

UNDERGRADUATE CATALOG

1980-82

THE UNIVERSITY OF TEXAS AT SAN ANTONIO BULLETIN
Published Monthly (September-April and three times in May)
by

THE UNIVERSITY OF TEXAS AT SAN ANTONIO

Volume VIII May 1980 Number 7
Second Class Postage Paid at San Antonio, Texas

CONTENTS

I.	CALENDAR	4
II.	GENERAL INFORMATION	9
III.	TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS	30
IV.	INSTITUTIONAL POLICIES CONCERNING STUDENTS	42
V.	ADMISSION REQUIREMENTS	48
VI.	GENERAL ACADEMIC REGULATIONS	56
VII.	BACHELOR'S DEGREE REGULATIONS	68
VIII.	SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS AND SUPPORT AREAS FOR 1980-82	78
IX.	UNDERGRADUATE DEGREE PROGRAMS AND COURSE DESCRIPTIONS	82
	INDEX	269
	INFORMATION DIRECTORY	274
	MAPS	275

Appendix A Preprofessional Courses of Study in Law and the Health Fields

Appendix B List of Approved General Education Requirements Courses.

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, on the basis of race, color, national origin, religion, or sex be excluded from participation in, be 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.

I. CALENDAR

UNDERGRADUATE

Fall Semester, 1980

August 20-21	Wednesday-Thursday. Registration, Orientation, Advisement. ¹
August 25	Monday. Classes begin.
August 29	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 1	Monday. Holiday.
September 8	Monday. Last day to withdraw and receive a 70% refund of tuition and fees.
September 10	Wednesday. Last day to add a class. Census date.
September 15	Monday. Last day to withdraw and receive a 50% refund of tuition and fees.
September 22	Monday. Last day to withdraw and receive a 25% refund of tuition and fees.
October 1	Wednesday. DEADLINE FOR FALL 1980 GRADUATES TO APPLY FOR GRADUATION.
October 24	Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.
November 27-29	Thursday-Saturday. Thanksgiving Holidays.
December 1	Monday. Last day to withdraw from The University.
December 8-13	Monday-Saturday. Final Examinations.
December 13	Saturday. Semester closes.

Spring Semester, 1981

January 7-8	Wednesday-Thursday. Registration, Orientation, Advisement. ¹
January 12	Monday. Classes begin.
January 16	Friday. Last day to add a class without special permission. Last day to choose credit-no-credit grading option. Last day for 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 23	Friday. Last day to withdraw and receive a 70% refund of tuition and fees.
January 27	Tuesday. Last day to add a class. Census date.
January 30	Friday. Summer 1980 readmission deadline for filing Petition for Reinstatement for students who were academically dismissed Fall Semester, 1980. Last day to withdraw and receive a 50% refund of tuition and fees.
February 6	Friday. Last day to withdraw and receive a 25% refund of tuition and fees.

¹A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

February 16	Monday. DEADLINE FOR SPRING 1981 GRADUATES TO APPLY FOR GRADUATION.
March 13	Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.
March 16-21	Monday-Saturday. Spring vacation.
April 27	Monday. Last day to withdraw from The University.
May 4-9	Monday-Saturday. Final Examinations.
May 9	Saturday. Semester closes.
May 10	Sunday. Commencement.

Summer Session, 1981

May 28	Thursday. Registration, Orientation, Advisement for all three terms. ²
June 1	Monday. Classes begin for first five-week or ten-week terms.
June 2	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 3	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 4	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.
June 8	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 19	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. Fall 1980 readmission deadline for filing Petition for Reinstatement for students who were academically dismissed Spring Semester 1980.
June 29	Monday. Last day to withdraw from The University for the first five-week term.
July 2-3	Thursday-Friday. Final examinations for courses in the first five-week term.
July 3	Friday. Close of first five-week term.
July 6	Monday. Registration for courses in second five-week term.
July 7	Tuesday. Classes begin for second five-week term.
July 8	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.

²A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

July 9	Thursday. Last day to withdraw from courses in the second five-week term and receive an 80% refund of tuition and fees.
July 10	Friday. Last day to add a class in the second five-week term. Census date.
July 14	Tuesday. Last day to withdraw from courses in the second five-week and receive a 50% refund of tuition and fees.
July 15	Wednesday. Last day for all Summer graduates to apply for their degree.
July 28	Tuesday. Last day to drop an individual course in the second five-week term. An automatic grade of "W" will be assigned.
August 5	Wednesday. Last day to withdraw from The University for the ten-week or second five-week term.
August 10-11	Monday-Tuesday. Final examinations for courses in the ten-week and second five-week terms.
August 11	Tuesday. Close of ten-week term, second five-week term, and Summer Session, 1981.

Fall Semester, 1981

August 19-20	Wednesday-Thursday. Registration, Orientation, Advisement. ³
August 24	Monday. Classes begin.
August 28	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 7	Monday. Holiday.
September 8	Monday. Last day to withdraw and receive a 70% refund of tuition and fees.
September 9	Wednesday. Last day to add a class. Census date.
September 11	Friday. Spring 1982 readmission deadline for filing Petition for Reinstatement for students who were academically dismissed Summer Session, 1981.
September 14	Monday. Last day to withdraw and receive a 50% refund of tuition and fees.
September 21	Monday. Last day to withdraw and receive a 25% refund of tuition and fees.
October 1	Thursday. DEADLINE FOR FALL 1981 GRADUATES TO APPLY FOR GRADUATION.
October 23	Friday. Last day to drop an individual course. An automatic grade of "W" will be assigned.
November 26-28	Thursday-Saturday. Thanksgiving Holidays.
November 30	Monday. Last day to withdraw from The University.
December 7-12	Monday-Saturday. Final Examinations.
December 12	Saturday. Semester closes.

³A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

Spring Semester, 1982

January 6-7

Wednesday-Thursday. Registration, Orientation, Advisement.⁴

January 11

Monday. Classes begin.

January 15

Friday. Last day to add a class without special permission. Last day to choose credit-no credit grading option. Last day for 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. Friday. Last day to withdraw and receive a 70% refund of tuition and fees.

January 22

Tuesday. Last day to add a class. Census date.

January 26

January 29

Friday. Summer 1982 readmission deadline for filing Petition for Reinstatement for students who were academically dismissed Fall Semester, 1981. Last day to withdraw and receive a 50% refund of tuition and fees.

February 5

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

February 15

Monday. DEADLINE FOR SPRING 1982 GRADUATES TO APPLY FOR GRADUATION.

March 12

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

March 15-20

Monday-Saturday. Spring vacation.

April 26

Monday. Last day to withdraw from The University.

May 3-8

Monday-Saturday. Final Examinations.

May 8

Saturday. Semester closes.

May 9

Sunday. Commencement.

Summer Session, 1982

May 27

Thursday. Registration, Orientation, Advisement for all three terms.⁵

May 31

Monday. Classes begin for first five-week or ten-week terms.

June 1

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 2

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 3

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.

⁴A more detailed calendar for registration, orientation, and advisement will be issued by the Registrar.

⁵Same as footnote above.

June 7	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 18	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. Fall 1982 readmission deadline for filing Petition for Reinstatement for students who were academically dismissed Spring Semester, 1982.
June 28	Monday. Last day to withdraw from The University for the first five-week term.
July 1-2	Thursday-Friday. Final examinations for courses in first five-week term.
July 2	Friday. Close of first five-week term.
July 5	Monday. Registration for courses in second five-week term.
July 6	Tuesday. Classes begin for second five-week term.
July 7	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 8	Thursday. Last day to withdraw from courses in the second five-week term and receive an 80% refund of tuition and fees.
July 9	Friday. Last day to add a class in the second five-week term. Census date.
July 13	Tuesday. Last day to withdraw from courses in the second five-week term and receive a 50% refund of tuition and fees.
July 15	Thursday. Last day for all Summer graduates to apply for their degree.
July 27	Tuesday. Last day to drop an individual course in the second five-week term. An automatic grade of "W" will be assigned.
August 4	Wednesday. Last day to withdraw from The University for the ten-week or second five-week terms.
August 9-10	Monday-Tuesday. Final examinations for courses in the ten-week and second five-week terms.
August 10	Tuesday. Close of ten-week term, second five-week term, and Summer Session, 1982.

II. GENERAL INFORMATION

THE UNIVERSITY OF TEXAS SYSTEM

BOARD OF REGENTS

Dan C. Williams, *Chairman*

Thos. H. Law, *Vice Chairman*

Betty Anne Thedford, *Secretary*

TERMS EXPIRE JANUARY, 1981

Thos. H. Law	Fort Worth
Walter G. Sterling	Houston
Dan C. Williams	Dallas

TERMS EXPIRE JANUARY, 1983

Jane Weinert Blumberg (Mrs. Roland K.)	Seguin
Sterling H. Fly, Jr., M.D.	Uvalde
Jess Hay	Dallas

TERMS EXPIRE JANUARY, 1985

Jon P. Newton	Austin
James L. Powell	Fort McKavett
Howard N. Richards	Beaumont

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
Gary L. Hammon Vice President for Business Affairs

DEANS

E. D. Hodo Dean, College of Business
Michael F. Kelly Acting Dean, College of Fine and
Applied Arts
Joseph Michel Dean, College of Multidisciplinary Studies
Frank Pino, Jr. Acting Dean, College of Humanities
and Social Sciences
Bernard P. Sagik Dean, College of Sciences and Mathematics
Dora G. Hauser Dean of Students
William C. Lindley Dean, Division of Continuing Education

ADMINISTRATIVE STAFF

Val D. Adams	Bursar
Vincent L. Avallone	Director of Career Planning and Placement Center
John H. Brown	Director of Admissions and Registrar
Manuel C. Chávez	Chief of Police
David A. Collins	Assistant Director of Admissions
Rudy A. Davalos	Director of Athletics
Ira L. Dewitt	Director of Procedures and Audits
Margaret V. Drake	Director of Institutional Studies
James A. Forester	Director of Community and Student Affairs
William B. Gearhart	Assistant Dean College of Sciences and Mathematics
Salvador H. Gómez	Director of Special Services
Samuel M. Gonzales	Director of Student Financial Aid
Patricia A. Graham	Assistant Dean of Students
Frederick C. Hample	Associate Registrar Assistant Dean College of Business
Arnold C. Hayden	Director of the Computer Center
Ronald D. Hedrick	Director of the Counseling Center
Michael F. Kelly	Director of Libraries
Wayne W. Laughery	Director Teacher Certification and Placement
George E. Mangrem	Director of Physical Plant
John W. Massey	Personnel Director
Richard S. Moore	Director of Purchasing
Jerry L. Phillips	Radiation Safety Officer
Frank Pino, Jr.	Assistant Vice President for Academic Affairs
Joe A. Powell	Business Manager Director of Auxiliary Services
William E. Stern	Budget Officer
Berry Sutherland	Associate Dean College of Multidisciplinary Studies
Shirley A. Wills	Director of News and Information
Armando B. Zepeda	Director of the Lutch Center

DIVISION DIRECTORS

COLLEGE OF BUSINESS

Leslie L. McNelis Division of Accounting and
Business Data Systems
Lila J. Flory-Truett Acting, Division of
Economics and Finance
William D. Litzinger Division of Management and
Marketing

COLLEGE OF FINE AND APPLIED ARTS

Ronald C. Binks Division of Art and Design
Clarence J. Stuessy Division of Music

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Alan E. Craven Division of English, Classics,
and Philosophy
Beverly J. Gibbs Acting, Division of
Foreign Languages
Thomas C. Greaves Division of Social Sciences

COLLEGE OF MULTIDISCIPLINARY STUDIES

Curtis W. Hayes Acting, Division of
Bicultural-Bilingual Studies
Thomas J. Cleaver Division of Education
Richard S. Howe Division of Environmental Studies
Berry Sutherland Acting, Division of Special Programs

COLLEGE OF SCIENCES AND MATHEMATICS

Wayne E. Magee Division of Allied Health and
Life Sciences
Charles A. Sorber Acting, Division of Earth and
Physical Sciences
Stanley G. Wayment Division of Mathematics, Computer
Science, and Systems Design

FACULTY

COLLEGE OF BUSINESS

Division of Accounting and Business Data Systems

- Leslie L. McNelis**, Professor, B.B.A., University of Oklahoma; M.B.A., University of Tulsa; Ph.D., University of Oklahoma
- Ruth H. Bullard**, Associate Professor, B.S., Mary Hardin-Baylor College; M.B.A., Ph.D., University of Texas at Austin
- 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
- Hans V. Johnson**, Associate Professor, B.S., B.A., University of Nebraska; M.B.A., University of Michigan; Ph.D., University of Nebraska
- James U. Ross**, Associate Professor, B.A., J.D., University of Texas at Austin
- Martha A. Fasci**, Assistant Professor, B.S., Our Lady of the Lake University; M.B.A., North Texas State University; Ph.D., University of Texas at Austin
- Fred Nordhauser**, Assistant Professor, B.S., Cornell University; M.S., Ph.D., Purdue University
- Susan L. Nordhauser**, Assistant Professor, B.A., Cornell University; M.S. Purdue University
- James R. Oliver**, Assistant Professor, B.S., B.A., M.A., Ph.D., University of Missouri-Columbia
- G. W. K. Willis**, Assistant Professor, B.B.A., M.B.A., Ph.D., Texas A&M University
- Raymond Arthur Zimmerman**, Assistant Professor, B.A., M.A., J.D., St. Mary's University; L.L.M., University of Denver

Division of Economics and Finance

- 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
- Lewis Mandell**, Professor, B.A., City College of New York; M.A., Northwestern University; Ph.D., University of Texas at Austin
- Dale B. Truett**, Professor, B.A., Purdue University; M.A., Ph.D., University of Texas at Austin
- Paul N. Bartlett, Jr.**, Associate Professor, B.A., Lamar State University; M.A., Louisiana State University; J.D., University of Texas at Austin
- Lila J. Flory-Truett**, Associate Professor, B.A., Kansas State University; M.A., Ph.D., University of Iowa
- William L. Scott**, Associate Professor, B.B.A., North Texas State University; M.A., Austin College; Ph.D., University of Houston
- Joseph Atkins**, Assistant Professor, B.A., M.A., Ph.D., Pennsylvania State University
- Ronald M. Ayers**, Assistant Professor, B.S., M.A., University of New Orleans; Ph.D., Tulane University
- Linda E. Sorber**, Assistant Professor, A.B., Randolph-Macon Woman's College; J.D., University of Texas at Austin
- John A. Swiger**, Assistant Professor, B.S., University of Richmond; Ph.D., University of North Carolina
- Alejandro Velez**, Assistant Professor, B.A., American University; M.A., Ph.D., University of Florida
- Kenneth E. Weiher**, Assistant Professor, A.B., College of William and Mary; M.A., Ph.D., Indiana University

Division of Management and Marketing

- A. W. Hunt, III**, Professor, B.S., M.S., Baylor University; Ph.D., University of Texas at Austin
- William D. Litzinger**, Professor, B.S., New York University; M.B.A., University of Pennsylvania; D.B.A., University of Southern California
- Patricia L. Burr**, Associate Professor, B.B.A., North Texas State University; M.A., Texas Woman's University; Ph.D., North Texas State University

- Sammy B. Gould**, Associate Professor, B.S., Ohio University; M.B.A., University of Colorado; Ph.D., Michigan State University
- Sandra L. James**, Associate Professor, B.B.A., M.B.A., St. Mary's University; Ph.D., University of Texas at Austin
- William G. Mitchell**, Associate Professor, M.B.A., University of Chicago; D.B.A., Arizona State University
- 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 Miami; 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.A., Ph.D., University of Texas at Austin
- Richard B. Wadsworth**, Associate Professor, B.S., Texas A&M University; M.S., Ph.D., University of Arizona
- William T. Flannery**, Assistant Professor, B.S., M.S., Ph.D., University of Houston
- John W. Gowens, II**, Assistant Professor, B.S., U.S. Naval Academy; M.B.A., D.B.A., Arizona State University
- Brian L. Hawkins**, Assistant Professor, B.A., M.A., Michigan State University; Ph.D., Purdue University
- Marye T. Hilger**, Assistant Professor, B.A., B.B.A., M.B.A., Ph.D., University of Texas at Austin
- Larry E. Penley**, Assistant Professor, B.A., M.A., Wake Forest University; Ph.D., University of Georgia
- Norman P. Smith**, Assistant Professor, B.A., Ph.D., University of California

COLLEGE OF FINE AND APPLIED ARTS

Division of Art and Design

- Ronald C. Binks**, Professor, B.F.A., Rhode Island School of Design; M.F.A., Yale School of Art and Architecture
- Charles T. Field**, Professor, B.A., Stanford University; M.F.A., University of Washington
- Jacinto Quirarte**, Professor, B.A., M.A., San Francisco State College; Ph.D., Universidad Nacional Autónoma de México
- Stephen J. Reynolds**, Associate Professor, B.F.A., M.F.A., Colorado University; M.A., Denver University
- Judith B. Sobre**, Associate Professor, B.A., New York University; M.A., Ph.D., Harvard University
- Stephen Jeffrey Daly**, Assistant Professor, B.A., San Jose State College; M.F.A., Cranbrook Academy of Art
- Alvin R. Martin, III**, Assistant Professor, A.B., Dartmouth College; A.M., Ph.D., Harvard University
- Neil D. Maurer**, Assistant Professor, B.A., Brown University; M.F.A., Rhode Island School of Design
- Robert J. Mullen**, Assistant Professor, A.B., University of Notre Dame; M.A., George Washington University, Howard University; Ph.D., University of Maryland
- Felipe Reyes, Jr.**, Assistant Professor, B.A., Trinity University; M.F.A., University of Michigan

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
- Gordon H. Lamb**, Professor, B.M.E., Simpson College; M.M., University of Nebraska; Ph.D., University of Iowa
- Clarence J. Stuessy, Jr.**, Professor, B.M., Southern Methodist University; M.A., Ph.D., Eastman School of Music
- James R. Riley**, Associate Professor, B.M., Centenary College; M.M., North Texas State University; D.M.A., University of Texas at Austin
- Larry J. Barnes**, Assistant Professor, B.M., M.M., Cleveland Institute of Music; D.M.A., Eastman School of Music

Michael A. Fink, Assistant Professor, B.M., University of Southern California; M.M., New England Conservatory of Music; Ph.D., University of Southern California
Michael P. Gulltinan, Assistant Professor, B.M., M.M., D.M.A., Eastman School of Music
Michael J. Moore, Assistant Professor, B.M., M.M., San Francisco Conservatory of Music; D.M.A., University of Arizona
Ronald E. Minetree, Instructor, B.M.E., M.M., East Carolina University
Robert J. Rustowicz, Instructor, B.M.E., Central Michigan University; M.M., College Conservatory of Music
Evelyn W. Troxler, Instructor, B.M., University of the Pacific; M.M., University of Southern California
Mark A. Williams, Instructor, B.S., M.M., Miami University

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

Division of English, Classics, and Philosophy

Alan E. Craven, Professor, B.A., M.A., Ph.D., University of Kansas
Gary Lane, Associate Professor, B.A., Oberlin College; M.A., Ph.D., University of Michigan
Bonnie K. Lyons, Associate Professor, B.A., M.A., Ph.D., Tulane University
John A. Stoler, Associate Professor, B.A., Ripon College; M.A., San Francisco State University; Ph.D., University of Arizona
Nikhil Bhattacharya, Assistant Professor, B.S., Presidency College; M.S., University of Calcutta; Ph.D., Boston University
Andrew G. Bjelland, Assistant Professor, B.A., Immaculate Conception Seminary; Ph.D., St. Louis University
Duane F. Conley, Assistant Professor, B.A., University of Texas at Austin; M.Phil., Ph.D., Yale University
Helen Dry, Assistant Professor, B.A., Southern Methodist University; M.A., Ph.D., University of Texas at Austin
Allan M. Emery, Assistant Professor, B.A., Rice University; M.A., Ph.D., Cornell University
Dewey R. Faulkner, Assistant Professor, B.S., Virginia Polytechnic Institute; Ph.D., University of North Carolina
John Hackett, Assistant Professor, B.A., Holy Cross College; Ph.D., St. Louis University
Theresa M. Kelley, Assistant Professor, B.A., University of Washington; M.A., Ph.D., Northwestern University
Charles W. Kneupper, Assistant Professor, B.A., Texas Lutheran College; M.A., Ph.D., Bowling Green State University
Margaret McBride, Assistant Professor, B.A., University of Kansas; M.A., Ph.D., University of Pennsylvania
Arthur R. Miller, Assistant Professor, B.A., West Liberty State College; M.A., Ph.D., Michigan State University
David R. Saliba, Assistant Professor, B.A., University of Texas at Austin; Ph.D., Brown University
Marjorie R. Smelstor, S. C., Assistant Professor, B.S., College of Mount Saint Joseph-on-the-Ohio; M.A., Ph.D., University of Wisconsin at Madison

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 Himelblau, Professor, A.B., M.A., University of Chicago; Ph.D., University of Michigan
Joseph Michel, Professor, B.A., De LaSalle College; M.A., Universidad Nacional Autónoma de México; Ph.D., University of New Mexico
Seth L. Wolitz, Professor, B.A., University of Chicago; Ph.D., Yale University
Theodore L. Kassier, Associate Professor, A.B., Columbia University; A.M., Ph.D., Princeton University
Frank Pino, Jr., Associate Professor, B.A., M.A., Arizona State University; Ph.D., Northwestern University

Rilda L. Baker, Assistant Professor, B.A., University of Nebraska; M.A., Ph.D., University of Texas at Austin
Yolanda J. Broyles, Assistant Professor, B.A., University of Arizona; M.A., Ph.D., Stanford University
Steven G. Kellman, Assistant Professor, B.A., State University of New York at Binghamton; M.A., Ph.D., University of California at Berkeley
James P. Lantolf, Assistant Professor, B.S.S.E., University of Scranton; M.A., Ph.D., Pennsylvania State University
Marc D. Silberman, Assistant Professor, B.A., University of Minnesota; A.M., Ph.D., Indiana University

Division of Social Sciences

Richard E. W. Adams, Professor, B.A., University of New Mexico; M.A., Ph.D., Harvard University
Thomas C. Greaves, Professor, B.A., University of Washington; Ph.D., Cornell University
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
Felix D. Almaraz, Jr., Associate Professor, B.A., M.A., St. Mary's University; Ph.D., University of New Mexico
Raymond R. Baird, Associate Professor, A.B., Eastern New Mexico University; M.S., Ph.D., University of Washington
Thomas A. Baylis, Associate Professor, B.A., Duke University; M.A., Ph.D., University of California at Berkeley
John A. Booth, Associate Professor, B.A., Rice University; M.A., Ph.D., University of Texas at Austin
David R. Johnson, Associate Professor, B.A., University of Illinois; M.A., Ph.D., University of Chicago
Woodruff D. Smith, Associate Professor, B.A., Harvard University; M.A., Ph.D., University of Chicago
Muriel A. Atkin, Assistant Professor, B.A., Sarah Lawrence College; M.Phil., Ph.D., Yale University
Sharon N. Barnartt, Assistant Professor, B.A., Brandeis University; M.A., University of Pittsburgh; Ph.D., University of Chicago
Steven R. Boyd, Assistant Professor, B.A., Claremont Men's College; M.A., Ph.D., University of Wisconsin at Madison
James R. Dykes, Jr., Assistant Professor, B.A., Ph.D., University of Texas at Austin
Catherine R. Edwards, Assistant Professor, B.A., University of California, Santa Barbara; M.A., C.Phil., University of California, Los Angeles
Richard A. Gambitla, Assistant Professor, B.A., M.A., Ph.D., Syracuse University
Robert Alan Goldberg, Assistant Professor, B.A., Arizona State University; M.A., Ph.D., University of Wisconsin, Madison
Francis G. Gosling, III, Assistant Professor, B.A., M.A., Ph.D., University of Oklahoma, Norman
Joel D. Gunn, Assistant Professor, B.A., M.A., University of Kansas; Ph.D., University of Pittsburgh
Richard J. Harris, Assistant Professor, B.A., Macalester College; M.A., Ph.D., Cornell University
Gilberto M. Hinojosa, Assistant Professor, B.A., Our Lady of the Snows; M.A., Saint Mary's University; Ph.D., University of Texas at Austin
Richard C. Jones, Assistant Professor, B.S., Austin Peay State University; M.A., Indiana University; Ph.D., Ohio State University
Joanne S. Kaufmann, Assistant Professor, A.B., University of California; A.M., Ph.D., Harvard University
Steven H. Kaye, Assistant Professor, B.A., University of Toronto; M.S., Ph.D., Yale University
Kenneth Levi, Assistant Professor, B.A., A.M., Ph.D., University of Michigan
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

Robert W. Patch, Assistant Professor, B.A., University of Illinois; Ph.D., Princeton University

Sidney Plotkin, Assistant Professor, B.A., M.A., Ph.D., City University of New York

Daniel C. Rigney, Assistant Professor, B.A., M.A., Ph.D., University of Texas at Austin

Michael P. Ryan, Assistant Professor, B.A., Pomona College; Ph.D., Stanford University

R. Michael Stevens, Assistant Professor, B.A., University of the South; M.A., Ph.D., Temple University

Kathleen Toth, Assistant Professor, B.A., M.A., Ohio State University; Ph.D., Boston University

Maria-Luisa Urdaneta, Assistant Professor, B.A., M.A., University of Texas at Austin; Ph.D., Southern Methodist University

Avelardo Valdez, Assistant Professor, B.S., M.A., University of Wisconsin, Milwaukee; Ph.D., University of California, Los Angeles

James L. Wadington, Assistant Professor, B.S., A.M., Ph.D., University of Illinois

Judith L. Whatley, Assistant Professor, B.A., University of Texas at Austin; Ph.D., Duke University

Richard P. Young, Assistant Professor, B.A., Lawrence College, M.A., Ph.D., Stanford University

COLLEGE OF MULTIDISCIPLINARY STUDIES

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 Panamá; M.A., Ph.D., University of Michigan

Albar A. Peña, 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 Autónoma de México; 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

Division of Education

Thomas J. Cleaver, Professor, B.S., M.Ed., Prairie View A&M College; Ph.D., University of Texas at Austin

Dewey D. Davis, Professor, B.S., Edinboro State College; M.Ed., Ph.D., University of Texas at Austin

Wayne W. Laughery, Professor, B.A., M.A., San Diego State College; Ed.D., Columbia University Teachers College

Elwood B. Traylor, Professor, B.A., Greenville College; M.A., Ed.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

Cecile G. Burns, Associate Professor, B.M., University of Jacksonville; Ed.M., Ed.D., Temple University

Emma D. Holden, Associate Professor, B.S., Huston-Tillotson College; M.S., Prairie View A&M University; Ph.D., Texas Woman's University

John W. Hollomon, Associate Professor, B.A., Dillard University; M.A., West Virginia University; M.A., Universidad Interamericana, Saltillo; Ph.D., University of New Mexico

Marian L. Martinello, Associate Professor, B.S., M.S., Queens College; Ed.D., Columbia University Teachers College

