political, economic, social, and cultural development in Latin America to the end of Spanish and Portuguese colonial rule.

3423 **The Republic Transformed, 1820-1877**  
(3-0) 3 hours credit.  
A study of the political, economic, and social and cultural developments in the United States from the age of Andrew Jackson through Reconstruction. Applies to the legislative requirement for United States history.

3433 **The Response to Industrialism, 1877-1929**  
(3-0) 3 hours credit.  
An examination of social and political responses to the industrial revolution in the United States. Applies to the legislative requirement for United States history.

3443 **Hispanics in the United States**  
(3-0) 3 hours credit.  
A study of Mexican Americans, Puerto Ricans, Cubans, and other Hispanics in the United States. Special attention will be given to ethnic institutions and traditions as well as to inter-ethnic relations and theories of assimilation and acculturation. Applies to the legislative requirement for United States history.

3453 **History of Medicine in the United States**  
(3-0) 3 hours credit.  
Social and cultural dimensions of American medicine from colonial times to the present. Topics may include medical education, licensing, midwifery, attitudes toward contraception and abortion, the rise of the hospital, the emergence of specialization, women and minorities in the profession, "irregular" medicine, and the debate over social medicine.  
(Formerly HIS 4123. Credit cannot be earned for both 3453 and 4123.)
3463  **History of Religion in the United States**  
(3-0) 3 hours credit.  
Religious behavior, ideas, and institutions in American society from colonial times to the present, with special emphasis on periods of religious change, including the First and Second Great Awakenings, the Social Gospel, and the New Religious Consciousness. (Formerly HIS 4133. Credit cannot be earned for both 3463 and 4133.)

3473  **History of Women in the United States**  
(3-0) 3 hours credit.  
Analysis of women’s lives in American history, including how women have been affected by the economic, social, cultural, and political structures in different periods; how this experience has been altered by class, race and ethnicity, region, and age; and how women have coped with and promoted change throughout American history. Applies to the legislative requirement for United States history. (Credit cannot be earned for HIS 3473 and SSC 3143.)

3483  **The Culture of Capitalism in the United States**  
(3-0) 3 hours credit.  
Describes the impact of industrialization on its participants in the United States from 1820 to the present. Topics may include the formation of classes, comparative cultures and institutions of the managers and the managed, the changing nature of work and employment, and the relationship of ethnicity and gender to work.

3493  **History of San Antonio**  
(3-0) 3 hours credit.  
An examination of San Antonio’s history. Topics may include the cultural origins of colonial San Antonio; political, economic, and social development; and the effects of urbanization on local ethnic communities.

3503  **The Expansion of Europe, 1415-1800**  
(3-0) 3 hours credit.  
A survey of European exploration, cultural and economic expansion, colonization, and imperialism.

3523  **European Cultural History**  
(3-0) 3 hours credit.  
Introduction to various aspects of the European cultural heritage, focusing on the interaction between society and culture. Topics may include popular culture, the arts, philosophy, science, social theory, ideology, and mass media.

3543  **History of Modern Warfare**  
(3-0) 3 hours credit.  
Survey of the major developments in the history of war since the Napoleonic era. Analyses of the social, economic, and political context in which wars have occurred. Emergence of new forms of weaponry, strategy, logistics, and tactics.

3583  **Revolutions in History**  
(3-0) 3 hours credit.  
Using various case studies selected by the instructor, this course will examine the changing goals and methods of revolutionaries from the late eighteenth century to modern times.

3633  **Early Modern England, 1485-1760**  
(3-0) 3 hours credit.  
English history in the Tudor, Stuart, and early Hanoverian eras, emphasizing the growth of the national state, the overseas expansion of England, and pre-industrial social and economic change.

3643  **Modern Spain**  
(3-0) 3 hours credit.  
A study of 19th and 20th century Spain, beginning with the origins of the Carlist movement, continuing with the rise and fall of the two Spanish Republics, the Civil War, the advent of the Franco regime, and concluding with the restoration of the monarchy.
3653 Modern Italy
(3-0) 3 hours credit.
A survey of Italian history from the eighteenth century to the present, in the wider context of modern European history.

3663 European International Relations Since 1789
(3-0) 3 hours credit.
European diplomacy and international relations since the French Revolution. Among the topics covered will be the Napoleonic Empire, the formation of the Concert of Europe, the Crimean War and the age of Bismarck, the diplomacy of imperialism, the origins of the two World Wars, and the Cold War.

3713 The Middle East in Crisis
(3-0) 3 hours credit.
This course will deal with the historical background to the Arab-Israeli dispute, the Middle East's relations with colonial and other major powers, and the area's problems with industrialization and modernization.

3723 The European Renaissance
(3-0) 3 hours credit.
The cultural achievements of Italy and northern Europe from the 14th to the 16th centuries in their economic, social, and political contexts. (Formerly HIS 3513; credit cannot be earned for both 3513 and 3723.)

3733 Europe in the Age of the Reformation
(3-0) 3 hours credit.
Culture, religion, and society in Europe in the 16th century. (Formerly HIS 3513; credit cannot be earned for both 3513 and 3733.)

3743 Russia, 1682-1917
(3-0) 3 hours credit.
The development of Russia from the accession of Peter the Great to the outbreak of the Russian Revolution. (Formerly HIS 3223; credit cannot be earned for both 3223 and 3743.)

3753 Soviet Russia Since 1917
(3-0) 3 hours credit.
The evolution of Soviet Russia from the revolution of 1917 to the present. A critical analysis of the building of a socialist society in the Soviet Union and the relationship of Soviet Russia to the outside world. (Formerly HIS 3223; credit cannot be earned for both 3223 and 3753.)

4003 History of Organized Crime
(3-0) 3 hours credit.
A study of the emergence and development of various types of syndicate crime and their impact on American society since the 19th century.

4113 American Intellectual History
(3-0) 3 hours credit.
Major intellectual trends in American society. Time periods covered and specific topical analysis will vary.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered prior to registration. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.

4933-6 Internship in History
3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator prior to registration. Supervised experience relevant to history within selected community organizations. A maximum of 6 credit hours may be earned through Internship in History (must be taken on a credit-no credit basis.)

4951-3 Special Studies in History
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not
often available as part of the regular course offerings. Special Studies courses may be repeated for credit when topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

4973 Seminar in History
(3-0) 3 hours credit. Prerequisite: Consent of instructor. Enrollment limited to juniors and seniors majoring in history. The opportunity for an intensive study of a selected topic. Primary emphasis on supervised research on various aspects of the topic.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in history during their last two semesters; completion of honors examination and approval of the Honors Program coordinator. Supervised research and preparation of an honors thesis. May be repeated once with advisor’s approval.

BACHELOR OF ARTS DEGREE IN PSYCHOLOGY

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120. All candidates for the degree must complete:

A. 30 semester hours in the major, 15 of which must be at the upper-division level.

1. 15 semester hours of required lower-division courses are:
   a. PSY 2013 Fundamentals of Psychology
   b. 6 semester hours from:
      PSY 2503 Developmental Psychology
      PSY 2513 Abnormal Psychology
      PSY 2523 Personality
      PSY 2533 Social Psychology
   c. 6 semester hours from:
      PSY 2543 Theories of Learning
      PSY 2553 Perception
      PSY 2573 Psychology of Thought
      PSY 2583 Psychology of Language

2. 15 semester hours of required upper-division courses are:
   a. PSY 3003 Laboratory Methods and Experimental Designs in Psychological Research
   b. 3 semester hours from:
      PSY 3103 Cognition
      PSY 4113 Cognitive Development
      PSY 4143 Memory
      PSY 4153 Attention
      PSY 4163 Sensory Processes
      PSY 4213 Social Cognition
      PSY 4243 Individual Differences in Information Processing
   c. 9 semester hours of upper-division courses in Psychology. No more than 3 hours of PSY 4911-3 Independent Study, PSY 4933-6 Internship in Psychology, or PSY 4993 Honors Thesis, may be counted toward this requirement.

---

*Thirty-nine of the total semester hours required for the degree must be at the upper-division level.*
B. 12 hours of support work outside of Psychology, chosen in consultation with the student’s advisor. The courses taken to meet this requirement must have a common focus and must be approved by the student’s advisor. Sample lists of approved support work courses are available from the student’s advisor.

C. 36 semester hours of electives.

COURSE DESCRIPTIONS

PSYCHOLOGY

(PSY)

1013 Methods of Knowledge
(3-0) 3 hours credit.
An application of contemporary research on human information processing to the development of academic skills. Lectures will focus on the analysis of common beliefs about the nature of effective learning strategies and about the basis for individual differences in academic performance.

2013 Fundamentals of Psychology
(3-0) 3 hours credit.
Introduction to the study of the mind and behavior with attention to awareness, discrimination, sensation, perception, emotion, motivation, learning, memory, problem-solving, personality, mental and behavioral development, abnormal behavior, and behavior in group settings. Participation in illustrative research required.

2503 Developmental Psychology
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.
Problems, methods and results in the study of the psychological development of the individual from the prenatal period to old age.

2513 Abnormal Psychology
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.
Dynamics of abnormal behavior, with attention to description, causes, and treatment of major psychological disorders, including neuroses, psychoses, personality disorders, and psychosomatic disorders.

2523 Personality
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.
Problems, methods, major theories, and results in the study of development and maintenance of typical modes of behavior and dynamics of adjustment.

2533 Social Psychology
(3-0) 3 hours credit. Prerequisite: SOC 1013 or PSY 2013 or consent of instructor.
Problems, methods, major theories, and results in the study of social interaction and interpersonal influence: self-identity, values and attitudes, role behavior, social perception and behavior within groups.

2543 Theories of Learning
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.
An examination of major theories about the nature of the learning process. Discussion will focus on the construction and evaluation of learning models. The practical implications of theoretical findings for the acquisition, maintenance, and elimination of behavior will be considered.

2553 Perception
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.
Survey of the processes by which the information available in light and sound is encoded and transformed to produce our perception of the world. Emphasis on the interaction between data-driven and conceptually-driven processes. Examination of elementary sensory physiology, illusions, pattern recognition, perceptual development, memory structures, and an introduction to information processing.
2573 **Psychology of Thought**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
The processes of reasoning, concept formation, language, problem-solving, and creativity.  
Topics may include the role of logic in thinking, information processing models of problem-solving, and techniques influencing creativity.

2583 **Psychology of Language**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
An introduction to the psychology of language. Contemporary research on the psychological aspects of language structure, comprehension, production, and development will be surveyed in order to illustrate the ways in which humans use verbal symbols to understand and describe events. Topics may include reading, brain-language relationships, and social determinants of thought and language.

3003 **Laboratory Methods and Experimental Designs in Psychological Research**  
(3-0) 3 hours credit. Prerequisites: PSY 2013, two courses from PSY 2503-2583; and STA 1053 or 1064, or equivalent. Prior or concurrent enrollment in STA 1993 recommended. This course is designed to offer students the opportunity to familiarize themselves with representative experimental designs employed in psychological research, to provide instruction in the choice of appropriate designs, to provide the opportunity to develop skills in the analysis of published research, and to offer an introduction to techniques for collecting and analyzing data.

3013 **Psychological Measurement**  
(3-0) 3 hours credit. Prerequisites: PSY 2013 and STA 1053 or 1064, or consent of instructor.  
The application of quantitative and qualitative measures to psychological data, interpretational strategies, and assessments of validity and reliability.

3023 **Social Psychology of Small Groups**  
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor.  
Theory and modern research in the social psychology of small groups. Particular attention will be given to group formation, the nature of small group processes, and the influence of groups on behavior.

3043 **Comparative Psychology**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
Comparative study of the social behavior of various species of animals, including man, from a phylogenetic perspective.

3053 **Cross-Cultural Psychology**  
(3-0) 3 hours credit. Prerequisites: PSY 2013 and ANT 1013 or consent of instructor.  
Perception, learning, cognition and thinking, personality and social behavior from a cross-cultural perspective.

3103 **Cognition**  
(3-0) 3 hours credit. Prerequisites: One of the following: PSY 2543, 2553, 2573, or 2583.  
Examination of current theories about how knowledge is represented in the mind. Emphasis will be placed on the processes by which stimuli are identified, by which past information is retrieved and utilized, and by which one's knowledge is modified.

3113 **Motivation and Emotion**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
Examination of causal and purposive accounts of human behavior, and of the biological and learned foundations of motivation. Particular emphasis is given to the causes of voluntary behavior.

3123 **Attitudes**  
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor.  
Examination of current theory and research on the nature of attitudes, their acquisition, and processes of attitude change. Topics may include psychological foundations of attitudes, structure and function of attitudes, attitude measurement, attitude-behavior consistency, theories of attitude change, and the role of attitudes in social behavior.

3203 **Industrial Psychology**  
(3-0) 3 hours credit. Prerequisite: Junior standing or consent of instructor.  
Applications of psychological knowledge to industrial problems such as personnel selection,
employee motivation and satisfaction, and the influence of organizations on behavior. The role of psychology in industry.

3513 **Psychopathology and Childhood**  
(3-0) 3 hours credit. Prerequisite: PSY 2513 or consent of instructor.  
Clinical findings and experimental research regarding childhood behavior problems, including hyperkinesis, infantile autism, childhood schizophrenia, and childhood neuroses. Additional topics include family influences on development of abnormal behavior and various psychotherapeutic techniques.

3523 **Psychology of Aging**  
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor.  
Descriptive and theoretical accounts of psychological aspects of aging.

3533 **Behavior Change and Psychotherapy**  
(3-0) 3 hours credit. Prerequisite: PSY 2513 or consent of instructor.  
Theory and research concerning different systems of psychotherapy, including psychoanalysis, behavior therapy, and client-centered therapy.

3633 **Aggression**  
(3-0) 3 hours credit. Prerequisites: ANT 1013, PSY 2013 or consent of instructor.  
Survey of social and psychological data, findings and theory of aggression, both human and non-human.

3903 **Advanced Psychological Research**  
(2-2) 3 hours credit. Prerequisites: PSY 3003. One of STA 1993, CS 1073, or CS 1714 (or CS 1711 and 1713) recommended.  
Provides the opportunity for the student to conduct current research in a sub-area of psychology under the instructor's supervision. Lectures will include a review of previous research in the sub-area and discussion of research design, data collection, data analysis, and the reporting of research.

4003 **History of Psychology**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
The development of major theoretical positions and research strategies in psychology from the ancient Greeks to the present with emphasis on the development of scientific psychology since the late nineteenth century.

4103 **Prejudice**  
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor.  
Consideration of social psychological and personality factors in prejudice and stereotyping, and their interaction with cultural factors in producing racism and other prejudices.

4113 **Cognitive Development**  
(3-0) 3 hours credit. Prerequisite: PSY 2503 or 2573 or consent of instructor.  
The development of perception, memory, and thinking in children, with attention to the roles of experience and maturation in development of thought, and to the validity of the concept of cognitive stages, particularly Piagetian models.

4133 **Social and Personality Development**  
(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor.  
Social and personality development across the life-span. Topics may include sex-role development, child rearing, achievement, and the influence of peers. Socialization into different social roles may also be considered. Credit cannot be earned for both PSY 4133 and either PSY 3283 or PSY 4123.

4143 **Memory**  
(3-0) 3 hours credit. Prerequisites: PSY 3003 and one of the following: PSY 2543, 2553, 2573, or 2583, or consent of instructor.  
4153 **Attention**  
(3-0) 3 hours credit. Prerequisites: PSY 3003 and one of the following: PSY 2543, 2553, 2573, or 2583, or consent of instructor.  
Mechanisms for selectively attending to only part of the perceptual information available and for simultaneous attentions to several perceptual sources. Special consideration of the role of stimulus characteristics, perceptual structures, and individual cognitive differences.

4163 **Sensory Processes**  
(3-0) 3 hours credit. Prerequisite: PSY 2553 and PSY 3003 or consent of instructor.  
Study of sensory physiology and the four psychophysical questions: detection, discrimination, magnitude estimation, and recognition.

4183 **Physiological Psychology**  
(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.  
The biological, particularly neurophysiological, bases of human behavior and cognition, the structure and organization of the nervous system, and the effect of the latter on perception, memory, learning, motivation and emotion. (Formerly PSY 2563. Credit cannot be earned for both 2563 and 4183.)

4203 **Prosocial Behavior**  
(3-0) 3 hours credit. Prerequisite: PSY 2533, or consent of instructor; PSY 3003 recommended.  
Cooperation, altruism, interpersonal attraction, and the development of relationships, including such underlying mechanisms as empathy, self-presentation and self-disclosure, norms, and trust.

4213 **Social Cognition**  
(3-0) 3 hours credit. Prerequisite: PSY 2533 or 2573, or consent of instructor.  
The study of how people perceive and construe social events, social situations, and the behavior of other people. Some emphasis is also placed on how social and cultural forces affect person perception processes.

4223 **Environmental Psychology**  
(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor.  
Analysis of the ways in which natural, architectural, and social environments structure the behavior of individuals and groups. Topics include environmental perception, spatial behavior, manipulation of environment and the nature of the person-environment interaction.

4243 **Individual Differences In Information Processing**  
(3-0) 3 hours credit. Prerequisites: PSY 3003 and one of the following: PSY 2543, 2553, 2573, or 2583, or consent of instructor.  
How individuals vary in the encoding and processing of information. Topics include cognitive pathologies and deficits, influence of incentives on cognitive performance, nature of belief systems, and consistency of cognitive style across tasks and skills.

4263 **Psychology and Law**  
(3-0) 3 hours credit.  
Consideration of the role of psychology in the legal system with emphasis on the contributions of psychology to the understanding of criminal behavior and the operation of the criminal justice system. Topics may include: eyewitness testimony, police behavior, jury selection, jury decision making, the insanity defense, plea bargaining and sentencing, punishment, and imprisonment.

4911-3 **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered prior to registration.  
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree. No more than 3 credit hours of independent study will apply toward Psychology major requirements.
228 / Psychology

4923 Current Topics in Psychology
(3-0) 3 hours credit. Prerequisites: PSY 2013 and junior standing or consent of instructor. Coverage of topics of current interest in the field of psychology. Topics may vary. May be repeated once for credit when topics vary, but no more than 3 credit hours will apply toward major requirements.

4933-6 Internship in Psychology
3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator prior to registration. Supervised experience relevant to psychology within selected community organizations. A maximum of 6 credit hours may be earned through Internship in Psychology. No more than 3 credit hours will apply toward Psychology major requirements. Must be taken on a credit-no credit basis.