- Berry Sutherland**, Associate Professor, B.S., University of Texas at Austin; M.S., Ed.D., University of Houston
- C. Taylor Whittier**, Associate Professor, A.B., A.M., Ph.D., University of Chicago
- Kenneth W. Wunderlich**, Associate Professor, B.A., Ph.D., University of Texas at Austin
- Steven L. Christopherson**, Assistant Professor, B.A., Stanford University; Ph.D., Cornell University
- George R. Colfer**, Assistant Professor, B.S., Lock Haven State College; M.S., Ithaca College; Ph.D., Texas A & M University
- Gillian E. Cook**, Assistant Professor, B.A., Sir George Williams University; Ed.M., Ed.D., Harvard Graduate School of Education
- Rudy A. Davalos**, Assistant Professor, B.S.Ed., Southwest Texas State University; M.A.Ed., Georgetown College
- Richard A. Diem**, Assistant Professor, B.S., Bradley University; M.S., Southern Illinois University; M.A., Colorado State University; Ph.D., Northwestern University
- Diana Mack Drake**, Assistant Professor, B.A., Swarthmore College; Ed.M., Ed.D., Harvard Graduate School of Education
- George W. Garrett**, Assistant Professor, B.S., Southwestern College; B.S.E., Henderson State University, Arkansas; M.Ed., Ed.D., East Texas State University
- Barbara M. Gonzalez**, Assistant Professor, B.A., M.A., Ph.D., University of Texas at Austin
- Ronald D. Hedrick**, Assistant Professor, A.B., M.Ed., University of Missouri; Ed.D., University of South Dakota
- Tony Wayne Johnson**, Assistant Professor, B.A., Western Carolina University; M.A., Ph.D., George Peabody College
- Margaret A. Langer**, Assistant Professor, B.S., Pennsylvania State University; Ed.M., Ed.D., Rutgers University
- Robert E. Lindberg**, Assistant Professor, B.A., University of Minnesota; M.Ed., University of Missouri; Ph.D., Arizona State University
- Eileen T. Lundy**, Assistant Professor, B.S., College of St. Teresa; Ph.D., University of Texas at Austin
- Jane B. Markowitz**, Assistant Professor, B.A., Brooklyn College; M.S., Syracuse University; Ph.D., Indiana University
- Margaret O. Paulissen**, Assistant Professor, B.S., M.A., Ph.D., University of Texas at Austin
- James E. Schnitz**, Assistant Professor, B.A., M.A.T., Ph.D., Northwestern University
- Katherine Strickland**, Assistant Professor, B.A., M.S., University of Wisconsin, Madison; Ph.D., University of Florida
- Sue Clark Wortham**, Assistant Professor, B.S., University of Houston; M.A., Southwest Texas State University; Ph.D., University of Texas at Austin
- Jesse T. Zapata**, Assistant Professor, A.A., San Antonio College; B.A., University of Texas at Austin; M.Ed., Texas Tech University; Ph.D., Arizona State University

Division of Environmental Studies

- J. Leland Hepworth**, Professor, B.S., Utah State University; M.S., University of Idaho; Ph.D., Oklahoma State University
- 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
- John W. Adams**, Associate Professor, B.S., M.S., Utah State University; Ph.D., Washington State University
- Richard R. Tangum**, Associate Professor, B.Arch., Texas Tech University; M.Arch., Virginia Polytechnic Institute; D.E.D., Texas A&M University
- 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
- Daniel O. Hogenauer**, Assistant Professor, B.S., Haverford College; Ph.D., Johns Hopkins University
- Louise B. Wollitz**, Assistant Professor, B.S., Cornell University; Ph.D., University of California, Berkeley

Division of Special Programs

- 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
James D. Calder, Associate Professor, B.A., University of Maryland; M.S., California State University at Long Beach; Ph.D., Claremont Graduate School
Wallace T. Ferguson, Assistant Professor, B.S., University of Texas at Austin; J.D., University of Texas Law School at Austin
Richard A. Lawrence, Assistant Professor, B.A., Bethel College; M.A. St. Mary's University; Ph.D., Sam Houston State University

COLLEGE OF SCIENCES AND MATHEMATICS

Division of Allied Health and Life Sciences

- Wayne E. Magee**, Professor, B.A., Kalamazoo College, M.S., Ph.D., University of Wisconsin at Madison
Bernard P. Saglik, Professor, B.S., College of City of New York; M.S., Ph.D., University of Illinois
F. Genevieve Antonson, Associate Professor, B.S., Mansfield State College; M.S., Ph.D., Florida State University
June E. Ayling, Associate Professor, B.S., Ph.D., University of California
M. Neal Guentzel, Associate Professor, B.A., M.A., Ph.D., University of Texas at Austin
Helen V. Oujesky, Associate Professor, B.A., B.S., Texas Woman's University; M.A., Texas Christian University; Ph.D., Texas Woman's University
Ray M. Patterson, Associate Professor, B.S., M.Ed., University of Southern Mississippi
Jerry L. Phillips, Associate Professor, B.A., University of Colorado; Ph.D., Colorado State University
Paul H. Rodriguez, Associate Professor, B.S., Creighton University; M.S., University of New Mexico; Ph.D., University of Rhode Island
Oscar W. Van Auken, Associate Professor, B.S., High Point College; M.S., Ph.D., University of Utah
Roberta Sue Jacobs Butera, Assistant Professor, B.S., University of Louisville; M.Ed., Duke University
Marilyn Subach, Assistant Professor, B.S., Arizona State University; M.S., University of Southern California, Los Angeles; Ph.D., University of California, Davis
William Scott Champney, Assistant Professor, A.B., State University of New York at Buffalo; Ph.D., University of Rochester
Helen Cronenberger, Assistant Professor, B.A., B.S., University of Texas at Austin; Ph.D., University of Houston, MT (ASCP) Methodist Hospital, Houston
James A. DeBoer, Assistant Professor, B.A., University of South Florida; Ph.D., Oregon State University
Frances T. Eiserloh, Assistant Professor, B.S., M.S., Trinity University
Arnold H. Hassen, Assistant Professor, B.S., Brooklyn College; Ph.D., Indiana University
Barbara Ann Melzer, Assistant Professor, B.S., University of North Dakota; M.S., University of Minnesota
Samuel A. Ramirez, Assistant Professor, B.A., University of Texas at El Paso; M.S., Texas Tech University; Ph.D., Indiana University
James T. Rutledge, Assistant Professor, A.B., University of California, Berkeley; Ph.D., University of California, Davis
Richard K. Schwartz, Assistant Professor, B.S., Washington University School of Medicine; M.S., Boston University
Nancy J. Dragotta, Instructor, B.S., Russell Sage College; Certificate in Physical Therapy, Albany Medical College; M.S., Southwest Texas State University
John P. Scholz, Instructor, B.S., West Chester State University; Physical Therapy Certificate, University of Pennsylvania
Deborah K. West, Instructor, B.S., Lamar University; M.P.H., University of Texas School of Public Health

Division of Earth and Physical Sciences

- Charles Howard**, Professor, B.S., Ph.D., University of Wisconsin at Madison

- B. S. Thyagarajan**, Professor, B.S., Loyola College, India; M.S., Ph.D., Presidency College, India
- Marvin L. Chatkoff**, Associate Professor, B.A., University of Oklahoma; M.S., University of Southern California; Ph.D., University of New Mexico
- Petr Hochmann**, Associate Professor, M.S., Charles' University, Prague; Ph.D., Czechoslovak Academy of Science, Prague
- Herbert B. Silber**, Associate Professor, B.S., M.S., Lehigh University; Ph.D., University of California
- Charles A. Sorber**, Associate Professor, B.S., M.S., Pennsylvania State University; Ph.D., University of Texas at Austin
- 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
- James Ogden Jones**, Assistant Professor, B.S., Midwestern State University; M.S., Baylor University; Ph.D., University of Iowa
- Raymond Kellman**, Assistant Professor, B.S., St. Peter's College; Ph.D., University of Colorado
- Robert D. Renthall**, Assistant Professor, B.A., Princeton University; Ph.D., Columbia University
- Eric Rice Swanson**, Assistant Professor, B.S., Western Michigan University; M.A., Ph.D., University of Texas at Austin
- Michael Twerdochlib**, Assistant Professor, B.S., Florida State University; M.S., University of Wisconsin; Ph.D., Ohio University
- Robert F. Williams**, Assistant Professor, B.A., Gettysburg College; Ph.D., Emory University

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
- William B. Gearhart**, Associate Professor, B.S., M.S., Ph.D., Cornell University
- Mario J. Gonzalez, Jr.**, Associate Professor, B.S.E.E., M.S.E.E., Ph.D., The University of Texas at Austin
- Rutger Jan Hangelbroek**, Associate Professor, Candidate, Masters, Ph.D., Rijksuniversiteit, Groningen (The Netherlands)
- Hugh B. Maynard**, Associate Professor, B.S., California Institute of Technology; M.S., Ph.D., University of Colorado
- Steven Robbins**, Associate Professor, S.B., S.M., Ph.D., Massachusetts Institute of Technology
- Gerald Wayne Adkins**, Assistant Professor, B.S., University of Kentucky; M.S., Florida Institute of Technology; Ph.D., Texas A&M University
- Cedric V. W. Armstrong**, Assistant Professor, B.S., Australian National University; M.S., University of London; Ph.D., University of Edinburgh
- Scott R. Cannon**, Assistant Professor, B.A., University of Utah; Ph.D., University of Utah Medical School
- Clinton J. Kolaski**, Assistant Professor, B.S., M.S., Ph.D., University of Wisconsin at Madison
- Wu-Hsiung Lu**, Assistant Professor, B.S.E.E., National Taiwan University; D.Sc., State University of New York at Buffalo
- Kay A. Robbins**, Assistant Professor, S.B., Ph.D., Massachusetts Institute of Technology
- John G. Romo**, Assistant Professor, B.A. Trinity University; M.S., Ph.D., Oklahoma State University
- Patricia Anne Semmes**, Assistant Professor, B.A., American University; M.A., University of Maryland; Ph.D., University of Texas at Austin

22 / FACULTY

James D. Thomas, Assistant Professor, B.S., M.S., Saint Louis University; M.A., Yeshiva University; Ph.D., Pennsylvania State University

Ram C. Tripathi, Assistant Professor, B.A., M.A., Banaras Hindu University, India; M.S., Ph.D. University of Wisconsin at Madison

Gregory Peter Wene, Assistant Professor, B.A., M.A., University of Texas at Austin; Ph.D., University of Iowa

Cheng-Hsuan Yuan, Assistant Professor, B.S., National Taiwan University; M.E.S., Ph.D., North Carolina State 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 9453 undergraduate and graduate students in September, 1979. The University had awarded 3888 degrees at the end of August, 1979.

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, 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 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 five 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 located in the Division of Continuing Education. The Division is administered by a Dean who reports directly to the President and who is responsible for developing and operating all continuing educa-

tion activities. The Division develops, promotes, coordinates, evaluates, and provides financial and logistical support for conferences, institutes, short courses, workshops, seminars, and special training programs. The Division has no permanently assigned faculty. Instructors for the various activities are selected from one or more of the five 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 was granted full accreditation at the graduate level by the Southern Association of Colleges and Schools in December 1974 and full accreditation at the undergraduate level in December 1976. Because accreditation applies retroactively within the year awarded, all UT San Antonio degrees have been awarded by an accredited institution.

THE JOHN PEACE LIBRARY

The John Peace Library of The University of Texas at 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 1979 the collections of the library include 358,000 books and periodicals, either bound or in microform; 71,000 federal, state and local documents; and 128,000 volume equivalents in various microform collections. The library subscribes to approximately 2,200 periodicals and receives as a designated depository a wide variety of federal, state, and local documents. In addition, the library has extensive holdings in microform of governmental documents and research reports. 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. 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

THE COMPUTER CENTER

The Computer Center provides modern computational facilities for research and academic programs. An intermediate scale computer is available for student and faculty

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

use. An IBM 370 model 148 is being utilized to support the academic computing requirements.

THE LUTCHER CENTER

The Lutcher Center is a conference facility of The University of Texas System. Responsibility for administration and supervision of the Lutcher Center is assigned to the President of The University of Texas at San Antonio.

The Lutcher Center supports the administrative and developmental programs of The University of Texas System and its component institutions. It also provides space, facilities, and services for educational and public service programs of component units of The University of Texas System. The Center may also be used by other public and private educational institutions and by groups engaged in public service.

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.

THE CENTER FOR ARCHAEOLOGICAL RESEARCH

The Center for Archaeological Research (in the Division of Social Sciences, College of Humanities and Social Sciences) was established in September, 1974. Among its objectives are: (1) to provide the opportunity for students to train in archaeology; (2) promoting archaeological research in the South and South Central Texas region; (3) carrying out archaeological surveys and assignments for federal and state agencies as required by legislation and executive orders; (4) aiding 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 80 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 160 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 and a multi-year study at the Maya site of Colha, Belize, in Central America. The Center has also helped to organize and support regional archaeological surveys and excavations and has participated in local, state, and international archaeological conferences.

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 applied sciences 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 applied science 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. Emphasis is on interdisciplinary research in the earth, life, and physical sciences. Efforts have been concentrated in applied physics, biological, chemical, environmental, energy, and health-related studies.

Specifically, research teams have been formed recently to conduct investigations in such diverse areas as "Health Effects Associated with the Application of Wastewater to Land," "Synthetic Studies Toward an Efficient Total Synthesis of Quinine," "Avian Activity Patterns and Population Density on and Adjacent to Proposed Sanitary Land-fill Sites," "Atmosphere Explorer Data Analysis and Electrodynamics Explorer Instrument Development," "PLAID - Panel Layout Automated Interactive Device," and "Alternative Water Disinfection Schemes for Reduced Trihalomethane Formation."

CENTER FOR LEARNING AND DEVELOPMENT RESEARCH IN EDUCATION

The Center for Learning and Development Research in Education, located in the College of Multidisciplinary Studies, 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 consists of 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

The Research Center for the Arts was established in the College of Fine and Applied Arts on September 1, 1977. The Center's activities encompass the visual and performing arts (studio art, architecture, and music), art and architectural history, and art criticism. A primary focus of the Center is on the latter disciplines with special reference to the study of Iberian and Interamerican arts. These disciplines by their scholarly nature form the nucleus of the Center's activities. 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

28 / GENERAL INFORMATION

Spain, Portugal, and the Americas. The Center by so doing takes advantage of the strengths of the courses and programs of the College and The University.

The Center fosters professional research in the visual and performing arts (studio art, architecture, and music) in general and in Iberian and Interamerican art historical research in particular. It provides the opportunities for faculty and students in the College to continue their own 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-Education 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 meals and fountain service to the university community. Owned and operated by UT San Antonio, the Cafeteria serves breakfast, hot lunches, and features short orders, soft drinks, and fountain items. Catering for both large and small groups is available. Further information may be obtained from the Cafeteria.

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.¹ 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 \$20.00. 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 tuition² 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:

TUITION EACH SEMESTER

Number of Hours Taken ³	RESIDENTS OF TEXAS	NONRESIDENTS	
		U.S. Citizens	Foreign Students
1	50.00	40.00	40.00
2	50.00	80.00	80.00
3	50.00	120.00	120.00
4	50.00	160.00	160.00
5	50.00	200.00	200.00
6	50.00	240.00	240.00
7	50.00	280.00	280.00
8	50.00	320.00	320.00
9	50.00	360.00	360.00
10	50.00	400.00	400.00
11	50.00	440.00	440.00
12	50.00	480.00	480.00

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, FEES, CHARGES, PENALTIES AND DEPOSITS / 31

13	52.00	520.00	520.00
14	56.00	560.00	560.00
15	60.00	600.00	600.00
16	64.00	640.00	640.00
17	68.00	680.00	680.00
18	72.00	720.00	720.00
19	76.00	760.00	760.00
20	80.00	800.00	800.00
21	84.00	840.00	840.00
Each Additional Hour	4.00	40.00	40.00

TUITION SUMMER SESSION

Number of Hours Taken ⁴	RESIDENTS OF TEXAS		NONRESIDENTS	
	Each Summer Term	Entire Summer Session	U.S. Citizens	Foreign Students
1	25.00	50.00	40.00	40.00
2	25.00	50.00	80.00	80.00
3	25.00	50.00	120.00	120.00
4	25.00	50.00	160.00	160.00
5	25.00	50.00	200.00	200.00
6	25.00	50.00	240.00	240.00
7	28.00	50.00	280.00	280.00
8	32.00	50.00	320.00	320.00
9	36.00	50.00	360.00	360.00
10	40.00	50.00	400.00	400.00
11	44.00	50.00	440.00	440.00
12	48.00	50.00	480.00	480.00
13	52.00	52.00	520.00	520.00
14	56.00	56.00	560.00	560.00
Each Additional Hour	4.00	4.00	40.00	40.00

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-resident will be made in accordance with the Texas Education Code.⁵ If the applicant

⁴Tuition 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.

⁵For residence regulations, consult the Office of Admissions and Registrar.

32 / TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS

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 services fees⁶ according to the number of semester credit hours for which registration is completed, as set forth in the table below:

SEMESTER HOURS	GENERAL FEE⁷	STUDENT SERVICE FEE
1	6.00	2.50
2	12.00	5.00
3	18.00	7.50
4	24.00	10.00
5	30.00	12.50
6	36.00	15.00
7	42.00	17.50
8	48.00	20.00
9	54.00	22.50
10	60.00	25.00
11	66.00	27.50
12	72.00	30.00
13	78.00	30.00
14	84.00	30.00
15	90.00	30.00
Each Additional Hour	6.00	-0-

STUDENT UNION FEE

Student Union Fees are as follows:

\$ 9.00 per student each regular session; \$4.50 each summer session, 1980-81
\$12.00 per student each regular session; \$6.00 each summer session, 1981-82

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

⁶See Exemption from Tuition and Fees in this section of the catalog

⁷The General Fee is authorized by statute for use and availability of university buildings and facilities.

must be paid 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 exemption⁸ 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 FEE FOR LIMITED BORROWER'S CARD

By paying \$15.00, a Texas resident may obtain a Limited Borrower's Card for borrowing unrestricted materials in person; this fee is also required of non-students who are auditing UT San Antonio courses and who wish library privileges. Persons holding a Limited Borrower's Card are charged a fee of \$2.00 (plus copying costs, if any) for each interlibrary loan request.

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.⁹

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 \$5.00 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 willingly 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

⁸See Exemption for Tuition and Fees in this section of the catalog.

⁹Borrowing and fine regulations of the John Peace Library are available in the Library.

34 / TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS

laboratory fee is charged, the schedule of classes indicates the associated fee. For each course which involves the use of computers in instruction, a laboratory fee of \$8.00 is charged.

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.

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

Parking fees for students are as follows:

Class B	\$15.00 Student parking permit 10.00 if purchased during the spring semester 5.00 if purchased during summer session
Class D	6.00 Motorcycles, motor scooters, motor bicycles 4.00 if purchased during the spring semester 2.00 if purchased during summer session
Class M	1.00 Bicycles .50 for less than twelve months

Student vehicles bearing valid State of Texas Disabled Veteran's licence plates are exempt from the payment of parking fees. A partial refund is made for any remaining term(s) in which the student does not enroll. Applications for such refunds may be obtained from the Bursar's Office.

All vehicles parking 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.

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.

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

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.

CATEGORY	ANNUAL FEE
1. Full-time student spouse	\$6.00 per semester or entire summer
2. Full-time student child	6.00 per semester or entire summer

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.

36 / TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS

UTSA Personnel and Dependents. Full-time faculty and staff desiring to use the Tennis Center are charged according to the schedule below:

CATEGORY	ANNUAL FEE
1. Faculty-staff member	\$12.00
2. Faculty-staff spouse	12.00
3. Faculty-staff child	12.00 (maximum of \$40.00 per family)

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 Texas 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. UT San Antonio alumni are assessed a \$3.00 annual fee for the same services. Both students and alumni receive, as part of their registration, the preparation, duplication and maintenance, of three sets of credentials. A fee of \$1.00 is assessed for each additional set requested by the registrant during his/her current year of registration.

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 Allied Health and 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.

Exemption of Texas ex-service personnel. Legal residents of Texas are exempted from tuition and all fees and charges except property deposit fees, student services fees and any fees or charges for lodging, board, or clothing when they meet *all* the following criteria prior to the end of the registration period for the term that the exemption is claimed:

1. They have resided in Texas for a period of not less than twelve (12) months prior to the date of registration.
2. They served in the armed forces or in certain auxiliary services in World War I, World War II, the Korean conflict, or the Cold War. If service was in the Cold War, they must have served on active military duty (other than for training) for more than 180 days.
3. They were *bona fide* legal residents of the state at the time of entering service.
4. They were honorably discharged from service (those who served in World War II and who were discharged because of being over the age of thirty-eight or because of a personal request are not eligible for this exemption).
5. They are not eligible for education benefits provided for veterans by the United States Government.

Benefits for children of Texas veterans. Exemption from payment of tuition and all fees and charges, except property deposit fees, student services fees and any fees or charges for lodging, board, or clothing is extended to children of members of the armed forces who were killed in action or died while in the service in World War II or the Korean conflict or in the Cold War, and to orphans of members of the Texas National Guard and the Texas Air National Guard killed since January 1, 1946 while on active duty.

38 / TUITION, FEES, CHARGES, PENALTIES AND DEPOSITS

Exemption of children of certain disabled public employees. Children of certain firemen, peace officers, employees of the Texas Department of Corrections, and game wardens who have suffered injury in death or disability sustained in the line of duty are exempt from payment of all tuition, fees, and charges except general property deposit or to fees or charges for lodging, board, or clothing.

Exemption of certain deaf and blind students. Blind or deaf persons who are Texas residents are, under certain conditions, exempt from payment of tuition and all fees and charges except any fees or charges for lodging, board, or clothing.

Children of prisoners of war or persons missing in action. A dependent child under 21 years of age, or a person under 25 years of age who receives the majority of support from his or her parent or parents, is exempted from the payment of tuition and all fees and charges, except property deposit fees and any fees or charges for lodging, board, or clothing if he or she is the dependent child of any person who is a domiciliary of Texas on active duty as a member of the armed forces of the United States and who at the time of registration is classified by the Department of Defense as a prisoner of war or as missing in action.

General Fee. When the payment of this required fee causes undue hardship, a student may receive an exemption from payment of the fee by making application through the Office of Student Financial Aid. Exemptions are limited to 5% of the total enrollment.

Exemption of Certain High School Graduates. The highest ranking graduate of an accredited Texas high school, as certified by the Texas Education Agency, is exempt from the payment of tuition during both semesters of the first regular session immediately following graduation.

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, but will be assessed a \$15.00 matriculation fee. This fee will be deducted from the balance of tuition and refundable fees owed to the student.

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.¹⁰

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 and is not assessed the \$15.00 matriculation 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. Tuition and applicable fees for added courses are billed to the student.

¹⁰These refund percentages are applicable to tuition, the supplementary fees, the general fee, laboratory fees, and the student service fee.

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 HEALTH SERVICES

The application for admission to The University of Texas at San Antonio includes an Immunization Record Form. This form must be completed by the student's family physician 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.

ADVISEMENT

Advisement for *undeclared* majors is a function of the Office of the Dean of Students, Division of Community and Student Affairs. 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 several 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 Office of the Dean of Students, Division of Community and Student Affairs.

FINANCIAL AID

Scholarships, grants-in-aid, and loans are administered through the Office of Student Financial Aid. Financial aid counseling for students and/or parents is an integral part of the total financial aid function. Applicants are urged to contact the UT San Antonio Office of Student Financial Aid for guidance concerning opportunities for self-help and sources of financial aid that will assist them in making decisions about financing their education.

UT San Antonio participates in the following state and federal financial aid programs: Basic Educational Opportunity Grant, College Work Study, Supplemental Educational Opportunity Grant, Texas Public Educational Grant, Law Enforcement Education Program, Federally Insured Student Loan, Hinson-Hazlewood Student Loan, and the National Direct Student Loan. Short-term emergency loans of up to \$120 are available but must be repaid within the semester in which they are made.

Application forms and information on how to apply for each of these programs are available at the Office of Student Financial Aid.

Scholastic aptitude and financial need are important factors in determining eligibility for most programs. Financial need is determined by a need analysis received after the applicant completes and submits a financial statement to the College Scholarship Service or the American College Testing Program. Consideration for eligibility for a Basic Grant will be given automatically to all undergraduate applicants who file a financial statement; therefore, undergraduate students are encouraged to comply with this requirement early in the Spring of each year.

Each financial aid applicant must:

1. Be officially admitted to The University.
2. File a financial statement with the College Scholarship Service or the American College Testing Program.
3. File a UT San Antonio Application for Financial Aid with the Office of Student Financial Aid.
4. Meet deadlines set by the Office of Student Financial Aid.

The Texas Rehabilitation Commission offers assistance for tuition and nonrefundable fees to students who have certain disabling conditions provided their vocational objectives have been approved by a Texas Rehabilitation Commission counselor. Examples of such conditions are orthopedic deformities, emotional disorders, diabetes, epilepsy, heart conditions, etc. Other services are also available to assist the handicapped student to become employable. Application for such service should be made at the Texas Rehabilitation Commission, 1222 N. Main Avenue, San Antonio, Texas.

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 with 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 to alumni of The University of Texas at San Antonio.

ATHLETICS

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

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 Office of Com-

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

²Fees for the Teacher Placement Service are set forth in Section III of this catalog.

munity and Student Affairs 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.

LOST AND FOUND

All personal articles found at The University are placed in the Office of the Dean of Students. Items can be claimed upon proper identification of ownership. After a two-week period, all unclaimed articles are transferred to the Campus Security Office.

HANDICAPPED STUDENTS

Handicapped students requiring special assistance should contact the Office of the Dean of Students, Division of Community and Student Affairs.

INTERNATIONAL STUDENTS

Foreign students who are enrolled at UT San Antonio should contact the Office of the Dean of Students, Division of Community and Student Affairs, for assistance. If possible, contact should be made prior to arrival in the San Antonio area.

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.

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:

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

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, 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. 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 corresponding 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 units¹ are suggested as follows:

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

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

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 or 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.

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

¹A unit represents a year of study in one subject at an accredited secondary school

50 / ADMISSION REQUIREMENTS

- 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), or successfully complete an intensive course in English from an accredited college or university in the United States. 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 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.

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 and 4 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 (2.0 on a 4.0 scale) on all work attempted; and
2. Satisfy requirements 3 or 4 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 (for both summer terms). 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, mathematics, natural science, 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. Normally, 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 and must petition for reinstatement to UT San Antonio.

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.

ADMISSION AS TRANSIENT STUDENTS

An applicant who wishes to enroll, normally for one 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 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 normally cannot register for a subsequent term unless he or she has been admitted as a transfer or special student according to the provisions set forth above.

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. Such students must meet the admission requirements for first-time freshmen, except for high school graduation, 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

52 / ADMISSION REQUIREMENTS

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.

THE GIFTED STUDENT PROGRAM

The University of Texas at San Antonio Gifted 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. Students who have completed the tenth grade by the date classes begin are eligible for admission. 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 student 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 priority dates may defer admission until a subsequent term.

ADMISSION PROCEDURES

The procedures to be followed in applying for admission are explained in the Application Information Brochure that accompanies the application form. 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, 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 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 first week of classes in a regular semester or during the first two class days of a summer 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 and the student's advisor. 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 the Director, Office of Teacher Certification and Placement. 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 the first three weeks of a summer term.

The University Calendar indicates the deadline dates for students to drop courses each term.

If a student ceases to attend class, the instructor must notify the Registrar's Office of the date on which attendance ceased.