4951-3 Special Studies in Psychology
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in psychology. Requirements for candidacy include the sponsorship of a faculty member and Psychology faculty approval of the student's project proposal. Supervised research and preparation of an honors thesis. May be repeated once for credit with advisor's approval. No more than 3 credit hours can apply toward Psychology major requirements.
DIVISION OF BICULTURAL-BILINGUAL STUDIES

The Division of Bicultural-Bilingual Studies offers courses which may be used to fulfill the General Education Requirements (GER), or which may be taken as support courses for programs within The University or as electives. Courses toward the Bilingual Education Endorsement (Undergraduate Course Option-BBL) are also offered. This endorsement, unlike others, may be treated as the Area of Specialization for the Provisional Elementary Certificate or as a Second Teaching Field for the Provisional Secondary Certificate. Courses in Bicultural-Bilingual Studies offer the opportunity for students to prepare the bilingual and/or second language teaching and give insights into different cultures, biculturalism, and multiculturalism.

The Division offers courses in teaching English as a Second Language designed to offer students the opportunity to learn appropriate methods and strategies for teaching at the elementary, secondary, and adult levels. Courses are designed for students who plan to teach second languages, but they also offer the opportunity for those who intend to teach in other areas or to enter fields that rely heavily on an understanding of language learning and bilingualism.

COURSE DESCRIPTIONS

BICULTURAL-BILINGUAL STUDIES (BBL)

3003 Multiculturalism in the Southwest
(3-0) 3 hours credit.
Survey of patterns, ideals, and prospects of multiculturalism in the present and future of the Southwest. Examination of cultural differences and similarities among all peoples of the region, and the roles of multiculturalism in politics, education, economics, religion, and everyday life.

3013 Contrastive Linguistics and Bilingualism
(3-0) 3 hours credit.
Survey of concepts in descriptive and social linguistics. Analyses of problems in contrastive linguistics affecting second language acquisition and bilingualism.

3023 Mexican-American Biculturalism
(3-0) 3 hours credit.
A survey of the major cultural patterns and of cultural diversity among Mexican Americans, including family and kinship, language, health, folklore, art, music, religion, sex roles, and cultural revitalization.

3033 The Mexican American in the Southwest
(3-0) 3 hours credit.
Historical foundations of U.S.-Mexico biculturalism in the area. Factors in the development of the area during the colonial era are studied as background for the contemporary bicultural Southwest. Mexican-American contributions to politics and economics of the area are considered.

3043 Psychological Considerations in a Bicultural Environment
(3-0) 3 hours credit.
A cross-cultural and social psychological study of human development, interethnic communication, stereotyping, learning styles, and other topics relevant to delivery of social and educational services in a bicultural setting.

3133 Communicative Competence in a Multilingual Society
(3-0) 3 hours credit.
Examination of theories of first and second language acquisition; analysis of the nature of language. Development of strategies to promote bilingualism and their application to school settings.

*Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.*
203 / Bicultural-Bilingual Studies
English as a Second Language

4023 Foundations of Bicultural-Bilingual Education
(3-0) 3 hours credit.
An investigation of the philosophies and theories of bicultural-bilingual education relating to the learning processes of children.

4033 Assessing Language and Learning in Bicultural-Bilingual Classrooms
(3-0) 3 hours credit.
A survey of evaluation and testing procedures appropriate for bicultural-bilingual classrooms.

4063 Teaching Content in a Bicultural-Bilingual Education Program
(3-0) 3 hours credit. Prerequisite: SPN 3143 or the equivalent.
An investigation and evaluation of curriculum and materials available in different content areas employed in teaching children in a bicultural-bilingual program. Directed field experiences and micro-teaching in the target languages. (Offered in Spanish.)

4073 Reading Materials in a Bicultural-Bilingual Program
(3-0) 3 hours credit.
A study of bilingual and Spanish-language materials appropriate for bilingual students at various age levels. Reading programs in the bicultural-bilingual classroom.

4911 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor and the Division Director and Dean of the College in which the course is offered. Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4951 Special Studies in Bilingual and Second Language Education
1 to 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

COURSE DESCRIPTIONS

ENGLISH AS A SECOND LANGUAGE
(ESL)

3003 Applications of Linguistics
(3-0) 3 hours credit.
A study of the applications of linguistics to the teaching of a second language in English as a Second Language and Bilingual Education programs. Particular attention given to psycholinguistic and sociolinguistic issues in second language acquisition.

3033 Introduction to Teaching English as a Second/Foreign Language
(3-0) 3 hours credit.
A study of the various approaches, methods, and techniques available for teaching language in English as a Second Language and Bilingual Education programs.

3053 Literacy in a Second Language
(3-0) 3 hours credit.
A course on the relationship of reading and writing acquisition to second language development; the design and evaluation of appropriate materials for the teaching of literacy.
DIVISION OF EDUCATION

The Division of Education offers three degree programs: The Bachelor of Arts Degree in Early Childhood and Elementary Education, the Bachelor of Science Degree in Health Education, and the Bachelor of Science Degree in Physical Education. Students seeking degrees in these areas may pursue teacher certification, or may follow similar but individualized programs to prepare them for professional service in institutions and agencies concerned with the welfare of children and youth.

The Division of Education also provides the professional education courses for all students seeking secondary and/or all-level teacher certification. Students seeking secondary and/or all-level teaching certificates pursue a degree in an approved academic area and complete the appropriate certificate requirements outlined in the “Undergraduate Certification Programs in Education” brochure available through the Office of Teacher Certification and Placement.

DIVISIONAL HONORS

The Division of Education designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for admission to the Division Honors Program is based on: 1) the student’s academic performance, and 2) recommendation by the faculty of the student’s major discipline. To be eligible for the program students must have a minimum grade-point average of 3.00 overall at UTSA and a minimum grade-point average of 3.50 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students admitted to the Honors program are expected to enroll in the appropriate Honors Thesis course during the final two semesters in residence. The completed thesis must be approved by the supervising faculty sponsor and another Divisional faculty member. Students interested in this program should contact their faculty advisors for additional information.

CERTIFICATE PROGRAMS

The University of Texas at San Antonio is approved by the Texas Education Agency to recommend students for teaching certificates in various baccalaureate degree areas. Requirements for all certificate programs offered through The University of Texas at San Antonio are listed in the “Undergraduate Certification Programs in Education” brochure available through the Office of Teacher Certification and Placement. Students seeking teacher certification should contact the Office of Teacher Certification and Placement and obtain a copy of this brochure as soon as their major is declared and a program advisor is assigned. Some academic requirements for the teaching certificate are in addition to those outlined for the degree. Students seeking teacher certification generally begin their work in professional education during the sophomore year.

Admission to Teacher Certificate Programs

All students seeking teacher certification must apply for admission to a certificate program through the Office of Teacher Certification and Placement. Applications for admission to a certificate program should be submitted when a student has completed at least 42 semester hours of course work and has attained a grade point average of 2.50 on all work attempted. Admission also requires the recommendations of three UTSA professors and satisfactory scores on the Pre-Professional Skills Test developed for the Texas Education Agency. Students wishing to register for the professional courses must have been admitted to the Certificate Program and/or have passed the basic skills test.
Admission to the Education Professional Semester and Student Teaching must be obtained during the semester prior to enrollment. Admission is contingent upon completion of the following requirements:

A. A 2.50 GPA, including all work attempted;
B. At least 90 semester credit hours; students should consult the Undergraduate Certification Programs in Education brochure, available in the Office of Teacher Certification and Placement for specific credit hour requirements;
C. Completion of EDU 2001, EDU 3003, and EDP 3013;
D. For students seeking a Kindergarten endorsement, 6 semester credit hours of approved courses in Early Childhood Education;
E. The recommendations of three UTSA professors, at least two of whom must be from the Division of Education; one of the three recommendations must be obtained from the student's assigned faculty advisor;
F. Presentation of a negative tuberculosis report from a licensed physician valid at the time of registration for the Professional Semester; and
G. Approval of the Director of Student Teaching.

BACHELOR OF ARTS DEGREE IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 121, of which at least 57 must be at the upper-division level.

All candidates for the degree must complete:

A. 24 semester hours in one of the two groups of courses listed below:
   1. Elementary Education
      a. Required courses to be taken early in the sequence:
         ECE 3213 Language Arts in the Elementary School
         ECE 3223 Social Science in the Elementary School
         ECE 4243 Second Languages in the Elementary School
         C&I 3703 Introduction to Developmental Reading
         C&I 3713 Introduction to Content Area Reading
      b. Additional courses in the sequence:
         ECE 3233 Mathematics in the Elementary School
         ECE 4133 The Expressive Modes of Children in the Elementary School
         ECE 4213 Science in the Elementary School
   2. Early Childhood Education
      ECE 3103 Young Children's Literature and Storytelling
      ECE 3113 Play and Creative Activities in Early Childhood Education
      ECE 3123 Development and Learning in Early Childhood
      ECE 3133 Programs in Early Childhood Education
      ECE 3203 Tests and Measurements for Early Childhood
      ECE 4103 Guidance of Young Children in Groups
      ECE 4113 Language Development and Reading in Early Childhood Education
      ECE 4123 Parents and Community Resources in Early Childhood and Elementary Education

B. 22 semester hours of course work in Education, 21 of which must be at the upper-division level.
1. Required courses to be taken in the sequence are:
   EDU 2001 Introduction to the School Environment
   EDU 3003 Educational Sociology
   EDP 3013 Growth, Development and Learning Theories

2. The Professional Semester for Elementary and Early Childhood majors in Education consists of the 15 semester hours listed below. Students not seeking teacher certification may, with the approval of the Undergraduate Advisor, select 15 hours of upper-division electives in place of the Education Professional Semester. Students who do not qualify for admission to the Professional Semester must, with the approval of the Undergraduate Advisor, substitute appropriate course work equivalent to the number of credit hours in the Professional Semester to earn a B.A. in Early Childhood and Elementary Education without certification.

Courses comprising the Education Professional Semester are required for the teaching certificate and must be taken concurrently in the first or second semester of the senior year.

EDP 4013 Measurement, Diagnosis, and Prescription in Educational Settings.
EDU 4013 Classroom Climate in the Elementary School
EDU 4031 Media Technology
EDU 4046 Student Teaching: Elementary
EDU 4072 Individualized Clinical Experiences

C. 33 semester hours of electives, 12 of which must be at the upper-division level. Students seeking a teaching certificate may use these electives to satisfy additional requirements for the certificate and should consult the Office of Teacher Certification and Placement for details.

BACHELOR OF SCIENCE DEGREE IN HEALTH EDUCATION

The minimum number of semester hours for this degree, including the 42 hours of General Education Requirements, is 124, of which at least 54 must be at the upper-division level.

All candidates for the degree must complete:

A. 24 semester hours in Health Education from the following:
   HPE 2503 The Foundations of Health Education
   HPE 2513 Personal and Family Health
   HPE 3513 The Elementary School Health Program
   HPE 3523 The Secondary School Health Program
   HPE 3533 Drug Education
   HPE 3543 Physical Growth and Development
   HPE 4513 Consumer Health
   HPE 4523 Teaching Sex Education
   HPE 4533 Nutrition Education
   HPE 4543 First Aid and Safety

B. 22 semester hours of support work, 21 of which must be at the upper-division level.

1. Required courses to be taken early in the program sequence are:
   EDU 2001 Introduction to the School Environment

*Other student teaching courses may substitute for EDU 4046, depending on the student's program emphasis. Students must apply to the Director of Student Teaching for admission to the Professional semester one semester in advance.
EDU 3003 Educational Sociology  
EDP 3013 Growth, Development and Learning Theories

2. The following courses comprise the Education Professional Semester for Health Education majors seeking teaching certificates and must be taken concurrently in the first or second semester of the senior year:
  
  EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings  
  EDU 4013 Classroom Climate in the Elementary School  
  or  
  EDU 4093 Teaching in the Secondary School  
  or  
  EDU 4046 Student Teaching: Elementary  
  or  
  EDU 4056 Student Teaching: Secondary  
  EDU 4072 Individualized Clinical Experiences

For students majoring in Health Education who are not seeking the teaching certificate, 15 hours of approved upper-division electives may be taken with the approval of the Undergraduate Advisor, in place of the Education Professional Semester. Students who do not qualify for admission to the Professional Semester must, with the approval of the Undergraduate Advisor, substitute course work equivalent to the number of credit hours in the Professional Semester to earn an undergraduate degree in Health Education without teacher certification.

C. 36 semester hours of electives, 12 of which must be at the upper-division level. These may be taken from any Division of The University and for students seeking certificates can be used to satisfy a second teaching field.

All students selecting a degree in Health Education must elect 4 semester hours of HPE Activity Courses (1001, 1101) including Physical Fitness.

BACHELOR OF SCIENCE DEGREE IN PHYSICAL EDUCATION

The minimum number of semester hours for this degree, including the 42 hours of General Education Requirements, is 125, of which at least 54 must be at the upper-division level.

All candidates for the degree must complete:

A. 33 semester hours in Physical Education from the following:
  
  HPE 2303 The Foundations of Physical Education  
  HPE 2331 Physical and Motor Assessment  
  HPE 2401 Gymnastics  
  AHS 3113 Kinesiology  
  HPE 2411 Rhythmical Activities and Dance  
  HPE 2423 Intramurals and Recreation Programming  
  HPE 2433 Lifetime Sports  
  HPE 3303 Athletic Injuries and Training Procedures  
  HPE 3413 The Elementary School Physical Education Program  
  HPE 3423 The Secondary School Physical Education Program

Students seeking a secondary teaching certificate must take C&I 3003 prior to the Education Professional Semester. Contact the Office of Teacher Certification and Placement for complete certification requirements.

Other student teaching courses may substitute for EDU 4046, depending on the student's program emphasis. Students must apply to the Director of Student Teaching for admission to the Professional Semester one semester in advance.

For students seeking certification, 124 hours are required to complete the dual requirements of the degree and the certificate. The Undergraduate Certification Programs in Education brochure should be consulted for additional information.
HPE 3443 Principles of Exercise and Physical Fitness
HPE 4113 Evaluation in Physical Education
HPE 4343 Movement Education
HPE 4403 Motor Learning and Skill Performance
HPE 4413 Coaching Interscholastic Athletics
HPE 4423 Adaptive Physical Education

1. All students must take the following courses: HPE 2331, HPE 2401, HPE 2411, HPE 2423, and AHS 3113.

2. For students seeking secondary certification, the following courses are required to complete the dual requirements of the degree and the teaching certificate: HPE 2303, HPE 2433, HPE 3303, HPE 3423, HPE 3443, HPE 4113, HPE 4403, HPE 4413, HPE 4423, and COM 1043.

3. For students seeking the all-level certificate, HPE 3413, HPE 4343 and ECE 3123 are also required.

B. 22 semester hours of support work, 21 of which must be at the upper-division level.

1. Required courses to be taken in the program sequence are:
   EDU 2001 Introduction to the School Environment
   EDU 3003 Educational Sociology
   EDP 3013 Growth, Development and Learning Theories

2. The following courses comprise the Education Professional Semester for Physical Education majors and must be taken concurrently in the first or second semester of the senior year:
   All-level Certification
   EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
   EDU 4093 Teaching in the Secondary School
   EDU 4031 Media Technology
   EDU 4043 Student Teaching: Elementary
   EDU 4053 Student Teaching: Secondary
   EDU 4072 Individualized Clinical Experiences

   Secondary Certification
   EDP 4013 Measurement, Diagnosis and Prescription in Educational Settings
   EDU 4093 Teaching in the Secondary School
   EDU 4031 Media Technology
   EDU 4056 Student Teaching: Secondary
   EDU 4072 Individualized Clinical Experiences

3. For students majoring in Physical Education who are not seeking the teaching certificate, 15 hours of upper-division electives may, with the approval of the Undergraduate Advisor, be taken in place of the Education Professional Semester. Students who do not qualify for admission to the Professional Semester must, with the approval of the Undergraduate Advisor, substitute course work equivalent to the number of credit hours in the Professional Semester to earn an undergraduate degree in Physical Education without certification.

---

*For specific courses required for elementary, secondary or all level certificates see the Office of Teacher Certification and Placement. Students planning to receive a secondary teaching certificate must include C&I 3003 in this program.*
C. 28 semester hours of free electives, 12 of which must be at the upper-division level.

1. Remaining hours may be taken from any Division in The University. For students seeking the teaching certificate, the requirements for a second teaching field must be satisfied.

2. All students majoring in Physical Education must include HPE 2001, HPE 2101 and HPE 4543.

COURSE DESCRIPTIONS
CURRICULUM AND INSTRUCTION (C&I)

3003 The Secondary School Curriculum
(3-0) 3 hours credit.
An overview of the nature, scope and purpose of the secondary school, with special emphasis on curriculum design, classroom management and discipline, secondary methods, multiculturalism, mainstreaming, and reading in the content area. Field experiences required.

3703 Introduction to Developmental Reading
(3-0) 3 hours credit. Prerequisites: ENG 1033, EDU 3003, and EDP 3013.
Study of basic concepts of reading within the structure of the language arts. Techniques and materials for developing oral language facility, perceptual skills, word identification skills, comprehension, assessment in reading and literacy appreciation are emphasized.

3713 Introduction to Content Area Reading
(3-0) 3 hours credit. Prerequisites: ENG 1033, EDU 3003, and EDP 3013.
Offers the opportunity to learn techniques for teaching vocabulary, comprehension, and study skills in content areas. Formerly ECE 3313. Credit cannot be earned for both ECE 3313 and C&I 3713.

3723 Study Skill Development in the Reading Program
(3-0) 3 hours credit. Prerequisites: C&I 3703 and 3713.
Information processing from lectures and texts to develop understanding of an area of knowledge. Considers locating resources, note taking skills, outlining, test-taking, reading rate and flexibility, reading of graphs and technical information, control strategies and higher order cognitive skills needed for problem-solving in various fields of study.

3733 Reading Comprehension Skills
(3-0) 3 hours credit. Prerequisites: C&I 3703 and 3713.
Offers theoretical framework for and practical application of methods and materials for developing reading comprehension and critical reading skills.

3743 Introduction to Reading Problems
(3-0) 3 hours credit. Prerequisites: C&I 3703 and 3713.
Study of and practical experience with reading problems in the classroom. Techniques for diagnosis and remediation of reading difficulties are emphasized.