The instructor may drop a student from the class for non-attendance. If the student is dropped by the instructor during the first nine weeks of a semester or the first three weeks of a summer term, the student will receive a grade of "W." After these periods, the instructor shall assign 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.

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 courses during a fall or spring semester or in six or more hours of courses during a 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 a summer term.

Note: Upon request, the Registrar may certify students as "full-time" during the term in which they intend to graduate if they are enrolled in the number of hours required to complete the degree, regardless of the number of hours involved.

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).

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.

<i>Symbols</i>	<i>Grade Points</i>
A	4
B	3
C	2
D	1
F	0
CR	0
EP	0
W	0
IN	0
NR	0
NC	0

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 Examination 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 within one year of the time that the "Incomplete" grade is 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 circum-

stances it is not possible to obtain the student's proper grade 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.

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, that he/she is aware of the policies on credit-no credit and is abiding by them. If it is later discovered that the affirmation 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 a 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 within the one year time limit by completing a Removal of Incomplete form and filing it with the Registrar's Office. Grade changes from "Postponement of Final Examination" ("EP") to a letter grade should be made as soon as possible 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 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 or extension study for the purpose of raising his/her grade-point average.

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, either in person or through a friend, 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 for at least one semester (Fall, Spring, or Summer), and must petition for reinstatement for future enrollment.

PETITION FOR REINSTATEMENT

1. When placed on Academic Dismissal, a student may petition for reinstatement to the Dean of the College in which he or she is majoring or intends to major after the student has been out for one semester (Fall, Spring, or Summer). Petition forms can be obtained at the appropriate Dean's office.
2. 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.
3. All petitions must be filed with the appropriate office before the end of the third week of class of the semester prior to the semester in which the student wishes to re-enroll. The final date for filing a Petition for Reinstatement is listed in the Schedule of Classes.
4. Appeal of a denial of 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 Dean of the College in which the student is enrolled may initiate disciplinary proceedings.

CANCELLATION OF ENROLLMENT

Any student who fails to fulfill admission or registration 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 of \$1.00 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

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 and a 2.0 grade-point average in all work included in the major.
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:

I. 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 Option 1. Entering students who have completed two units (two years) of a single foreign language will follow Option 2.

Option 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.)

Option 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

9 Semester Credit Hours

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-

70 / BACHELOR'S DEGREE REGULATIONS

pleting 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

15 Semester Credit Hours

Students are required to complete the following:

A. History

Required are six semester credit hours 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)

(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 in 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 requirements for a baccalaureate degree.

No upper-division credit may be earned at a junior college. All course requirements 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 completed at an accredited institution as a lower-division course, the course need not be repeated, but another upper-division course, as approved by the student's Advisor, must be completed at 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 accreditation 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 completed elsewhere to courses at UT San Antonio and their applicability to the student's proposed baccalaureate degree at UT San Antonio.

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.

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.

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:

74 / BACHELOR'S DEGREE REGULATIONS

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 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.

APPLICATION FOR THE DEGREE

A degree candidate must officially apply for graduation at the Registrar's Office 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. The degree application fee is required only once for the same degree.

Undergraduate students should apply for their degrees during the term in which their current enrollment yields 90 semester hours of earned credit. The degree check prepared by the Registrar's Office is not, however, prepared and issued until one semester before graduation. Students seeking information about their degree requirements prior to the preparation of the degree check should consult their academic advisor.

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 overall basis and at UT San Antonio are eligible for graduation Summa Cum Laude.

Candidates who have completed some portion of the requirements for the baccalaureate degree at other collegiate institutions may 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 1980-82**

SUMMARY OF UNDERGRADUATE DEGREE PROGRAMS

The following undergraduate degree programs are available during 1980-82.¹ 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) Organizational Administration
(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

- Concentration:** Art
Architectural 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.

Bachelor of Science (BS)

Applied Science

- Concentrations:** (1) Applied Geology
(2) Applied Physics
(3) Environmental Science
(4) Polymer Science

Biology

Chemistry

Health Education

Mathematics

Mathematics, Computer Science, and Systems Design

Medical Technology

Occupational Therapy

Physical Education

Physical Therapy

Summary of Undergraduate Support Areas

Additional undergraduate courses are available in the following support areas during 1980-82.²

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

Linguistics

Military Science

Philosophy

Russian

Social Science

²Course offerings in undergraduate support 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

COLLEGE OF BUSINESS

General Education Requirements as Applied to the College of Business¹

Option I

English	ENG 1013, ENG 1023, ENG 1033, COM 1043
Foreign Language	6 semester hours in a single foreign language plus 3 semester hours in one of the following related areas: 3 hours of the same foreign language, or 3 hours of foreign literature or culture taught in English, or 3 hours of Fine and Applied Arts, or 3 hours of Humanities, Philosophy, or Classics, or 3 hours of Bicultural-Bilingual Studies
Mathematics	MAT 1033, CS 1043, STA 1064
Natural Science	3 semester hours
Economics, Education, or Environmental Studies	3 semester hours
History	6 semester hours
Political Science	6 semester hours

Option II

English	ENG 1013, ENG 1023, ENG 1033, COM 1043
Anthropology, Sociology, or Psychology	3 semester hours
Fine and Applied Arts	3 semester hours
Electives in Humanities and Social Sciences, Fine and Applied Arts, or Bicultural-Bilingual Studies	3 semester hours
Mathematics	MAT 1033, CS 1043, STA 1064
Natural Science	3 semester hours
Economics, Education, or Environmental Studies	3 semester hours
History	6 semester hours
Political Science	6 semester hours

¹All candidates for the Bachelor of Arts Degree in Economics must follow Option I requirements. See Appendix B for the list of Approved General Education Requirements Courses.

BACHELOR OF BUSINESS ADMINISTRATION DEGREE / 83
IN ACCOUNTING WITH A CONCENTRATION IN ACCOUNTING

**DIVISION OF ACCOUNTING AND
BUSINESS DATA SYSTEMS**

The Division faculty recommends that prospective majors should have attained an overall grade-point average of 2.5 in their first 60 semester hours of university credit and a "B" average for Accounting 2013 and 2023.

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

The minimum number of semester hours required for this degree, including the 49 hours of General Education Requirements,² is 127.

All candidates for the degree must complete:

- A. 33 semester hours in the *major*, 27 of which must be at the upper-division level.

1. 27 semester hours of required courses are:

ACC 2013 Fundamentals of Accounting I
ACC 2023 Fundamentals of Accounting II
ACC 3013 Managerial Accounting
ACC 3023 Intermediate Accounting I
ACC 3033 Intermediate Accounting II
ACC 3043 Federal Income Tax Accounting
ACC 4013 Principles of Auditing
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*, 30 of which must be at the upper-division level.

36 semester hours of required courses are:

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. 9 semester hours to be taken as Option I³ or Option II.⁴

Option I

3 semester hours in Anthropology, Sociology, or Psychology;

²The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

³Students entering UTSA under Track I must take those courses designated under Option I.

⁴Students entering UTSA under Track II must take those courses designated under Option II.

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

3 semester hours in Fine and Applied Arts;

3 semester hours of electives;

Option II

9 semester hours of electives of which at least 6 must be taken outside the College of Business.

**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 49 hours of General Education Requirements⁵ is 127.

All candidates for the degree must complete:

- A. 33 semester hours in the *major*, 18 of which must be at the upper-division level.

1. 30 semester hours of required courses are:

ACC 2013 Fundamentals of Accounting I
ACC 2023 Fundamentals of Accounting II
ACC 3013 Managerial Accounting
ACC 3023 Intermediate Accounting I
BDS 2013 Principles of Business Data Systems I
BDS 2023 Principles of Business Data Systems II
BDS 3073 Small Business Computer Applications
BDS 3063 Data Structures and Information Retrieval
BDS 4053 Business Systems Analysis
BDS 4063 Advanced Topics in Business Data Systems

2. 3 additional semester hours of computer related course work.

- B. 33 semester hours of *support work*, 27 of which must be at the upper-division level.

33 semester hours of required courses are:

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. 12 semester hours to be taken either as Option I⁶ or Option II.⁷

Option I

3 semester hours in Anthropology, Sociology, or Psychology;

3 semester hours of Fine and Applied Arts,

6 semester hours of electives;

⁵The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

⁶Students entering UTSA under Option I must take those courses designated under Option I.

⁷Students entering UTSA under Option II must take those courses designated under Option II.

Option II

12 semester hours of electives of which at least 6 must be taken outside the College of Business.

COURSE DESCRIPTIONS

ACCOUNTING (ACC)

2013 Fundamentals of Accounting I

(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.

2023 Fundamentals of Accounting II

(3-0) 3 hours credit. Prerequisite: ACC 2013.

A continuation of Fundamentals of Accounting I, with an introduction to the concepts of accounting for planning and control.

3013 Managerial Accounting

(3-0) 3 hours credit. Prerequisite: ACC 2023.

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.

3023 Intermediate Accounting I

(3-0) 3 hours credit. Prerequisite: ACC 2023. Students desiring to major in accounting should have attained a "B" average for ACC 2013 and ACC 2023.

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 Accounting II

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

A continuation of the study of accounting theory and concepts of Intermediate Accounting I.

3043 Federal Income Tax Accounting

(3-0) 3 hours credit. Prerequisite: ACC 2023.

Fundamentals of federal income tax accounting, with emphasis on individual income tax; income inclusions and exclusions and statutory deductions in computing tax liability.

4013 Principles of Auditing

(3-0) 3 hours credit. Prerequisites: ACC 3033 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 3013.

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 Accounting

(3-0) 3 hours credit. Prerequisite: ACC 3033.

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.

4073 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.

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.

4153 Corporate and Partnership Taxation

(3-0) 3 hours credit. Prerequisite: ACC 3043.

Taxation of corporate and partnership earnings and distributions. Includes corporate reorganizations, liquidations, personal holding companies, collapsible corporations and Subchapter S.

4163 Federal Tax Procedures

(3-0) 3 hours credit. Prerequisite: ACC 4153.

Organization of the Internal Revenue Service, audit problems, district and appellate conferences, assessments, collections, refunds, civil penalties and tax crimes.

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.

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 in Accounting

4936 3 or 6 hours credit. Prerequisite: Senior standing.

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 discipline 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.

Special purpose computer languages such as COBOL and RPG. The development of program logic, file description, input, calculation, and output of practical business-oriented problems on computer systems.

2023 Principles of Business Data Systems II

(3-0) 3 hours credit. Prerequisites: BDS 2013 and ACC 2013.

Continuation of BDS 2013 for students concentrating in BDS or desiring additional spe-

cialization in Data Processing. Extension of COBOL Programming to direct access media, variable format input and non-sequential access methods. Study of the use and placement of the data processing function in the current business environment.

3013 Accounting Information Systems

(3-0) 3 hours credit. Prerequisites: ACC 2023 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 2023.

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 2023 or consent of instructor.

Use of computers in the small business environment. Emphasis on programming, applications and management of minicomputers. Students will use typical small business computers in a hands-on, office environment for both programming and packaged software applications.

4053 Business Systems Analysis

(3-0) 3 hours credit. Prerequisites: BDS 3063 and ACC 3013.

Tools and techniques of applications systems analysis. Case studies emphasizing problem definition, feasibility studies, analysis, design, development, documentation and implementation 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.

Survey of recent developments in data processing and computer technology. Analysis will focus on applications in the local business community and theoretical developments which relate to those applications.

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 in Business Data Systems

4936 3 or 6 hours credit. Prerequisite: 12 hours of upper-division work in accounting or business data systems.

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 49 hours of General Education Requirements,⁸ is 127.

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. 33 semester hours of *support work*, 24 of which must be at the upper-division level.
 1. 30 semester hours of required courses are:
 - ACC 2013 Fundamentals of Accounting I
 - ACC 2023 Fundamentals of Accounting II
 - ACC 3013 Managerial Accounting
 - 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. 18 semester hours to be taken either as Option I⁹ or Option II.¹⁰
 - Option I
 - 3 semester hours in Anthropology, Sociology, or Psychology;
 - 3 semester hours in Fine and Applied Arts;
 - 12 semester hours of *electives*;
 - Option II
 - 18 semester hours of *electives*, of which at least 6 must be taken outside of the College of Business.

⁸The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

⁹Students entering UTSA under Option I must take those courses designated under Option I.

¹⁰Students entering UTSA under Option II must take those courses designated under Option II.

BACHELOR OF ARTS DEGREE IN ECONOMICS

The minimum number of semester hours required for this degree, including the 49 hours of General Education Requirements;¹¹ is 124.¹²

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. 21 semester hours of *support work*.
 1. 3 semester hours of ACC 2013 Fundamentals of Accounting I is required.
 2. 18 semester hours distributed as follows:
 - 6 additional semester hours in the College of Business;
 - 3 semester hours in Anthropology, Sociology or Psychology;
 - 9 additional semester hours of Social Science.
- C. 27 semester hours of electives, but no more than 9 semester hours of this group may be in additional economics courses.

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. Credit cannot be earned for ECO 2003 and ECO 2013 or ECO 2023.

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. Credit can not be earned for ECO 2013 and ECO 2003 or ECO 2023.

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. Credit cannot be earned for ECO 2023 and ECO 2003 or ECO 2013.

¹¹The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

¹²Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

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 administrative problems; analysis of market systems and firm behavior; examination of public and private decision making and economic issues.

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 3013 or ECO 3033, and MAT 1033 or the equivalent, 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 arrangements, 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.

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 the 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; neo-Keynesian, 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.)

92 / BACHELOR OF BUSINESS ADMINISTRATION
DEGREE IN FINANCE

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.

4493 Economics of the Transportation Industry

(3-0) 3 hours credit. Prerequisite: ECO 2023 or the equivalent.

Economic analysis applied to specific problems of transport. Effects of location and transportation cost on firm behavior; public regulation and policy; capacity, rate structure, service areas; problems of urban mass transportation.

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 Economics

4936 3 or 6 hours credit. Prerequisite: 12 hours of upper-division economics.

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 49 hours of General Education Requirements,¹³ is 127.

All candidates for the degree must complete:

- A. 18 semester hours in the *major*, all of which must be at the upper-division level.
 1. 9 semester hours of required courses are:
 - FIN 3013 The Finance Function
 - FIN 3033 Principles of Investment
 - FIN 3313 Money and Banking
 2. 9 additional semester hours are required in finance, as approved by the student's Advisor.
- B. 42 semester hours of *support work*, 30 of which must be at the upper-division level.
 1. 39 semester hours of required courses are:
 - ACC 2013 Fundamentals of Accounting I
 - ACC 2023 Fundamentals of Accounting II
 - ACC 3013 Managerial Accounting
 - BLW 3013 Business Law or
 - ECO 3213 Government Regulation of Industry
 - ECO 2013 Introductory Macroeconomics

¹³The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

- 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
- MGT 4893 Business Policies and Management
- MKT 3013 Principles of Marketing

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

C. 18 semester hours to be taken either as Option I¹⁴ or Option II.¹⁵

Option I

3 semester hours in Anthropology, Sociology, or Psychology;

3 semester hours in Fine and Applied Arts;

12 semester hours of electives;

Option II

18 semester hours of electives, of which at least 6 must be taken outside the College of Business.

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 2023 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.

¹⁴Students entering UTSA under Option I must take those courses designated under Option I.

¹⁵Students entering UTSA under Option II must take those courses designated under Option II.

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 utility 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 3403 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.

4543 Finance of Non-Profit Organizations

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

Types of non-profit organizations and their functions; budget development and income generation; the decision process in the provision of services; analytical approaches in managerial finance of non-profit institutions.

4563 Hospital Financial Management

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

The special problems of financial management of health care delivery systems, medical insurance programs, and health maintenance organizations; issues in fund-raising; application of cost-benefit analysis to situations concerning human life and welfare.

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. Prerequisites: FIN 3013 and FIN 3313 or their equivalents.

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.

4723 Urban Land Acquisition and Development

(3-0) 3 hours credit. Prerequisite: FIN 4713 or the equivalent.

Examination of urban real estate and its planning; implications of institutional-legal constraints; economic considerations in land use; financial strategies; relationship of land use to quality of the urban environment.

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, 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 Finance

4936 3 or 6 hours credit. Prerequisite: 12 hours of upper-division finance.

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

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 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. Prerequisites: ENG 1013 and ENG 1023, 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.

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 and secured transactions under the Uniform Commercial Code.

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.

BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN MANAGEMENT / 97
WITH A CONCENTRATION IN ORGANIZATIONAL ADMINISTRATION

**DIVISION OF MANAGEMENT
AND MARKETING**

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

The minimum number of semester hours required for this degree, including the 49 hours of General Education Requirements,¹⁶ is 127.

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 3023 Organizational Behavior
 - MGT 3033 Quantitative Decision Analysis and Production
 - MGT 3043 Business Communications
 - MGT 4893 Business Policies and Management
 2. 6 additional semester hours are required in management, as approved by the student's Advisor.
- B. 39 semester hours of *support work*, 27 of which must be at the upper-division level.
 1. 33 semester hours of required courses are:
 - ACC 2013 Fundamentals of Accounting I
 - ACC 2023 Fundamentals of Accounting II
 - ACC 3013 Managerial Accounting
 - ACC 3023 Intermediate 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. 18 semester hours to be taken either as Option I¹⁷ or Option II.¹⁸
 - Option I
 - 3 semester hours in Anthropology, Sociology, or Psychology;
 - 3 semester hours in Fine and Applied Arts;
 - 12 semester hours of electives;
 - Option II
 - 18 semester hours of electives of which at least 6 must be taken outside the College of Business.

¹⁶The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

¹⁷Students entering UTSA under Option I must take courses designated under Option I.

¹⁸Students entering UTSA under Option II must take courses designated under Option II.

**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 49 hours of General Education Requirements,¹⁹ is 127.

All candidates for the degree must complete:

- A. 18 semester hours in the *major*, all of which must be at the upper-division level.
 1. 15 semester hours of required courses are:
MGT 3033 Quantitative Decision Analysis and Production
MGT 3343 Production Management Applications
MGT 3333 Management Information Systems
MGT 3353 Logistics Management
MGT 4603 Advanced Logistics

or

MGT 3033 Quantitative Decision Analysis and Production
MGT 3313 Statistical Applications in Business
MGT 3323 Simulation Applications in Business
MGT 3343 Production Management Applications
MGT 4593 Advanced Quantitative Decision Analysis
 2. 3 additional semester hours in management, as approved by the student's Advisor.
- B. 42 semester hours of *support work*, 30 of which must be at the upper-division level.
 1. 39 semester hours of required courses are:
ACC 2013 Fundamentals of Accounting I
ACC 2023 Fundamentals of Accounting II
ACC 3013 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
MGT 4893 Business Policies and Management
MKT 3013 Principles of Marketing
 2. 3 additional semester hours in the College of Business;
- C. 18 semester hours to be taken either as Option I²⁰ or Option II.²¹
 - Option I
3 semester hours in Anthropology, Sociology, or Psychology;
3 semester hours in Fine and Applied Arts;
12 semester hours of electives;

¹⁹The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

²⁰Students entering UTSA under Option I must take courses designated under Option I.

²¹Students entering UTSA under Option II must take courses designated under Option II.

**BACHELOR OF BUSINESS ADMINISTRATION DEGREE IN MANAGEMENT / 99
WITH A CONCENTRATION IN MARKETING**

Option II

18 semester hours of electives of which at least 6 must be taken outside the College of Business

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

The minimum number of semester hours required for this degree, including the 49 hours of General Education Requirements,²² is 127.

All candidates for the degree must complete:

- A. 18 semester hours in the *major*, all of which must be at the upper-division level.
 1. 9 semester hours of required courses are:
 - MKT 3013 Principles of Marketing
 - MKT 4083 Marketing Research
 - MKT 4893 Advanced Marketing
 2. 6 semester hours of required courses must be selected from the following:
 - MKT 3033 Principles of Promotion
 - MKT 3133 Distribution
 - MKT 4093 Consumer Behavior
 3. 3 additional semester hours are required in marketing, as approved by the student's Advisor.
- B. 42 semester hours of *support work*, 30 of which must be at the upper-division level.
 1. 39 semester hours of required courses are:
 - ACC 2013 Fundamentals of Accounting I
 - ACC 2023 Fundamentals of Accounting II
 - ACC 3013 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. 18 semester hours to be taken either as Option I²³ or Option II.²⁴

Option I

3 semester hours in Anthropology, Sociology, or Psychology;
3 semester hours in Fine and Applied Arts;
12 semester hours of electives;

Option II

18 semester hours of electives of which at least 6 must be taken outside the College of Business

²²The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

²³Students entering UTSA under Option I must take courses designated under Option I.

²⁴Students entering UTSA under Option II must take courses designated under Option II.

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

**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 49 hours of General Education Requirements,²⁵ is 127.

All candidates for the degree must complete:

- A. 18 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
 - MGT 4803 Human Resources Management
 2. 3 additional semester hours in management, as approved by the student's Advisor.
- B. 42 semester hours of *support work*, 30 of which must be at the upper-division level.
 1. 39 semester hours of required courses are:
 - ACC 2013 Fundamentals of Accounting I
 - ACC 2023 Fundamentals of Accounting II
 - ACC 3013 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. 18 semester hours to be taken either as Option I²⁶ or Option II.²⁷
 - Option I
 - 3 semester hours in Anthropology, Sociology, or Psychology;
 - 3 semester hours in Fine and Applied Arts;
 - 12 semester hours of electives;
 - Option II
 - 18 semester hours of electives of which at least 6 must be taken outside the College of Business.

²⁵The 49 hours of General Education Requirements are distributed to the College of Business as set out above under General Education Requirements as Applied in the College of Business.

²⁶Students entering UTSA under Option I must take courses designated under Option I.

²⁷Students entering UTSA under Option II must take courses designated under Option II.

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 patterns on communication. The course will also stress the means of evaluating organizational communication effectiveness.

3183 Administrative Process

(3-0) 3 hours credit.

Study of the functions of management including planning, organizing, staffing, directing, and controlling. Focus on integration of managerial functions in accomplishment of the administrative tasks under conditions of risk, uncertainty, and change. May not be taken for credit by students who have had MGT 3013 or its equivalent. For non-business majors.

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.

3323 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.

3333 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.

3343 Production Management Applications

(3-0) 3 hours credit. Prerequisites: MGT 3013 and MGT 3033 or their equivalents.

Applications of modeling and optimization techniques in inventory, production, and quality control with related considerations of reliability, maintenance, and transportation.

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.

Policies and practices related to the design and administration of the personnel activity. Employee recruitment, selection, development, evaluation, and compensation given emphasis.

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.

4593 Advanced Quantitative Decision Analysis

(3-0) 3 hours credit. Prerequisites: MGT 3313, 3323 and MGT 3343, 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.

4603 Advanced Logistics

(3-0) 3 hours credit. Prerequisites: MGT 3333, 3343, and MGT 3353, or their equivalents.

Detailed analysis of the management of logistics systems with specific focus on policy and planning considerations. Designed to offer the opportunity for a comprehensive understanding of the functional areas of logistics and the integration of these functions into an effective and efficient logistics 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, POL 3703, or consent of instructor.

History and current status of collective bargaining practices, contract administration, and governmental policies in the public sector.

4803 Human Resources Management

(3-0) 3 hours credit. Prerequisites: MGT 3613, 3623, and MGT 4633, or their equivalents.

Detailed analysis of the management of personnel systems with specific focus on policy and planning considerations. Designed to offer the opportunity for a comprehensive understanding of the functional areas of personnel and the integration of these functions into an effective and efficient personnel system.

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.

4893 Business Policies and Management

(3-0) 3 hours credit. Prerequisite: Semester of graduation or 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, 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 Management

4936 3 or 6 hours credit. Prerequisite: 12 hours of upper-division management.

The opportunity for work experience in research or 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 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 Principles of Promotion

(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.

Principles of persuasive communication and consumer behavior are stressed as fundamentals to the understanding of promotional techniques. 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 Mass Communications and 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.

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 Salesmanship

(3-0) 3 hours credit. Prerequisite: MKT 3013 or the equivalent.

Professional salesmanship and sales management 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 market-product 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 market-place. 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.

4893 Advanced Marketing

(3-0) 3 hours credit. Prerequisites: MKT 3033, 3113 and MKT 4083, 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, 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 Marketing

4936 3 or 6 hours credit. Prerequisite: 12 hours of upper-division marketing.

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.

COLLEGE OF FINE AND APPLIED ARTS

DIVISION OF ART AND DESIGN

The Division of Art and Design offers a program to provide the opportunity for an extensive education in the visual arts through direct studio practice to develop skills, experience, and understanding of mediums and modes of expression. Art History and Criticism forms an integral part of the curriculum, encouraging the student to develop awareness of past and present achievements of artists. The Division awards the Bachelor of Fine Arts degree as recognition of successful completion of prolonged and intensive course work in a variety of art activities.

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

The minimum number of semester hours required for the degree, including 42 hours of General Education Requirements, is 126.

Transfer students must 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 2x2 slides of work from courses taken at another institution.

It is recommended that majors attain a minimum grade point average of 2.5 in their first 60 semester hours and a 3.0 average in their area of specialization.

All candidates for the degree must complete:

A. 21 semester hours of required art courses:

- ART 1003 Design: Two Dimensional
- ART 1013 Design: Three Dimensional
- ART 1023 The Arts of Vision and Sound
- ART 1213 Drawing: Articulation
- ART 1223 Drawing: Structure
- ART 2213 Drawing: Figure
- ART 4923 Bachelor of Fine Arts Degree Project

B. 12 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. 24 additional semester hours are required in upper-division Art and Art History courses, 12 semester hours of which must be completed in one of the following specializations: Drawing, Painting, Photography, Sculpture, Ceramics, Printmaking.

D. 18 semester hours are required in Art History and Criticism courses, 9 of which must be the following:

- AHC 1113 Survey of Art I: Ancient to Medieval
- AHC 1123 Survey of Art II: Renaissance through 18th Century
- AHC 2133 Survey of Art III: 19th and 20th Centuries

E. 9 semester hours of free electives are required, and may be selected outside the College of Fine and Applied Arts.

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 multidimensional surfaces.
- 1023 The Arts of Vision and Sound**
(3-0) 3 hours credit.
An introduction to the multiple facets of creativity as they apply to the visual and aural arts examined from points of view of the historian, artist, and musician.
- 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 organizing drawing marks, conceptual practices and perceptual principles.
- 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.
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.
Instruction in print processes for relief, woodcut, monoprint, dry point, and engraving.
- 2513 Photography: Basic**
(0-6) 3 hours credit. Prerequisites: ART 1003, 1013, 1213, 1223.
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. Formerly ART 2213. Credit cannot be earned for both 2313 and 3013.
- 3113 Painting: Intermediate**
(0-6) 3 hours credit. Prerequisites: 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.
A continuation of ART 3113 with emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated once for credit.
- 4233 Drawing: Advanced**
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3213.
A continuation of ART 3213 with emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated once for credit.
- 4433 Printmaking: Advanced**
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3413.
A continuation of ART 3413 with 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 once for credit.
- 4533 Photography: Advanced**
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3513.
A continuation of ART 3513 with emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated once for credit.
- 4673 Sculpture: Advanced**
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3653.
A continuation of ART 3653 with emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated once for credit.
- 4753 Ceramics: Advanced**
(0-6) 3 hours credit. Prerequisite: Six credit hours in ART 3733.
A continuation of ART 3733 with emphasis on the development of a personal vision and individual approach to the use of the medium. May be repeated once for credit.
- 4823 The Creative Process**
(2-2) 3 hours credit.
An examination of ideas, art theories, and principles of creativity through an examination of art problems and a study of writings by artists, psychologists, philosophers and critics.

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.

4923 Bachelor of Fine Arts Degree Project

3 hours credit. Prerequisite: Application for Degree.

Must be taken in the term in which the student expects to graduate. An exhibition of selected work and a written project, both to be completed during the last year and submitted to a faculty committee for approval. The project places the work in an aesthetic and historical context.

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)

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 to 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 and Architecture: 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 and Architecture: 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 and Architecture: 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.

3213 Islamic Art and Architecture

(3-0) 3 hours credit.

A study of art and architecture in the Near East, North Africa and Spain.

110 / ART HISTORY AND CRITICISM

3223 Spanish Art and Architecture

(3-0) 3 hours credit.

Art and architecture in the Iberian Peninsula from the seventh century to the reign of Fernando and Isabel.

3323 European Art and Architecture: Nineteenth and Twentieth Centuries

(3-0) 3 hours credit.

A study of painting, sculpture, architecture and the graphic arts in Europe from 1790 to 1950.

3333 United States Art and Architecture: Nineteenth and Twentieth Centuries

(3-0) 3 hours credit.

Painting, sculpture, architecture and the graphic arts in the United States from 1790 to 1950.

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.

3443 Native American Art

(3-0) 3 hours credit.

A study of art in North America prior to European colonization.

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.

3613 History of Modern Architecture

(3-0) 3 hours credit.

A study of modern architecture — its origin and its technological and philosophical evolution from the nineteenth century to the present.

3813 History of Photography

(3-0) 3 hours credit.

The history of photography from its inception to the present.

3923 Art of Film

(3-0) 3 hours credit.

A survey of the cinematic art: development of the motion picture aesthetics and major stylistic and thematic trends.

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.

4143 Art and Architecture of the Southwest

(3-0) 3 hours credit.

A study of the art and architecture in the American Southwest and Mexico.

4423 Contemporary Art of Latin America and Mexico

(3-0) 3 hours credit.

A study of twentieth century art in Latin America and Mexico.

4523 Oriental Art

(3-0) 3 hours credit.

A study of the arts of the Far East including Japan, China, Korea, and Southeast Asia.

4813 Art Criticism

(3-0) 3 hours credit. Prerequisites: AHC 1113 and 1123 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, and the Division Director and Dean of the College in which the course is offered.

Independent reading, research, discussion, and/or writing under direction of a faculty

ART HISTORY AND CRITICISM — BACHELOR OF FINE ARTS / 111
DEGREE IN ART AND DESIGN WITH A CONCENTRATION
IN ARCHITECTURAL DESIGN

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 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 140.

All candidates for the degree must complete:

- A. 72 semester hours in the major, 46 of which must be at the upper-division level.

1. 26 semester hours of required lower-division architectural courses are:

ARC	1212	Architectural Design I
ARC	1312	Architectural Graphics I
ARC	1222	Architectural Design II
ARC	1322	Architectural Graphics II
ARC	2113	Architectural Design III
ARC	2214	Construction I
ARC	2312	Architectural Rendering I
ARC	2123	Architectural Design IV
ARC	2224	Construction II
ARC	2322	Architectural Rendering II

2. 46 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	4135	Architectural Design Studio III
ARC	4145	Architectural Design Studio IV
ARC	4513	Architectural Practice
ARC	4613	Construction Management

- B. 38 semester hours of support work.

1. 32 semester hours of required courses.

PHY	1903	Technical Physics I
PHY	1911	Technical Physics I Laboratory
PHY	1923	Technical Physics II
PHY	1931	Technical Physics II Laboratory
MAT	1214	Calculus I
MAT	1223	Calculus II
ART	1213	Drawing: Articulation
ART	1223	Drawing: Structure

- AHC 1113 Art and Architecture I: Ancient through Medieval
- AHC 1123 Art and Architecture II: Renaissance to Eighteenth Century
- AHC 3613 History of Modern Architecture
- AHC 4143 Art and Architecture of the Southwest

2. 6 additional semester hours are required in Environmental Studies approved by the student's Advisor.

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.

COURSE DESCRIPTIONS

ARCHITECTURAL DESIGN (ARC)

1212 Architectural Design I

(0-4) 2 hours credit.

Study of the visual elements and organization of two and three dimensional space as related to architectural form.

1222 Architectural Design II

(0-4) 2 hours credit. Prerequisite: ARC 1212.

A continuation of ARC 1212.

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.

2113 Architectural Design III

(0-6) 3 hours credit. Prerequisites: ARC 1222, 1322, ART 1223.

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.

2214 Construction I

(4-0) 4 hours credit. Prerequisites: ARC 1222, 1322.

Introduction to building systems and materials.

2224 Construction II

(4-0) 4 hours credit. Prerequisites: ARC 2214, MAT 1214, PHY 1903.

A study of statistics and strength of materials.

- 2312 Architectural Rendering I**
(0-4) 2 hours credit. Prerequisites: ARC 1222, 1322, ART 1223.
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.
- 3115 Architectural Design Studio I**
(1-8) 5 hours credit. Prerequisite: Required lower-division Architectural Design courses.
The study of the process of researching, programming and developing physical design solutions.
- 3125 Architectural Design Studio II**
(1-8) 5 hours credit. Prerequisite: ARC 3115.
Continuation of the study of the process of researching, programming and developing physical design solutions.
- 3234 Construction III**
(3-2) 4 hours credit. Prerequisites: MAT 1213, PHY 1903 or concurrent registration, and required lower-division Architectural Design courses or consent of instructor.
The study of the design and behavior of structural steel and timber systems, including the application of building specifications.
- 3244 Construction IV**
(3-2) 4 hours credit. Prerequisite: PHY 1923 or concurrent registration and ARC 3234.
The study of the design and behavior of structural concrete systems, including the application of building specifications.
- 3313 Environmental Control Systems I**
(3-0) 3 hours credit. Prerequisite: Required lower-division Architectural Design courses or consent of instructor.
Qualitative and quantitative study of heating, ventilating, cooling, plumbing and mechanical movement systems, and their integration into a building system.
- 3323 Environmental Control Systems II**
(3-0) 3 hours credit. Prerequisite: ARC 3313.
A qualitative and quantitative study of acoustical, electrical and illumination systems, and their integration into a building system.
- 3413 Architectural Documents I**
(2-2) 3 hours credit. Prerequisite: Upper-division standing.
An introduction to the technical documents of building construction, their preparation and use in communication between the architect and other professional consultants.
- 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.
- 4135 Architectural Design Studio III**
(1-8) 5 hours credit. Prerequisite: ARC 3125.
Further development of design problems integrating structural and mechanical systems for complete design solutions to various building types.
- 4145 Architectural Design Studio IV**
(1-8) 5 hours credit. Prerequisite: ARC 4135.
Continuation of the development of design problems integrating structural and mechanical systems for complete design solutions to various building types.
- 4513 Architectural Practice**
(3-0) 3 hours credit. Prerequisite: ARC 4135.
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: ARC 3244.

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, will apply to a bachelor's degree.

4951-3 Special Studies in Architectural 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 the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

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 four emphases in the Bachelor of Music program: music literature, music performance, music theory-composition, or music management. 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. The award is made for either (1) the successful completion of MUS 4983, Honors Seminar, or (2) an outstanding record or performances culminating in a superior Senior Recital and an overall grade-point average of at least 3.0.

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 management emphasis, where it is 136.

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 2102	Aural Skills III
MUS 2112	Aural Skills IV
MUS 2314	Theoretical Studies in Music Literature I
MUS 2324	Theoretical Studies in Music Literature II
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 majoring in music are required (a) to make one recital appearance during the last semester of study on their principal instrument; (b) to perform in a university ensemble each term in residence including summer terms; (c) to meet music performance proficiency standards established for principal and secondary instruments (students not meeting these 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. 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 LITERATURE EMPHASIS

- A. 16 semester hours of music performance are required from the following courses which may be repeated for credit to fulfill the 16 hour requirement.

Keyboard Principal Instrument:

- MUS 1552 Functional Piano for Keyboard Principal
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III
- MUS 1511 Music Performance-Secondary Instrument

Non-Keyboard Principal Instrument:

- MUS 1522 Class Piano

and/or

- MUS 1511 Music Performance-Secondary Instrument (Piano)
- MUS 1532 Functional Piano for Non-Keyboard Principal
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III

B. 15 semester hours of music literature are required from the following:

- MUS 3253 Topics in Music Literature (3 topics required)
- MUS 3613 Music in Contemporary Life

or

- MUS 3623 Music of the Americas
- MUS 4913 Independent Study

or

- MUS 4951-3 Special Studies in Music

or

- MUS 4983 Honors Seminar

C. 6 semester hours of music theory are required as follows:

- MUS 3133 Topics in Analysis
- MUS 4113 Counterpoint

D. 9 semester hours of History are required from the following:

- HIS 2603 Western Civilization to 1648
- HIS 2613 Western Civilization Since 1648
- HIS 3263 Seventeenth and Eighteenth Century Europe
- HIS 3303 History of Mexico
- HIS 2513 The European Renaissance
- HIS 3253 European Cultural History

E. 8 semester hours of electives.

MUSIC PERFORMANCE EMPHASIS

A. 28 semester hours of music performance are required from the following courses which may be repeated for credit to fulfill the 28 hour requirement.

Keyboard Principal Instrument:

- MUS 1552 Functional Piano for Keyboard Principal
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3544 Music Performance-Private Instruction IV
- MUS 4544 Music Performance-Private Instruction V

Non-Keyboard Principal Instrument:

- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3544 Music Performance-Private Instruction IV
- MUS 4544 Music Performance-Private Instruction V

MUSIC PERFORMANCE EMPHASIS — / 117
MUSIC THEORY COMPOSITION EMPHASIS

- B. 6 semester hours of music theory are required and may be fulfilled by selecting from the following courses:

MUS 3143 Orchestration
MUS 3152 Choral Arranging
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 Topics in Music Literature
History of Song required of voice principals.
Orchestral Literature required of orchestral instrument 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.

- D. Piano principals are required to complete 2 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 pedagogy. Depending on the student's principal instrument one of the following pedagogy courses will fulfill this requirement.

Classical guitar, organ, piano and voice — MUS 4562 Pedagogy Of Solo Instruments.

Orchestral instruments — MUS 4532 Pedagogy of Orchestral Instruments

- F. Voice principals are required to complete 4 semester hours of diction courses (MUS 3512 Diction: English and French, and MUS 3522 Diction: Italian and German).

- G. All music performance majors are required to complete MUS 4561 Senior Recital.

- H. Free electives are required depending upon principal instrument: 12 semester hours for piano principals, 10 semester hours for voice principals, 14 semester hours for other music performance principals.

- I. A qualifying recital of no more than 30 minutes in length must be presented and approved by the Division of Music before the student can be admitted to upper-division level courses in music performance. A senior recital of approximately one hour in length must be presented and approved by the Division of Music.

MUSIC THEORY-COMPOSITION EMPHASIS

- A. 16 semester hours of music performance courses are required from the following courses which may be repeated for credit to fulfill the 16 hour requirement.

Keyboard Principal Instrument:

MUS 1552 Functional Piano for Keyboard Principal
MUS 1542 Music Performance-Private Instruction I
MUS 2542 Music Performance-Private Instruction II
MUS 3532 Music Performance-Private Instruction III
MUS 1511 Music Performance-Secondary Instrument

Non-Keyboard Principal Instrument:

MUS 1522 Class Piano
and/or

118 / MUSIC THEORY COMPOSITION EMPHASIS —
MUSIC MANAGEMENT EMPHASIS

- MUS 1511 Music Performance-Secondary Instrument (Piano)
- MUS 1532 Functional Piano for Non-Keyboard Principal
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III

- 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 3133 Topics in Analysis
- MUS 3143 Orchestration
- MUS 3162 Composition II
- MUS 4113 Counterpoint
- MUS 4142 Composition III

- C. 3 additional semester hours of music literature are required.

- D. MUS 4561 Senior Recital is required of all students in the theory-composition emphasis.

- E. 9 semester hours of electives.

- F. 9 semester hours of approved music electives.

- G. The student's Senior Recital (MUS 4561) shall include a selection of the student's compositions totaling a minimum of 20 minutes. The student will submit completed scores representing a majority of the programs to an examining committee the semester prior to that of the recital.

The examining committee shall determine the acceptability of the recital program.

MUSIC MANAGEMENT EMPHASIS

- A. 16 semester hours of music performance courses are required from the following courses which may be repeated for credit to fulfill the 16 hour requirement.

- MUS 1522 Class Piano
- and/or*

- MUS 1511 Music Performance-Secondary Instrument
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III

- B. 6 additional semester hours of music education are required. This requirement may be fulfilled by the following:

- MUS 3413 Genesis and Development of Music Learning in the Elementary School

- MUS 3463 General Music in the Junior High School

or

- MUS 4423 The Eclectic Curriculum in the Elementary School

or

- MUS 3423 Brass and Percussion Techniques: Elementary School

or

- MUS 3433 Woodwind and String Techniques: Elementary School

or

- MUS 4452 Marching Band Techniques

- C. MUS 3613 Music in Contemporary Life is required of all students in the music management emphasis.

- D. 37 hours of support work are required. This requirement may be fulfilled by completing the following:

BACHELOR OF MUSIC EDUCATION DEGREE — / 119
SECONDARY CHORAL EMPHASIS

ACC 2013	Fundamentals of Accounting I
ACC 2023	Fundamentals of Accounting II
ECO 2013	Introductory Macroeconomics
ECO 2023	Introductory Microeconomics
BLW 3013	Business Law
FIN 3013	The Finance Function
MGT 3013	Organization and Management Theory
MGT 3023	Organizational Behavior
MKT 3013	Principals of Marketing
CS 1053	Computer Programming for Business Application
MAT 1033	Algebra with Calculus for Business
STA 1064	Basic Statistics for Business and Economics

BACHELOR OF MUSIC EDUCATION DEGREE

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 126 for the secondary choral emphasis, 127²⁸ for the all-level choral emphasis, and 129²⁹ for the secondary and all-level instrumental emphasis.

SECONDARY CHORAL EMPHASIS

A. 59 semester hours in music.

1. 43 semester hours of required music courses are:

- 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 2102 Aural Skills III
- MUS 2112 Aural Skills IV
- MUS 2314 Theoretical Studies in Music Literature I
- MUS 2324 Theoretical Studies in Music Literature II
- MUS 2403 Conducting I: Secondary Schools
- MUS 2413 Conducting II: Secondary Schools
- MUS 3113 Analysis
- MUS 3213 Music in Western Civilization I
- MUS 3223 Music in Western Civilization II
- MUS 3413 Genesis and Development of Music Learning in the Elementary School
- or*
- MUS 3443 Conducting III: Secondary Schools
- MUS 3463 General Music in the Junior High School
- MUS 3512 Diction: English and French *or*
- MUS 3522 Diction: Italian and German

2. 16 semester hours of applied music performance are required from the following courses which may be repeated for credit to fulfill the 16-hour requirement.

- MUS 1522 Class Piano
and/or

²⁸Thirty-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.

²⁹Same as footnote above.

Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.

120 / SECONDARY CHORAL EMPHASIS —
ALL-LEVEL CHORAL EMPHASIS

- MUS 1511 Music Performance-Secondary Instrument
- MUS 1552 Functional Piano for Keyboard Principals
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III

- B. 21 semester hours in professional education (including 6 hours of student teaching) are required.
- C. 4 additional semester hours of general education for certification (3 hours of speech electives and EDU 2001) are required.
- D. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on their principal instrument; (b) to perform in a university ensemble each term in residence including summer terms; (c) to meet music performance proficiency standards established for principal and secondary instruments; (students not meeting these standards are to repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence.

ALL-LEVEL CHORAL EMPHASIS

60 semester hours in music.

- 1. 44 semester hours of required music courses are:

- 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 2102 Aural Skills III
- MUS 2112 Aural Skills IV
- MUS 2314 Theoretical Studies in Music Literature I
- MUS 2324 Theoretical Studies in Music Literature II
- MUS 2403 Conducting I
- MUS 3113 Analysis
- MUS 3213 Music in Western Civilization I
- MUS 3223 Music in Western Civilization II
- MUS 3413 Genesis and Development of Music Learning in the Elementary School
- MUS 3463 General Music in the Junior High School
- MUS 4423 The Eclectic Curriculum in the Elementary School
- MUS 2413 Conducting II: Secondary Schools

- 2. 16 semester hours of applied music performance are required from the following courses which may be repeated for credit to fulfill the 16-hour requirement:

- MUS 1522 Class Piano
and/or
- MUS 1511 Music Performance-Secondary Instrument
- MUS 1552 Functional Piano for Keyboard Principals
- MUS 1542 Music Performance-Private Instruction I
- MUS 2542 Music Performance-Private Instruction II
- MUS 3532 Music Performance-Private Instruction III

- B. 21 semester hours in professional education (including 6 hours of student teaching) are required.

- C. 4 additional semester hours of general education for certification (3 hours of speech electives and EDU 2001) are required.
- D. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on their principal instrument; (b) to perform in a university ensemble each term in residence including summer terms; (c) to meet music performance proficiency standards established for principal and secondary instruments; (students not meeting these standards are required to repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence.

SECONDARY INSTRUMENTAL EMPHASIS

- A. 62 semester hours in music
 - 1. 46 semester hours of required music courses are:
 - MUS 1102 Aural Skills I
 - MUS 1112 Basic Skills of Music I
 - MUS 1122 Aural Skills II
 - MUS 1132 Basic Skills in Music II
 - MUS 2102 Aural Skills III
 - MUS 2112 Aural Skills IV
 - MUS 2314 Theoretical Studies in Music Literature I
 - MUS 2324 Theoretical Studies in Music Literature II
 - MUS 2403 Conducting I: Secondary Schools
 - MUS 2413 Conducting II: Secondary Schools
 - MUS 3113 Analysis
 - MUS 3143 Orchestration
 - MUS 3213 Music in Western Civilization I
 - MUS 3223 Music In Western Civilization II
 - MUS 3423 Brass and Percussion Techniques: Elementary School
 - or
 - MUS 3433 Woodwind and String Techniques: Elementary School
 - MUS 4452 Marching Band Techniques
 - MUS 3413 Genesis and Development of Music Learning in the Elementary School
 - or
 - MUS 3423 Brass and Percussion Techniques: Elementary School
 - or
 - MUS 3433 Woodwind and String Techniques: Elementary School
 - or
 - MUS 3443 Conducting III: Secondary Schools
 - or
 - MUS 3463 General Music in the Junior High School
 - 2. 16 semester hours of music performance are required from the following courses which may be repeated for credit to fulfill the 16 hour requirements:
 - Keyboard Principal Instrument:
 - MUS 1552 Functional Piano for Keyboard Principal
 - MUS 1542 Music Performance-Private Instruction I
 - MUS 2542 Music Performance-Private Instruction II
 - MUS 3532 Music Performance-Private Instruction III
 - MUS 1511 Music Performance-Secondary Instrument

122 / SECONDARY INSTRUMENTAL EMPHASIS —
ALL-LEVEL INSTRUMENTAL EMPHASIS

Non-Keyboard Principal instrument:

MUS 1522 Class Piano
and/or

MUS 1511 Music Performance-Secondary Instrument (Piano)

MUS 1532 Functional Piano for Non-Keyboard Principal

MUS 1542 Music Performance-Private Instruction I

MUS 2542 Music Performance-Private Instruction II

MUS 3532 Music Performance-Private Instruction III

- B. 21 semester hours in professional education (including 6 hours of student teaching) are required.
- C. 4 additional semester hours of general education for certification (3 hours of speech electives and EDU 2001) are required.
- D. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on their principal instrument; (b) to perform in a university ensemble each term in residence including summer terms; (c) to meet music performance proficiency standards established for principal and secondary instruments (students not meeting these standards are required to repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence.

ALL-LEVEL INSTRUMENTAL EMPHASIS

- A. 62 semester hours in music

- 1. 46 semester hours of required music courses are:

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 2102 Aural Skills III

MUS 2112 Aural Skills IV

MUS 2314 Theoretical Studies in Music Literature I

MUS 2324 Theoretical Studies in Music Literature II

MUS 2403 Conducting I: Secondary Schools

MUS 3113 Analysis

MUS 3213 Music in Western Civilization I

MUS 3223 Music in Western Civilization II

MUS 3413 Genesis and Development of Music Learning in the
Elementary School

MUS 3423 Brass and Percussion Techniques: Elementary School

MUS 3433 Woodwind and String Techniques: Elementary School

5 hours to be selected from:

MUS 2413 Conducting II: Secondary Schools

MUS 3463 General Music in the Junior High School or

MUS 4452 Marching Band Techniques

- 2. 16 semester hours of music performance are required from the following courses which may be repeated for credit to fulfill the 16 hour requirement:

Keyboard Principal Instrument:

MUS 1552 Functional Piano for Keyboard Principal

MUS 1542 Music Performance-Private Instruction I

MUS 2542 Music Performance-Private Instruction II
 MUS 3532 Music Performance-Private Instruction III
 MUS 1511 Music Performance-Secondary Instrument

Non-Keyboard Principal Instrument:

MUS 1522 Class Piano

and/or

MUS 1511 Music Performance-Secondary Instrument (Piano)

MUS 1532 Functional Piano for Non-Keyboard Principal

MUS 1542 Music Performance-Private Instruction I

MUS 2542 Music Performance-Private Instruction II

MUS 3532 Music Performance-Private Instruction III

- B. 21 semester hours in professional education (including 6 hours of student teaching) are required.
- C. 4 additional semester hours of general education for certification (3 hours of speech electives and EDU 2001) are required.
- D. Special degree requirements. All students majoring in music are required (a) to make one recital appearance during the last semester of study on their principal instrument; (b) to perform in a university ensemble each term in residence including summer terms; (c) to meet music performance proficiency standards established for principal and secondary instruments (students not meeting these standards are required to repeat music performance courses until the proficiency standards have been met); (d) to register in MUS 2001 Concert Music each semester in residence.

COURSE DESCRIPTIONS

MUSIC (MUS)

1102 Aural Skills I

(2-0) 2 hour 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

(2-0) 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.

1511 Music Performance-Secondary Instrument

1 hour credit.

Private instruction for students desiring or required to study as secondary instruments 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 developed including 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.

1562 Music Performance-Class Voice

(2-0) 2 hours credit. Prerequisite: Placement examination and consent of instructor.

For students seeking a BM or BME degree, with little or no previous vocal training. Offers the opportunity for development of fundamentals of voice technique, including in-class performances of suitable songs. May be repeated for credit.

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

(2-0) 2 hours credit. Prerequisite: MUS 1122 or the equivalent.

Sight singing, aural skills and keyboard techniques applied to literature and theory drawn from MUS 2314.

2112 Aural Skills IV

(2-0) 2 hours credit. Prerequisites: MUS 2102 and MUS 2314 or the equivalents.

Application of skills to materials drawn from MUS 2324. Should be taken concurrently with MUS 2324.

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

(2-0) 2 hours credit. Prerequisites: MUS 1102, 1112 and consent of instructor.

Fundamentals of composition through small forms.

2314 Theoretical Studies in Music Literature I

(4-0) 4 hours credit. Prerequisites: MUS 1122, 1132.

A team taught course involving theoretical analysis of harmony, melody, and form, stylistic identity, performance practice, biography, historical perspective, and writing techniques of music. Organized principally by performance media.

- 2324 Theoretical Studies in Music Literature II**
(4-0) 4 hours credit. Prerequisite: MUS 2314.
A continuation of MUS 2314.
- 2403 Conducting I: Secondary 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 cuing, 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 opportunity to study skills and aesthetic principles needed to accompany vocal and instrumental music. 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.
- 3113 Analysis**
(3-0) 3 hours credit. Prerequisites: MUS 2112 and MUS 2324 or the equivalents.
Analytical techniques applied to all parameters in selected works from a variety of style periods. Structural analysis of musical forms.
- 3133 Topics in Analysis**
(3-0) 3 hours credit. Prerequisite: MUS 3113 or the equivalent.
Topics approached through restricted analysis. Topics include: Structure and form in "New Music"; Beethoven's principles of musical development; expansion of tonal harmony in the music of Wagner and other late romantics. May be repeated for credit when topics vary.
- 3143 Orchestration**
(3-0) 3 hours credit. Prerequisites: MUS 2112, 2324.
Applied instrumentation, emphasizing idiomatic scoring for various orchestral and wind combinations with an approach to writing for full orchestra and symphonic band.
- 3152 Choral Arranging**
(2-0) 2 hours credit. Prerequisite: MUS 2324 or the equivalent.
Practical studies in arranging for choral ensembles with emphasis on successful writing for secondary school choirs.

3162 Composition II

(2-0) 2 hours credit. Prerequisites: MUS 2112, 2142, 2324 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. Prerequisite: MUS 2324 or the equivalent.

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. Prerequisite: MUS 2324 or the equivalent.

A study of musical styles and literature in the Classic, Romantic and Contemporary periods.

3253 Topics in Music Literature

(3-0) 3 hours credit. Prerequisite: Upper-division standing.

Topics include: String Chamber Music; Wind Chamber Music; History of Song; Orchestral Literature; History and Literature of the Guitar; Choral Literature from 1400 to 1825; Choral Literature from 1825 to Present; History and Literature of the Keyboard Up to 1750; Literature of the Pianoforte; Organ Literature; The Operatic Tradition; Music Since 1950; and The Instrumental Concerto. Two or more topics may be taken concurrently. May be repeated for credit when topics vary.

3413 Genesis and Development of Music Learning in the Elementary School

(3-1) 3 hours credit. Prerequisites: MUS 2324 or the equivalent and upper-division standing in music.

Methods of music instruction and materials for music learning in the elementary school. Music learning for beginners and early childhood examined.

3423 Brass and Percussion Techniques: Elementary School

(3-1) 3 hours credit. Prerequisite: MUS 1132 or the equivalent.

Playing and teaching techniques, selection of materials, and maintenance care for brass and percussion instruments. Designed for the public school instrumental teacher.

3433 Woodwind and String Techniques: Elementary School

(3-1) 3 hours credit. Prerequisite: MUS 1132 or the equivalent.

Playing and teaching techniques, selection of materials, and maintenance care for woodwind and string instruments. Designed for the public school instrumental teacher.

3443 Conducting III: Secondary Schools

(3-1) 3 hours credit. Prerequisite: MUS 2412 and consent of the instructor.

Rehearsal techniques and expressive conducting emphasized through practical experience and performance.

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.

3512 Diction: English and French

(2-0) 2 hours credit.

Study of French and English pronunciation for singers; the pronunciation of both languages as it applies to public performance.

3522 Diction: Italian and German

(2-0) 2 hours credit.

Study of Italian and German pronunciation for singers; the pronunciation of both languages as it applies to public performance.

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; touring is required of all members. May be repeated for credit.

3712 Concert Choir

(0-5) 2 hours credit. Prerequisite: Consent of instructor by audition.

An ensemble whose repertoire is chosen from both sacred and secular literature. Serious music is emphasized. May be repeated for credit.