3783 Psycholinguistics and Reading
(3-0) 3 hours credit. Prerequisite: C&I 3703.
Application of psycholinguistic concepts to the teaching of reading. Relationships among cognitive processes, language processes, and reading instruction.

4706 Practicum in Reading
(3-6) 6 hours credit. Prerequisite: 12 semester hours in Reading.
Application of developmental reading procedures in a group setting. Placements arranged for supervised field experiences.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty
member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

**4951-3 Special Studies in Curriculum and Instruction**
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

**COURSE DESCRIPTIONS**

**EARLY CHILDHOOD AND ELEMENTARY EDUCATION (ECE)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3103</td>
<td>Young Children's Literature and Storytelling</td>
<td>(3-0)</td>
<td></td>
<td>Review of books, stories, and library materials including audio-visual materials and aids for young children. Students have the opportunity to become acquainted with books for the very young, their authors and illustrators. Criteria for selection and methods of presentation are stressed. Practice is given in reading and telling stories to children.</td>
</tr>
<tr>
<td>3113</td>
<td>Play and Creative Activities in Early Childhood Education</td>
<td>(3-0)</td>
<td></td>
<td>Study of play as learning and creative expression across curriculum areas. Planning and developing indoor and outdoor environments. Required observations to be arranged.</td>
</tr>
<tr>
<td>3123</td>
<td>Development and Learning in Early Childhood</td>
<td>(3-0)</td>
<td></td>
<td>The opportunity to study growth and development during infancy and early childhood. Review and integration of physical, social, emotional, and cognitive development of normal and developmentally handicapped children. Practice in observing and recording children's learning experiences.</td>
</tr>
<tr>
<td>3133</td>
<td>Programs in Early Childhood Education</td>
<td>(3-0)</td>
<td>ECE 3123</td>
<td>Review of historical, philosophical, and psychological foundations of nursery, day-care, kindergarten and primary school materials for young children. Current trends and program models in early childhood education. Observations to be arranged.</td>
</tr>
<tr>
<td>3203</td>
<td>Tests and Measurement for Early Childhood</td>
<td>(3-0)</td>
<td>ECE 3123</td>
<td>Principles of making and using assessment and evaluation instruments for young children and early childhood programs. Functions and limitations of norm-referenced and criterion-referenced measures, standardized tests, and developmental tests.</td>
</tr>
<tr>
<td>3213</td>
<td>Language Arts in the Elementary School</td>
<td>(3-0)</td>
<td>ENG 1033, EDU 3003, EDP 3013</td>
<td>The study of Language Arts as the basis for written and oral communication. Emphasis given to instructional planning and writing of behavioral objectives with implications for varying instruction to meet individual needs.</td>
</tr>
<tr>
<td>3223</td>
<td>Social Science in the Elementary School</td>
<td>(3-0)</td>
<td>ECE 3213, ECE 3223, ECE 4243, EDU 3003, EDP 3013</td>
<td>Planning for instruction in the social studies, including the examination and identification of concepts from the social sciences that are significant for children's academic, social, and personal development.</td>
</tr>
<tr>
<td>3233</td>
<td>Mathematics in the Elementary School</td>
<td>(3-0)</td>
<td>MAT 1123, ECE 3213, ECE 3223, ECE 4243</td>
<td>Study of and practice in planning for the teaching of mathematics K-8 to normal and exceptional students. Specific attention given to content organization, teaching strategies, questioning, and the use of varied materials including computer-assisted learning.</td>
</tr>
</tbody>
</table>
4103 Guidance of Young Children in Groups  
(3-0) 3 hours credit. Prerequisite: ECE 3123, or ECE 3203.  
Study of basic teaching skills, curriculum areas, implementation, organization, and  
evaluation, professional-ethical decision making. Required observations to be arranged.

4113 Language Development and Reading in Early Childhood Education  
(3-0) 3 hours credit.  
Introduction to theories of language and cognitive development in young children with im­  
plications for language instruction and beginning reading.

4123 Parents and Community Resources in Early Childhood and Elementary Education  
(3-0) 3 hours credit. Prerequisite: ECE 3123, ECE 3133, or ECE 4103.  
Study of methods of educating for parenthood including planning for parent workshops,  
group meetings, parent-teacher conferences, and supportive programs. Techniques of in­  
terviewing children and surveying family services and resources within the community.

4133 The Expressive Modes of Children in the Elementary School  
(3-0) 3 hours credit. Prerequisites: MUS 3653, ECE 3213, ECE 3223, and ECE 4243.  
Study of creative processes as they relate to the subject areas of the elementary school  
curriculum. Special attention given to formulating objectives, individualizing and personal­  
izing instruction, promoting critical and creative thinking skills, and developing freedom  
in expression.

4213 Science in the Elementary School  
(3-0) 3 hours credit. Prerequisites: Completion of the General Education Requirements in  
science, ECE 3213, ECE 3223, and ECE 4243.  
Identification, analysis, selection, use, and evaluation of instructional objectives and of  
strategies for developing science concepts and inquiry skills in children of elementary  
school age.

4243 Second Languages in the Elementary School  
(3-0) 3 hours credit. Prerequisites: Completion of the General Education Requirements in  
foreign language or culture, EDU 3003, and EDP 3013.  
A study of second language teaching and learning theories. Emphasis on instruction as it  
relates to second languages and to meeting learning needs of children in a multi-cultural  
society.

4911-3 Independent Study  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the  
student’s advisor, and the Division Director and Dean of the College in which the course  
is offered.  
Independent reading, research, discussion, and/or writing under the direction of a faculty  
member. May be repeated for credit, but not more than 6 hours of independent study,  
regardless of discipline, will apply to a bachelor’s degree.

4951-3 Special Studies in Early Childhood and Elementary Education  
1-3 hours credit. Prerequisite: Consent of instructor.  
Organized course offering the opportunity for specialized study not normally or not often  
available as part of the regular course offerings. Special Studies courses may be  
repeated for credit when the topics vary, but not more than 6 hours within any one  
discipline will apply to a bachelor’s degree.

COURSE DESCRIPTIONS  
EDUCATION (EDU)

2001 Introduction to the School Environment  
(1-0) 1 hour credit.  
Field observation of learners with campus based discussions relating observations to im­  
plications for curricular content, behavioral expectations, value orientation, and individual  
and societal needs.

2013 Issues in American Education  
(3-0) 3 hours credit.  
Overview of the basic structure and cultural significance of American education; empha-
sis on the analysis of conflict, consensus and evaluation, and alternative policy responses. This course may not be counted toward Education degree requirements.

**3003 Educational Sociology**  
(3-0) 3 hours credit. Prerequisite: EDU 2001 for students seeking the degree in Education. Study of the ways in which the school can effectively use the social process in developing and educating the individual; the interrelationships of the school with the family, the church, and other societal agencies particularly in the social and cultural setting of the Southwestern United States.

**4013 Classroom Climate in the Elementary School**  
(3-0) 3 hours credit. Prerequisite: Admission to the Professional Semester or permission of the Director of Student Teaching. Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance. Study of and practice in identifying and developing curricular materials, planning for instruction, developing effective elementary classroom climate, and evaluating instructional outcomes particularly in the context of the Southwestern United States; the methodology of instruction as related to specific disciplines. (This course may be offered in multiple sections according to the subject matter to be taught.)

**4031 Media Technology**  
(1-0) 1 hour credit.  
Introduction to the variety and uses of audio visual equipment, materials, and techniques in teaching.

**4043-6 Student Teaching: Elementary**  
3 or 6 hours credit. Prerequisite: Admission to the Professional Semester or consent of the Director of Student Teaching. Students must apply to the Director of Student Teaching for admission to the Professional Semester one semester in advance. The opportunity for field-based experiences in the elementary school.

**4053-6 Student Teaching: Secondary**  
3 or 6 hours credit. Prerequisite: Admission to the Professional Semester or consent of the Director of Student Teaching. Students must apply to the Director of Student Teaching for admission to the Professional Semester one semester in advance. The opportunity for field-based experiences in the secondary school.

**4063 Student Teaching: Kindergarten**  
3 hours credit. Prerequisite: Admission to the Professional Semester or consent of the Director of Student Teaching. Students must apply to the Director of Student Teaching for admission to the Professional Semester one semester in advance. The opportunity for field-based experiences at the kindergarten level.

**4072 Individualized Clinical Experiences**  
2 hours credit. Prerequisites: Admission to the Professional Semester and concurrent enrollment in EDU 4046 or EDU 4043 and EDU 4053 or the equivalent. Students must inform the Director of Student Teaching of their plans to enroll in this course one semester in advance. A series of simulated and direct experiences planned to develop and improve competency components which have been identified as needs of individual students. The experiences are designed to provide opportunities for students to further investigate and apply strategies related to teaching/learning situations or to apply corrective measures to diagnosed areas of weaknesses.

**4083 Student Teaching: Special Education**  
3 hours credit. Prerequisite: Admission to the Professional Semester or consent of the Director of Student Teaching. Students must apply to the Director of Student Teaching for admission to the Professional Semester one semester in advance. The opportunity for field-based experiences in a special education classroom.

**4093 Teaching in the Secondary School**  
(3-0) 3 hours credit. Prerequisite: C&I 3003, EDP 3013, EDU 3003, or consent of the instructor. Study of and practice in identifying and developing curricular materials, planning for instruction, developing effective secondary classroom climate, and evaluating instructional outcomes, particularly in the context of the Southwestern United States; the methodology...
of instruction as related to specific disciplines. (This course may be offered in multiple sections according to the subject matter to be taught.)

4951-3 Special Studies in Education
1-3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4993 Honors Thesis
(3-0) 3 hours credit. Prerequisite: Enrollment limited to candidates for honors in the Division of Education during the last two semesters. Approval by the Honors Program Coordinator.
Supervised research and preparation for an honors thesis. May be repeated once with advisor's approval.

COURSE DESCRIPTIONS
EDUCATIONAL PSYCHOLOGY (EDP)

3013 Growth, Development and Learning Theories
(3-0) 3 hours credit. Prerequisite or concurrent enrollment: EDU 2001 or consent of instructor.
Study of developmental psychology: human motivation and behavior, the relationships between development and learning, and the special nature of 'exceptional' children and youth as learners.

3603 Introduction to Exceptionality
(3-0) 3 hours credit.
Study of the nature and characteristics of exceptional children; educational and therapeutic services for exceptional children at the local, state, national and international level, as well as a study of demographics, etiology, and efficiency of delivery systems of services for exceptional children.

3623 Assessment of Exceptional Children
(3-0) 3 hours credit. Prerequisite: EDP 3603 or consent of instructor.
An introduction to both formal and informal assessment procedures. Students are offered the opportunity to train to administer and evaluate the results of informal assessment devices in the areas of life skills, motor development, perception, language and academic subject areas.

3633 Behavior Management of Exceptional Children
(3-0) 3 hours credit. Prerequisite: EDP 3603.
A study of behavior management strategies and techniques to alter, improve, and maintain children's academic and social behaviors. Application of learning theory principles, measurement procedures, knowledge of divergent and convergent theories and practices regarding behavior change strategies, and current and significant research are emphasized.

3643 Language and Cognitive Development and Dysfunction
(3-0) 3 hours credit. Prerequisite or concurrent enrollment: EDP 3603.
Current theories in the areas of language development and cognition are studied in terms of their contribution to the development of a methodology for the education of the exceptional child. Educational programs in the areas of language and cognition are evaluated in terms of their theoretical basis and educational utility.

3653 Practicum in Special Education (Introductory)
3 hours credit. Prerequisite or concurrent enrollment: EDP 3603 and EDP 3643.
Observation and evaluation of educational procedures and services for exceptional children; observation and recording of the performance of children as learners.

3663 Practicum in Special Education (Intermediate)
3 hours credit. Prerequisite or concurrent enrollment: EDP 3623 and EDP 3633.
Working with teachers of exceptional children in developing, administering and evaluating assessment tools; planning language and learning sequences for children.
4013 Measurement, Diagnosis and Prescription in Educational Settings
(3-0) 3 hours credit. Prerequisite: EDP 3013.
Introduction to the area of study which includes analysis and theoretical basis of learning, the assessment of learners and learner needs, and the measurement of achievement.

4603 Parents, Community Resources and Continuing Education for Exceptional Children
(3-0) 3 hours credit.
Study of methods and techniques for working with parents of exceptional children and for effecting cooperative home, school, and community relations for the improvement of the child’s life and environment.

4653 Practicum in Special Education (Advanced)
3 hours credit. Concurrent enrollment: EDP 4603.
Field work with teachers in planning and implementing educational sequences for exceptional children.

4951-3 Special Studies in Educational Psychology
1-3 hours credit. Prerequisite: Consent of instructor.
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

COURSE DESCRIPTIONS
HEALTH AND PHYSICAL EDUCATION (HPE)

1001 Individual and Dual Physical Activity Sports
(0-3) 1 hour credit.
Practice in the techniques of individual and dual sports. Individual sections focus on particular sports as indicated in the schedule of courses. May be repeated for credit, but not more than 6 hours of HPE 1001 alone or in combination with HPE 1101 will apply to a bachelor’s degree.

1101 Team Sports
(0-3) 1 hour credit.
Practice in the techniques of team sports including the practice and development of team skills. Individual sections to focus on particular sports as indicated in the schedule of courses. May be repeated for credit, but not more than 6 hours of HPE 1101 alone or in combination with HPE 1001 will apply to a bachelor’s degree.

2001 Skill Analysis in Physical Activity: Individual Activities
(0-3) 1 hour credit.
Specialized activity instruction involving skills, drills, rules and regulations, and skill performance in a variety of selected individual activities.

2101 Skill Analysis in Physical Activity: Team Sports
(0-3) 1 hour credit.
Specialized activity instruction involving skills, drills, rules and regulations, and skill performance in a variety of selected team sports.

2303 The Foundations of Physical Education
(3-0) 3 hours credit.
Orientation of the physical educator to the profession. A study of history, philosophy, principles, objectives, and current concepts in physical education. Special examination of career potential within the profession. Formerly HPE 3403. Credit cannot be earned for both 2303 and 3403.

2331 Physical and Motor Assessment
(0-3) 1 hour credit.
The opportunity to develop individual physical fitness and motor ability profiles for students in physical education. Analysis of strengths and weaknesses in physical capacity.
2401 Gymnastics  
(0-3) 1 hour credit. 
Practice in gymnastic activities in a balanced physical education program. Formerly HPE 4433. Credit cannot be earned for both 2401 and 4433.

2411 Rhythmic Activities and Dance  
(0-3) 1 hour credit. 
Practice in rhythmic techniques in physical education and various types of dance.

2423 Intramurals and Recreation Programming  
(3-0) 3 hours credit. 
Organization and administration of intramural programs, intramural activities, scheduling procedures, tournaments, participation units, officiating, extramurals, and other clubs.

2433 Lifetime Sports  
(3-0) 3 hours credit. 
Instruction in the development of skills in lifetime sports activities with emphasis on individual and dual sports. Introduction to instructional strategies used in teaching physical activity. Formerly HPE 3433. Credit cannot be earned in 2433 and 3433.

2503 The Foundations of Health Education  
(3-0) 3 hours credit. 
Study of the history, principles, objectives, and current concepts of health education. Formerly HPE 3503. Credit cannot be earned for both 2503 and 3503.

2513 Personal and Family Health  
(3-0) 3 hours credit. 
Overview of medical and scientific facts and principles applied to healthful living and prevention and control of diseases. Formerly HPE 4503. Credit cannot be earned for both 2513 and 4503.

3303 Athletic Injuries and Training Procedures  
(3-0) 3 hours credit. 
Prevention and care of athletic injuries. A study of training and conditioning for the team and individual. Techniques and procedures for emergencies; diagnostic, preventive, and remedial measures and organization of the training room facility.

3413 The Elementary School Physical Education Program  
(3-0) 3 hours credit. 
Selection of physical education activities for the elementary school program. Theory and practice of methods and techniques pertinent to the elementary school program. Emphasis on traditional teaching and its scope of activities.

3423 The Secondary School Physical Education Program  
(3-0) 3 hours credit. Prerequisites: HPE 2303, HPE 2331, HPE 2433. 
Selection of physical education activities for the secondary school. Theory and practice of methods, techniques, teaching designs, and organizations in the secondary school program.

3443 Principles of Exercise and Physical Fitness  
(3-0) 3 hours credit. 
Analysis of the nature of physical fitness, basic principles of exercise and concepts of physical fitness. A study of methods and programs for developing and evaluating physical fitness.

3513 The Elementary School Health Program  
(3-0) 3 hours credit. 
Study of the health problems of elementary school students as a basis for health instruction; using the Texas Education Agency guidelines as a basis for planning.

3523 The Secondary School Health Program  
(3-0) 3 hours credit. 
Study of the health problems of secondary school students as a basis for health instruction; using the Texas Education Agency guidelines as a basis for planning.