3721 UTSA Chorus

(0-2) 1 hour credit.

This choral ensemble is open to all students without audition. UTSA Chorus sings serious music, folk music and popular music. The ensemble performs for campus and civic activities. May be repeated for credit.

3742 UTSA Wind Ensemble

(0-5) 2 hours credit. Prerequisite: Consent of instructor.

The wind ensemble studies, rehearses and performs the repertoire for various combinations of wind instruments. May be repeated for credit.

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 Chamber Orchestra

(0-3) 1 hour credit. Open to all students by audition.

The Chamber Orchestra studies, rehearses and performs the repertoire from all periods for small orchestral combinations. 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.

4113 Counterpoint

(3-0) 3 hours credit. Prerequisites: MUS 2112, 2324.

Contrapuntal techniques of the 16th, 18th, and 20th centuries developed through writing and analysis.

4142 Composition III

(2-0) 2 hours credit. Prerequisites: MUS 3113, 3162, and consent of instructor.

Writing for small and large ensembles in the larger forms. 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. Prerequisite: MUS 2325.

Techniques for the development of a marching band are presented for prospective band directors.

4532 Pedagogy of Orchestral Instruments

(2-0) 2 hours credit. Prerequisite: Upper-division standing in music.

Survey of techniques, practices and materials of teaching the orchestral instruments. Review of materials for beginning, intermediate, and advanced students. Topics include: Strings, Brass, Woodwinds, and Percussion. May be repeated for credit when topics vary.

4544 Music Performance-Private Instruction V

4 hours credit. Prerequisite: 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.

4562 Pedagogy of Solo Instruments

(2-0) 2 hours credit. Prerequisite: Upper-division standing in music.

Survey of techniques, practices and materials of teaching the solo instrument studied. Review of materials for beginning, intermediate and advanced students. in one of the following areas: Classical Guitar, Piano, Organ, Voice.

4581 Chamber Music

(1-0) 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.

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. Prerequisite: 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 analytical/historical study of a topic to be designated by the instructor.

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

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 120.³⁰

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. The area of support work is selected by the student in consultation with his or her advisor. Examples of support areas include the following: philosophy, humanities, classics, art, music, American studies, literary concentrations, drama, film, languages, linguistics, anthropology, psychology, sociology, history, economics, comparative literature or cultures, communication, or a combination of these, approved by the undergraduate advisor.
- 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.

COURSE DESCRIPTIONS

ENGLISH (ENG)

1003 Basic English

(3-1) 3 hours credit.

A 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

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.

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.)

2213 Introduction to the Study of Literature

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

A study of critical principles and literary concepts through an investigation of poetry, drama, and fiction.

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 early twentieth century.

2263 Major American Writers

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Study of representative works of major American writers.

2273 Topics in Popular Literature

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Critical readings in one of the following popular modes: Science Fiction, Gothic Fiction, Western Fiction, Detective Fiction, and 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 will include the nature of Biblical narrative, history, prophecy, character, and vision.

2613 Introduction to Literary Genres

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Opportunity to read and discuss classic and contemporary selections from a single literary genre: fiction, poetry, or drama. May be repeated for credit when topics vary.

3033 Contemporary American Literature

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Study of the major American writers of the past three decades.

3043 Black Literature in America

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

A comprehensive survey of the works of Black writers in America from the eighteenth century to the present; imaginative literature, and folk literature will be studied.

3053 Classic American Literature

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Study of the major American writers of the mid-nineteenth century, including Poe, Whitman, Thoreau, and Melville. Formerly ENG 2253. Credit cannot be earned for both 2253 and 3053.

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.

A comprehensive study of the works of an individual English or American author, or of several authors studied in relation to one another. The writers studied may be selected from the following: Spenser, Marlowe, Milton, Pope, Hardy, Joyce, and Faulkner. May be repeated for credit when authors vary.

3123 Modern Fiction

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

A 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.

A study of the presentation of women and feminist issues in verse, fiction, and non-fiction prose of the nineteenth and twentieth centuries. Both men and women writers will be read.

3143 Modern Drama

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Study of representative plays in the modern dramatic tradition, from 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).

- 3233 Shakespeare: 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.
A critical survey of selected novels of the eighteenth and nineteenth centuries with emphasis on the literary qualities of the works.
- 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 theories of 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.
Offers the opportunity for extensive practice in the writing of expository and argumentative prose.
- 3323 History of the English Language**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
A historical survey of the development of the sounds and grammatical structure 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 linguistics and to the history of language study. Consideration of the differences between traditional grammar and current linguistic theory. Description of English phonology and semantics; discussion of such topics as language acquisition and the teaching of reading.
- 3353 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 semantic evolution of selected words.
- 3373 Children's Literature**
(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.
A 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.
- 4013 The Metaphysical Poets**
(3-0) 3 hours credit. Prerequisite: ENG 2213 or 2223 or the equivalent.
An intensive study of the chief metaphysical poets with emphasis on Donne, Herbert, Crashaw, Marvell, and Vaughan.
- 4023 The Romantic Poets**
(3-0) 3 hours credit. Prerequisite: ENG 1033 or 2213 or the equivalent.
An 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 2213 or 2223 or the equivalent.
An 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 2213 or 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.

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 English

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 for English Majors

(3-0) 3 hours credit. Prerequisite: ENG 2223 or the equivalent.

An undergraduate seminar limited to English majors in their final year. The opportunity for intensive study of a genre, topic, or a 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 120.³¹

All candidates for the degree must complete:

A. 33 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.

3. 12 hours of upper-division work, 6 hours each in any two of the following: (a) classics, (b) philosophy, (c) a modern literature (Spanish, French, German, Russian, or English), including foreign language literature courses in translation, and culture and civilization courses.

B. 9 semester hours of *support work* in the form of an interdisciplinary course of studies, developed in conjunction with the Humanities advisor, and designed to aid the student's integration of his or her program in terms of central themes, focal problems, or areas of historical interest. Normally courses are selected in history, history and theory of art and music, a second modern literature, classics, and philosophy.

C. 36 semester hours of *electives*.

A student whose grade-point average in the Interdisciplinary Humanities major prior to the beginning of his or her final year is 3.5 or above may petition the Humanities

³¹Thirty-nine of the total semester hours required for the degree must be at the upper division level.

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 final grade-point average of 3.5 or above in the major.

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.

3013 History of Ideas

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

A 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.

An 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.

An 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.

3053 The Romantic Age

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

An 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.

A 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.

3423 Intercultural Humanities Perspectives

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

Interdisciplinary study of differing visions of human nature and human values; emphasis upon questions of cultural diversity and cross-cultural influences. Topics include traditions in Far Eastern, India, African, Semitic, Pre-Columbian, and Western societies. May be repeated for credit when topics vary.

3433 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 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 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, its literary production. Individual topics include: France, Germany, Spain, Russia, the nations of Spanish-America. 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.

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 for Humanities Majors

(3-0) 3 hours credit.

An 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 (CLA)

2013 Introduction to Ancient Greece

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

An 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.

An 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.

Theory and practice of speaking in formal settings. Exercises in preparation, adaptation and delivery of oral presentations.

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 2383 and 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

(3-0) 3 hours credit. Prerequisite: ENG 1023 or the equivalent.

An 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. An 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.

An 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. Topics may include: business ethics, medical ethics, and social ethics. May be repeated for credit when topics vary.

3003 Basic Philosophical Problems II

(3-0) 3 hours credit. Prerequisite: PHI 2013 or PHI 2043 or the equivalent.

A continuation of PHI 2013 Basic Philosophical Problems; 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 which 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

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. 30 semester hours in the *major*, all of which must be at the upper-division level, as follows:
 1. 15 semester hours of required courses:
 - FRN 3023 Advanced Composition and Conversation
 - FRN 3413 French Literature and Culture, 1000-1700
 - FRN 3423 French Literature and Culture, 1700-Present
 - CSH 3313 Introduction to Literary Studies
 - LNG 3813 Introduction to Linguistics
 2. 15 additional semester hours are required in French.
- B. 18 semester hours of *support work*, as follows:
 1. CSH 1103 Literary Masterpieces of World Culture I
CSH 1113 Literary Masterpieces of World Culture II
 2. One course numbered 3333 in a foreign language discipline other than French.
 3. 9 semester hours of approved courses chosen with the consent of the undergraduate advisor.
- C. 30 semester hours of *electives*.

COURSE DESCRIPTIONS

FRENCH (FRN)

1013 Elementary French I

(2-2) 3 hours credit.

Fundamentals of French, aimed at offering the opportunity for developing abilities in understanding, speaking, reading, and writing.

1023 Elementary French II

(2-2) 3 hours credit. Prerequisite: FRN 1013 or the equivalent.

Fundamentals of French, aimed at offering the opportunity for developing abilities in understanding, speaking, reading, and writing. A continuation of FRN 1013.

2013 Intermediate French I

(2-2) 3 hours credit. Prerequisite: FRN 1023 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing French. Review of French grammar, and development of reading techniques. Additional exposure to French culture. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences.

2023 Intermediate French II

(2-2) 3 hours credit. Prerequisite: FRN 2013 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing French. Review of French grammar, and development of reading techniques. Additional exposure to French culture. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation of FRN 2013.

3013 Applied French Linguistics and Phonetics

(3-1) 3 hours credit. Prerequisite: LNG 3813.

Practical application of linguistic principles to the teaching of French. Attention given to problems involving the contrasting structures of French and English. Exercises in sound discrimination and phonetic transcription based on the articulatory description of standard French.

3023 Advanced Composition and Conversation

(3-0) 3 hours credit. Prerequisite: FRN 2023 or consent of instructor.

Selected grammar review. Theme writing and diagnosis of the grammatical problems of individual students. Conversation correlated with readings and reports, aimed at increasing oral fluency by vocabulary expansion and the active formation and use of grammatical sentences.

3113 Introduction to French Linguistics

(3-0) 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.

3333 French Literature in English Translation

(3-0) 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.

3343 French Folklore and Popular Culture

(3-0) 3 hours credit. Prerequisite: FRN 2013 or consent of instructor.

An examination of particular forms, trends, or issues in the folklore and popular culture of the French-speaking world.

3413 French Literature and Culture, 1000-1700

(3-0) 3 hours credit. Prerequisite: FRN 2013 or consent of instructor.

Selected masterpieces from the Middle Ages to 1700 are studied as examples of central moments in French culture and literary history. The course presents the shape of French civilization, emphasizing the major periods, styles, literary movements, generations, and the political, social and philosophical trends in each epoch.

3423 French Literature and Culture, 1700-Present

(3-0) 3 hours credit. Prerequisite: FRN 2013 or consent of instructor.

Selected masterpieces from 1700 to the present are studied as examples of central moments in French culture and literary movements, generations, the political, social and philosophical trends in each epoch.

3513 Medieval French Literature

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor.

Poetic genres and poetic languages. *The Song of Roland* and epic poetry. Chretien de Troyes and the "Roman Courtois." Origin and development of lyrical forms from Provençal poetry to Villon. *Romance of the Rose* and the love romance. *Aucassin and Nicolette* and narrative prose. Origins and development of the theater.

3523 French Renaissance and Baroque

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor.

Definition of terms. Examination of the Renaissance ideal. The thinkers: Bude, Lefevre d'Etaples, Rabelais, Montaigne. The poets: Marot, Ecole Lyonnaise, the Pleiade. The Religious Question. D'Aubigne and the poets of the Baroque. The theater.

3533 The Classical Moment — The Generation of 1660

(3-0) 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 salon life. Major texts of Moliere, Racine, La Fontaine, Bossuet, Pascal, La Bruyere, Fenelon, etc.

3543 The French Enlightenment

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor.

Literature and philosophy. The encyclopedists. The key figures and their major works: Montesquieu, Voltaire, Diderot, Rousseau.

3553 French Nineteenth Century: Romanticism, Realism, Naturalism

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. Definition of each literary and cultural movement. The history, intellectual positions, central themes, key figures. Analysis of the major representative works in all genres: Chateaubriand, Lamartine, Hugo, Balzac, Flaubert, Zola, etc.

3563 The Belle Epoque: 1885-1914

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. The *fin de siècle* aesthetic and Art Nouveau. Cosmopolitanism versus nationalism. The Dreyfus Affair. The role of Paris. The inter-relations of the arts. The divergence between Right Bank and Left Bank literature. The sense of the modern era: renewal and nostalgia. Writers: Huysmans, Barres, Gide, Peguy, Valery-Larbaud, Proust. Poets and dramatists: Verhaeren, Mallarmé, Claudel, Valéry, Segalen, St. John Perse, Apollinaire.

3573 The Francophonic World

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. Negritude in Africa, the Caribbean and Haiti. Bicultural issues in Quebec and Louisiana, the study of major literary-cultural movements, the major writers and the masterpieces. Senghor, Césaire, Damas, Ouologuem, Roumain, Saint-Denis-Garneau, Anne Hébert.

4413 French Literary Genres

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. Provides the opportunity for intensive study of the history, characteristics, and major achievements in a particular French literary genre: novel, short narrative, lyric, or drama. May be repeated for credit when topics vary.

4513 Contemporary French Culture and Literature from 1945-Present

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. From the existential novel of Camus to the New Novel of Butor and Robbe-Grillet, to the New Novel of Sollers, Wittig, etc. The prose poetry of Ponge, Char, St. John-Perse. The new poetic movements: *poésie concrète*, *poésie lettriste*. The theater of the Absurd and its aftermath (Ionesco, Genet, Beckett, Arrabal). The new critical wave from Barthes to Kristeva: *Communications*, *Tel Quel*, *Semiotica*.

4813 Masterpieces in French Literature

(3-0) 3 hours credit. Prerequisite: FRN 3413, or FRN 3423, or consent of instructor. Only one supreme masterpiece is analyzed, studied and discussed per semester. Emphasis is placed on the use of various contemporary critical methodologies to examine and interpret the text. Examples: *The Essais* of Montaigne, the *Roman de la Rose*, The Grail Cycle, Rabelais, *Les Tragiques* of d'Aubigné, the *Memoires* of Saint-Simon, *Les Fleurs du Mal* of Baudelaire, *A La Recherche Du Temps Perdu* of Proust. May be repeated for credit when topics vary.

4823 Great Themes in French Literature

(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. Examples: love, evil, utopias, the vision of society, the role of women, the spiritual quest, etc. 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.

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.

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 The Languages of The Mexican American

(3-0) 3 hours 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 semiology. Readings from: Saussure, Hjelmslev, Chomsky, Jakobson, Greimas, Benevise, Eco, and others.

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.

All candidates for the degree must complete:

- A. 30 semester hours in the *major*, all of which must be at the upper-division level, as follows:
 1. 15 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

CSH 3313 Introduction to Literary Studies

LNG 3813 Introduction to Linguistics

2. 15 additional semester hours are required in German, 6 of which must be at the 4000 level, exclusive of Independent Study.

B. 18 semester hours of *support work*, as follows:

1. CSH 1103 Literary Masterpieces of World Culture I
CSH 1113 Literary Masterpieces of World Culture II
2. One course numbered 3333 in a foreign language discipline other than German.
3. 9 semester hours of approved courses chosen with the consent of the undergraduate advisor.

C. 30 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. A continuation of GER 1013.

2013 Intermediate German I

(2-2) 3 hours credit. Prerequisite: GER 1023 or the equivalent.

The opportunity for continued skill development in comprehension, speaking, reading and writing German. Review of German grammar, and development of reading techniques. Additional exposure of Germanic culture. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences.

2023 Intermediate German II

(2-2) 3 hours credit. Prerequisite: GER 2013 or the equivalent.

The opportunity for continued skill development in comprehension, speaking, reading and writing German. Review of German grammar, and development of reading techniques. Additional exposure to Germanic culture. Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation of GER 2013.

3013 German Phonetics and Phonology

(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 sen-

tences. 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.

3053 Advanced Grammar and Stylistics

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

A study of selected syntactic characteristics of the language with special attention to grammatical categories, subordination and verb systems including verbal aspects.

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 Buchner 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 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. Trummerliteratur, Gruppe 47, Bitterfeld Weg, Gruppe 61, Wiener Gruppe, other groups and major figures.

4013 Literary Genres

(3-0) 3 hours credit. Prerequisite: GER 3413, or GER 3423, or consent of instructor. Offers the opportunity for an intensive study of a single genre or subgenre in German literature such as lyric, drama, novel, short narrative, essay, comedy, tragedy, allegory, satire, romance. 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. Offers the opportunity for intensive study of a particular German literary or intellectual figure, 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.

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 RUSSIAN²¹

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³²

All candidates for the degree must complete:

- A. 30 semester hours in the *major*, all of which must be at the upper-division level, as follows:
 1. 15 semester hours of required courses:
 - RUS 3023 Advanced Composition and Conversation
 - RUS 3613 Contemporary Russia
 - RUS 3623 Russia: Culture and Civilizations
 - CSH 3313 Introduction to Literary Studies
 - LNG 3813 Introduction to Linguistics
 2. 15 additional semester hours are required in Russian.
- B. 18 semester hours of *support work*, as follows:
 1. CSH 1103 Literary Masterpieces of World Culture I
CSH 1113 Literary Masterpieces of World Culture II
 2. One course numbered 3333 in a foreign language discipline other than Russian.
 3. 9 semester hours of approved courses chosen with the consent of the undergraduate advisor.
- C. 30 semester hours of *electives*.

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. A continuation of RUS 1013.

2013 Intermediate Russian I

(2-2) 3 hours credit. Prerequisite: RUS 1023 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing Russian. Review of Russian grammar, and development of reading techniques. Additional exposure to Russian culture. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences.

2023 Intermediate Russian II

(2-2) 3 hours credit. Prerequisite: RUS 2013 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing Russian. Review of Russian grammar, and development of reading techniques. Expansion of reading and writing capabilities. Additional exposure to Russian culture. Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education and the natural sciences. A continuation of RUS 2013.

³²The Bachelor of Arts Degree in Russian is not offered in 1980-82, although individual courses in Russian may be scheduled. Class schedules for specific terms should be consulted.

3013 Phonetics and Pronunciation

(3-1) 3 hours credit. Prerequisites: RUS 2023 and LNG 3813 or consent of instructor. Offers the opportunity for intensive patterned pronunciation drills and exercises in sound discrimination and transcription, based on detailed articulatory description of various dialects of Russian.

3023 Advanced Composition and Conversation

(3-0) 3 hours credit. Prerequisite: RUS 2023 or consent of instructor. Selected grammar review. Theme writing and diagnosis of the grammatical problems of individual students. Conversation correlated with readings and reports, aimed at increasing oral fluency by vocabulary expansion and the active formation and use of grammatical sentences.

3113 Introduction to Russian Linguistics

(3-0) 3 hours credit. Prerequisites: RUS 2023 and LNG 3813 or consent of instructor. Application to Russian 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 the relationship between some irregularities and historical change and to dialectal variation.

3323 Introductory Readings in Russian Literature

(3-0) 3 hours credit. Prerequisite: RUS 2023 or consent of instructor. An elementary sampling of a number of literary masterpieces through periods, genres and styles.

3333 Russian Literature in English Translation

(3-0) 3 hours credit. Major works of Russian literature: themes, genres, movements. May not be applied to a major in Russian.

3613 Contemporary Russia

(3-0) 3 hours credit. Prerequisite: RUS 2023 or consent of instructor. Problems and conflicts determining the cultural development of contemporary Russia. Ethnic, social, political, economic and cultural characteristics as seen mainly through the essay. Intellectual currents and the role of the intellectual leaders in forming the cultural expression of Russia.

3623 Russia: Culture and Civilizations

(3-0) 3 hours credit. Prerequisite: RUS 2023 or consent of instructor. The cultural life of the respective geographic regions and social strata of Russia as reflected in and interpreted by its literary production, especially the novel.

4323 The Russian Folktale and the Russian Ballad

(3-0) 3 hours credit. Prerequisite: RUS 3323. A study of two main literary forms in oral tradition. Their themes and structures. Their influence on non-traditional written literature. Survey of the critical theories, from Romantic philology to Modern Formalism, attempting an analysis of the folktale and the ballad.

4333 Nineteenth Century Russian Literature

(3-0) 3 hours credit. Prerequisite: RUS 3323. Periods, genres, styles and authors. Literature and social structure: bourgeois and anti-bourgeois undercurrents. Literary creation and social status in a caste society. Selected readings from Fet, Pushkin, Tolstoy, Dostoyevski, Chekhov, Belin, and Lermontov.

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 Russian

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 the 42 hours of General Education Requirements, is 120.³³

All candidates for the degree must complete:

- A. 33 semester hours in the *major*, all of which must be at the upper-division level, as follows:
 1. 24 semester hours of required courses:
 - CSH 3313 Introduction to Literary Studies
 - SPN 3013 Phonetics and Pronunciation
 - SPN 3023 Advanced Composition
 - SPN 3113 Introduction to Spanish Linguistics
 - SPN 3313 Introduction to Hispanic Literatures I
 - SPN 3323 Introduction to Hispanic Literatures II
 - SPN 3613 Spanish Culture and Civilization
 - SPN 3623 Spanish-American Culture and Civilization
 2. 9 additional semester hours of Spanish, 6 of which must be at the 4000 level.
- B. 21 semester hours of *support work*, as follows:
 1. CSH 1103 Literary Masterpieces of World Culture I
 - CSH 1113 Literary Masterpieces of World Culture II
 2. 3 semester hours in Linguistics (LNG)
 3. One course numbered 3333 in a foreign language discipline other than Spanish.
 4. 9 semester hours of approved courses chosen with the consent of the undergraduate advisor.
- C. 24 semester hours of *electives*.

COURSE DESCRIPTIONS

SPANISH (SPN)

1013 Elementary Spanish I

(2-2) 3 hours credit.

Fundamentals of Spanish, aimed at 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, aimed at offering the opportunity for developing abilities in understanding, speaking, reading, and writing. A continuation of SPN 1013.

2013 Intermediate Spanish I

(2-2) 3 hours credit. Prerequisite: SPN 1023 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing Spanish. Review of Spanish grammar and development of reading techniques. Additional exposure to Hispanic cultures. Increased vocabulary, oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education, and the natural sciences. Students receiving credit for SPN 2013 may not receive credit for SPN 2043, SPN 2053, or SPN 2063.

³³Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.

2023 Intermediate Spanish II

(2-2) 3 hours credit. Prerequisite: SPN 2013 or the equivalent.

Offers the opportunity for continued skill development in comprehension, speaking, reading and writing Spanish. Review of Spanish grammar and development of reading techniques. Additional exposure to Hispanic cultures. Increased vocabulary and oral practice and readings in areas such as the humanities and social sciences, health, business, communication, education, and the natural sciences. A continuation of SPN 2013.

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. Credit cannot be earned for SPN 2013 and 2043, 2053, or 2063.

2053 Spanish for the Business/Management Fields

(2-2) 3 hours credit. Prerequisite: SPN 1023 or consent of instructor.

Foreign language skills relevant to careers in business fields. Emphasis on reading skills and simple conversations on business topics. Exposure to terminology from contracts, financial statements, business law, marketing, banking, etc. Intended for students with some background in Spanish. Credit cannot be earned for SPN 2013 and 2043, 2053, or 2063.

2063 Spanish for the Criminal Justice Fields

(2-2) 3 hours credit. Prerequisite: SPN 1023 or consent of instructor.

Foreign language skills for careers in Criminal Justice. Emphasis on vocabulary building and developing conversational ability in situations germane to the Criminal Justice fields. Intended for students with some background in Spanish. Credit cannot be earned for SPN 2013 and 2043, 2053, or 2063.

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 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 towards 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. Prerequisites: SPN 2023, 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. Prerequisites: SPN 2023, 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.

3313 Introduction to Hispanic Literatures I

(3-0) 3 hours credit. Prerequisite: SPN 2023, or SPN 2223, or consent of instructor. The literature of Spain and Spanish America from 850 to 1700. Readings of selections and complete works. Practice in critical analysis through papers and examinations.

3323 Introduction to Hispanic Literatures II

(3-0) 3 hours credit. Prerequisites: SPN 2023, SPN 2223, or consent of instructor. The literature of Spain and Spanish America, from 1700 to the present. Readings of selections and complete works. Practice in critical analysis through papers and examinations.

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.

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 currents 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 currents 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 attention 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: SPN 3313. 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: SPN 3313.

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: SPN 3313.

The flourishing of Spanish prose, poetry, and drama between 1450 to 1700. Readings from authors such as Fernando de Rojas, Garcilaso de la Vega, Fray Luis de León, San Juan de la Cruz, Góngora, Quevedo, Lope de Vega, Tirso de Molina, Calderón, and Cervantes.

4343 Spanish Literature of the Nineteenth Century

(3-0) 3 hours credit. Prerequisite: SPN 3323.

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: SPN 3323.

Spanish literature from the generation of 1898 to the Civil War. Readings from authors such as Unamuno, Azorín, Antonio and Manuel Machado, Benavente, Baroja, Valle-Inclán, Ortega y Gasset, and García Lorca.

4363 Spanish Literature of the Post Civil War Period

(3-0) 3 hours credit. Prerequisite: SPN 3323.

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: SPN 3313.

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 Inés de la Cruz.**4433 Spanish-American Literature of the 19th Century**

(3-0) 3 hours credit. Prerequisite: SPN 3323.

Its roots in eighteenth century ideology and life. European influences and Spanish-American responses in poetry, including "poesia gauchesca," drama, novel, and essay.

4443 Spanish-American Modernism

(3-0) 3 hours credit. Prerequisite: SPN 3323.

The modernist movement as begun by Martí and Darío, 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: SPN 3323.

Literary movements, authors, and works. Focus on "vanguardista" poetry and early twentieth century novel, short story, and essay.

4463 Contemporary Spanish-American Poetry and Drama

(3-0) 3 hours credit. Prerequisite: SPN 3323.

Literary themes and structures, poets (Neruda, Borges, Paz) and dramatists (Usigli, Gorotiza, Heiremans).

4473 Contemporary Spanish-American Prose

(3-0) 3 hours credit. Prerequisite: SPN 3323.

The novel, short story, and essay: Asturias, Carpentier, Cortázar, Fuentes, García Márquez, Paz, Reyes, Rulfo, Sábato, Vargas-Llosa, and Yáñez.

4483 National Literatures of Spanish America

(3-0) 3 hours credit. Prerequisite: SPN 3323.

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: SPN 3323, 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.

rience 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.

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.

1203 Introduction to Hispanic Cultures

(3-0) 3 hours credit.

An overview of the cultures of Spain, Spanish America, and Hispanic groups in the United States as revealed through their literatures and other forms of expression. Exploration of the unifying and diversifying elements in Hispanic Civilization from its beginnings. All readings from English language or translated materials.

1233 Contemporary Hispanic Cultures

(3-0) 3 hours credit.

Hispanic culture as revealed in literature and the arts from the late nineteenth century to the present. All readings from English language or translated materials.

2113 The Foreign Film

(3-0) 3 hours credit.

An introduction to film as art and as cultural expression. Emphasis on cinematic techniques, national traditions, genres, and on the distinctive features of film as a humanistic medium. May be repeated for credit when topics vary.

3013 American Seen Through European Eyes

(3-0) 3 hours credit. Prerequisite: Upper-division standing.

Credit may not be applied to a major in foreign languages when taken in English. A study of European impressions of North America (Canada, United States, particularly Louisiana, Texas and California) and South America from the early travels and exploration to the present. An examination of the central themes and concerns of selected European authors.