3533 Drug Education  
(3-0) 3 hours credit. 
Study of the use and abuse of tobacco, alcohol, and other drugs; other mood and behavior modifiers. An evaluation of motivation in drug abuse. Strategies for teaching drug education.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3543</td>
<td>Physical Growth and Development</td>
<td>3 hours</td>
<td></td>
<td>Review of physical growth and development as dynamic lifetime processes. The changes in early adolescence and implications for teachers.</td>
</tr>
<tr>
<td>4113</td>
<td>Evaluation in Physical Education</td>
<td>3 hours</td>
<td>Consent of instructor</td>
<td>Applications of tests and measurement theory in physical education. Emphasis on selection and administration of appropriate tests and the interpretation of their results by fundamental statistical procedures.</td>
</tr>
<tr>
<td>4343</td>
<td>Movement Education</td>
<td>3 hours</td>
<td></td>
<td>Theory and practice of movement education to be used in the elementary school program. Analysis of movement experiences with regard to perceptual motor development, physical fitness, and sports skill development. In-depth study of activities, methods, and techniques used in movement education.</td>
</tr>
<tr>
<td>4403</td>
<td>Motor Learning and Skill Performance</td>
<td>3 hours</td>
<td>Consent of instructor</td>
<td>Study of psychomotor learning, including motor learning theories, motor and skill learning, state of performer, and application of instructional techniques in motor learning and skill performance. Introduction to psychological and sociological aspects of physical activity.</td>
</tr>
<tr>
<td>4413</td>
<td>Coaching Interscholastic Athletics</td>
<td>3 hours</td>
<td>Consent of instructor</td>
<td>Theory of coaching pertinent to the interschool athletic program. Emphasis on organization and administration in coaching. A study of content and techniques involved in coaching a variety of sports.</td>
</tr>
<tr>
<td>4423</td>
<td>Adaptive Physical Education</td>
<td>3 hours</td>
<td>Consent of instructor</td>
<td>Study of corrective and adaptive activities and programs for the exceptional child. Theory and implication of specific handicaps and disabilities with emphasis on adjustments. Application to exercise and sports programs.</td>
</tr>
<tr>
<td>4513</td>
<td>Consumer Health</td>
<td>3 hours</td>
<td></td>
<td>Study of the consumer's selection of health products and services, and the acquisition of basic knowledge regarding consumer health with a view towards providing students with information that will help them make wise decisions when selecting professional health care, services, and products.</td>
</tr>
<tr>
<td>4523</td>
<td>Teaching Sex Education</td>
<td>3 hours</td>
<td></td>
<td>Study of the teaching of human sexuality. Emphasis on the understanding of sexual drives and on methods for teaching sex education.</td>
</tr>
<tr>
<td>4533</td>
<td>Nutrition Education</td>
<td>3 hours</td>
<td></td>
<td>Study of content, attitudes, and practices regarding nutrition and its effects on health and behavior. Study and assessment of methods of teaching nutrition to young people.</td>
</tr>
<tr>
<td>4543</td>
<td>First Aid and Safety</td>
<td>3 hours</td>
<td></td>
<td>A study and evaluation of current first aid and safety skills and information. Emphasis on application of skill in emergency situations. Successful completion of required skills may lead to American Red Cross and American Heart Association certificates.</td>
</tr>
<tr>
<td>4911-3</td>
<td>Independent Study</td>
<td>1-3</td>
<td>Permission in writing</td>
<td>Independent reading, research, discussion and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor's degree.</td>
</tr>
</tbody>
</table>
244 / Health and Physical Education

4951-3  **Special Studies In Health and Physical Education**  
1-3 hours credit. Prerequisite: Consent of instructor.  
Organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

4956  **Internship in Health or Physical Education**  
6 hours credit. Prerequisite: Consent of instructor.  
Supervised internship with selected health or recreational agencies. Recommended for students seeking the degree without teacher certification.
DIVISION OF SOCIAL AND POLICY SCIENCES

The Division of Social and Policy Sciences offers bachelor of arts degrees in criminal justice, geography, political science, and sociology.

At least 30 credit hours of course work are required to fulfill a social and policy sciences major. The 30 hour total is considered a minimum, and students are encouraged to deepen and broaden their control of their field through careful allocation of some of their elective credit hours.

All social and policy sciences majors require the student to complete at least six semester hours of support work. These courses, which require the advisor's advance approval, should serve to introduce the student to aspects of the social sciences in addition to those entailed in the course work within the student's major discipline.

INTERNSHIP STUDY

Majors in the Division of Social and Policy Sciences may apply 3 or 6 semester hours of internship study to their baccalaureate program. Internship entails supervised experience within selected organizations in the San Antonio area. Placement is arranged by the Internship Coordinator of the Division of Social and Policy Sciences. Supervision and grading of the internship experience is normally done by Division faculty members. Students from majors other than the social sciences are welcome to participate but should consult with their faculty advisors regarding the role of the internship within their own degree programs. Further information can be obtained from the Internship Coordinator.

DIVISIONAL HONORS

The Division of Social and Policy Sciences designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Selection of students for admission to the Division Honors Program is based on: 1) the student's academic performance, and 2) recommendation by the faculty of the student's major discipline. To be eligible for the program students must have a minimum grade-point average of 3.00 overall at UTSA and a minimum grade-point average of 3.50 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students admitted to the Honors program are expected to enroll in the appropriate Honors Thesis course during the final two semesters in residence. The completed thesis must be approved by the supervising faculty sponsor and another Divisional faculty member. Students interested in this program should contact their faculty advisors for additional information.

BACHELOR OF ARTS DEGREE IN CRIMINAL JUSTICE

Criminal Justice. This program is intended to provide the opportunity for a comprehensive educational preparation for persons seeking a professional career in the field of criminal justice; with emphases in the areas of Law Enforcement, Corrections-Juvenile Justice, Para-Legal Management, and Security Management.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 124. The criminal justice major, through consultation with the student's faculty advisor, should choose elective courses within the General Education Requirements which will develop fundamental awareness of the complex social and cultural issues in contemporary American society.
All candidates for the degree must complete:

A. 30-33 semester hours of upper-division criminal justice coursework distributed as follows:

1. 15 semester hours of upper-division core:
   - CRJ 3053 Crime and Justice: Theory and Practice
   - CRJ 3213 Criminal Justice: Administrative Organization
   - CRJ 3623 Substantive Criminal Law
   - CRJ 4003 Research in Criminal Justice
   - CRJ 4973 Criminal Justice: Senior Seminar

2. 9 semester hours from one of the following areas of emphasis:
   a. Law Enforcement
      - CRJ 3133 Basic Criminalistics
      - CRJ 3633 Evidentiary Issues in the Legal Process
      - CRJ 4123 Concepts of Investigation
      - CRJ 4413 Trends in Police Administration
   b. Corrections-Juvenile Justice
      - CRJ 3513 Corrections: Theory and Practice
      - CRJ 3533 Alternatives to Incarceration
      - CRJ 4573 Correctional Administration
      - CRJ 4613 Counseling and Delivery of Services in Corrections
   c. Para-Legal Management
      - CRJ 3603 Para-Legal Management Practices
      - CRJ 3613 Legal Bibliography and Advocacy Research
      - CRJ 4633 Criminal Procedure
      - CRJ 4813 Court Organization and Jurisdiction
   d. Security Management
      - CRJ 3163 Introduction to Security Management
      - CRJ 3193 Security Management Practices
      - CRJ 4203 Issues in Security Management
      - CRJ 4733 Intelligence Programs and National Security

3. 3-6 semester hours of CRJ 4933-6 Internship in Criminal Justice, to be taken in consultation with the student’s faculty advisor. 3-6 semester hours of appropriate upper-division coursework may be taken in lieu of the Internship if a student has equivalent employment in a criminal justice position.

4. 3 semester hours of CRJ upper-division hours to be selected in consultation with the student’s faculty advisor.

B. A statistics course is required of all criminal justice majors.

C. 15 semester hours of upper-division support work (recommended outside the criminal justice area) to be selected through consultation with the student’s faculty advisor.

D. 31 semester hours of electives of which CRJ 2113 or its equivalent is recommended.*

*The 21 semester hours identified in the lower-division Law Enforcement Core Curriculum of the Texas Commission on Law Enforcement Officer Standards and Education may be transferred as electives for the undergraduate degree in Criminal Justice.
COURSE DESCRIPTIONS
CRIMINAL JUSTICE
(CRJ)

2113 The American Criminal Justice System
(3-0) 3 hours credit.
Philosophy and history of criminal justice in America; examination of criminal justice agencies operating as an interacting system, from police through the courts and into corrections.

3053 Crime and Justice: Theory and Practice
(3-0) 3 hours credit.
A study of crime and its causes with an emphasis on the behavioral and environmental factors affecting the responses to crime and the administration of justice. (Formerly CRJ 3043: Credit cannot be earned for both CRJ 3043 and CRJ 3053.)

3133 Basic Criminalistics
(3-0) 3 hours credit.
Application of the physical and natural sciences to the administration of criminal justice probability, value and limitation of various types of physical evidence, and basic processing techniques.

3163 Introduction to Security Management
(3-0) 3 hours credit.
Survey of the scope of the security management field in business, industry, and government; consideration of the problems and issues affecting the relationship between publicly-funded law enforcement and the private sector.

3193 Security Management Practices
(3-0) 3 hours credit.
A study of the application of physical, personnel and information security practices. Theory and application of physical protection, employee integrity programs and information control measures. Management perspectives on security program planning, integration and implementation. (Formerly CRJ 3173 and CRJ 3183: Credit can be earned only for CRJ 3193 or CRJ 3173 and CRJ 3183.)

3213 Criminal Justice: Administrative Organization
(3-0) 3 hours credit. Prerequisite: CRJ 2113 or equivalent recommended.
Functional and structural approaches to the study of criminal justice administration. Examination of traditional and innovative approaches in criminal justice organization with emphasis on the systems approach.

3513 Corrections: Theory and Practice
(3-0) 3 hours credit.
Examination of the historical development of corrections; its philosophical orientation theories and practices, including the traditional and contemporary; institutional and non-institutional aspects.

3533 Alternatives to Incarceration
(3-0) 3 hours credit.
Problems in probation, pardons, and parole examined as to policies, procedures, and feasibility. Relationships to community service organizations.

3543 The Juvenile Justice System
(3-0) 3 hours credit.
History and development of traditional and current methods for responding to the need of the juvenile offender. Process oriented approach to the roles of involved agencies with emphasis upon formal and informal treatment methods.
3603 Para-Legal Management Practices  
(3-0) 3 hours credit.  
Examines the role and function of para-legal management practices in a variety of organizational settings. Integration of theory and practice emphasized.

3613 Legal Bibliography and Advocacy Research  
(3-0) 3 hours credit.  

3623 Substantive Criminal Law  
(3-0) 3 hours credit. Prerequisite: CRJ 2113 or equivalent recommended.  
Jurisprudential philosophy and case study of common law and statutory crimes; includes functions and development of substantive criminal law, elements of specific offenses; defenses.

3633 Evidentiary Issues in the Legal Process  
(3-0) 3 hours credit.  
Issues and problems of proof in civil and criminal trials, admissibility, examining witnesses, constitutional considerations, exclusionary rules.

4003 Research in Criminal Justice  
(3-0) 3 hours credit. Prerequisite: A statistics course.  
Introduction to the general methodology of research (including experimental design, statistics, and computer usage) that pertains to the administration of justice. Emphasizes critical analysis and application of research findings in the field of criminal justice. Credit cannot be earned for both CRJ 4003 and 4013.

4123 Concepts of Investigation  
(3-0) 3 hours credit. Prerequisite: CRJ 3133 or consent of instructor.  
Examination of theories and practices of the investigation process in the criminal justice system; specific operational techniques; application of innovative techniques.

4203 Issues in Security Management  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Managerial aspects of the security field in both public and private sectors; security management problems arising from labor disputes, demonstrations, civil disorders, and riots; white collar crime; organized crime; industrial espionage; management issues peculiar to security organizations operating under federal and state regulatory constraints.

4413 Trends in Police Administration  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Examination of the management of law enforcement organizations through administrative structure and process. Analysis of program development and implementation in providing police service.

4573 Correctional Administration  
(3-0) 3 hours credit. Prerequisite: CRJ 3213 or consent of instructor.  
Examination from an administrative perspective of the organization and management of correctional agencies. Substantive trends and issues in correctional administration, management, and supervision.

4613 Counseling and Delivery of Services in Corrections  
(3-0) 3 hours credit. Prerequisite: Senior standing or consent of instructor.  
The role and techniques of counseling and interviewing in the delivery of correctional services. Study of service delivery programs tailored to the specific needs of the correctional clients.

4633 Criminal Procedure  
(3-0) 3 hours credit. Prerequisite: CRJ 3623 or consent of instructor.  
A procedurally oriented discussion of arrest, extradition, jurisdiction and venue, preliminary examination, bail, the grand jury, indictment and information, arraignment, trial and review, probation, parole, and pardon.

4713 Organized Crime and the Criminal Justice System  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Study of the development of organized criminal activity through generic and legal definitions. Federal and state relationships in the response of the criminal justice system to this phenomenon.
4723 The Media and Criminal Justice
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Impact of radio, television, motion pictures, records, books, and newspapers on the public’s perception of criminal justice. The media images of major figures in the criminal justice system.

4733 Intelligence Programs and National Security
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Examines a wide range of issues concerning intelligence and national security.

4743 Crime in Fiction
(3-0) 3 hours credit.
An examination of the links between fictional characterizations of crime and justice, social conditions and non-fictional research findings through such authors as Chekov, Dickens, Dostoyevsky, Norris, Puzo, Twain, Wright, Wambaugh and others.

4813 Court Organization and Jurisdiction
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Detailed analysis of the organizational and jurisdictional aspects of the federal and state judicial systems. Examination of various state models, ranging from fragmented to unified state judicial systems.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4933-6 Internship in Criminal Justice
3 or 6 hours credit. Prerequisites: CRJ 3213, and 3623; consent of Internship Coordinator prior to registration.
Supervised experience in an administrative setting which provides the opportunity to integrate theory and practice in criminal justice agencies.

4951-3 Special Studies in Criminal Justice
1 to 3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

4973 Criminal Justice: Senior Seminar
(3-0) 3 hours credit. Prerequisite: Senior standing and consent of instructor.
A seminar reserved for criminal justice majors during their senior year. Review of significant new research in criminal justice in conjunction with individualized research projects. May not be repeated for credit.

4993 Honors Thesis
(3-0) 3 hours credit. Prerequisites: Enrollment limited to candidates for honors in criminal justice during their last two semesters; completion of honors examination and approval by the Honors Program Coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor’s approval.

**BACHELOR OF ARTS DEGREE IN GEOGRAPHY**

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.30

---

30Thirty-nine of the total semester hours required for the degree must be at the upper-division level.
Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
All candidates for the degree must complete:

A. 30 semester hours in the major, 21 of which must be at the upper-division level.
   1. 12 semester hours of required courses are:
      a. 6 semester hours:
         - GRG 2613 Physical Geography
         - GRG 2623 Human Geography
      b. 6 semester hours from:
         - GRG 3113 Geography of the U.S. and Canada
         - GRG 3123 Geography of Latin America
         - GRG 3153 Geography of Texas
   2. 3 semester hours; SSC 3003 Social Research Methods
   3. 15 additional semester hours of geography electives chosen in consultation with the student’s advisor. A maximum of six of these hours may be applied to the major from:
      - ECO 3403 Economic Aspects of Urbanization
      - ECO 4303 Economic Problems of Emerging Nations
      - ENV 3023 Man and His Natural Resources
      - GEO 4063 Principles of Environmental Geology
      - MKT 4093 Consumer Behavior
      - POL 3413 The Politics of Urban Development
      - POL 3433 Leadership and Management in the Third World
      - PSY 2533 Social Psychology
      - PSY 2553 Perception
      - PSY 4223 Environmental Psychology
      - SOC 3023 Urban Sociology
      - SOC 3033 Population Dynamics
      - SOC 3073 Migration and Adjustment
      - SOC 3173 Economy and Society
      - URB 3033 Urban Systems Management
      - URB 3523 The Contemporary City

B. 6 semester hours of courses in the social sciences outside the major, chosen with the consent of the advisor.

C. 42 semester hours of electives.

**COURSE DESCRIPTIONS**

**GEOGRAPHY**

*(GRG)*

1013 **Fundamentals of Geography**
(3-0) 3 hours credit.
Introduction to the study of physical and cultural features on the earth, their distributions, causes and consequences to man. Topics include landforms, climate, population and food, perception and migration, economic growth and urbanization.

2613 **Physical Geography**
(3-0) 3 hours credit.
Study of the earth's major landforms and climatic patterns, the processes giving rise to these patterns, and their relationship to human activity.

2623 **Human Geography**
(3-0) 3 hours credit.
An analysis of human spatial perception and behavior, which may include spatial perception, human territoriality migration, innovation diffusion, and spatial planning.
3113 **Geography of the U.S. and Canada**  
(3-0) 3 hours credit.  
Selected geographic aspects of the major regions of the United States and Canada, emphasizing current social and economic issues in these regions.

3123 **Geography of Latin America**  
(3-0) 3 hours credit.  
Selected geographic aspects of Mexico, Central America, the West Indies, and South America.

3153 **Geography of Texas**  
(3-0) 3 hours credit.  
An analysis of the physical, economic, and cultural patterns of the State of Texas as they vary across its geographic regions. Examines physical and settlement patterns, evaluation of regional economies, population and regional growth issues.

3213 **Cultural Geography**  
(3-0) 3 hours credit.  
Study of human culture hearths, the distribution of languages and religion, environmental perception, environmental determinism, and human settlement patterns.

3313 **Cartography**  
(3-0) 3 hours credit.  
The design, construction, and reproduction of maps; the history of mapping and cartographic theory.

3323 **Spatial Analysis**  
(3-0) 3 hours credit. Prerequisite: Consent of instructor.  
Application of mathematical and statistical analysis to spatial data. Topics may include geographic sampling, spatial pattern analysis, and techniques of areal association and classification.

3513 **Urban Geography**  
(3-0) 3 hours credit.  
The spatial patterns of urbanization, city growth and functioning seen cross-culturally and comparatively; geographic considerations of contemporary urban issues; the development and use of urban information systems.

3533 **Geography of Economic Activity**  
(3-0) 3 hours credit.  
Analysis of the location of production at national, regional, and local scales, principles, models, and planning of economic behavior over space.

3613 **Conservation of Resources**  
(3-0) 3 hours credit.  
A survey of the distribution of world resources, with special emphasis on new and novel solutions to problems of resource scarcity. Topics include food, scenic and recreational resources, and other selected components of the biosphere and lithosphere.

3623 **Population Geography**  
(3-0) 3 hours credit.  
Study of the distribution, growth, movement, and adaptation of human populations over space.

3633 **Geography of Development**  
(3-0) 3 hours credit.  
Analysis of differential rates of economic growth between and within countries and regions.

3713 **Weather and Climate**  
(3-0) 3 hours credit.  
Analysis of the elements and causes of daily weather, climatic classification, and climatic change. Study of world distributions and components of climate.

4911-3 **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student's advisor, and the Division Director and Dean of the College in which the course is offered.
Bachelor of Arts Degree in Political Science

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

4933-6 Internship in Geography
3 or 6 hours credit. Prerequisite: Consent of internship coordinator. Supervised experience relevant to geography within selected community organizations. A maximum of 6 credit hours may be earned through Internship in Geography.

4951-3 Special Studies in Geography
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in geography during their last two semesters; completion of honors examination and approval by the Honors Program coordinator. Supervised research and preparation of an honors thesis. May be repeated once with advisor’s approval.

BACHELOR OF ARTS DEGREE IN POLITICAL SCIENCE

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.21

All candidates for the degree must complete:

A. 30 semester hours in the major, 21 of which must be at the upper-division level.

1. 15 semester hours of required courses are:
   a. 6 semester hours from courses numbered POL 2503-2693
   b. SSC 3003 Social Research Methods
   c. One advanced undergraduate seminar, to be chosen from the following: POL 4113, POL 4153, POL 4973, or designated sections of POL 4951-3, or, with approval of the student’s advisor POL 4913, Independent Study
   d. 3 semester hours chosen from Social Science (SSC) courses

2. 15 semester hours of political science electives, 12 of which must be at the upper-division level, are required, to be chosen in consultation with the student’s advisor.

At least 3 hours must be taken from each of the following areas:

(a) Comparative politics and international relations;
(b) Political theory and public law.
(c) American politics and public administration.

Up to 6 hours may be applied to the major from:

ECO 3273 Public Choice and the Public Finances
HIS 3093 United States Constitutional History
HIS 3583 Revolutions in History
SOC 3103 Complex Organizations
SOC 3123 Survey Research Methods
SSC 3103 Major Theories of the Social Sciences

39 of the total semester hours required for the degree must be at the upper division level.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
SSC  3533  Inter-American Relations  
SSC  4353  Leadership and Elites 

B. 6 semester hours of courses in the social sciences outside the major chosen with consent of the advisor. 
C. 42 semester hours of electives. 

COURSE DESCRIPTIONS  
POLITICAL SCIENCE  
(POL) 

1023 The Politics of the American Economy  
(3-0) 3 hours credit.  
(Formerly POL 2063; credit cannot be earned for both 1023 and 2063.)  

1053 Introduction to American Politics  
(3-0) 3 hours credit.  
Constitutional theory and political practice in the United States. Political behavior, parties and pressure groups, the Presidency and Congress, the judiciary, contemporary public policy issues. Applies to the legislative requirement in United States government.  

1083 The United States in the World  
(3-0) 3 hours credit.  
The development of conceptions of the United States' role in the world. The foreign policy decision-making process and its legal and constitutional basis. The relationship of domestic politics to the conduct of foreign policy. Applies to the legislative requirement in United States government.  
(Formerly POL 2083; credit cannot be earned for both 1083 and 2083.)  

1093 The Political Systems of the United States and Mexico  
(3-0) 3 hours credit.  
A comparative examination of the constitutional frameworks, political institutions, and political practice of the United States and Mexico. The two revolutions, the role of the constitution, the power of the executive, Partido Revolucionario Institutional (PRI), Republicans and Democrats, the question of political opposition, federal-state relations, the politics of economic development, etc. Applies to the legislative requirement in United States government.  
(Formerly POL 2013; credit cannot be earned for both 1093 and 2013.)  

1133 Introduction to Texas Politics  
(3-0) 3 hours credit.  
Constitutional theory and political practice in Texas. Constitutional development, the Governor and the Legislature, the judiciary, parties, pressure groups, county, city, and town government. Applies to the legislative requirement in Texas government.  
(Formerly POL 1043; credit cannot be earned for more than 3 hours from among 1043, 1133, 1143 and 2043.)  

1143 Contemporary Public Policy in Texas  
(3-0) 3 hours credit.  
The relationship between the constitutional and legal framework and contemporary policy issues. The power of the state executive office, executive-legislative relations, environmental and energy policy, state-local relations, etc. Applies to the legislative requirement in Texas government.  
(Formerly POL 2043; credit cannot be earned for more than 3 hours from among 1043, 1133, 1143 and 2043.)  

1173 American State and Local Politics  
(3-0) 3 hours credit.  
A comparative examination of state constitutions, governmental structures, and politics, with special emphasis on Texas. Applies to the legislative requirement in Texas government.  
(Formerly POL 2073; credit cannot be earned for both 1173 and 2073.)
2023 Civil Liberties in American Law and Practice
(3-0) 3 hours credit.
The Bill of Rights and its contemporary application in the United States. The theory and history of civil liberties in America. Freedom of religion and expression; privacy; legal due process; equal protection; etc. Applies to the legislative requirement in United States government.

2503 Introduction to Political Theory
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The fundamental concepts and problems of politics, as viewed by the classical political philosophers and contemporary theorists; justice, power, authority, obligation, freedom, equality.

2513 Public Administration and Public Policy
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The role of bureaucratic agencies in the formulation and implementation of public policy. Organization theory and administration in the public sector. While the approach of the course is comparative, special emphasis is placed on bureaucracy in the United States.

2523 Political Behavior
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The study of mass and elite political attitudes and activity from a behavioral perspective. Topics covered may include elections, legislative behavior, public opinion, and political socialization.

2603 International Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The theory and practice of international relationships. The character of the contemporary international system will be analyzed from several theoretical perspectives and in the light of recent diplomatic history.

2623 Law and Society
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An examination of the role of law in society. Topics examined may include: natural law; legal realism; constitutional, statutory, common, civil, socialist, and administrative law. The structure and functions of the judiciary, police, and legal profession.

2633 Comparative Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
A comparative examination of the diverse forms, goals, styles, and practices of government in Western, Communist, and developing societies. Several major politics will be studied in detail.

3083 Ethnic Politics in the United States
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The role of ethnic and racial minorities in the politics of the United States; the responsiveness of existing political structures to ethnic problems; ethnic political organizations and influence.

3093 Mexican-American Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
This course provides an opportunity to study Mexican-American participation in the electoral process, political and economic institutions, labor organizations, and alternative modes of political action.

3103 Political Ideology
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An examination of ideology as a social phenomenon affecting political behavior, and of the specific doctrines of liberalism, socialism, conservatism, fascism, and Communism.

3133 **American Political Theory**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The political theory of the Constitution; the Federalist Papers; Adams; Jefferson; Paine; Calhoun; Thoreau; Social Darwinism; Pragmatism; twentieth century political thought.

3133 **Political Philosophy: Ancient and Medieval**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The major works of Western political philosophy from ancient times to the Renaissance.  
Writers examined may include Plato, Aristotle, Thucydides, Augustine, Machiavelli.

3143 **Political Philosophy: Modern**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The major works of political philosophy from the Renaissance to the nineteenth century.  
Writers examined may include Hobbes, Locke, Rousseau, Hegel, Marx, Mill.

3153 **Political Philosophy: Contemporary**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
Political thought from the late nineteenth century to the present. Topics examined may include: contemporary Marxism and critical theory; analytic political theory; positivism and social science; phenomenological approaches; existentialism; contemporary ethics.

3213 **American Community Politics**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
An examination of local governments in the United States and the metropolitan political economies which frame their interactions with each other and with other regional, state, and national governments. Problems of participation, power, political organization, development, and planning.

3223 **Judicial Politics**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
Political behavior of the major participants in the judicial process: judges, attorneys, juries, defendants, litigants; the political and administrative context of the judicial process; judicial-executive and judicial-legislative relations; the impact of court decisions.

3233 **Political Campaigns and Elections**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
A study of the ways in which public officials are recruited and elected in the United States and other democracies. Campaign strategy and tactics; nominations and primaries; the legal framework of elections; the problem of constituency; voting studies; campaign finance.

3253 **Public Opinion and Public Policy in the United States**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
Mass attitudes and beliefs and their linkage to political elites and public policy in the United States.

3263 **Political Socialization**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The acquisition of political attitudes in childhood, adolescence, and adulthood. The impact of the family, school, informal group, job, media, elite socialization. The sources of political dissent and opposition. (Formerly PSY 3353; credit cannot be earned for both PSY 3353 and POL 3263.)
256 / Political Science

3273 The Mass Media and Government
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
This course offers an opportunity to examine the political economy of the mass media. Consideration of the idea of a free press, theories of communication, the business of communications, journalism and politics, government regulation of media ownership and operations, the rights of reporters, citizen access. (Formerly SOC 3163; credit cannot be earned for both SOC 3163 and POL 3273.)

3283 The American Presidency
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The President's role in the American political system. Topics may include the constitutional framework and historical development of presidential powers. Presidential personality. Legislative, foreign policy, and war-making powers. (Formerly POL 3303; credit cannot be earned for both POL 3303 and 3283.)

3313 The American Federal System
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The political theory of federalism; the constitutional provisions; interstate coordination of policies; local-state-federal relations; the political role of private and public interests within the federal framework.

3323 Constitutional Law
(3-0) 3 hours credit. Prerequisite: POL 2023, POL 2623, HIS 3093, or consent of instructor.
An examination of major constitutional issues, past and present, through the intensive study of leading cases. Recommended for pre-law students. Applies to the legislative requirement in United States government.

3333 Political Power
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
A theoretical and empirical analysis of power in the political setting. Group, elite, organizational, and structural approaches will be considered. Case studies of the translation of economic and social power into political power.

3343 Political Participation
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The level and modes of political participation in the United States and other societies. The impact of socioeconomic status, ethnicity, context, psychological attributes, rational calculation, regime type, and other influences upon participation.

3363 Political Parties and Interest Groups
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The function of political parties on the political process; and interest groups, their function as private governments and their role in shaping public policy.

3373 The Legislative Process
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The functions, structures, and politics of legislatures and their relationships to their constituencies and other branches of government.

3383 Comparative Communist Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
A comparative examination of government and politics in the Soviet Union, China, Yugoslavia, and other Communist societies ideology, The cultural and economic setting of politics. The international relations of Communist states.

3393 Latin American Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An examination of political institutions and their relationship to social and economic change in Latin America. The military in politics. Revolutionary movements. The economic setting.

3403 **European Politics**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The interplay of politics with the changing social and economic environment in the advanced industrial societies of Western Europe. Elites, participation, governmental structures, party systems, interest groups, and public policy will be examined in several selected polities and the Common Market.

3413 **The Politics of Urban Development**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
This course offers an opportunity to pursue a political-economic analysis of the metropolis focusing on the problems and conflicts stemming from urban growth and stagnation. Topics examined may include uneven development, planning, industrial development policy, taxation, intergovernmental rivalry. Case studies may be drawn from societies other than the U.S.

3433 **Leadership and Modernization in the Third World**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
An examination of political elites and leadership in the modernization process. Topics examined include charisma, military rule, nationalist and revolutionary leadership, and bureaucracy in Asia, Africa, and Latin America.

3443 **Asian Politics**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
A comparative examination of the political systems of selected Asian nations and their attempts to deal with problems of social, economic, and political change. Nations studied may include Japan, China, India, and Korea.

3453 **The Politics of Mexico**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
Background to contemporary political system of Mexico, including independence, foreign intervention, the Diaz regime, and the 1910-17 revolution. Other topics may include the Constitution, the structure of government, political parties, the presidency, economic development and policy, contemporary leadership and elites.

3463 **Politics of the Third World**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
The political system of various Third World nations. An inquiry into the political and economic problems of these countries, such as development, instability, political change. (Formerly POL 3423; credit cannot be earned for both POL 3423 and POL 3463.)

3503 **American Foreign Policy Since World War II**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
A critical examination of the principles and practices of American foreign policy as it has developed since World War II.

3513 **International Organizations**  
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.  
An examination of international and regional political, economic, and military organizations, their purposes, operations, and role in the international system. Organizations examined may include: the United Nations, the Common Market, NATO, the Warsaw Pact, the Organization of American States, multinational corporations. The role of international law.
258 / Political Science

3523 Force in International Politics
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An examination of war, other forms of political violence and coercion in international relations. Topics considered may include Western thought of war, causes of and justifications for war, foreign military intervention, how wars end, approaches to the reduction of international violence, defense strategy.

3533 International Politics of Regions
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
A critical examination of the foreign policies and international relations of nations in which regions and blocs are analyzed as subsystems of the international system. A comparative approach may be utilized. Regions studied may include: The Middle East, Africa, Southeast Asia, and Western Europe.

3603 Public Policy Formulation and Implementation
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An analysis of public policy formation and implementation in the larger setting of power in the United States. The implications of the policy process for democracy. Case studies will be drawn from a range of problem areas including energy, health, the environment, and the fiscal crisis.

3613 Public Budgeting and Taxation
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An examination of the process and politics of public budgeting and taxation, and of the bureaucratic behavior accompanying it.

3623 Public Policy Evaluation
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The process and politics of public policy evaluation. The methodology of program evaluation will be examined as well as the political problems associated with policy evaluation. Case studies of specific government programs will be examined.

3703 Personnel Administration in the Public Sector
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
A survey of personnel management in the public sector. Topics examined may include recruitment, civil service and patronage appointments, career development, manpower utilization, conflict of interest questions, employee organization and relations, affirmative action.

3713 Comparative Systems of Public Administration
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
Administrative goals, structures, processes, and behavior in comparative perspective. Bureaucracies in Western democratic, Communist, and developing political systems will be examined.

3723 Ethics in Government
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The philosophical, legal, and practical problems of establishing accountability in government and promoting ethical standards among government officials.

4113 Models of Democracy
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
The study of important democratic theorists offers the opportunity to gain a foundation for the critical and comparative analysis of several types of political systems which view themselves as democratic: e.g., U.S. constitutional liberalism, Swiss cantonal federalism, Spanish anarcho-syndicalism, Soviet and Chinese Communism, industrial democracy.
4153 Seminar in Jurisprudence
(3-0) 3 hours credit. Prerequisite: Fulfillment of general education Political Science requirements.
An analytic inquiry into the normative, empirical and ideological underpinnings of law. The functions, nature, and utilities of law in various social and conceptual schemes. Alternatives to formal law and jural dispute settling.

4323 Administrative Law
(3-0) 3 hours credit. Prerequisite: POL 2023, POL 2513, or POL 2623, or consent of instructor.
A survey of those aspects of public law of particular relevance to public administration, analyzing such problem areas as the delegation of authority, formal accountability, open records and confidentiality, and responsiveness to democratic value in decision making.

4911-3 Independent Study
1-3 hours credit. Prerequisites: Permission in writing (form available) of the instructor, the student’s advisor, and the Division Director and Dean of the College in which the course is offered.
Independent reading, research, discussion, and/or writing under the direction of a faculty member. May be repeated for credit, but not more than 6 hours of independent study, regardless of discipline, will apply to a bachelor’s degree.

4933-6 Internship in Political Science
3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator.
Supervised experience relevant to political science within selected community organizations. A maximum of 6 credit hours may be earned through Internship in Political Science.

4951-3 Special Studies in Political Science
1-3 hours credit. Prerequisite: Consent of instructor.
An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor’s degree.

4973 Seminar in Political Science
(3-0) 3 hours credit. Prerequisite: Consent of instructor. Enrollment limited to juniors and seniors majoring in Political Science.
The opportunity for an intensive study of a selected topic. Primary emphasis on supervised research on various aspects of the topic. May be repeated for credit when topics vary.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in political science during their last two semesters; completion of honors examination and approval by the Honors Program coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor’s approval.

BACHELOR OF ARTS DEGREE IN SOCIOLOGY

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.21

All candidates for the degree must complete:

A. 30 semester hours in the major, 21 of which must be at the upper-division level.

1. 15 semester hours of required courses are:
   a. SOC 1013 Introduction to the Study of Society

21Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.
b. 3 semester hours of theory courses from:
   SOC 3153 Classical Sociological Theory
   SOC 3183 Contemporary Sociological Theory

c. 3 semester hours of methods courses from:
   SOC 3123 Survey Research Methods
   SSC 3003 Social Research Methods

d. SOC 4973 Sociology Senior Seminar, or
   SOC 4993 Honors Thesis

e. 3 semester hours chosen from Social Science (SSG) courses.

2. 15 additional semester hours of sociology electives, chosen in consultation with the student's advisor. 6 hours may be selected from the following:
   AMS 2013 Basic Issues in American Culture
   ANT 3223 Cultural Ecology
   EDU 3003 Educational Sociology
   GRG 3513 Urban Geography
   GRG 3623 Population Geography
   HIS 3033 American Reform
   LNG 3833 Sociology of Language
   MGT 3023 Organizational Behavior
   POL 3273 The Mass Media and Government
   PSY 2533 Social Psychology
   PSY 3023 Social Psychology of Small Groups
   PSY 4133 Social and Personality Development
   SSC 3003 Social Research Methods
   SSC 3103 Major Theories of the Social Sciences
   STA 3013 Multivariate Analysis for the Life and Social Sciences

B. 6 semester hours of courses in the social sciences outside the major chosen with the consent of the advisor.

C. 42 semester hours of electives
   It is strongly recommended that theory and research methods requirements be completed by the first semester of the junior year.

COURSE DESCRIPTIONS

SOCIOLOGY
   (SOC)

1013 Introduction to the Study of Society
   (3-0) 3 hours credit.
   An introduction to the study of human groups, the relations of individuals to groups, and the process of becoming a group member and functioning in a group setting.

2013 Social Problems
   (3-0) 3 hours credit.
   An examination of major contemporary social problems, their causes and consequences. Topics may include poverty, racism, sexism, deviance and crime, drug and alcohol dependence, the urban crisis, over-population, war.

2053 Marriage and the Family
   (3-0) 3 hours credit.
   A sociological analysis of the modern family and marriage, its structures and functions, variant patterns and the influence of contemporary society on this institution. Topics may include: dating, marital roles, divorce, child-raising, and alternative life styles.
3013 Social Stratification
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Theory and research pertaining to inequalities of power, prestige, and economic privilege.
Major emphasis upon inequality and social mobility in the United States.

3023 Urban Sociology
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Development of modern world cities, the ecology of cities, the organization of cities, major
social problems, the assimilation psychology of urban life for both more developed and less
developed countries. (Formerly SOC 2023; credit cannot be earned for both 2023 and
3023.)

3033 Population Dynamics
(3-0) 3 hours credit.
Trends in mortality, fertility, and migration for selected countries and their projected con-
sequences. Associated population policies and options are considered. (Formerly SOC
2033; credit cannot be earned for both 2033 and 3033.)

3043 Race and Ethnic Relations
(3-0) 3 hours credit.
Dominant-subordinate relations in world societies, with major emphasis on the United
States. Models of assimilation, colonial and class society and consequences for minority
and majority populations may be examined. (Formerly SOC 2063; credit cannot be earned
for both 2063 and 3043.)

3053 Deviance and Conformity
(3-0) 3 hours credit.
Consideration of sociological and social psychological factors associated with compliant
and deviant behavior; the links between deviance and strategies for social control.

3063 Collective Behavior
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Case studies and associated theory dealing with various forms of collective behavior and
social movements, including mobs, revolutions, cults and panics.

3073 Migration and Adjustment
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Geographic movement of populations, ties to economic, physical, ideological and social
features and resultant problems of adjustment. Historical as well as contemporary exam-
ple will be examined. Attention will be given to both legal and illegal immigration.