3313 Introduction to Literary Studies

(3-0) 3 hours credit. Prerequisite: ENG 1023 or equivalent.

Offers the opportunity for development of an awareness of literature and the skills with which to approach and understand it. Examination of the particularities of individual

national traditions and of the interrelationship of all literary traditions. Emphasis on the nature of genre, period, and style. Formerly CSH 4013. Credit cannot be earned for both 3313 and 4013.

3343 Masterpieces of Oral Tradition

(3-0) 3 hours credit.

An introduction to the literary masterpieces of the oral traditions in Africa, North and South American Indian literatures. Topics may focus on any one of the geographic areas.

3353 Opera as Drama

(3-0) 3 hours credit. Prerequisite: Upper-division standing.

An examination of the relationships between theater and music as it is developed in different countries. A study of, and comparison among, varying national traditions in both serious and comic opera.

4513 Iconography in Foreign Literatures and Arts

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

A study of the relationships between French, German, Spanish and Russian literatures and arts through the reading of selected texts and the study of analogous

4951-3 Special Studies in Comparative Studies in the Humanities

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. May be used to fulfill language requirement.

COURSE DESCRIPTIONS FOREIGN LANGUAGE (FL)

1013 Elementary Foreign Language I

(2-2) 3 hours credit.

Offers the opportunity for instruction and practice in speaking, reading, writing, and understanding a foreign language in which The University does not have a degree program. May be repeated for credit when language varies.

1023 Elementary Foreign Language II

(2-2) 3 hours credit. Prerequisite: FL 1013 in the same foreign language, or the equivalent.

A continuation of FL 1013. Further instruction in speaking, reading, writing, and understanding a foreign language in which The University does not have a degree program. May be repeated for credit when language varies.

2013 Intermediate Foreign Language

(2-2) 3 hours credit. Prerequisite: FL 1023 in the same foreign language, or the equivalent.

A continuation of FL 1023. Further development of skills in speaking, reading, writing, and understanding a foreign language in which The University does not have a degree program. May be repeated for credit when language varies.

DIVISION OF SOCIAL SCIENCES

The Division of Social Sciences offers bachelor of arts degrees in anthropology, geography, history, political science, psychology, sociology, and American studies. The latter degree is offered jointly with the Division of English, Classics, and Philosophy.

At least 36 credit hours of course work are required to fulfill a social science major. The 36-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 science majors other than those in American studies require the student to complete 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.

At some point in the student's junior or senior year, one of the several social science (SSC) courses is completed. These interdisciplinary courses typically involve intensive examination of some topic from the perspectives offered by two or more disciplines within the social sciences.

INTERNSHIP STUDY

Majors in the Division of Social 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 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 Sciences designates certain of its outstanding students as Honors students and provides the opportunity for advanced study under close faculty supervision.

Admission to the Divisional Honors program is based on performance on a comprehensive examination in the major discipline and recommendation by the faculty of the student's major discipline. The honors examination, which must be taken prior to the student's registration for the last two semesters in residence, is open only to students with a minimum grade-point average of 3.0 overall at UTSA and a minimum grade-point average of 3.5 in their major at UTSA. The minimum grade-point averages must be maintained for students to receive the approval of the Division Honors Committee and the discipline faculty. Students 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

The Bachelor of Arts Degree in American Studies is an interdisciplinary degree offered jointly by the Divisions of Social Sciences and English, Classics, and Philosophy.

Students in the American Studies program will use materials and methodologies from several disciplines to explore the interrelationships among the diverse elements of American culture. With prior approval students choose courses from those offered by many Divisions in The University, as well as specialized American Studies courses; in this curriculum, students work out an area of interest (e.g., Minorities in the Southwest, Modernism in America, Comparative Culture, etc.) with an AMS advisor and submit it to the American Studies Committee of the College for approval.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁴

All candidates for the degree must complete:

- A. 39 semester hours in courses approved by the American Studies Committee, 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 Main Currents in Pre-Industrial American Culture
 - c. AMS 3023 Main Currents in Industrial American Culture
 - d. 9 semester hours of AMS 4911-3 Special Studies in American Culture
 - 2. 21 semester hours of elective courses offered in other disciplines approved by the American Studies Committee.
- B. 39 semester hours of *electives*.

COURSE DESCRIPTIONS

AMERICAN STUDIES (AMS)

2013 Basic Issues in American Culture

(3-0) 3 hours credit. Prerequisites: Minimum of two of the following: ENG 1013, 1023, 1033; HIS 1013, 1023, 1033.

Opportunity to study the concept of American culture. Alternative definitions of culture will be examined, ranging from aesthetic uses (culture as the refinement of sensibilities through art, music, and literature) to the more inclusive usages of the term among social scientists.

3013 Main Currents in Pre-Industrial American Culture

(3-0) 3 hours credit. Prerequisite: AMS 2013 or consent of instructor.

Examines the major influences which shaped American culture in the pre-industrial era. Topics will include the impact of colonialism, the enlightenment, the frontier and other factors upon the development of a distinctive society.

3023 Main Currents in Industrial American Culture

(3-0) 3 hours credit. Prerequisite: AMS 2013 or consent of instructor.

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.

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.

³⁴Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

4933-6 Internship in American Studies

3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator.

Supervised experience relevant to American Studies within selected community organizations. A maximum of 6 credit hours may be earned through Internship in American Studies.

4951-3 Special Studies in American Culture

1-3 hours credit. Consent of instructor.

Topics vary, and may include: Popular Culture; Science and Technology in American Life; Ethnic Contributions to American Culture; Religion and American Culture; Myth, Symbols, and Ideology in American Culture; Western Americana. Two or more topics may be taken concurrently. 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, except for American Studies majors who will be required to take this course for a total of nine semester hours.

BACHELOR OF ARTS DEGREE IN ANTHROPOLOGY

Anthropology is the study of man's cultural behavior — that body of customs and ideas which continues from generation to generation, serves the same function that instinctual patterns do in lower animals, and varies markedly from one human population to another. Among the subfields of anthropology are archaeology, the reconstruction and explanation of man's cultural past; cultural anthropology, the study of cultural and linguistic variation among contemporary peoples; and physical anthropology, the study of fossil man and the physiological bases of cultural behavior.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁵

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 Anthropological Inquiry: Archaeology and Physical Anthropology *or*

ANT 2023 Anthropological Inquiry: Cultural Anthropology and Linguistics

c. ANT 4973 Anthropology Senior Seminar

d. 3 semester hours chosen from social science (SSC) courses.

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 chosen in consultation with the student's advisor. Some or all of these hours *may* be applied to the major from:

HIS 3113 The American Indian

LNG 3833 Sociology of Language

STA 3013 Multivariate Analysis for the Life and Social Sciences

PSY 3053 Cross-Cultural Psychology

PSY 3633 Aggression

³⁵Thirty-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.

- 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

- 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

ANTHROPOLOGY (ANT)

1013 Man in Adaptation

(3-0) 3 hours credit.

The study of man's culture, past and present; its origins, development, and contemporary change; and the explorations of man's physical and cultural differences, using the paradigm of adaptation.

2013 Anthropological Inquiry: 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 Anthropological Inquiry: 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.

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 retrenchment under the imposition of Anglo-American dominance, and the recent emergence of new forms of cultural expression within tribal and urban areas.

3163 Anthropological Approaches to Medicine and Nursing

(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.

The implications of selected core concepts for medicine, nursing, and health care research. For students intending to enter the health professions.

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 social type. Particular attention is given to the structure of stratified plural societies and to the role of power in modernization.

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 Archaeology of Mesoamerica

(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; current status.

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 Early Man

(3-0) 3 hours credit. Prerequisite: ANT 1013 recommended.

The fossil record of sapien emergence and the development of races.

3513 Human Populations

(3-0) 3 hours credit. Prerequisite: ANT 2013.

The physical anthropology of human populations including human genetics, functional anatomy, evolution, demography, phenotypic diversity applied to both prehistoric and contemporary populations.

3613 Cross-Cultural Studies of Socialization

(3-0) 3 hours credit. Prerequisite: ANT 1013.

Examination and evaluation of anthropological and psychological comparative studies of child-rearing and enculturation in selected cultures.

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 Origins of Civilization

(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.

4163 The City as Artifact

(3-0) 3 hours credit.

The physical and material aspects of the city are examined as responses to, and influences upon, individual and group behavior in urban centers. Attention given to deliberate attempts to shape the urban environment to effect change in urban society.

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.

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 Anthropology

3 or 6 hours credit. Prerequisite: Consent of internship coordinator.

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 GEOGRAPHY

At the core of geography are relationships over space. Some relationships involve physical-human interactions (e.g., the carrying capacity of the environment for different cultural groups, or the environmental consequences of pollution by man). Some relationships involve human-human interactions (e.g., between urban form and urban function, or between a group's socioeconomic status and its place-perceptions). The primary variables for geography are spatial: location, scale, pattern, orientation, interconnection. These variables may be examined in detail in the context of a particular region (regional geography) or in less detail across a number of regions (systematic geography). The major examines the field of geography and its implications for the use of physical and social space.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁶

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 from:
 - GRG 2613 Physical Geography
 - GRG 2623 Human Geography
 - GRG 2633 Economic Geography
 - b. 6 semester hours from:
 - GRG 3113 Geography of America North of Mexico
 - GRG 3123 Geography of Latin America
 - GRG 3133 Geography of Western Europe and the Mediterranean
 - GRG 3153 Geography of Texas
 2. 3 semester hours chosen from social science (SSC) courses.
 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:
 - ANT 4163 The City as Artifact
 - GEO 4063 Principles of Environmental Geology
 - ECO 3403 Economic Aspects of Urbanization

³⁶Thirty-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.

ECO 4303	Economic Problems of Emerging Nations
ENV 3023	Man and His Natural Resources
ENV 3523	The Contemporary City
HIS 4173	History and Evolution of the City
POL 3423	Social Conflict in the Third World
PSY 3123	Attitudes
PSY 4223	Environmental Psychology
SOC 3073	Migration and Adjustment
SOC 3173	Economy and Society

- 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 man's environment, the distribution of physical and cultural variations, and the nature of the interaction between features of the environment and social/economic structures.

2613 Physical Geography

(3-0) 3 hours credit.

Study of the earth's major landforms and climatic patterns and the processes giving rise to these patterns.

2623 Human Geography

(3-0) 3 hours credit.

Cross-cultural analysis of environmental behavior and environmental cognition, of the system of resource use in which these processes are embedded, and of their relationship to cultural change and economic growth.

2633 Economic Geography

(3-0) 3 hours credit.

A spatial analysis of world patterns of economic activity; appraisal of resources, production, circulation, and consumption; principles, models, and planning of economic behavior.

3113 Geography of America North of Mexico

(3-0) 3 hours credit.

Selected geographic aspects of the major regions of the United States and Canada.

3123 Geography of Latin America

(3-0) 3 hours credit.

Selected geographic aspects of Mexico, Central America, the West Indies, and South America.

3133 Geography of Western Europe and the Mediterranean

(3-0) 3 hours credit.

Geographic aspects of the cultural, economic and political development of the people of Western Europe and the Mediterranean.

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.

3323 Spatial Analysis

(3-0) 2 hours credit. Prerequisite: Consent of instructor.

Application of mathematical and statistical analysis to spatial data. Topics may include

162 / GEOGRAPHY — BACHELOR OF ARTS DEGREE IN HISTORY

geographic sampling, spatial pattern analysis, and techniques of areal association and classification.

3513 Urban Geography

(3-0) 3 hours credit. Prerequisite: GRG 1013 or consent of instructor.

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.

3613 Conservation of Resources

(3-0) 3 hours credit. Prerequisite: GRG 1013 or consent of instructor.

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. Prerequisite: GRG 1013 or consent of instructor.

Study of the distribution, growth, movement, and adaptation of human populations over space.

3633 Geography of Development

(3-0) 3 hours credit. Prerequisite: GRG 1013 or consent of instructor.

Analysis of differential rates of economic growth between and within countries and regions.

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 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 HISTORY

History is the study of the past of human society, as that past is revealed mainly through the analysis of written and oral records. The foundation of historical study is a set of methods for evaluating and interpreting historical sources and a set of attitudes toward the past, whereby non-contemporary societies are regarded as objects of investigation in themselves, as products of prior history, and as the bases from which subsequent change developed. The vastness of the discipline precludes a single standard internal division of the subject; the branches of history may be categorized by geographical region (e.g., American, European), by era (e.g., medieval, modern), and by the type of human activity upon which the historian focuses (e.g., political, intellectual).

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁷

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. 27 semester hours of required courses are:
 - a. 6 semester hours from courses numbered HIS 2503-2693 covering different continental areas.
 - b. 18 additional semester hours of history electives, chosen in consultation with the student's advisor, 15 hours must be at the upper-division level. A maximum of 6 semester hours *may* be applied to the major from:
 - ANT 3673 Origins of Civilization
 - ECO 3163 Development of Economic Thought
 - ECO 3183 Economic Development of the United States
 - ECO 3303 Theories of Economic Progress
 - POL 3133 Political Philosophy: Ancient and Medieval
 - POL 3143 Political Philosophy: Modern
 - POL 3323 Constitutional Law
 - PSY 4003 History of Psychology
 - SOC 3173 Economy and Society
 - SOC 3363 The Sociology of Knowledge
 - SSC 3143 Women in American Life
 - SSC 3533 Inter-American Relations
 - c. HIS 4973 Seminar in History
 2. 3 semester hours chosen from social science (SSC) courses.
- B. 6 semester hours of courses outside the major, chosen with the consent of the advisor.
- C. 42 semester hours of electives.

COURSE DESCRIPTIONS

HISTORY (HIS)

1013 United States History 1607-1789

(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

³⁷Thirty-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.

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.

2033 Economic Development and Social Change in the United States Since 1850

(3-0) 3 hours credit.

American industrialization and the development of modern American society. Special attention is paid to the economic background of industrialization, attendant social problems, immigration, race relations, and the emergence of a mass-consumption economy. 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.

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, underdevelopment, international relations, and political ideologies. Formerly HIS 2543. Credit cannot be earned for both 2533 and 2543.

2563 The Middle East Since 622 A.D.

(3-0) 3 hours credit.

An introduction to Islamic civilization since the time of Mohammed. This course will emphasize social values, cultural achievements, and enduring sources of conflict such as forms of political organization, modernization, and changing varieties of empire.

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 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 Borderlands Since 1821

(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. Special attention is given to the area as a meeting place of various European, American and Asian ethnic groups and to their cultural institutions and traditions.

3083 History of the American West

(3-0) 3 hours credit.

An examination of the American westward movement since 1776. Topics include patterns of migration and settlement and the relationship of the West to the rest of the nation. Special attention is given to settlement of states outside the Borderlands in the nineteenth century and the development of the entire West in the twentieth century.

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.

3103 History of Labor in the United States

(3-0) 3 hours credit. Prerequisite: HIS 2033 or consent of instructor.

An examination of factors antecedent to the rise of organized labor, the early unionizing efforts and their results, the legalization of collective bargaining, institutionalization of the union movement, and the rise of new labor interest groups.

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 in 1836, emphasizing the Spanish and Mexican backgrounds of Texas and the changes which preceded Texas' independence. Applies to the legislative requirement in Texas history.

3133 History of Minorities in the Southwest

(3-0) 3 hours credit.

An interpretation of the development of ethnic enclaves in the Southwest. Special attention to ethnic institutions and traditions as well as to inter-ethnic relations.

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 World War I 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 a southern identity, slavery, Civil War and Reconstruction, Jim Crowism, the Civil Rights Movement, with emphasis on the period since 1815.

3203 Britain Since 1660

(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.

3223 Russia Since 1682

(3-0) 3 hours credit.

The development of Russia since the accession of Peter the Great, including the Russian Revolution and the establishment of the Soviet state.

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.

3243 History of Spain

(3-0) 3 hours credit.

A survey of Iberian history from the evolution of the northern kingdoms to the twentieth century, emphasizing the growth and development of Castile and Aragon, Hapsburg imperialism, the Bourbon reformers, and the modern political alignments that culminated in the Spanish Civil War.

3253 The Economic and Social History of Europe Since 1760

(3-0) 3 hours credit.

The technological and social origins of industrialization, its development and spread in the nineteenth century, and its effects on society and culture. Demographic change and the family. "Post-industrial" society.

3263 Seventeenth and Eighteenth Century Europe

(3-0) 3 hours credit.

A survey of European history emphasizing France and the impact of the Enlightenment and the French Revolution in shaping modern political ideology, social values and culture.

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.

3303 History of Mexico

(3-0) 3 hours credit.

The development of the Mexican nation and culture from the Aztecs to the present.

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.

3503 The Expansion of Europe, 1415-1800

(3-0) 3 hours credit.

A survey of European exploration, cultural and economic expansion, colonization, and imperialism.

3513 The European Renaissance and Reformation

(3-0) 3 hours credit.

Exploration of the life and thought of a dynamic period in European history when the foundations of the modern world were established in religion, politics, economy, art, science, and society. Origins of the Reformation and its consequences for European life and values.

3523 European Cultural History

(3-0) 3 hours credit. Prerequisite: ENG 1033.

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.

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.

4173 History and Evolution of the City

(3-0) 3 hours credit.

An examination of the origins of the city, the development and variation of the urban settlement in response to the agricultural, commercial and industrial revolutions, and the city viewed cross-culturally to illustrate its common and diverse functions.

4193 Colonialism: A Comparative Approach

(3-0) 3 hours credit.

The colonial experiences of several different areas of the world, analyzed and compared against the historical background of the Third World.

4203 History of Science

(3-0) 3 hours credit.

The emergence of science among alternative explanatory systems from its roots in classical times to the present. Science as an intellectual activity, a social product and a force for change. Parallels and divergences in the development of social and physical sciences.

4303 History of Urban Crime in America

(3-0) 3 hours credit.

This course explores the changing nature of the criminal underworld as it has responded to broad socioeconomic processes in American urban society since 1800. Topics include a consideration of street crime, juvenile delinquency, and professional thieves; an examination of changing perceptions of narcotics use; and an extensive analysis of the origins and development of organized crime.

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 History

3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator.

Supervised experience relevant to history within selected community organizations. A maximum of 6 credit hours may be earned through Internship in History.

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 the 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 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

Political Science is the study of public decisions, the principles and processes by which, and the structures through which, they are made. It is concerned with the conflict among different social values and interests as they influence and are influenced by the behavior of governments and politicians. Traditionally, political science has been associated with the study of history, law, and philosophy; the contemporary discipline is more closely allied with sociology and economics. These influences are reflected in the diversity of approaches and methods used in the field. Among the major subdivisions of political science are American government and politics, comparative politics, international politics, public law, public administration, and political philosophy.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁸

³⁸Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

Students seeking teacher certifications 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. 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, or designated sections of POL 4951-3, or, with approval of the student's advisor, POL 4933, Internship in Political Science, or 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
HIS	4193	Colonialism: A Comparative Approach
PSY	3353	Political Socialization
SOC	3103	Corporate Structures
SOC	3163	The Mass Media, Government, and Public Opinion
SOC	4103	Survey Research Methods
SSC	3533	Inter-American Relations
SSC	4353	Leadership and Elites
SSC	3103	Major Theories of the Social Sciences

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.

PUBLIC ADMINISTRATION

Students electing an emphasis in public administration or policy planning in local, regional, state, or national government, take a particular sequence of courses within the political science major. While meeting the above requirements, the following courses are taken:

POL 2513 Public Administration and Public Policy

One of the following:

POL 3613 Public Budgeting and Taxation

POL 3703 Personnel Administration in the Public Sector

One of the following:

POL 3603 Public Policy Analysis

POL 3723 Ethics in Government

POL 4323 Administrative Law

POL 4933 Internship in Political Science

Students pursuing the Public Administration sequence register with the chairperson of the Public Administration Committee, in the Division of Social Sciences.

COURSE DESCRIPTIONS

POLITICAL SCIENCE

(POL)

1023 The Politics of the American Economy

(3-0) 3 hours credit.

The Constitution, the courts and government economic intervention. The new industrial state. Corporations, unions, and government. Consumer politics. Fiscal and monetary policy. The budget. Applies to the legislative requirement in United States government. 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.

1073 The Origins of the American Constitutional System

(3-0) 3 hours credit.

The political theory of the Declaration of Independence and the Constitution. The Constitutional Convention. The debate over ratification. The economic theory of the Constitution. Applies to the legislative requirement in United States government. Formerly POL 2033. Credit cannot be earned for both 1073 and 2033.

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 Institucional (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 both 1043 and 1133.

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 both 1143 and 2043.

1153 Federalism in the United States and Mexico

(3-0) 3 hours credit.

A comparative course on federal-state relations. Special emphasis is placed upon Texas and its relationship to the American national government, as compared to the state-center relationships in Mexico. Both constitutional stipulations and contemporary practice are considered. Applies to the legislative requirement in Texas government. Formerly POL 2053. Credit cannot be earned for both 1153 and 2053.

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.

An examination of the Bill of Rights and its contemporary application in the United States. The theory and history of civil liberties in America. Freedom of expression; privacy; religious freedom; legal due process; etc. Applies to the legislative requirement in United States government.

2503 Introduction to Political Theory

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of the instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of the instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of the instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

A comparative examination of the diverse forms, goals, styles, and practices of government in Western, Communist, and developing societies. Several major polities will be studied in detail.

3103 Political Ideology

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

An examination of ideology as a social phenomenon affecting political behavior, and of the specific doctrines of liberalism, socialism, conservatism, fascism, and Communism.

3113 American Political Theory

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

The major works of political philosophy from the Renaissance to the nineteenth century. Writers examined may include Hobbes, Locke, Rousseau, Hebel, Marx, Mill.

3153 Political Philosophy: Contemporary

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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 course decisions.

3233 Political Campaigns and Elections

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

A study of the ways in which public officials are recruited and elected in the United States and other democracies. Campaign strategy and tactics; nominations and primaries; the legal framework of elections; the problem of constituency; voting studies; campaign finance.

3243 American Political Culture

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

The enduring patterns of American political behavior examined in light of historical and contemporary politics. The sources of these patterns and the significance of distinct political subcultures.

3293 Ethnic Politics in the Southwest

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

The role of Mexican-American, Indian, and Black minorities in the politics of the Southwest; the responsiveness of existing political structures to ethnic problems; ethnic political organizations and influence.

3303 Executive-Legislative Relations in the United States

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1133 to POL 1173 or consent of instructor.

The constitutional framework and historical development of presidential and congressional powers. Legislation. Foreign policy and war-making power. Executive privilege. Impoundment. Impeachment. Applies to the legislative requirement in United States government.

3313 The American Federal System

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 1093, or consent of instructor.

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. Special emphasis on Texas. Applies to the legislative requirement in Texas government.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

The American political party system is analyzed and compared with those of Great Britain and other democracies as well as within single-party systems in the Communist states and the Third World.

3373 The Legislative Process

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

A comparative examination of legislatures in the United States and other industrial societies, their functions, structures, and future prospects.

3383 Comparative Communist Politics

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

The interplay of politics with the changing social and economic environment in the advanced industrial societies of Europe. Western and Eastern Europe will be treated comparatively. The Common Market and selected individual countries will be examined.

3413 The Politics of Urban Development

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

A comparative examination of urban governments and politics, and of their capacity to respond to urban issues and problems. Topics examined may include political participation; the politics of finance and intergovernmental relations; urban growth.

3423 Social Conflict in the Third World

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

A consideration of conflict situations which may arise in a developing society including conflicts between traditional and modern structures, the development of class conflicts, and the problems of minority populations.

3433 Leadership and Modernization in the Third World

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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.

3503 American Foreign Policy Since World War II

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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.

3523 Force in International Politics

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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.

3603 Public Policy Analysis

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

An examination of the process and politics of public budgeting and taxation, and of the bureaucratic behavior accompanying it.

3703 Personnel Administration in the Public Sector

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor. POL 2513 recommended.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor. POL 2513 recommended.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

An investigation of the philosophical, legal, and practical problems of establishing and maintaining ethical standards in government. The theory and practice of public morality in administration, public policy-making and elective politics will be examined.

4113 Models of Democracy

(3-0) 3 hours credit. Prerequisite: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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: 3 credit hours from any course numbered from POL 1013 to POL 2083 or consent of instructor.

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.

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 values 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.

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 PSYCHOLOGY

Psychology is the study of animal, and particularly human behavior and of cognitive processes and thought. Modern psychology includes a wide variety of subspecialties such as perception, memory, learning, physiological processes, thinking, motivation, emotion, social behavior, personality, child development, and psychopathology. The psychology student has the opportunity for exposure to the varying theoretical and methodological approaches used by psychologists and learns the facts and concepts of several different approaches.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.³⁹

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. PSY 2013 Fundamentals of Psychology
 - b. 3 semester hours from courses numbered PSY 2503-2533
 - c. 3 semester hours from courses numbered PSY 2543-2593
 - d. PSY 3003 Laboratory Methods and Experimental Design in Psychological Research
 - e. 3 semester hours chosen from Social Science (SSC courses)
 2. 15 semester hours of psychology electives, chosen in consultation with the student's advisor.

A maximum of nine semester hours *may* be applied to the major from:

ANT	3613	Cross-Cultural Studies of Socialization
ANT	3623	Primate Behavior
BIO	3213	Animal Ecology
BIO	3083	Biosocial Genetics
COM	3083	Language and Communication Theory
LNG	3843	Psychology of Language
STA	3013	Multivariate Analysis for the Life and Social Sciences
MGT	3253	Interpersonal Communication
PHI	3033	Philosophy of Science
SOC	3053	Deviance and Conformity
SOC	3253	Theories of the Individual and Society
SOC	3293	Sex Roles
SSC	3003	Social Research Methods
SSC	4373	Program Evaluation

- 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.

³⁹Thirty-nine of the total semester hours required for the degree must be at the upper-division level.

COURSE DESCRIPTIONS

PSYCHOLOGY (PSY)

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 neurotic personality, neurotic symptom formation and psychosomatic disorders. Further topics include the effects of brain injuries and the major psychoses.

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.

Alternative theories of the acquisition, elimination and maintenance of behavior and the effects of previous experience on responses to new situations. Varieties of practical applications of laboratory findings and variables influencing applicability are considered.

2553 Perception

(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.

Consideration of the various means by which patterns of light and sound are transformed into perception of an environment, with emphasis on vision. Topics include psychophysics, color vision, elementary sensory physiology, perceptual development, illusions, pattern recognition, information processing, and the role of social and cultural factors in perception.

2563 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.

2573 Thinking and Creativity

(3-0) 3 hours credit. Prerequisite: PSY 2013 or consent of instructor.

The processes of reasoning, concept formation, problem-solving, and creativity. The role of logic in thinking, heuristic and algorithmic methods of problem-solving, and techniques influencing creativity.

3003 Laboratory Methods and Experimental Designs in Psychological Research

(1-4) 3 hours credit. Prerequisite: STA 1053 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

experience in data collection and analysis, and to provide exposure to basic equipment and procedures used in the sub-areas of the discipline.

3013 Psychological Measurement

(3-0) 3 hours credit. Prerequisite: PSY 2013 and STA 1053 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 dyads, triads, and small groups. Group dynamics, balance theory, non-verbal communication and small group research design are given particular attention.