3083 Social Change
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Principal models and theories of social transformation applied to examples of societal
change.

3093 Religion and Society
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Religious institutions and movements in the United States with comparative data from
other countries. The relationship of religious institutions to social stratification, economic
institutions, and political and social change.

3103 Complex Organizations
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The sociology of public and private bureaucratic organizations, the structure and behav-
ior of management, and patterns of mobility within corporate organizations.

3113 Criminology
(3-0) 3 hours credit.
A study of violent crimes, crimes without victims, property crimes, organized crimes, and
drugs. Extent, causes, and methods of analysis. Societal reactions to crime: police,
courts, and correctional institutions.

3123 Survey Research Methods
(3-0) 3 hours credit. Prerequisite: One upper-division course in the social sciences.
A course in survey research, including research design, questionnaire construction
sampling, interviewing, control procedures, and data processing. (Formerly SOC 4103:
Credit cannot be earned for both 4103 and 3123.)
Sociology of Pluralism in the Southwest  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
The principal minority groups in the American Southwest, with emphasis on form and consequences of intergroup relations, social movements, and related social changes, and formal models of Southwestern plural society.

Juvenile Delinquency  
(3-0) 3 hours credit.  
Analysis of the extent, distribution and varieties of juvenile crime, with a survey of classic and contemporary sociological research on its causes, prediction and prevention.

Classical Sociological Theory  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
The transition from social philosophy to sociology, with special emphasis upon European theorists in the nineteenth and early twentieth centuries. (Formerly SOC 4143: Credit cannot be earned for both SOC 4143 and SOC 3153.)

Economy and Society  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
The relationship of the economic system to the social system as a whole in selected societies. The varieties of capitalist and socialist economic organizations, and their social implications.

Contemporary Sociological Theory  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
An examination of current trends in sociological theory: contemporary functionalism, evolutionism, exchange theory, radical criticism, phenomenology and symbolic interactionism, and formal theory construction. (Formerly SOC 4163: credit cannot be earned for both 4163 and 3183.)

The Sociology of Work and Occupations  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
Occupational structures in selected societies. The relationship between occupations and economic rewards, life styles, and world view. Determinants of work satisfaction.

Gerontology  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
An examination of the role of older persons in selected societies and the distinctive problems which they confront.

Medical Sociology  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
The identification of social factors in the distribution and cause of disease; relationships between patients and medical professionals; the contribution of lay belief to health, illness, treatment and recovery; health institutions; the distribution of medical resources and organization of health care delivery.

Sociology of the Life Span  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
Concentration on adult development in major social institutions through the life span, from adolescence to old age. Social determinants of development are studied, using specific life histories.

The Individual and Society  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
An examination of major theories dealing with the effects of culture and social structure on the development and functioning of the personality and the self.

Poverty  
(3-0) 3 hours credit. Prerequisite: SOC 1013.  
The causes and consequences of poverty in the United States and selected other societies. An examination of social programs designed to combat poverty.

Sex Roles  
(3-0) 3 hours credit.  
The nature of sex roles in our own and other societies. Consideration of how people learn sex roles and the outcomes of this learning for individuals, families, and societies. Alternatives to conventional sex roles.
3303  **Women at Work**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
Patterns of female labor force participation, their causes and consequences will be dis­
cussed. Relationships between women's work roles and their other roles will be con­sidered.

3363  **The Sociology of Knowledge**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
The relationship between social structures and modes of thought: theology, ideology, 
science, and other belief systems. The impact of society on science and of science on 
society. Invention, discovery, and the knowledge explosion.

3403  **Mexican American Stratification**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
A course offering the opportunity to study the variables affecting the social status of Mex­
ican Americans and relations between this group and the dominant society. Issues 
studied may include the position of Mexican Americans in economic, political and status 
hierarchies and the major factors limiting mobility within these systems.

3413  **Warfare and the Military**  
(3-0) 3 hours credit. 
A sociological analysis of military organization and military personnel with emphasis on 
motivation during times of war.

3423  **Homicide and Suicide**  
(3-0) 3 hours credit. Prerequisite: SOC 1013; SOC 3113 recommended. 
An analysis of intentional death. Case studies and associated theory focusing on motives, 
sequences of events, types of individuals involved, subcultures of violence, and variations 
over time among nations. Methods of treatment and prevention.

3463  **Sociology of Sport and Leisure**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
This course will examine the social meanings of play and leisure in advanced industrial 
societies. Emphasis will be on the origins, structure and function of these phenomena in 
the United States with major emphasis on sport as an institution.

4173  **Comparative Family Structures**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
A review of research comparing major conventional and alternative family structures in 
pre-industrial and industrial societies.

4203  **Applied Community Studies**  
(3-0) 3 hours credit. Prerequisite: SOC 1013. 
An examination of theories, methods, and techniques of field work. The course will con­sider research in organizations, communities, and other settings, and ethical problems 
involved in such research.

4911-3  **Independent Study**  
1-3 hours credit. Prerequisites: Permission in writing (form available) from the instructor, 
the student's advisor, and the Division Director and Dean of the College in which the 
course is offered. 
Independent reading, research, discussion, and/or writing under the direction of a faculty 
member. May be repeated for credit, but not more than 6 hours of independent study, 
regardless of discipline, will apply to a bachelor's degree.

4933-6  **Internship In Sociology**  
3 or 6 hours credit. Prerequisite: Consent of internship coordinator. 
Supervised experience relevant to sociology within selected community organizations. A 
maximum of 6 credit hours may be earned through Internship in Sociology.

4951-3  **Special Studies in Sociology**  
1-3 hours credit. Prerequisite: Consent of instructor. 
An organized course offering the opportunity for specialized study not normally or not 
often available as part of the regular course offerings. Special Studies courses may be 
repeated for credit when the topics vary, but not more than 6 hours within any one 
discipline will apply to a bachelor's degree.
4973 Sociology Senior Seminar
(3-0) 3 hours credit. Prerequisite: Senior standing in the sociology major.
A capstone course designed to integrate sociological theory and methods and to guide students in the conduct of social research.

4993 Honors Thesis
3 hours credit. Prerequisite: Enrollment limited to candidates for honors in sociology during their last two semesters; completion of honors examination and approval by the Honors Program coordinator.
Supervised research and preparation of an honors thesis. May be repeated once with advisor's approval.

COURSE DESCRIPTIONS
SOCIAL SCIENCE
(SSC)

3003 Social Research Methods
(3-0) 3 hours credit. Prerequisite: At least one social science course.
An introduction to methods of empirical research in the social sciences. Topics may include the philosophy of science; conceptualization, operationalization and measurement; various data gathering procedures; data analysis; use of applied social statistics. May also include use of standard computer packages.

3103 Major Theories of the Social Sciences
(3-0) 3 hours credit.
A survey of major theories and types of theories in nineteenth and twentieth century social science. Particular attention is paid to the origin of distinctions among the social sciences and to competing visions of the connections between them.

3153 Women In American Society
(3-0) 3 hours credit.
Examines aspects of women's experience in contemporary American society. Topics may include labor-force participation and economic decision-making, political and religious status, gender role socialization, family organization and the feminist and anti-feminist movements. When possible, cross-cultural and historical comparisons will be introduced. Topics and approaches will vary. (Formerly SSC 3143. Credit can be earned only for HIS 3473 or SSC 3143 or SSC 3153.)

3203 Violence and Society
(3-0) 3 hours credit. Prerequisite: Advanced standing in a social science discipline or consent of the instructor.
This course examines the major theories which attempt to explain why violence occurs in society. Certain forms of violence, both legal and illegal, are studied from a variety of perspectives in the social sciences to determine whether present explanations of violent behavior are adequate.

3303 Economy and Polity
(3-0) 3 hours credit.
The political, legal and ethical context of modern commercial society is explored through the evolution of conceptions of the economy, the individual and the state. Topics may include the ethical and legal impact of business practices, normative implications of the interaction of modern government and economic activity, the impact of markets on concepts of public and private life.

3533 Inter-American Relations
(3-0) 3 hours credit.
The development of political, economic, and cultural relations among nations of the Americas. (Formerly HIS 3533. Credit cannot be earned for both HIS 3533 and SSC 3533.)

4213 Freudian Theory In the Social Sciences
(3-0) 3 hours credit.
Study of the development of Freud's thought through a chronological survey of some major works and through consideration of Freud's background and life. The influence of Freud on such neo-Freudian schools as Adler, Horney and Fromm and the impact of Freudian and neo-Freudian ideas on the social sciences.
4223 Research Applications in the Social Sciences
(3-0) 3 hours credit. Prerequisites: STA 1993 or SSC 3003 or equivalent. Provides students the opportunity to apply research and quantitative techniques as analytical tools in the social and policy sciences.

4353 Leadership and Elites
(3-0) 3 hours credit. A survey of the major theoretical and empirical approaches to the study of elites and leadership. Political, sociological, psychological, and historical perspectives are examined. (Formerly POL 4353. Credit cannot be earned for both POL 4353 and SSC 4353.)

4373 Program Evaluation
(3-0) 3 hours credit. Prerequisite: PSY 3003, PSY 3013, SOC 3123 or 4103, or SSC 3003, or consent of instructor. Theoretical and applied perspectives on the evaluation of social change programs. Focus on the problems involved in designing, implementing, and evaluating community-based intervention.

4951-3 Special Studies in Social Sciences
1-3 hours credit. Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Studies courses may be repeated for credit when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

COURSE DESCRIPTIONS

URBAN STUDIES (URB)

3013 Urban Human Resources Policy
(3-0) 3 hours credit. Theory, history, and record of manpower programs; basic relationships between institutions and forces which affect the labor market and the ability of public agencies to place and administer human resources programs.

3033 Urban Systems Management
(3-0) 3 hours credit. The complexities of the modern city from a systems approach; survey and analysis of the techniques, tools, problems, and opportunities of contemporary urban management.

3103 Seminar on Urban Environmental Values
(3-0) 3 hours credit. Prerequisite: ENV 2013. This seminar will be an interdisciplinary inquiry into how environmental perceptions are formed. The influence of human values on the quality of both the natural and the built environments will be explored in detail. Special emphasis will be given to a comparative analysis of sometimes conflicting values represented by differing cultures, disciplines and frames of reference and the role they play in the formulation of public policy.

3203 Comparative Urban Development
(3-0) 3 hours credit. A study of the physical structure of the third world city and its cultural, social, and economic basis; current urban issues and environmental relationships.

3523 The Contemporary City
(3-0) 3 hours credit. An introduction to urban America from a multidisciplinary perspective. Attention to the economic, social, political and environmental factors which have produced the physical form and institutional arrangements of the contemporary city. Problems and opportunities currently facing American cities.

3723 Introduction to Urban Planning
(3-0) 3 hours credit. Prerequisite: ENV 3523. An introduction to the nature, use, purpose and preparation of a master plan for the future physical growth and development of a community. The course focuses on the planning process by which a city prepares and implements its master plan.
Air Force Reserve Officer Training Corps Program

4103 The Government and Environmental Protection
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
A survey of current federal and state action directed at improving environmental quality. Attention to specific legislation and its implications for the future of our society and various industries.

4503 Alternative Urban Futures
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
An investigation and discussion of alternatives for future urban life and form. Exploration of possible paths into the future, new forms of urban structure, and the feasibility of utopian ideas for future cities.

4513 Problems of Urban Change
(3-0) 3 hours credit. Prerequisite: Consent of instructor.
Problems presented by growth and change in the urban environment are explored.

RESERVE OFFICE TRAINING CORPS PROGRAM

Army R.O.T.C. A student enrolling at The University of Texas at San Antonio may pursue courses in Military Science designed to provide the opportunity to develop the knowledge and skills required for a commission as an officer in the U.S. Army. The Reserve Officer Training Corps (R.O.T.C.) is open to all qualified students (male and female) on a voluntary basis at both The University of Texas at San Antonio and The University of Texas Health Science Center. All courses for those enrolled in the program are held on The University of Texas at San Antonio campus.

Air Force R.O.T.C. The University of Texas at San Antonio students may enroll in Aerospace Studies courses that are required for an officer commission in the U.S. Air Force. The Air Force Reserve Officer Training Corps (R.O.T.C.) is open to all qualified students (male and female) on a voluntary basis. The program is available under cooperative arrangements with Southwest Texas State University in San Marcos. All courses for The UTSA students enrolled in the program are held on The University of Texas at San Antonio campus.

AIR FORCE RESERVE OFFICER TRAINING CORPS PROGRAM

To obtain a commission as an officer in the U.S. Air Force, a baccalaureate degree in one of the disciplines offered by The University of Texas at San Antonio and completion of either the Four-Year Program or the Two-Year Program in Aerospace Studies is required. Credit for aerospace studies courses may be applied toward a baccalaureate degree only as free electives. With respect to the free electives specified in the degree requirements for each major, there is a maximum number of hours of aerospace studies that may be applied to the free electives allowed.

Credit for aerospace studies courses, when awarded by another accredited college or university, is accepted by The University of Texas at San Antonio as free elective credit within the same limitations as aerospace studies credit earned at The University.

Two routes to an Air Force Commission are available in Air Force ROTC at The University of Texas at San Antonio. Entering students may enroll in the Four-Year Program, and students with at least two academic years remaining in college may apply for the Two-Year Program.

For the Four-Year Program, a formal application is not required for entering students. Registration is accomplished at the same time and the same manner as for other college courses. During the freshman and sophomore years, students enroll in the General Military Course (GMC). They then may compete for entry into the Professional Officer Course (POC), which is outlined below and normally taken during the last two years of college. Membership in the GMC does not confer any military status or commitment upon the cadet. GMC contract cadets must successfully complete a course in English composition.
The **Two-Year Program** consists of the Professional Officer Course (POC), the last two years of the Four-Year Program. It is designed to provide greater flexibility to meet the needs of students desiring Air Force opportunities. The basic requirement is that students have two academic years remaining at either the undergraduate or graduate level or a combination of both. Since the processing procedure for admission into the **Two-Year Program** must be completed well in advance of intended enrollment, students interested in the program should apply in the Fall Semester preceding the academic year in which they intend to enter the program. Application should be made in writing or by a personal visit to the Professor of Aerospace Studies. Upon completion of the six-weeks paid summer field training course, students entering the **Two-Year Program** may petition for credit in Aerospace Studies 1011, 1021, 2011, and 2021. When applicants are enrolled in the Professional Officer Course, they enlist in the Air Force Reserve which enables them to receive a subsistence allowance.

Participation in a leadership laboratory is required in conjunction with all courses. The laboratory provides the opportunity to acquire leadership skills and experiences that will enhance a cadet’s ability to perform as an Air Force Officer.

**COURSE DESCRIPTIONS**

**AEROSPACE STUDIES (ASC)**

**1011 General Military Course I**  
(1-1) 1 hour credit.  
This course examines the development and growth of air power from a historical perspective starting before the first powered flights, continuing through World War I, the inter-war years, and World War II. It traces development of the various concepts for employment of air power and focuses upon factors which have prompted research and technological change.

**1021 General Military Course II**  
(1-1) 1 hour credit.  
A continuation of 1011, beginning with the development of air power from World War II to the present. Various events and trends in the history of air power are examined, especially where these provide significant examples of the impact of air power on strategic thought. Contemporary defense strategy, concepts, and doctrine are emphasized.

**2011 General Military Course III**  
(1-1) 1 hour credit.  
A study of the doctrine, mission and organization of the United States Air Force; United States strategic offensive and defensive forces; their missions and functions; employment of nuclear weapons.

**2021 General Military Course IV**  
(1-1) 1 hour credit.  
Aerospace defense; missile defense; United States general purpose forces, and Aerospace support forces; the mission, resources, and operations of the tactical air forces with special attention to limited war; review of Army, Navy, and Marine general purpose forces.

**3013 The Professional Officer Course I**  
(3-1) 3 hours credit.  
A seminar course which examines management principles, functions, tools and problem solving. Throughout the course, students will learn and practice communication skills necessary as future junior officers in the United States Air Force.

**3023 The Professional Officer Course II**  
(3-1) 3 hours credit.  
A seminar course pertaining to professionalism and leadership as applicable to the junior officer. Includes the meaning of professionalism and professional responsibilities. Includes study and practice in the use of Air Force communicative skills.
Aerospace Studies
Army Reserve Officers Training Corps

4013 The Professional Officer Course III
(3-1) 3 hours credit.
A study of the military justice system and the role and function of the professional military officer in a democratic society. Includes examination of American defense policy formulation and implementation. Students are provided the opportunity to learn and practice communication skills necessary as future junior officers in the U.S. Air Force.

4023 The Professional Officer Course IV
(3-1) 3 hours credit.
Continuation of 4013, with an extensive analysis of various dynamics involved in defense policymaking. Examination of various institutional agencies in light of their specific interests in defense policy. Case studies involving weapons acquisition programs, technological innovation, doctrinal imperatives, and political factors.

ARMY RESERVE OFFICER TRAINING CORPS PROGRAM

To obtain a commission as an officer in the U.S. Army, students must complete either the Four-Year Program or the Two-Year Program in Military Science and be a full-time student pursuing a baccalaureate degree in one of the disciplines offered by The University of Texas at San Antonio. Students who complete their Military Science program prior to receiving their baccalaureate degree receive their commissions under the Early Commissioning Program and remain in the Army Reserve while completing their degree requirements.

Credit for military science courses may be applied toward a baccalaureate degree only as free electives. With respect to the free electives specified in the degree requirements for each major, there is a maximum number of hours of military science that may be applied to the free electives allowed. Credit for military science courses, when awarded by another accredited college or university, is accepted by The University of Texas at San Antonio as free elective credit within the same limitations as military science credit earned at The University.

The Four-Year Program consists of 18 semester hours of military science courses and is offered in two parts: a Basic Course and an Advanced Course. A formal application is not required for students entering the Four-Year Program. Registration is accomplished at the same time and the same manner as for other university courses. The Basic Course, consisting of 6 semester hours of course work, is normally taken during the freshman and sophomore years. Enrollment in the Basic Course does not confer any military status or commitment upon the student. Students who successfully complete the Basic Course are eligible for entry into the Advanced Course.

The Basic Course requirements may be compressed into one academic year. The Basic Course may be waived without credit for students with prior military service and/or junior ROTC.

Students who desire enrollment in the Advanced Course but have not completed the Basic Course may enroll in MSC 2034 or attend a six-week paid summer camp.

The Advanced Course, outlined below in the Two-Year Program, consists of 12 semester hours of course work and is normally taken during the junior and senior years at The University.

The Two-Year Program consists of the Advanced Course, the last two years of the Four-Year Program. Students must have two academic years remaining at either the undergraduate or graduate level (or a combination of both) and satisfy the Basic Course requirements through any of the options listed above in the discussion of the Four-Year Program.

Upon entering the Advanced Course, a student is required to sign a contract which obligates him or her to complete the ROTC program and serve a tour of duty as a commissioned officer in the United States Army or Army Reserve. Students enrolled in the
Advanced Course receive a subsistence allowance and are eligible to receive additional pay as an "officer trainee" with a local Reserve or National Guard as a participant in the Simultaneous Membership Program.

Students in the Advanced Course attend a paid six-week summer camp between their junior and senior years.

The Army ROTC program offers competitive scholarships for up to three years to selected students. These scholarships provide for tuition, fees, and a subsistence allowance.

Participation in a leadership laboratory is required in conjunction with all courses. The laboratory provides the opportunity to acquire leadership skills and experiences that will enhance a student's ability to perform as an Army Officer.

Students enrolled in Army ROTC courses are furnished, free of charge, complete uniforms, texts, and necessary equipment.

The program requirements for the Basic and Advanced Courses are as follows:

<table>
<thead>
<tr>
<th>Basic</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSC 1011 or MSC 1101</td>
<td>MSC 3013</td>
</tr>
<tr>
<td>MSC 1021 or MSC 1201</td>
<td>MSC 3023</td>
</tr>
<tr>
<td>MSC 2012</td>
<td>MSC 4013</td>
</tr>
<tr>
<td>MSC 2022</td>
<td>MSC 4023</td>
</tr>
</tbody>
</table>

COURSE DESCRIPTIONS

MILITARY SCIENCE (MSC)

1011  Fundamentals of Leadership and Management I
(1-2) 1 hour credit.
Organization of the Army and ROTC. Discussion of career opportunities for ROTC graduates and the military as a profession. Customs and traditions of the service. Development of leadership potential. Credit cannot be earned for both MSC 1011 and 1101.

1021  Fundamentals of Leadership and Management II
(1-2) 1 hour credit.
Leadership case studies of problems facing junior leaders in today's Army in non-combat situations. Evaluation of weapons and warfare using the principles of warfare as a catalyst. Effects of technological and sociological change on the military. Continuation of customs and traditions of the service. Development of leadership potential. Credit cannot be earned for both MSC 1021 and 1201.

1101  Leadership Skills I
(1-2) 1 hour credit.
Opportunity for development of leadership potential through introduction of basic skills. Application of basic map-reading principles. Introduction to orienteering. Introduction to back-packing, hiking, and survival techniques. Practical leadership exercises during three weekend laboratories in which students employ techniques learned in lectures. Credit cannot be earned for both MSC 1011 and 1101.

1201  Leadership Skills II
(1-2) 1 hour credit.
Opportunity for development of leadership potential through introduction to individual and team skills such as mountaineering techniques, marksmanship, watercraft techniques, or first aid. Practical leadership exercises during three weekend laboratories in which students employ techniques learned in lectures. Credit cannot be earned for both MSC 1021 and 1201.

2012  Applied Leadership and Management I
(2-2) 2 hours credit.
American military history. A study of the development of American military institutions, policies, experience, and traditions in peace and war from colonial times to the present.
Emphasis will be on the evolution of warfare, military theory and the military profession. Introduction to the operation of basic military teams with emphasis on organization and equipment.

**2022 Applied Leadership and Management II**
(2-2) 2 hours credit.
Military geography and the use of maps. Continuation of the operation of basic military teams to include the principles of offensive and defensive combat and the functions and responsibilities of the junior leader. Development of leadership potential through practical exercises.

**2034 Introduction to Leadership and Management**
(4-3) 4 hours credit.
Organization of the Army and ROTC. The military as a profession. Customs and traditions of the service. Leadership case studies of problems facing junior leaders. Military geography and use of maps. Operation of the basic military team. Development of leadership potential through practical exercises. Credit will not be earned for both MSC 2034 and Basic Course requirements.

**3013 Advanced Leadership and Management I**
(3-2) 3 hours credit. Prerequisites: MSC 1011, 1021, 2012, and 2022, or consent of instructor.

**3023 Advanced Leadership and Management II**
(3-2) 3 hours credit. Prerequisite: MSC 3013 or consent of instructor.
Performance-oriented instruction in preparation for Advanced Camp. Development of the leader's ability to express himself, analyze military problems, and prepare and deliver logical solutions. Analysis of the leader's role in planning, directing, and coordinating the efforts of individuals and small units in the execution of offensive and defensive tactical missions.

**4013 Seminar in Leadership and Management of the Military Team**
(3-2) 3 hours credit. Prerequisite: MSC 3023 or consent of instructor.
Analysis of selected leadership and management problems. Responsibilities of the Commander and staff in areas of personnel, intelligence, operations, and logistics. Administration of military law. The interrelationships of the military team.

**4023 Seminar in Leadership and Management**
(3-2) 3 hours credit. Prerequisite: MSC 4013 or consent of instructor.
Analysis of selected leadership and management problems. Responsibilities of the Commander in the management of personnel, account, logistics, operations, maintenance, and unit readiness. Seminars in the role of the officer in the conduct of personal affairs.
UNIVERSITY HONORS PROGRAM

Course Descriptions

Honors
(HON)

3113 Honors Seminar
(3-0) 3 hours credit. Prerequisite: Enrollment in The University Honors Program. Interdisciplinary seminar, team-taught by faculty from different academic areas, that explores broad topics. May be repeated for credit when the topics vary.
Appendix A.

PREPROFESSIONAL COURSES OF STUDY IN LAW
AND THE HEALTH FIELDS

The University of Texas at San Antonio does not offer specific prelaw, premedical, predental or prenursing programs; rather, students select courses of study in preparation for admission to law, medical, dental, and nursing schools in terms of individual preferences and in terms of specific program requirements of individual professional schools.

The semester hour and grade requirements set forth below are minimum requirements, and satisfactory completion of these requirements does not assure admission to any such professional schools, since applications for admission far exceed spaces available.

Preparation for law school. Most law schools do not recommend or encourage students to concentrate in a particular area or discipline, although they do recommend that students acquire certain skills during their undergraduate career. Since these vary from school to school, students should be familiar with the requirements and preferences of the particular school or schools to which they intend to apply. That information can be obtained from the collection of current catalogs and directories for law schools in Texas and throughout the United States available through UT San Antonio’s Prelaw Advisory Committee. Information on the procedures for admission to law schools and the Law School Admission Test (LSAT) is also available from the committee. Appointments to consult with members of the committee may be made through the Office of the Division of Social and Policy Sciences.

Preparation for Medical and Dental Schools. In general, medical and dental school admission committees do not state a preference about an undergraduate major field, leaving the student free to choose, after conferences with his or her advisor, a degree program suited to the student’s special abilities and interests. The vast majority of entrants have four years of college with a bachelor’s degree. A few students with outstanding records and a high degree of maturity are admitted to medical school after completing 90 semester hours and to dental schools after completing 60 semester hours.

Admission requirements for The University of Texas Medical and Dental Schools are representative of admission requirements for most other American schools. These requirements include: one year of college English; two years of biology as required for college science majors (one year must include laboratory work); one year of physics as required for college science majors, including laboratory; one year of general chemistry and one year of organic chemistry as required for college science majors, including the corresponding laboratories; one-half year of college calculus (not required for dental school).

Each applicant is required to take the Medical College Admission Test or the Dental Admission Test. The preferred time to take these tests is at the spring test date prior to late summer or fall application for admission.

Students are encouraged to consult with the Chairman, Health Professions Advisory Committee, Division of Life Sciences early in their college career for advisement and for information concerning professional school requirements. The committee chairman also should be consulted concerning the written evaluation which must be submitted for each applicant.
Applications for all University of Texas System Medical and Dental Schools are processed by the Medical and Dental Application Centers, 201 West Seventh Street, Suite 712, Austin, Texas 78701.

Preparation for nursing school. Admission requirements for The University of Texas Schools of Nursing are representative of admission requirements for most other American nursing schools. A minimum of 60 semester hours is required, including six semester hours of college English, nine hours in behavioral sciences, twelve hours in history and government, three hours in statistics, and eighteen hours in natural sciences, which must include chemistry, anatomy, physiology, microbiology, and nutrition. Additional information and advisement may be obtained from the Chairman, Health Professions Advisory Committee, Division of Life Sciences.
Appendix B.

LIST OF APPROVED GENERAL EDUCATION REQUIREMENTS COURSES

Listed below are the approved courses which fulfill the General Education Requirements for:

I. Languages and Cultures
II. Sciences and Mathematics
III. Social Sciences

1. Languages and Cultures 18 Semester Credit Hours
   A. English 9 Semester Credit Hours
      ENG 1013 Freshman Composition
      ENG 1023 Critical Reading and Writing I
      ENG 1033 Critical Reading and Writing II
   B. Other Languages and Cultures 9 Semester Credit Hours
      Entering students who have not completed two units (two years) of a single foreign language will follow Track 1. Entering students who have completed two units (two years) of a single foreign language will follow Track 2.
      Track 1: 6 semester credit hours in a single foreign language equivalent to completion of UTSA’s second semester (1023) in a given language, plus
      3 semester credit hours in the same foreign language to be chosen from the following (when offered):
      FRN 2006 Intermediate French-Accelerated
      FRN 2013 Intermediate French I
      GER 2013 Intermediate German I
      HBR 2013 Intermediate Hebrew I
      ITL 2013 Intermediate Italian I
      RUS 2013 Intermediate Russian I
      SPN 2006 Intermediate Spanish-Accelerated
      SPN 2013 Intermediate Spanish I
      SPN 2043 Spanish for the Health Care Fields
      SPN 3153 Spanish for the Business/Management Fields
      SPN 2223 Spanish for Spanish Speakers
      or
      3 semester credit hours of foreign literature (taught in English) to be chosen from the following (when offered):
      FRN 3333 French Literature in English Translation
      GER 3333 German Literature in English Translation
      HUM 3073 Oriental Literature
      RUS 3333 Russian Literature in English Translation
      SPN 3333 Hispanic Literature in English Translation
      or
      3 semester credit hours of culture to be chosen from the following (when offered):
      ANT 3143 Peoples and Societies of Latin America
Appendix B / 275

BBL 3003 Multiculturalism in the Southwest
BBL 3023 Mexican-American Biculturalism
BBL 3033 The Mexican American in the Southwest
CSH 1203 Introduction to Hispanic Culture
CSH 1233 Contemporary Hispanic Culture
GRG 3123 Geography of Latin America
GRG 3213 Cultural Geography
HIS 2533 Latin America Since 1492
HIS 2573 Survey of African History
HIS 3213 France Since 1750
HIS 3233 Germany Since 1806
HIS 3293 Imperial Spain
HIS 3303 History of Mexico
HIS 3403 Pre-Hispanic and Colonial Latin America
HIS 3743 Russia, 1682-1917
HUM 3623 National Cultures and Civilizations
POL 3393 Latin American Politics

or

3 semester credit hours of fine and applied arts to be chosen from the following (when offered):

AHC 1113 Art and Architecture I: Ancient Through Medieval
AHC 1123 Art and Architecture II: Renaissance through Eighteenth Century
AHC 2213 Art and Architecture of the Americas I
AHC 2223 Art and Architecture of the Americas II
AHC 3223 Spanish Art
AHC 3423 Pre-Columbian Art and Architecture of Mesoamerica
AHC 3453 New World Hispanic Art and Architecture
AHC 4423 Contemporary Art of Latin America
ARC 2413 History of Architecture I
MUS 3623 Music of the Americas
MUS 3643 Masterpieces of Music
MUS 3721 UTSA Chorus

or

3 semester credit hours of classics and philosophy to be chosen from the following (when offered):

CLA 2013 Introduction to Ancient Greece
CLA 2023 Introduction to Ancient Rome
CLA 3033 Homer and the Tragic Vision
CLA 3043 Classical Comedy
PHI 2023 Introduction to Ancient Philosophy
PHI 3073 Oriental Philosophy

Track 2: 9 semester credit hours in language and culture courses to be chosen from the following courses with no more than 6 hours in any one discipline:

Foreign Languages
FRN 1006 Elementary French-Accelerated*
FRN 1013 Elementary French I*

*Must be a different foreign language from the one in which two years of high school credit was presented upon admission.
FRN 1023 Elementary French II*  
GER 1013 Elementary German I*  
GER 1023 Elementary German II*  
HBR 1013 Elementary Hebrew I*  
HBR 1023 Elementary Hebrew II*  
ITL 1013 Elementary Italian I*  
ITL 1023 Elementary Italian II*  
RUS 1013 Elementary Russian I*  
RUS 1023 Elementary Russian II*  
SPN 1006 Elementary Spanish — Accelerated*  
SPN 1013 Elementary Spanish I*  
SPN 1023 Elementary Spanish II*  

Linguistics  
COM 2343 Introduction to Mass Communication  
COM 3083 Language and Communication Theory  
LNG 3813 Introduction to Linguistics  
LNG 3833 Sociology of Language  
LNG 3843 Psychology of Language  
LNG 3853 Languages of Mexican Americans  
CSH 1103 Literary Masterpieces of World Culture I  
CSH 1113 Literary Masterpieces of World Culture II  
CSH 2113 The Foreign Film  
CSH 2313 Introduction to Literary Studies  
ENG 2273 Topics in Popular Literature  
ENG 2283 Literary Themes and Motifs  
ENG 2513 The Bible as Literature  
ENG 2613 Introduction to Literary Forms  
ENG 2813 The Latin and Greek Element in English  
ENG 3033 Contemporary American Literature  
ENG 3043 Black Literature in America  
ENG 3063 Modern American Literature  
ENG 3133 Women in Literature  
ENG 3373 Children's Literature  
FRN 3333 French Literature in English Translation  
GER 3333 German Literature in English Translation  
HUM 2643 Introduction to Film  
HUM 3073 Oriental Literature  
HUM 3263 Modern European Novel  
RUS 3333 Russian Literature in English Translation  
SPN 3333 Hispanic Literature in English Translation  

Historical and Cultural Studies  
AMS 2013 Basic Issues in American Culture  
AMS 3013 Early American Culture  
AMS 3023 Modern American Culture  
ANT 1013 Man in Adaptation  
ANT 3113 World Ethnography  
ANT 3133 Native Peoples of North America  
ANT 3143 Peoples and Societies of Latin America  

*Must be a different foreign language from the one in which two years of high school credit was presented upon admission.
ANT 3673 Ancient Civilizations of the Near East, Egypt, and Europe
BBL 3003 Multiculturalism in the Southwest
BBL 3023 Mexican-American Biculturalism
BBL 3033 The Mexican American in the Southwest
CSH 1203 Introduction to Hispanic Cultures
CSH 1233 Contemporary Hispanic Cultures
GRG 1013 Fundamentals of Geography
GRG 2623 Human Geography
GRG 3123 Geography of Latin America
GRG 3213 Cultural Geography
HIS 2533 Latin America since 1492
HIS 2553 The Far East: History and Civilization
HIS 2573 Survey of African History
HIS 2603 Western Civilization to 1648
HIS 2613 Western Civilization Since 1648
HIS 3113 The American Indian
HIS 3233 Germany since 1806
HIS 3263 Seventeenth and Eighteenth Century Europe
HIS 3403 Pre-Hispanic and Colonial Latin America
HIS 3523 European Cultural History
HIS 3643 Modern Spain
HIS 3653 Modern Italy
HUM 3623 National Cultures and Civilizations
POL 2523 Political Behavior
POL 2633 Comparative Politics
POL 3093 Mexican-American Politics
POL 3433 Leadership and Modernization in the Third World
POL 3453 The Politics of Mexico
POL 3463 Politics of the Third World
PSY 2013 Fundamentals of Psychology
PSY 2533 Social Psychology
PSY 3053 Cross-Cultural Psychology
SOC 1013 Introduction to the Study of Society
SOC 3043 Race and Ethnic Relations
SOC 3133 Sociology of Pluralism in the Southwest
SOC 3193 Sociology of Work and Occupations
SOC 3403 Mexican American Stratification
SOC 4173 Comparative Family Structures
Fine and Applied Arts
ART 1153 Painting for Non-Art Majors
ART 1163 Drawing for Non-Art Majors
ART 1173 Photography for Non-Art Majors
ART 1183 Ceramics for Non-Art Majors
AHC 1113 Art and Architecture I: Ancient through Medieval
AHC 1123 Art and Architecture II: Renaissance to 18th Century
AHC 1133 Art and Architecture III: 19th and 20th Century
AHC 2213 Art and Architecture of the Americas I
AHC 2223 Art and Architecture of the Americas II
AHC 3223 Spanish Art
AHC 3373 European and United States Art: Twentieth Century
AHC 3423 Pre-Columbian Art and Architecture of Mesoamerica
AHC 3453 New World Hispanic Art and Architecture
AHC 3813 History of Photography
AHC 4113 Contemporary Art of the United States
AHC 4423 Contemporary Art of Latin America
ARC 2413 History of Architecture I
ARC 2423 History of Architecture II
ARC 3613 History of Modern Architecture
MUS 2603 Beginning Guitar
MUS 2623 Music Reading and Notation for the Non-Music Major
MUS 2653 Jazz and Rock Music
MUS 3613 Music in Contemporary Life
MUS 3623 Music of the Americas
MUS 3643 Masterpieces of Music
MUS 3701 Madrigal Singers
MUS 3712 Concert Choir
MUS 3721 UTSA Chorus
MUS 3742 UTSA Wind Ensemble
MUS 3751 Symphonic Band
MUS 3761 Chamber Orchestra
MUS 3771 Jazz Ensemble

Classical and Humanistic Studies
CLA 2013 Introduction to Ancient Greece
CLA 2023 Introduction to Ancient Rome
CLA 3023 Classical Mythology
HUM 3013 History of ideas
HUM 3113 The Hero in Fiction
HUM 3413 Man and the Cosmos
PHI 2013 Basic Philosophical Problems I
PHI 2023 Introduction to Ancient Philosophy
PHI 2033 Introduction to Modern Philosophy
PHI 2043 Introductory Logic
PHI 2053 Moral Issues in Contemporary America
PHI 3003 Basic Philosophical Problems II
PHI 3013 Philosophy of Religion
PHI 3033 Philosophy of Science
PHI 3063 World Religions
PHI 3073 Oriental Philosophy
PHI 3213 Ethics

II. Sciences and Mathematics 9 Semester Credit Hours
Nine semester credit hours of sciences and mathematics are required with no more than six hours in either area.