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. Prerequisite: One course in Psychology or Anthropology 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: Two Psychology courses (One from course numbered PSY 2543-2593) or consent of instructor. Consideration of the cognitive processes underlying the acquisition and internal representation of stimulus information and the means by which such information is utilized and modified. Emphasis on the ways in which the major theoretical approaches differ in their analyses of such phenomena as awareness, imagery, problem-solving, and intrinsic motivation.

3113 Motivation

(2-2) 3 hours credit. Prerequisites: Two Psychology courses 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 volitional behavior.

3123 Attitudes

(3-0) 3 hours credit. Prerequisite: PSY 2533 or consent of instructor. Consistency and learning models of attitude acquisition and change. Theories and research on the relationships between attitudes and behavior with attention to various techniques of attitude measurement.

3143 Psychology of Subjective Experience

(3-0) 3 hours credit. Prerequisite: PSY 3103 or consent of instructor. Philosophical and methodological problems of analyzing consciousness with special consideration of the determinants of normal and altered states of awareness. Topics include the function of consciousness, the mind-body problem, the nature of affective experience, imagery, and the perception of time.

3203 Industrial Psychology

(3-0) 3 hours credit. Prerequisites: Two Psychology courses or MGT 3023 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.

3283 Socialization

(3-0) 3 hours credit. Prerequisite: PSY 2503 or PSY 2533 or consent of instructor. The study of how people learn to behave appropriately and to internalize the values of groups. Particular emphasis is given to moral development and to the relationships between children and parents and the outcomes of these relationships for socialization.

3353 Political Socialization

(3-0) 3 hours credit.

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. Both American and comparative studies are examined.

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 withdrawal reactions. 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.

Traditional and modern approaches to the social, institutional, neurological, and physical bases of aging.

3533 Behavior Change and Psychotherapy

(3-0) 3 hours credit. Prerequisite: PSY 2513 or consent of instructor.

Classic and modern theories and related research on the process of behavior and value change, particularly in the contexts of rehabilitation and psychotherapy. Comparison of various models and their empirical support, the definition of progress and cure, and the linkage of attitude and value change to behavior change.

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 on aggression, both human and non-human.

4003 History of Psychology

(3-0) 3 hours credit.

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 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.

4123 Personality Development

(3-0) 3 hours credit. Prerequisite: PSY 2503 or consent of instructor.

The development of stable individual differences and personality structures throughout the life span.

4143 Memory

(3-0) 3 hours credit. Prerequisites: PSY 2553, PSY 3103, or consent of instructor.

Models for the coding, storage, and retrieval of information in memory. Organization and structure of short-term memory, long-term memory, semantic memory and the role of verbalization and images in memory.

4153 Attention

(3-0) 3 hours credit. Prerequisites: PSY 2553, PSY 3103, or consent of instructor.

Mechanisms for selectively attending to only part of the perceptual information available and for simultaneous attention to several perceptual sources. Special consideration of the role of stimulus characteristics, perceptual structures, cognitive skills, and motivational factors.

4203 Prosocial Behavior

(3-0) 3 hours credit. Prerequisite: PSY 2533, or consent of instructor; PSY 3003 recommended.

180 / PSYCHOLOGY — BACHELOR OF ARTS DEGREE IN SOCIOLOGY

Cooperation, altruism, interpersonal attraction, and the development of relationships, including such underlying mechanisms as empathy, self-presentation and self-disclosure, norms, and trust.

4213 Person Perception

(3-0) 3 hours credit. Prerequisite: PSY 2533 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.

4233 Freudian Psychology

(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.

4243 Individual Differences in Information Processing

(3-0) 3 hours credit. Prerequisites: PSY 2523 and PSY 3103 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.

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 Psychology

3 or 6 hours credit. Prerequisite: Consent of Internship Coordinator.

Supervised experience relevant to psychology within selected community organizations. A maximum of 6 credit hours may be earned through Internship in Psychology.

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 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

Sociology is the study of human social relationships and the products of these relationships. Sociologists investigate the organization and structure of societies, communities, and smaller groups and the manner in which these social units function, change, and affect individuals and groups. Specialized areas of sociological research include social psychology, child-rearing, race relations, criminology, deviance, aging, and urban and medical sociology.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 120.⁴⁰

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

b. 3 semester hours of theory courses from:

SOC 3083 Theories of Social Change

SOC 3253 Theories of the Individual and Society

SOC 4143 Classical Sociological Theory

SOC 4163 Contemporary Sociological Theory

SSC 3103 Major Theories of the Social Sciences

c. 3 semester hours of methods courses from:

SOC 4103 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 (SSC) courses.

2. 15 additional semester hours of sociology electives, chosen in consultation with the student's advisor. A maximum of 6 of these hours *may* be applied to the major from:

AMS 2013 Basic Issues in American Culture

ANT 3223 Cultural Ecology

ECO 4293 Economics of Discrimination and Poverty

EDU 3003 Educational Sociology

HIS 3033 American Reform

STA 3013 Multivariate Analysis for the Life and Social Sciences

MGT 3023 Organizational Behavior

LNG 3833 Sociology of Language

PSY 2533 Social Psychology

PSY 3023 Social Psychology of Small Groups

PSY 3283 Socialization

SSC 3003 Social Research Methods

SSC 3103 Major Theories of the Social Sciences

SSC 3333 Utopias

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*

⁴⁰Thirty-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.

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.

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 recommended.

Development of modern world cities, the ecology of cities, the organization of cities, major social problems, the social 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. Prerequisite: SOC 1013 recommended.

Trends in mortality, fertility, and migration for selected countries and their projected consequences. Associated population policies and options are considered. Formerly SOC 2033. Credit cannot be earned for both 2033 and 3033.

3043 Race and Ethnic Relations

(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.

Dominant-subordinant relations in world societies, with major emphasis on the United States. Models of plural and class society, and uses and consequences of power are examined. Formerly SOC 2063. Credit cannot be earned for both 2063 and 3043.

3053 Deviance and Conformity

(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.

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 examples will be examined. Attention will be given to both legal and illegal immigration.

3083 Theories of 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 Corporate Structures

(3-0) 3 hours credit. Prerequisite: SOC 1013.

The sociology of public and private bureaucratic organizations, the structure and behavior of management, and patterns of mobility within corporate organizations.

- 3113 Criminology**
(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.
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.
- 3133 Sociology of Pluralism in the Southwest**
(3-0) 3 hours credit. Prerequisite: SOC 1013 or consent of instructor.
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.
- 3143 Juvenile Delinquency**
(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.
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.
- 3163 The Mass Media, Government, and Public Opinion**
(3-0) 3 hours credit.
An examination of the relationships between the press and electronic media and government, and of the role of the media in shaping public opinion. Topics to be covered may include: investigative reporting; news management; government regulation of the media; shield laws; the concentration of media ownership and control.
- 3173 Economy and Society**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The relationship of the economic system to the social system as a whole in selected societies. The varieties of capitalist and socialist economic organizations, and their social implications.
- 3193 The Sociology of Work and Occupations**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
Occupational structures in selected societies. The relationship between occupations and economic rewards, life styles, and world view. Determinants of work satisfaction.
- 3203 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.
- 3213 Medical Sociology**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The identification of social factors in the distribution and cause of disease; relationships between patients and medical professionals; the contribution of lay beliefs to health, illness, treatment and recovery; health institutions; the distribution of medical resources and organization of health care delivery.
- 3233 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.
- 3253 Theories of the Individual and Society**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
An examination of major theories dealing with the effects of culture and social structure on the development and functioning of the personality and the self.
- 3283 Poverty**
(3-0) 3 hours credit. Prerequisite: SOC 1013.
The causes and consequences of poverty in the United States and selected other societies. An examination of social programs designed to combat poverty.
- 3293 Sex Roles**
(3-0) 3 hours credit. Prerequisite: SOC 1013, PSY 2013, or consent of instructor.
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 discussed. Relationships between women's work roles and their other roles will be considered.

3343 Life Styles

(3-0) 3 hours credit. Prerequisite: SOC 1013.

An analysis of alternative patterns of consumption in contemporary societies, along lines suggested by Max Weber. The relationship between life style and economic resources, region, race and ethnicity, occupation, and world view. Political and other social constraints upon deviant life styles.

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.

3413 Warfare and the Military

(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.

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 and SOC 3113 are 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 Play 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. Topics may include the historical, cultural, economic and psychological dimensions of leisure, the relationship between work and play, and the emergence or demise of selected types of leisure activity.

4103 Survey Research Methods

(3-0) 3 hours credit. Prerequisite: One upper-division course in the social sciences.

An advanced course in survey research, including research design, questionnaire construction, sampling, interviewing, control procedures, data processing, analysis and interpretation of results.

4113 Social Indicators and Social Planning

(3-0) 3 hours credit. Prerequisite: A research methods course or consent of instructor.

Techniques for anticipating future trends. Construction and use of social indicators and evaluation of projective techniques.

4143 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.

4163 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.

4173 Comparative Family Structures

(3-0) 3 hours credit. Prerequisite: SOC 1013 recommended.

A review of research comparing major conventional and alternative family structures in industrial countries.

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 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.

An introduction to investigative techniques and methodologies in the social sciences. Topics may include philosophies and theories of social science, modes of analysis, statistical techniques, as applied to research design, problems of operational definition, individual and aggregate data analysis.

3103 Major Theories of the Social Sciences

(3-0) 3 hours credit.

A review of seminal theories in nineteenth and twentieth century social science, illustrated in cases of social behavior.

3143 Women in American Life

(3-0) 3 hours credit.

The changing role of women from colonial times to the present, with particular attention to women's influence on the family, the labor force, economic decision-making, and political action. Formerly HIS 3143. Credit cannot be earned for both HIS 3143 and SSC 3143.

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.

3213 Theories of the City

(3-0) 3 hours credit.

A survey of current and classic explanations of the city including the city as polity, the city as plan, the city and the hinterland, and the advent of the metropolis, drawing on the various social sciences, philosophy and the arts.

3223 The Family

(3-0) 3 hours credit. Prerequisite: Advanced standing in a social science discipline or consent of instructor.

An examination of the family as a crucial social institution in the past and in more recent times. Topics may include: cross-cultural variation, childhood, adolescence, the aged, demographic change, the slave and modern black family, the birth control movement, sex-role expectations, socialization of the young, and the shifting functions of the family.

3333 Utopias

(3-0) 3 hours credit.

A critical examination of utopian social experiments and the conditions under which they have succeeded or failed. Formerly SOC 3333. Credit cannot be earned for both SOC 3333 and SSC 3333.

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.

4203 Formal Theory in the Social Sciences

(3-0) 3 hours credit. Prerequisite: 6 hours of mathematics and 6 hours of upper-division courses in the social sciences or consent of the instructor.

A discussion of the role of mathematical theory and computer simulation in the social sciences with an emphasis on the formulation of standard mathematical or other formal descriptions of social events. Topics will include probabilistic and deterministic models from the social 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 4103, 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 the 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.

COLLEGE OF MULTIDISCIPLINARY STUDIES

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.⁴¹ Courses in Bicultural-Bilingual Studies offers the opportunity for students to prepare for 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.

A descriptive study of Spanish and English with emphasis on the grammatical differences between the two languages. Problems of linguistic interference as these apply to the native speaker of Spanish. Strategies for developing bilingualism and the application of these strategies in a bicultural-bilingual program.

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, with primary emphasis on the political and economic aspects.

3043 Psychological Considerations in a Bicultural Environment

(3-0) 3 hours credit.

An introduction to the concept of stereotyping as revealed in research, education, mental health, legal systems, and interpersonal relations; psychological implications of cross-cultural learning styles.

⁴¹Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.

- 3133 Communicative Competence in a Spanish-English Bilingual Society**
(3-0) 3 hours credit.
An introduction to the nature of language with special emphasis on its acquisition and use. Regional varieties of English and Spanish in the Southwest.
- 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.
- 4911-3 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 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 Application 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 strategies for teaching basic language skills: oral language development, reading, and writing.
- 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.
- 3043 Psycholinguistic Concepts in Second Language Teaching/Learning**
(3-0) 3 hours credit.
A study of second language acquisition theory with emphasis on implications for second language teaching.

DIVISION OF EDUCATION

The undergraduate programs in the Division of Education offer the opportunity for the initial preparation and certification of teachers for elementary and secondary schools and for persons seeking similar preparation for professional service in other institutions and agencies concerned with the welfare of children and youth.

Degree Programs

Three degree programs are available through the Division of Education: 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 majoring in these areas who are not seeking teaching certificates follow similar but individualized programs which may or may not include the professional student teaching semester.

Certificate Programs

Specific requirements for all certificates are listed in a brochure available from the Office of Teacher Certification and Placement in the Division of Education.

Students wishing to be certified as elementary or kindergarten teachers, as teachers of Health at the elementary or secondary level, or as teachers of Physical Education at the secondary level or at elementary and secondary levels should pursue one of the three degree programs. All such students should register their intent to seek the certificate with the Office of Teacher Certification and Placement in the Division of Education and receive a copy of the approved certificate program as soon as their major is declared and a program advisor is assigned.

The Division of Education also provides the professional education courses for all students preparing to teach while pursuing a degree in other Colleges and Divisions of the University. Students seeking all-level certificates in music or secondary certificates in other approved subject fields should register with the Office of Certification and Placement and take courses in professional education as early as their sophomore year.

For secondary and all-level teaching certificates, the following sequence of professional education courses is required:

Pre-Professional Semester Courses 7 semester hours

EDU	2001	Introduction to the School Environment
EDU	3003	Educational Sociology
EDP	3013	Growth, Development and Learning Theories

Professional Semester Courses 15 semester hours

EDP	4013	Measurement, Diagnosis and Prescription in Educational Settings	(5 weeks)
⁴² EDU	4031	Media Technology	(5 weeks)
EDU	4093	Teaching in the Secondary School	(5 weeks)
EDU	4056	Student Teaching: Secondary	(10 weeks)
EDU	4072	Individualized Clinical Experiences	(10 weeks)

⁴²Music education students are exempted from this course requirement.

190 / BACHELOR OF ARTS DEGREE IN EARLY CHILDHOOD AND ELEMENTARY EDUCATION

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, including at least 18 of the semester credit hours required for the major teaching field and 18 of the semester credit hours required for the area of specialization (elementary certificate) or for the second teaching field (secondary certificate);
- C. Completion of EDU 2001, EDU 3003, and EDP 3013;
- D. For Kindergarten endorsement students, completion of 6 of the required semester credit hours;
- E. The recommendations of three UTSA professors, at least two of whom must be from the Division of Education;
- 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.

Students who do not qualify for admission to the Professional Semester and those who do not seek a teaching certificate 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 an undergraduate degree in Education without certification.

Any student at UTSA can elect to take Pre-Professional Semester Education courses and, if later admitted to a teacher education program, can petition to have the courses already taken counted toward that program.

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 and Foreign Languages in the Elementary School
 - 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
 - C&I 3703 Introduction to Developmental Reading
 - C&I 3713 Introduction to Content Area Reading
 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

BACHELOR OF SCIENCE DEGREE IN HEALTH EDUCATION / 191

- ECE 3133 Programs in Early Childhood Education
- ECE 3203 Tests and Measurement 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.

Required courses to be taken early in the sequence are:

- EDU 2001 Introduction to the School Environment
- EDU 3003 Educational Sociology
- EDP 3013 Growth, Development and Learning Theories

The Professional Semester for Elementary and Early Childhood majors in Education consists of the 15 semester hours below or a substitute program of electives approved by the Undergraduate Advisor.

Courses comprising the Education Professional Semester are required for the teaching certificate⁴³ 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: Elementary⁴⁴
- 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,⁴⁵ is 128, 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

⁴³Students seeking teacher certification should consult the Undergraduate Certification Programs in Education brochure for information.

⁴⁴EDU 4043 and EDU 4063 may substitute for EDU 4046, EDU 4086 or EDU 4083 and EDU 4043 may also substitute for EDU 4046. Students must inform the Director of Student Teaching of their plans to enroll in this course (these courses) one semester in advance.

⁴⁵Of the 42 hours listed as General Education Requirements, students majoring in Health Education must take BIO 1013 Life and Living Systems and AHS 2103 Human Biology; Physiology.

192 / BACHELOR OF SCIENCE DEGREE IN PHYSICAL EDUCATION

- HPE 3543 Physical Growth and Development
- HPE 4513 Consumer Health
- HPE 4523 Teaching Sex Education
- HPE 4533 Nutrition Education

- B. 22 semester hours of support work, 21 of which must be at the upper-division level.

Required courses to be taken early in the program sequence are:

- EDU 2001 Introduction to the School Environment
- EDU 3003 Educational Sociology
- EDP 3013 Growth, Development and Learning Theories

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
- EDU 4031 Media Technology
- EDU 4046 Student Teaching: Elementary⁴⁶
- or
- EDU 4056 Student Teaching: Secondary
- EDU 4072 Individualized Clinical Experiences

For students majoring in Health Education who are not seeking the teaching certificate, HPE 4956 plus 9 hours of approved upper-division electives or 15 hours of approved upper-division electives must be taken in place of the Education Professional Semester.

- 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.⁴⁷

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,⁴⁸ 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

⁴⁶EDU 4043 and EDU 4063 may substitute for EDU 4046. EDU 4086 or EDU 4083 and EDU 4043 may also substitute for EDU 4046. Students must inform the Director of Student Teaching of their plans to enroll in this course (these courses) one semester in advance.

⁴⁷For students seeking certification, 128 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.

⁴⁸Of the 42 hours listed as General Education Requirements, students majoring in Physical Education must take AHS 2103 Human Biology: Physiology and AHS 3113 Kinesiology.

Students seeking Teacher Certification should consult the Undergraduate Certification Programs in Education brochure for information.

BACHELOR OF SCIENCE DEGREE IN PHYSICAL EDUCATION / 193

- 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
- 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 and Officiating
- HPE 4423 Adaptive Physical Education

1. All students must take the following courses: HPE 2331, HPE 2401, HPE 2411, and HPE 2423.
 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, 137 hours are required to complete the dual requirements of the degree and the all-level teaching certificate. The 12 additional hours must be HPE 3413, HPE 4343, ECE 3123 and COM 1043.
- 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, HPE 4956 plus 9 hours of approved upper-division electives or 15 hours of approved upper-division electives must be taken in place of the Education Professional Semester.
- C. 28 semester hours of free electives, 12 of which must be at the upper-division level.

1. 24 hours may be taken from any Division of the University and for students seeking the teaching certificate, they must be used to satisfy the requirements for a second teaching field.
2. All students majoring in Physical Education must elect at least 2 hours of HPE 1001 and 2 hours of HPE 1101. No activity course may be repeated for credit to satisfy this requirement. Four different activities or sports must be taken.

COURSE DESCRIPTIONS

CURRICULUM AND INSTRUCTION (C&I)

3703 Introduction to Developmental Reading

(3-0) 3 hours credit. Prerequisite: ENG 1033.

Offers the opportunity to learn basic concepts of reading within the structure of the language arts. Identification of learner needs in relation to techniques and materials for developing perceptual skills, oral language fluency, word recognition, comprehension, study skills, rate adaptation, and literary appreciation. Formerly ECE 3303. Credit cannot be earned for both ECE 3303 and C&I 3703.

3713 Introduction to Content Area Reading

(3-0) 3 hours credit. Prerequisite: ENG 1033.

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 Skill Development in the Reading Program

(3-0) 3 hours credit. Prerequisite: C&I 3703.

Study of children's perceptual and conceptual development in relation to the reading process. Exploration of relationships among child development, curriculum development, and skill development in reading. Formerly ECE 3323. Credit cannot be earned for both ECE 3323 and C&I 3723.

3733 Reading Comprehension Skills

(3-0) 3 hours credit. Prerequisite: C&I 3713.

Materials and methods for developing students' reading comprehension and functional literacy. Formerly EDU 3303. Credit cannot be earned for both EDU 3303 and C&I 3733.

3746 Introduction to Reading Problems

(3-6) 6 hours credit. Prerequisite: C&I 3703.

Study of and laboratory experience with reading problems in the classroom. Diagnosis and correction of specific reading skill disabilities. Formerly ECE 4303. Credit cannot be earned for both ECE 4303 and C&I 3746.

3783 Psycholinguistics and Reading

(3-0) 3 hours credit. Prerequisite: ENG 3343, LNG 3813, or ESL 3003 and 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

(6-0) 6 hours credit. Prerequisites: C&I 3713 and C&I 3746.

Application of developmental procedures in small groups. Guided field-based experiences with weekly seminars designed to enrich the field experience. Formerly ECE 4936. Credit cannot be earned for both ECE 4936 and C&I 4706.

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 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)

3103 Young Children's Literature and Storytelling

(3-0) 3 hours credit.

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.

3113 Play and Creative Activities in Early Childhood Education

(2-2) 3 hours credit.

A multi-arts integrated approach to fostering the development of creative expression in young children through experiences in music, movement, dramatics, and play. Students develop materials, plan activities, share ideas and skills, and implement these with young children.

3123 Development and Learning in Early Childhood

(3-0) 3 hours credit.

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.

3133 Programs in Early Childhood Education

(3-0) 3 hours credit. Prerequisite: ECE 3123.

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.

3203 Tests and Measurement for Early Childhood

(3-0) 3 hours credit. Prerequisite: ECE 3123.

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.

3213 Language Arts in the Elementary School

(3-0) 3 hours credit. Prerequisites: ENG 1033, EDU 3003, and EDP 3013.

Study of communication processes in children's elementary school experiences, emphasizing instructional planning as it relates to the individual's language development and learning styles.

3223 Social Science in the Elementary School

(3-0) 3 hours credit. Prerequisites: Completion of the General Education Requirements in history and government, EDU 3003, and EDP 3013.

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.

3233 Mathematics in the Elementary School

(3-0) 3 hours credit. Prerequisites: MAT 1123, ECE 3213, ECE 3223, and ECE 4243.

Study of and practice in planning for the teaching of mathematics K-8 to normal and exceptional students. Specific attention given to content organization, the cognitive and affective development of students, the use of varied materials, questions, and teaching strategies.

4103 Guidance of Young Children in Groups

(3-0) 3 hours credit. Prerequisite: ECE 3123 or ECE 3203.

Study of basic teaching skills; play as education, curriculum areas, program planning, organization and evaluation, professional-ethical decision-making. 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 implications 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 interviewing 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 personalizing 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 and Foreign 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.

Review of past and present attitudes, methods, and materials related to second and foreign language teaching in the elementary school. Study of processes of first and second language development, social and cultural influences on verbal and non-verbal interaction, and strategies for facilitating second language learning.

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 implications 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; emphasis 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 inform the Director of Student Teaching of their plans to enroll in this course 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 inform the Director of Student Teaching of their plans to enroll in this course 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 inform the Director of Student Teaching of their plans to enroll in this course 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.

4083-6 Student Teaching: Special Education

3 or 6 hours credit. Prerequisite: Admission to the Professional Semester or consent 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.

The opportunity for field-based experiences in a special education classroom.

4093 Teaching in the Secondary School

(3-0) 3 hours credit. Prerequisites: 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.

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. Concurrent enrollment: EDP 3603 and 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. Concurrent enrollment: EDP 3623 and 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. Two activities/sports are required for the Physical Education 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. Two sports are required for the Physical Education Degree.

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 Rhythmical Activities and Dance

(0-3) 1 hour credit.

Practice in rhythmical techniques in physical education and various types of dance.

200 / HEALTH AND PHYSICAL EDUCATION

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 sports 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.

3543 Physical Growth and Development

(3-0) 3 hours credit.

Review of physical growth and development as dynamic lifetime processes. The changes in early adolescence and implications for teachers.

4113 Evaluation in Physical Education

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

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.

4343 Movement Education

(3-0) 3 hours credit.

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.

4403 Motor Learning and Skill Performance

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

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.

4413 Coaching and Officiating

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

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.

4423 Adaptive Physical Education

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

Study of corrective and adaptive activities and programs for the exceptional child. Theory and implication of specific handicaps and disabilities with emphasis on adjustment. Application to exercise and sports programs.

4513 Consumer Health

(3-0) 3 hours credit.

Study of the consumer's selection of health products and services, and the acquisition of basic knowledge 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.

4523 Teaching Sex Education

(3-0) 3 hours credit.

Study of the teaching of human sexuality. Emphasis on the understanding of sexual drives and on methods for teaching sex education.

4533 Nutrition Education

(3-0) 3 hours credit.

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.

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 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 ENVIRONMENTAL STUDIES

The Division of Environmental Studies offers undergraduate elective courses to support existing UT San Antonio degree programs and to offer the opportunity for students to prepare for future graduate work in Environmental Management. Many of the following courses are designed to complement the programs of those students majoring in Architectural Design, Criminal Justice, Earth and Physical Sciences, Education, and Social Sciences. The Division of Environmental Studies does not offer an undergraduate degree.

COURSE DESCRIPTIONS ENVIRONMENTAL MANAGEMENT (ENV)

2013 Introduction to Environmental Systems

(3-0) 3 hours credit.

An introduction to the concept and challenge of man-machine-community interrelationships within both the natural and man-made environment. Attention to environmental systems and their importance.

3013 Environment and Human Resources Management

(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 plan and administer human resources programs.

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.

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.

3523 The Contemporary City

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

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.

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.

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.

4203 Environmental Impact Analysis

(3-0) 3 hours credit.

The National Environmental Policy Act and the procedures for doing environmental impact statements. Students collect data for and write an environmental impact statement.

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.

4603 Environmental Quality Analysis

(2-3) 3 hours credit. Prerequisite: CHE 2003.

The procedures and instrumentation for the analysis of air, water, and soils. Environmental data acquisition and basic analysis for the interpretation and characterization of environmental quality.

4663 The Latin American City

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

A study of the physical structure of the Latin American city and its cultural, social, and economic bases; current urban issues and environmental relationships.

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.

4951-3 Special Studies in Environmental Management

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 in Environmental Management. Special studies courses may be repeated when the topics vary, but not more than 6 hours within any one discipline will apply to a bachelor's degree.

DIVISION OF SPECIAL PROGRAMS

The Division of Special Programs offers the opportunity for students to major in the area of Criminal Justice. It also administers The University's Army R.O.T.C. Program.

Criminal Justice. This program is intended to provide a comprehensive educational preparation for persons seeking a professional career in the field of criminal justice; with emphases in the areas of Law Enforcement Planning and Management, Corrections-Juvenile Justice, Judicial Administration, and Security Administration.

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. The program is available under cooperative arrangements with St. Mary's University of San Antonio. All courses for those enrolled in the program are held on The University of Texas at San Antonio campus.