Mathematics
CS 1043 Computer Programming for Business Applications
CS 1073 Introductory Computer Programming for Scientific Applications
CS 2033 Fundamentals of Computer Concepts I
CS 2133 Fundamentals of Computer Concepts II
MAT 1013 Algebra
MAT 1023 Calculus for the Social Sciences
MAT 1033 Algebra with Calculus for Business
MAT 1063 Algebra for Scientists and Engineers
MAT 1093 Precalculus
MAT 1103 Consumer Mathematics
MAT 1113 Mathematics for Elementary Teachers I
MAT 1123 Mathematics for Elementary Teachers II
MAT 1214 Calculus I
MAT 1223 Calculus II
MAT 2213 Calculus III
MAT 2233 Linear Algebra
MAT 3113 Algebra for Elementary Teachers
MAT 3123 Geometry for Elementary Teachers
MAT 3213 Foundations of Analysis
MAT 3223 Complex Variables
MAT 3233 Modern Algebra
MAT 3243 Calculus for Applications
STA 1053 Basic Statistics
STA 1064 Basic Statistics for Business and Economics
STA 1993 Statistical Methods for the Life and Social Sciences

Sciences
AHS 1053 Introductory Microbiology
AHS 2043 Nutrition
AHS 2061 Introductory Microbiology Laboratory
AHS 2083 Human Biology: Anatomy
AHS 2091 Human Biology: Anatomy Laboratory
AHS 2103 Human Biology: Physiology
AHS 2111 Human Biology: Physiology Laboratory
AST 1013 Introduction to Astronomy I
AST 1023 Introduction to Astronomy II
AST 1031 Introduction to Astronomy Laboratory
BIO 1013 Introduction to Life Sciences
BIO 1103 Principles of Biology
BIO 1112 Principles of Biology Laboratory
BIO 2003 Human Sex and Reproduction
BIO 3003 Introduction to Oceanography
BIO 3023 Drugs and Society
BIO 3083 Biosocial Genetics
BIO 4073 Law, Ethics and the Life Sciences
CHE 1003 General Chemistry for Allied Health Sciences
CHE 1103 Introductory Chemistry
CHE 1111 General Chemistry Laboratory for Allied Health Sciences
CHE 1122 Introductory Chemistry Laboratory Workshop
CHE 2103 Elementary Organic and Biochemistry
CHE 2111 Organic and Biochemistry Laboratory
EGR 1203 Introduction to Science and Technology
GEO 1003 Introduction to Geology
GEO 1011 Introduction to Geology Laboratory
GEO 1023 Earth History
GEO 1031 Earth History Laboratory
PHY 1013 Introduction to Physical Sciences
PHY 1703 Energy and the Environment
PHY 1603 General Physics I
PHY 1611 General Physics I Laboratory
PHY 1623 General Physics II
III. Social Sciences 15 Semester Credit Hours

A. History 6 Semester Credit Hours

The State of Texas stipulates that coursework taken for the Bachelor's degree should include six semester hours of United States history, three of which may be Texas history chosen from the following:

Applies to the legislative requirement for United States history

- HIS 1013 United States History 1607-1789
- HIS 1023 United States History 1789-1896
- HIS 1033 United States History 1896 to the Present
- HIS 2063 History of American Foreign Policy
- HIS 3003 Colonial America and the Formation of American Society
- HIS 3023 American Independence and National Unity, 1760-1820
- HIS 3033 American Reform
- HIS 3093 United States Constitutional History
- HIS 3173 Modern America
- HIS 3183 Law and American Development
- HIS 3423 The Republic Transformed, 1820-1877
- HIS 3433 The Response to Industrialism 1877-1929
- HIS 3443 Hispanics in the United States
- HIS 3473 History of Women in the United States

Applies to the legislative requirement for Texas history

- HIS 2053 History of Texas Since 1836
- HIS 3123 History of Texas: The Colonial and Mexican Periods and the War of Independence

B. Political Science 6 Semester Credit Hours

The State of Texas stipulates that coursework taken for the Bachelor's degree should include six semester hours of courses treating the United States constitution and the constitution of the State of Texas chosen from the following:

Applies to the legislative requirement in United States government

- POL 1023 The Politics of the American Economy
- POL 1053 Introduction to American Politics
- POL 1083 The United States in the World
- POL 1093 The Political Systems of the United States and Mexico
- POL 2023 Civil Liberties in American Law and Practice
- POL 3323 Constitutional Law

Applies to the legislative requirement in Texas government

- POL 1133 Introduction to Texas Politics
- POL 1143 Contemporary Public Policy in Texas
- POL 1173 American State and Local Politics
- POL 3313 The American Federal System

C. Other 3 Semester Credit Hours

- ECO 2003 Introduction to Political Economy
- ECO 2013 Introductory Macroeconomics
- ECO 2023 Introductory Microeconomics
ECO 3163 Development of Economic Thought
ECO 3173 Introduction to Comparative Systems
EDU 2013 Issues in American Education
EDU 3003 Educational Sociology
ENV 2013 Introduction to Environmental Systems
URB 3013 Urban Human Resources Policy
URB 3523 The Contemporary City
INDEX

Academic
Dismissal, 66
Probation, 65
Records, Release of, 67
Standing, 65
Accommodations, Living, 47
Accounting
BBA degree, 83
concentrations:
Accounting, 83
Business Data Systems, 84
course descriptions, 85
Accounting and Business
Data Systems, Division of, 83
Accreditation, 27
Adding Courses, 58
Address, Change of, 67
Administration
UT San Antonio, 13
UT System, 12
Administrative Staff, 14
Admission, 50
application dates, 54
certification program, 55
first-time freshmen, 50
high school student, 54
international freshman students, 51
international transfer students, 51
procedures, 54
provisional program for
freshmen, 53
re-admission, 55
special students, 53
teacher certification programs, 55
transfer students, 51
summer transient students, 53
Advisement, 45
Aerospace Science, course
descriptions, 267
Allied Health Sciences
course descriptions, 190
American Studies
BA degree, 210
course descriptions, 211
Anthropology
BA degree, 212
course descriptions, 213
Application Dates, 54
Application for Degree, 76
Architectural Design
course descriptions, 114
Army ROTC, 268
Art and Design
BFA degree, 107
concentrations:
Architectural Design, 112
Art, 107
Interior Design, 113
Division of, 107
Art, course descriptions, 108
Art History and Criticism
course descriptions, 110
Astronomy, course descriptions, 174
Athletics, Intercollegiate, 46
Auditing
fee, 35
procedures for, 59
Baccalaureate Degrees, Additional, 75
Bachelor's Degree Requirements, 70
Bad Check Charge, 35
Behavioral and Cultural Sciences,
Division of, 210
Bicultural-Bilingual Studies
course descriptions, 229
Division of, 229
Biology
BS degree, 184
course descriptions, 192
Board of Regents, 12
Bookstore, UT San Antonio, 30
Building Development,
concentration under BBA
in Management, 100
Business, College of, 82
Business Data Systems
concentration under
BBA in Accounting, 84
course descriptions, 87
Business Law, course
descriptions, 96
Business Management, concentration
under BBA in Management, 97
Cafeteria, 30
Calendar, UT San Antonio, 4
Cancellation of Enrollment, 67
Career Planning and Placement Center,
46
Career Planning and Placement
Registration Fee, 38
Catalog of Graduation, 76
Center for Applied Research and
Technology, 28
Center for Archaeological Research, 29
Center for Learning and Development Research in Education, 29
Center for Studies in Business, Economics, and Human Resources, 28
Certification Programs, Teacher, admission to, 55
Challenge Examinations UT San Antonio, 63
Challenging Undergraduate Courses by Examination Fee, 35
Change of address, 67
of degree, 60
of grades, 64
of major, 60
of name, 67
Charges
bad check, 35
replacement of student identification card, 35
transcript, 35
Chemistry
BS degree, 158
course descriptions, 159
Class Participation Policy, 64
Classics, course descriptions, 124
Classification system, Student, 60
College Work, previous declaration of, 55
Communications
course descriptions, 124
Comparative Studies in the Humanities, course descriptions, 139
Computing Resources, 28
Computer Science
course descriptions, 200
Computer Science and Systems Design
BS degree, 197
course descriptions, 209
Concurrent Tuition, 33
Correspondence Courses, 75
Counseling Center, 44
Course Numbering System, 60
Courses
adding, 58
auditing, 59
challenging by examination, 63
correspondence, 75
dropping, 58
enrollment in graduate courses for graduate credit, 75
enrollment in graduate courses for undergraduate credit, 75
extension, 75
repeating, 64
Credit
by examination, 62
transfer of, 73
Credit-No Credit Grading Policy, 62
Criminal Justice BA degree, 245
course descriptions, 247
Curriculum and Instruction course descriptions, 236
Deans, 13
Dean's List, 65
Debts Owed The University, 41
Declaration of previous college work attempted, 55
Degree application for, 76
change of, 60
fee for application, 34
programs, summary of, 78
requirements for Bachelor's, 70
Degrees, Additional Baccalaureate, 75
Deposit, General Property, 38
Directory Information, 46
Dishonesty, Scholastic, 66
Dismissal, Academic, 66
Division Directors, 15
Dropping Courses, 58
Early Childhood and Elementary Education
BA degree, 232
course descriptions, 237
Earth and Physical Sciences Division of, 158
Economics BA degree, 89
BBA degree, 89
course descriptions, 90
Economics and Finance
Division of, 89
Education
course descriptions, 238
Division of, 231
Education Requirements, General, 70
Educational Psychology
course descriptions, 240
Engineering, Division of, 176
course descriptions, 178
Engineering
Civil, BS degree, 176
course descriptions, 179
Electrical, BS degree, 177
course descriptions, 180

Mechanical, BS degree, 178
course descriptions, 182

English
BA degree, 117
course descriptions, 118

English as a Second Language
course descriptions, 230

English, Classics and Philosophy
Division of, 117

Enrollment
Cancellation of, 67
in graduate courses for
graduate credit, 75
in graduate courses for
undergraduate credit, 75
verification of, 59

Environmental-Natural Resources,
course descriptions, 174

Examination
challenging courses
by, 63
credit by, 62
fee for challenging courses by, 35

Examinations
Postponement of Final, 65

Executive Officers, 13

Exemption from Tuition and Fees, 39

Extension Courses, 75

Faculty, 16

Fee
adjustment of, 40
auditing, 35
career planning and placement
registration, 38
challenging undergraduate courses
by examination, 35
degree application, 34
duplicate receipt, 38
exemption from, 39
field trip, 36
general, 34
laboratory, 35
late registration, 35
parking, 36
physical instruction
laboratory, 37
special, 34
student gymnasium and
facility use, 37
student services, 34
supplementary, 35
teacher placement service, 38

Tennis Center, 37
University Center, 34
UTSA faculty and staff
gymnasium and facility use, 37

Field Trip Fee, 36

Finance
BBA degree, 93
course descriptions, 94
Financial Aid for Students, 45
Fine Arts and Humanities, College
of, 107

Fines, for Library Materials Overdue,
Lost, or Damaged, 35

Foreign Languages
Division of, 128

French
BA degree, 128
course descriptions, 128

Freshmen
first-time, 50
international student, 48
provisional admission program for, 53

Full-time Student, 60

General Education
Requirements, 70
List of approval General Education Requirements courses, 274

General Information, 11

Geography
BA degree, 249
course descriptions, 250

Geology,
BS degree, 163
course descriptions, 165

German
BA degree, 131
course descriptions, 132

Gifted and Talented Student Program, 54

Grade Reports, 63

Grades
change of, 64
explanation of symbols, 61
reporting of, 63
system of, 60

Graduation
catalog of, 76
dates, 77
with honors, 76

Handicapped Students, 48

Health Education
BS degree, 233
Health and Physical Education
course descriptions, 241
Health Services for Students, 44
Hebrew, course descriptions, 140
High School Students, Admission of, 54
History
BA degree, 216
course descriptions, 217
History of UT San Antonio, 25
Honor Roll, 65
Honors, Graduation with, 76
Honors Program, 54
course descriptions, 271
Humanities
BA degree, 121
course descriptions, 122
Identification Card, 47
Industrial Management, Concentration under BBA in Management, 98
Information Directory, 290
Insurance, Professional Liability (malpractice), 39
International Students, 48
International Freshmen Students admission of, 52
International Transfer Students, admission of, 52
Intramural Activities, 46
Italian, course descriptions, 141
John Peace Library, 27
Laboratory Fee, 35
Late Registration, 58
Late Registration Fee, 35
Law and the Health Fields Preprofessional Courses of Study in, 272
Library Fines for Overdue Materials and for Lost or Damaged Items, 35
Library, John Peace, 27
Life Sciences, Division of, 184
Linguistics, course descriptions, 142
Lost and Found, 47
Major, Change of, 60
Majors, Multiple, 75
Management
BBA degree, 97
course descriptions:
Building Development, 100
Business Management, 97
Industrial Management, 98
Marketing, 98
Personnel/Human Resources, 99
course descriptions, 100
Management and Marketing Division of, 97
Marketing
course descriptions under BBA in Management, 98
course descriptions, 104
Mathematics
BS degree, 198
course descriptions, 202
Mathematics, Computer Science and Systems Design Division of, 197
Media Resources, 30
Medical Technology Joint degree, UTSA/UTHSC, 185
Military Science
course descriptions, 269
Minimum Residence Requirements, 72
Multiple Majors, 75
Music
BM degree, 144
BME degree, 148
course descriptions, 151
Division of, 144
Name, Change of, 67
Numbering System, Course, 60
Occupational Therapy
BS degree, 187
Officers, Executive, 13
Organization, UT San Antonio, 26
Orientation, 47
Parking Fees, 36
Part-Time Student, 60
Payment and Refund Policies, 40
Personnel/Human Resources, concentration under BBA in Management, 99
Petition for Reinstatement, 66
Philosophy, course descriptions, 125
Physical Education
BS degree, 234
Physical Instruction Laboratory fee, 37
Physical Therapy, BS degree, 188
Physics
BS degree, 168
course descriptions, 171
Political Science
BA degree, 252
course descriptions, 253
Postponement of Final Examination, 65
Preprofessional Courses of Study in Law and the Health Fields, 272
Prerequisites, 60
Probation, Academic, 65
Provisional Admission Program for Freshmen, 53
Psychology
  BA degree, 223
  course descriptions, 224
Purpose and Philosophy of UT San Antonio, 25
Re-admission, 55
Refund Policy, 40
Regents, Board of, 12
Registration
  general information, 58
  late, 58
Reinstatement, Bachelor's Degree, 69
Release of Transcripts and Academic Records, 67
Repeating Courses, 64
Research Center for the Arts, 29
Residence Regulations, Bachelor's Degree, 69
Residence Requirements, Minimum, 72
ROTC, Army, 266
ROTC, Air Force, 266
Russian
  course descriptions, 143
Scholastic Dishonesty, 66
Sciences and Mathematics
  College of, 158
Social and Behavioral Sciences, College of, 210
Social and Policy Sciences, Division of, 245
Social Science, course descriptions, 264
Sociology
  BA degree, 259
  course descriptions, 260
Spanish
  BA degree, 134
  course descriptions, 135
Special Students, Admission of, 53
Staff, Administrative, 14
Statistics, course descriptions, 202
Student
  Classification System, 60
  Identification Card Charge, 35
  Services Fee, 34
Students, Institutional Policies
  Concerning, 43
  activities, 44
  advisement, 45
  counseling center, 44
  directory information, 46
  financial aid, 45
  handicapped, 48
  health services, 44
  international, 48
  orientation, 47
  Responsibilities under the Rules and Regulations of the Board of Regents, 44
  testing center, 44
  Support Areas, Summary of, 78
  Systems Design
    course descriptions, 207
  Teacher Certification Programs
    admission to, 55
  Teacher Placement Service, 46 fee, 38
  Tennis Center Fee, 37
  Testing Center, 44
  Transcripts, UT San Antonio, 67 charge for, 35
  release of, 67
  Transfer of Credit, 73
  Transfer Student, admission of, 51
  International, admission of, 52
  Transient Students, Summer, admission as, 53
  Tuition, 32
    concurrent, 33
    exemption from, 39
    payment, 32
    payment and refund policies, 40
    penalty for payment of tuition under incorrect residence classification, 34
    refund policies, 32
    residence regulations, 33
  Undergraduate
    degree programs, summary of, 79
    support areas, summary of, 80
  Urban Studies,
    course descriptions, 265
  Verification of Enrollment, 59
  Withdrawal Procedures, 59
INFORMATION DIRECTORY

Requests for information should be directed to the offices shown below. The University's address is: The University of Texas at San Antonio, San Antonio, Texas, 78285. The main telephone number of UT San Antonio is (512) 691-4011.

Academic Advisement
Declared majors ........................................... College Deans
Undeclared majors ....................................... Director of Student Services
Academic Degree Programs and Courses ......................... College Deans
Admission
Undergraduate and Graduate ............................... Director of Admissions
Career Planning ........................................... Director of Career Planning and Placement Center
Changes in Enrollment ................................... Registrar
Continuing Education ................................... College Deans
Credit by Examination ................................... Testing Center
Degree Application ...................................... Registrar
Financial Aid, Loans, or Scholarships ....................... Director of Student Financial Aid
Financial Matters ....................................... Business Manager
General Information ..................................... Director of Admissions
Handicapped Students ................................... Director of Student Services
Health Services ......................................... Student Health Center
International Students ................................ Director of Student Services
Parking ..................................................... University Police
Placement Service
Teacher .................................................. Director, Office of Teacher Certification and Placement
Non-Teacher .............................................. Director of Career Planning and Placement Center
Psychological Counseling................................ Director of Counseling Center
Recreational Activities ................................ Director of Athletics
Refunds .................................................. Business Manager
Registration ............................................. Registrar
Residency ................................................ Registrar
Student Activities ....................................... Dean of Students
Student Employment ................................... Director of Student Financial Aid
Director Career Planning and Placement Center
Student Services General ............................... Registrar
Teacher Certification Program .......................... Registrar
Transfer of Credit ...................................... Registrar
Transcripts .............................................. Registrar
Veterans' Affairs ...................................... Registrar
Withdrawal from University ............................. Registrar