BACHELOR OF ARTS DEGREE IN CRIMINAL JUSTICE

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. 36 semester hours of upper-division criminal justice coursework distributed as follows:
 1. 15 semester hours of upper-division core:
 - CRJ 3013 Concepts and Issues in Criminal Justice
 - CRJ 3043 Criminal Justice: Ecology and Etiology
 - CRJ 3213 Criminal Justice: Administrative Organization
 - CRJ 3623 Substantive Criminal Law
 - CRJ 4013 Research and Data Processing in Criminal Justice
 2. 12 semester hours from one of the following areas of emphasis:
 - a. Law Enforcement Planning and Management:
 - CRJ 3633 Evidentiary Issues in the Legal Process
 - CRJ 4133 Community Crime Prevention Programs
 - CRJ 4413 Trends in Police Administration
 - CRJ 4513 Criminal Justice Planning
 - b. Corrections-Juvenile Justice
 - CRJ 3513 Corrections: Theory & Practice
 - CRJ 3533 Alternatives to Incarceration
 - CRJ 4573 Correctional Administration
 - CRJ 4613 Counseling and Delivery of Services in Corrections
 - c. Judicial Administration
 - CRJ 3613 Legal Bibliography and Advocacy Research
 - CRJ 4633 Criminal Procedure
 - CRJ 4803 Court Management
 - CRJ 4813 Court Organization and Jurisdiction
 - d. Security Administration
 - CRJ 3163 Introduction to Security Administration

- CRJ 3173 Physical Security
- CRJ 3183 Personnel Security
- CRJ 4203 Issues in Security Administration

3. 9 semester hours upper-division electives in criminal justice at least 3 semester hours of which must be drawn from INTERNSHIP IN CRIMINAL JUSTICE for preservice students.
- B. A statistics course is required of all criminal justice majors. This course may also be used to fulfill part of the General Education Requirements.
- C. 15 semester hours of upper-division support work outside the criminal justice area is recommended, to be selected through consultation with the student's faculty advisor.
- D. 31 semester hours of electives.⁴⁹

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.

3013 Concepts and Issues in Criminal Justice

(3-0) 3 hours credit.

Conceptual framework of the administration of justice with an emphasis on the major policy issues which influence the criminal justice system in contemporary America.

3043 Criminal Justice: Ecology and Etiology

(3-0) 3 hours credit.

Examination of social, political, economic, religious, and emotional characteristics of criminal justice problems; historical as well as systems perspective with a multidisciplinary approach.

3133 Basic Criminalistics

(2-2) 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 Administration

(3-0) 3 hours credit.

Survey of the scope of the security administration field in business, industry, and government; consideration of the problems and issues affecting the relationship between publicly-funded law enforcement and the private sector.

3173 Physical Security

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

Protection of facilities, security requirements and standards, and security surveys. Theory and application of defense; locks and locking devices, safes, vaults, and counter-measures; intrusion devices and defense against methods of entry; sabotage and sabotage devices. Planning related to facilities for security of inventory, personnel, and documents.

3183 Personnel Security

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

The opportunity for comprehensive study of security problems related to background

⁴⁹The 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 free electives for the undergraduate degree in Criminal Justice.

investigation and use of investigative reports; problems in personnel clearances and use of nonclearable personnel; debriefing procedures for retired or dismissed personnel; concepts, problems, and procedures of personnel protection.

3213 Criminal Justice: Administrative Organization

(3-0) 3 hours credit.

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 needs of the juvenile offender. Process oriented approach to the roles of involved agencies with emphasis upon formal and informal treatment methods.

3613 Legal Bibliography and Advocacy Research

(3-0) 3 hours credit.

Detailed study of theory and practice of legal bibliography. Development and refinement of legal writing techniques.

3623 Substantive Criminal Law

(3-0) 3 hours credit.

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.

4013 Research and Data Processing in Criminal Justice

(3-0) 3 hours credit. Prerequisite: Students registering for this course must have fulfilled the statistics requirement.

An introduction to the general methodology of research (including experimental design, statistics, and computer usage), that pertains to the administration of justice. Special attention given to the implications of automated information system in agency administration, and in crime detection and prevention.

4123 Concepts of Investigation

(3-0) 3 hours credit. Prerequisite: CRJ 3133 or consent of instructor.

Examination of theories and practices of the investigative process in the criminal justice system; specific operational techniques; application of innovative techniques.

4133 Community Crime Prevention Programs

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

An analysis of the typologies, philosophies, and operations of existing and projected community-based crime prevention programs. Emphasis on a variety of governmental and non-governmental community support and action programs.

4203 Issues in Security Administration

(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: CRJ 3213 or 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.

4513 Criminal Justice Planning

(3-0) 3 hours credit. Prerequisite: CRJ 4013.

Offers the opportunity to gain knowledge and skills pertinent to the understanding and implementation of planning in the criminal justice system; examination of techniques of data and analysis; use of PERT/CPM in criminal justice.

4543 Juvenile Justice Law

(3-0) 3 hours credit. Prerequisite: CRJ 3543 or consent of instructor.

Historical and case oriented approach to the legal basis of individualized justice for children including early common law approaches, the child saving movement, the juvenile court era, and the modern challenge to the court by the constitutionalists.

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.

4803 Court Management

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

Application of management principles and technology to the organizational components of the judiciary. Impact of the role and function of the judicial manager on the criminal justice system.

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.

208 / ARMY RESERVE OFFICER TRAINING CORPS PROGRAM

4933 Internship in Criminal Justice

4936 3, 6, or 9 hours credit. Prerequisites: CRJ 3013, 3043, and 3623.

4939 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.

ARMY RESERVE OFFICER TRAINING CORPS PROGRAM

To obtain a commission⁵⁰ as an officer in The U.S. Army, a baccalaureate degree in one of the disciplines offered by The University of Texas at San Antonio and 18 semester hours of military science courses are required. 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, are 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 18 semester hours of military science courses which constitute the Army ROTC program at The University of Texas at San Antonio are offered in two parts: a Basic Course, consisting of 6 semester hours of course work, taken in the first two years at The University and an Advanced Course, consisting of 12 semester hours of course work taken in the last two years at The University.

The program requirements for the Basic Course are as follows:

MSC 1011 or MSC 1101
MSC 1021 or MSC 1201
MSC 2012
MSC 2022

Students may enroll in the Basic Course without obligation to take additional ROTC training. Students enrolled in the Basic Course are furnished, free of charge, complete uniforms, texts, and necessary equipment.

Students who desire enrollment in the Advanced Course but have not completed the Basic Course, may enroll in MSC 2034. MSC 2034 is only offered during first summer session and will fulfill prerequisites for the Advanced Course.

The program requirements for the Advanced Course are as follows:

MSC 3013
MSC 3023
MSC 4013
MSC 4023

Students enrolled in the Advanced Course receive \$100 per month, and texts, uniforms, and equipment are provided. 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.

⁵⁰Some of the 18 hours of military science required for the commission may be waived (without credit) for prior military service and/or junior ROTC.

Participation in a leadership laboratory is required in connection with all courses. The leadership laboratory consists of a varied program of enrichment and development for future army officers consisting of an active guest speaker program, participation in civic action projects, tours of military and related installations, field training exercises, and a limited amount of drill and physical conditioning.

Between their junior and senior years, students are required to attend a five week summer camp.

The ROTC program offers competitive scholarships for up to three years to selected students. These scholarships provide for tuition, fees, and subsistence of \$100 per month.

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 12, 1.

1202 Applied Leadership and Management I

(2-2) 2 hours credit.

Operation of basic military team with emphasis on organization and equipment. Military geography and use of maps and aerial photography.

1202 Applied Leadership and Management II

(2-2) 2 hours credit.

American military history. Continuation of operation of basic military teams to include principles of offensive and defensive combat stressing the functions and responsibilities of the junior leader. Development of leadership potential through practical exercises.

1204 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 may 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.

Performance-oriented instruction in preparation for Advanced Camp. Analysis of psychological, physiological, and sociological factors which affect human behavior. Analysis of leadership and management processes. Techniques in planning, presenting, and evaluating performance-oriented instruction.

3023 Advanced Leadership and Management II

(3-2) 3 hours credit. Prerequisite: MSC 3013 or consent of instructor.

Performance-oriented instruction in preparation for Advanced Camp. Development of the leader's ability 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.

COLLEGE OF SCIENCES AND MATHEMATICS

DIVISION OF ALLIED HEALTH AND LIFE SCIENCES

The Division offers a Bachelor of Science Degree in Biology as well as Allied Health programs leading to Bachelor of Science Degrees in Medical Technology, Occupational Therapy, and Physical Therapy. Also available are preprofessional courses to offer students the opportunity to prepare for admission to medical, dental, and nursing school.⁵¹

The B.S. Degree in Biology is structured around a comprehensive core curriculum and related offerings in chemistry, physics, and mathematics that lead to more highly specialized areas of the life sciences, such as physiology, genetics, microbiology, biochemistry, environmental biology and molecular biology.

There are two programs at UT San Antonio that lead to a B.S. Degree in Medical Technology. One program consists of three years of academic work and twelve months of clinical laboratory training in a hospital school of medical technology approved by the Council of Education of the American Medical Association. The second program is a four-year integrated program in which clinical training is introduced at the beginning of the program and in which there is a concentrated clinical hospital experience in the latter part of the program. The integrated program is offered in cooperation with The University of Texas Health Science Center at San Antonio. Graduates of both the three-plus-one and the integrated programs may obtain certification by passing the examination of the Board of Registry of the American Society of Clinical Pathologists.

The Bachelor of Science Degree in Occupational Therapy offers the opportunity for the student to gain 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. Upon completion of the degree program the student is eligible to take the national examination for registration with the American Occupational Therapy Association.

The Bachelor of Science Degree program in Physical Therapy emphasizes the biological and physical sciences essential for understanding the functioning of the human body, as well as the importance of the humanities and social sciences in addition to the specific skill areas. Preclinical and clinical experience is taken in the last two years of a student's program. Upon completion of the degree program the student is eligible to take licensure examinations.

Special Admission Requirements for Upper-Division Allied Health Sciences Courses. Acceptance into The University to major in Medical Technology, Occupational Therapy, and Physical Therapy does not indicate acceptance into the upper-division Allied Health Sciences courses. Admission requirements for those courses are:

- 1) completion of pre-professional requirements with a minimum grade of "C" in each course;
- 2) a minimum cumulative GPA of 2.8 in all pre-professional courses;

⁵¹Specific premedical, predental, 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 Allied Health and Life Sciences and through the Chairman of the Health Related Professions Advisory Committee of The University of Texas at San Antonio.

212 / BACHELOR OF SCIENCE DEGREE IN BIOLOGY

- 3) a report from the student's personal physician regarding the applicant's physical and mental health; and
- 4) a personal interview for selected applicants.

Acceptance into the Three-Plus-One Medical Technology program does not guarantee the student a position in the final year of clinical training. UT San Antonio students compete with students from other universities for the available internships at hospital schools of medical technology. Securing the fourth year clinical training is the student's responsibility. The Director of the Medical Technology Program assists the students in this regard, but the final decisions upon acceptance are made by individual hospitals.

Acceptance into the junior year of the Integrated Medical Technology program guarantees a student a continued position in the upper-division Allied Health Science courses, as long as he or she maintains at least a 2.5 cumulative grade-point average.

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 126.⁵²

All candidates for the degree must complete:

- A. 45 semester hours in the *major*, 22 of which must be at the upper-division level.
 1. 25 semester hours in the Biology Core Curriculum are required:

BIO	1103, 1112	Principles of Biology and Laboratory
BIO	1213, 1222	Principles of Environmental Biology and Laboratory
BIO	2313, 2322	Genetics and Laboratory
BIO	3413, 3422	General Physiology and Laboratory
BIO	3513, 3522	Biochemistry and Laboratory
 2. 20 additional semester hours of Biology electives are required, 12 of which must be at the upper-division level in consultation with the student's Advisor. The Biology electives may be selected from any of the Biology courses, except those for non-majors, and from certain Allied Health Sciences courses.
- 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	2212	Organic Qualitative Analysis
 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	1803, 1811	Physics for Life Sciences I and Laboratory
PHY	1823, 1831	Physics for Life Sciences II and Laboratory
- C. 15 semester hours of *electives*.

⁵²Thirty-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 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.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 138.

THREE-PLUS-ONE PROGRAM

A. 72 semester hours are required in the *major*.

1. 26 semester hours 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
BIO 4763, 4771	Parasitology and Laboratory

2. 12 semester hours are required in Allied Health Sciences: (These courses are taken at UTSA prior to the hospital clinical rotation.)

AHS 1871	Allied Health Sciences
AHS 1883	Introduction to Medical Technology
AHS 3463	Human Physiology
AHS 4783, 4792	Pathogenic Microorganisms and Laboratory
AHS 4942-9	Clinical Field Work Experience — Level II (to be repeated during the 12 month hospital training for a total of 36 hours: 12 hours in each of Fall, Spring and Summer semesters).

3. 34 additional semester hours are required in Allied Health Sciences: (These courses are the hospital clinical rotation.)

AHS 2413, 2422	Hematology & Laboratory
AHS 2533, 2542	Parasitology & Urinalysis & Laboratory
AHS 3773, 3782	Clinical Chemistry & Laboratory
AHS 3863, 3872	Immunohematology & Serology and Laboratory
AHS 4843	Advanced Clinical Microbiology
AHS 4854	Advanced Clinical Chemistry
AHS 4863	Advanced Clinical Hematology
AHS 4884	Advanced Immunohematology & Serology

B. 24 hours 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 2212	Organic Qualitative Analysis

2. 8 semester hours are required in Physics:

PHY 1803, 1811	Physics for Life Sciences I and Laboratory
PHY 1823, 1831	Physics for Life Sciences II and Laboratory

214 / BACHELOR OF SCIENCE DEGREE IN MEDICAL TECHNOLOGY

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

INTEGRATED PROGRAM

A. 72 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

A. 2. 32 semester hours are required in Allied Health Sciences:

AHS 1871	Allied Health Sciences
AHS 1883	Introduction to Medical Technology
AHS 2413, 2422	Hematology and Laboratory
AHS 2533, 2542	Parasitology and Urinalysis and Laboratory
AHS 3463	Human Physiology
AHS 3773, 3782	Clinical Chemistry and Laboratory
AHS 3863, 3872	Immunohematology and Serology and Laboratory
AHS 4783, 4792	Pathogenic Microorganisms and Laboratory

3. 18 additional semester hours are required in Allied Health Sciences:
(These courses are the hospital clinical experience.)

AHS 4843	Advanced Clinical Microbiology
AHS 4854	Advanced Clinical Chemistry
AHS 4863	Advanced Clinical Hematology
AHS 4884	Advanced Immunohematology and Serology
AHS 4942-9	Clinical Field Work Experience — Level II (to be repeated during the two-semester hospital clinical rotation for a total of 4 hours)

B. 24 semester hours 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 2212	Organic Qualitative Analysis

2. 8 semester hours are required in Physics:

PHY 1803, 1811	Physics for Life Sciences I and Laboratory
PHY 1823, 1831	Physics for Life Sciences II and Laboratory

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

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.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 151.

All candidates for the degree must complete:

- A. 99 semester hours in the *major*, 88 of which must be at the upper-division level.

1. 9 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
		<i>or</i>
AHS	2083, 2091	Human Biology: Anatomy and Laboratory

2. 90 semester hours are required in Allied Health Sciences:

AHS	1871	Allied Health Sciences
AHS	1891	Survey of Physical Medicine and Rehabilitation
AHS	3002	Principles of Practice
AHS	3012	Introductory Pathology
AHS	3164, 3174	Human Gross Anatomy for Occupational and Physical therapy and Laboratory
AHS	3213	Occupational Therapy Media I
AHS	3232	Occupational Therapy Media II
AHS	3463, 3471	Human Physiology and Laboratory
AHS	3754	Dynamics of Motion I
AHS	3793	Occupational Therapy Theory I
AHS	3802	Clinical Medicine I
AHS	3812	Clinical Seminar
AHS	3902	Occupational Therapy Skills Laboratory I
AHS	3924	Clinical Field Work Experience Level I
AHS	4003	Clinical Medicine II
AHS	4013	Clinical Medicine III
AHS	4023	Occupational Therapy Skills Laboratory II
AHS	4033	Occupational Therapy Skills Laboratory III
AHS	4043	Occupational Therapy Media III
AHS	4053	Occupational Therapy Theory II
AHS	4463, 4471	Human Neurosciences and Laboratory
AHS	4501	Seminar in Rehabilitation
AHS	4803	Occupational Therapy Theory III
AHS	4823	Allied Health Management and Consultation
AHS	4923	Special Project
AHS	4942-9	Clinical Field Work Experience — Level II (repeated for a total of 18 hours credit)

- B. 10 semester hours of *support work*.

1. 4 semester hours are required in Chemistry:

CHE	1003, 1111	General Chemistry for Allied Health Sciences and Laboratory
-----	------------	---

216 / BACHELOR OF SCIENCE DEGREE IN PHYSICAL THERAPY

- or
- CHE 1103, 1122 Introductory Chemistry and Laboratory Workshop
2. 6 semester hours are required in Psychology:
- PSY 2513 Abnormal Psychology
PSY 2523 Personality
- C. All students are required to complete:
SOC 1013, Introduction to the Study of Society, PSY 2013, Fundamentals of Psychology and PSY 2503, Developmental Psychology as a part of their preprofessional training. Students following tract 2 of the General Education Requirements may elect 6 semester hours of this sequence as part of their General Education Requirement.

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.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 145.

All candidates for the degree must complete:

- A. 90 semester hours in the *major*, 79 of which must be at the upper-division level.
1. 14 semester hours are required in Biology:
- BIO 1103, 1112 Principles of Biology and Laboratory
BIO 2123, 2131 Comparative Anatomy of Vertebrates and Laboratory
BIO 3413, 3422 General Physiology and Laboratory
2. 73 semester hours are required in Allied Health Sciences courses:
- AHS 1871 Allied Health Sciences
AHS 1891 Survey of Physical Medicine and Rehabilitation
AHS 3012 Introductory Pathology
AHS 3164, 3174 Human Gross Anatomy for Occupational and Physical therapy and Laboratory
AHS 3201 Physical Therapy: History and Philosophy
AHS 3302, 3311 Physical Therapy Procedures and Laboratory
AHS 3754 Dynamics of Motion I
AHS 3881, 3892 Therapeutic Concepts and Procedures in Physical Therapy and Laboratory
AHS 3922-6 Clinical Field Work Experience — Level I
AHS 4003 Clinical Medicine II
AHS 4013 Clinical Medicine III
AHS 4104 Normal and Abnormal Aspects of Human Development
AHS 4222, 4231 Advanced Concepts and Procedures in Physical Therapy and Laboratory
AHS 4301 Clinical Education (repeated for a total of 4 credit hours)
AHS 4313 Therapeutic Exercise I
AHS 4323 Therapeutic Exercise II

AHS 4413, 4421	Mammalian Physiology and Laboratory
AHS 4463, 4471	Human Neurosciences and Laboratory
AHS 4501	Seminar in Rehabilitation
AHS 4823	Allied Health Management and Consultation
AHS 4923	Special Project
AHS 4942-9	Clinical Field Work Experience — Level II

B. 16 semester hours of *support work*.

1. 8 semester hours are required in Chemistry:

CHE 1103	Introductory Chemistry
CHE 2003	Chemical Principles
CHE 2012	Inorganic Qualitative and Quantitative Analysis

2. 8 semester hours are required in Physics:

PHY 1803, 1811	Physics for Life Sciences I and Laboratory
PHY 1823, 1831	Physics for Life Sciences II and Laboratory

C. All students are required to complete:

SOC 1013, Introduction to the Study of Society, PSY 2013, Fundamentals of Psychology and PSY 2503, Developmental Psychology as a part of their pre-professional training. Students following tract 2 of the General Education Requirements may elect 6 semester hours of this sequence as part of their General Education Requirement.

COURSE DESCRIPTIONS

BIOLOGY (BIO)

1013 Introduction to Life Sciences

(3-0) 3 hours credit. Concurrent enrollment in BIO 1021 recommended. May not be applied to a major in this Division.

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.

1021 Introduction to Life Sciences Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 1013. May not be applied to a major in this Division.

Laboratory exercises, films and demonstrations in biology. Credit cannot be earned for both BIO 1021 and BIO 1112.

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. 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.

1213 Principles of Ecology

(3-0) 3 hours credit. Prerequisites: BIO 1103 and BIO 1112. Concurrent enrollment: BIO 1222.

The interaction of organisms with their environment, ecological principles, adaptations of organisms, environmental pollution and principles of conservation.

1222 Principles of Ecology Laboratory

(0-6) 2 hours credit. Concurrent enrollment: BIO 1213.

Emphasis will be placed on modern ecological techniques, including examinations of plant, animal and bacterial populations, and measurement of selected chemical and

physical parameters. One overnight field trip and several other off-campus trips will be required.

2003 Human Sex and Reproduction

(3-0) 3 hours credit. Prerequisites: BIO 1013 or 1103 or consent of instructor. May not be applied to a major in this Division.

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.

A comprehensive treatment 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.

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 1183 or equivalent.

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. Prerequisite: BIO 1103, CHE 1103, or consent of instructor.

General oceanography with emphasis on biological aspects and living marine resources.

3012 Introductory Pathology

(2-0) 2 hours credit. Prerequisites: BIO 1103, 1112 or AHS 2103.

Concepts of disease and diagnosis of pathological conditions.

3023 Drugs and Society

(3-0) 3 hours credit. Prerequisite: BIO 1103, CHE 1103, or consent of instructor.

An examination of drugs and their role in society.

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 Comparative Vertebrate Embryology

(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422.

Sequential analysis of development in vertebrates and the factors which effect fertilization organogenesis and implantation.

3151 Comparative Vertebrate Embryology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3143.

3162 Histology and Cytology

(2-0) 2 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 3162.

3203 Plant Ecology

(3-0) 3 hours credit. Prerequisite: BIO 1213, 1222, or consent of instructor.

The major biomes of North America and Texas will be studied, including the chemical, physical and biological factors that influence the development of these biomes.

3211 Plant Ecology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3203.

Laboratory will include four weekend field trips to major biomes of Texas. Qualitative and quantitative methods used to evaluate plant communities will be examined.

3213 Animal Ecology

(3-0) 3 hours credit. Prerequisites: BIO 1213 and 1222.

A detailed study of populations, interrelationships, behavior patterns and physiological responses of animals to their environment.

3221 Animal Ecology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3213.

3243 Field Biology and Ecology

(3-0) 3 hours credit. Prerequisite: BIO 1103, 1112, or consent of instructor. Concurrent enrollment: BIO 3251.

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.

3251 Field Biology and Ecology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3243.

Practical experience observing, collecting and identifying Texas plants and animals. Several field trips will be required.

3263 Ornithology

(2-3) 3 hours credit. Prerequisites: BIO 1213 and 1222.

A detailed examination of the class Aves, stressing the taxonomy, anatomy, physiology, ecology and behavior of birds. Field and laboratory work will be included as part of the course.

3273 Spring Flowers

(2-3) 3 hours credit.

A study of the wild flowers that occur in central Texas. Identification of the more common wild flowers will be stressed, as well as family characteristics, flower anatomy, and plant morphology. Off-campus field trips will be required. Plant collecting techniques and wild flower photography will be included.

3323 Evolution

(3-0) 3 hours credit. Prerequisite: BIO 2313.

A discussion of theories and possibly mechanisms for evolutionary changes at various levels of organization.

3343 Plant Sciences

(3-0) 3 hours credit. Prerequisites: BIO 1103 and 1112.

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.

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, 2212; BIO 2313 recommended.

Introduction to biochemistry: amino acids; protein structures; enzyme action; lipids and saccharides; metabolism; nucleic acids and molecular biology.

3522 Biochemistry Laboratory

(0-6) 2 hours credit. Concurrent enrollment: BIO 3513.

Basic biochemical laboratory techniques: titration, protein purification, enzyme kinetics, chromatography, electrophoresis, centrifugation.

3533 Radiation Biology

(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522.
Interactions of ionizing ultraviolet and visible radiations with matter; biological effects; cellular repair of radiation damage; biological photo-receptors.

3541 Radiation Biology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3533.

3713 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.

3722 Microbiology Laboratory

(0-6) 2 hours credit. Concurrent enrollment: BIO 3713.

3733 Industrial Microbiology

(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722.

A study of fermentations of industrial importance, food processing, and quality control.

3741 Industrial Microbiology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3733.

3813 Cellular Biology

(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3513.

The composition, function and interaction of cellular constituents and substructures at the ultra-structural level.

3821 Cellular Biology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 3813.

3831 Tissue and Organ Culture

(1-0) 1 hour credit. Prerequisites: BIO 3513 and 3522. Concurrent enrollment: BIO 3842.
Theoretical and practical aspects of maintaining and growing cells, tissues and organs from various sources.

3842 Tissue and Organ Culture Laboratory

(0-6) 2 hours credit. Concurrent enrollment: BIO 3831.

4003 Principles of Marine Biology

(3-0) 3 hours credit. Prerequisite: BIO 1213.

The fauna and flora of marine ecosystems with special emphasis on the Northwestern Gulf Coast.

4011 Principles of Marine Biology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 4003.

Shallow and deep water collection, identification and observation. Some weekend field trips required.

4022 Limnology

(2-0) 2 hours credit. Prerequisites: BIO 1213.

Ecology of inland waters with emphasis on functional aspects of lake ecosystems, productivity and nutrient relations of plankton, pollution and eutrophication.

4032 Limnology Laboratory

(0-6) 2 hours credit. Concurrent enrollment: BIO 4022.

Comparative limnology of Texas lakes and streams supported by laboratory analysis of biological material collected in water samples.

4043 Desert Ecology

(2-3) 3 hours credit. Prerequisites: BIO 1213 and 1222.

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. Off-campus field trips to several desert regions will be required.

4073 Law, Ethics and the Life Sciences

(3-0) 3 hours credit. Prerequisites: BIO 1013, 1103, 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.

4243 Physiological Ecology

(3-0) 3 hours credit. Prerequisites: BIO 3213, 3221, 3243 and 3251.

An integration of physiological and biochemical solutions and mechanisms to environmental problems at the organismic level.

4251 Physiological Ecology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 4243.

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 Physiology

(3-0) 3 hours credit. Prerequisites: BIO 3413 and 3422.

A phylogenetic study of physiologic adaptation in animals.

4361 Comparative 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.

4443 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.

4451 Endocrinology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 4443.

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 2212.

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.

Qualitative and quantitative experiments in the study of plant physiology.

4622 Biological Literature

(2-0) 2 hours credit. Prerequisite: senior standing.

Survey of selected biological references with emphasis on utilization of journals and scientific writing.

4723 Virology

(3-0) 3 hours credit. Prerequisites: BIO 3513 and 3522, 3713, 3722.

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, 3713, 3722.

A study of the properties of antigens and antibodies, current concepts of humoral and cell-mediated immunity and the cells involved.

222 / BIOLOGY — ALLIED HEALTH SCIENCES

4751 Immunology Laboratory

(0-3) 1 hour credit. Concurrent enrollment: BIO 4743.

4763 Parasitology

(3-0) 3 hours credit. Prerequisites: BIO 3713 and 3722.

A study of the animal parasites of humans and related hosts with emphasis on their epidemiology, life cycles, pathology and control.

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.

4923 Special Project

3 hours credit. Prerequisite: Consent of Division Director.

An intensive supervised student project.

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.

4973 Proseminar

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

Presentation and discussion of current scientific literature.

ALLIED HEALTH SCIENCES (AHS)

1053 Introductory Microbiology

(3-0) 3 hours credit. Prerequisite: BIO 1013, 1103, or consent of instructor.

May not be applied to a major in this Division.

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 major in this Division. 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: AHS 1871.

Clinical laboratory safety, specimen collection and preservation, quality controls, medical laboratory calculations, reagent preparation and medical technical terminology.

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.

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 or consent of instructor.
The structure of human muscular, skeletal, nervous and organ systems.
- 2091 Human Biology: Anatomy Laboratory**
(0-3) 1 hour credit.
Concurrent enrollment: AHS 2083.
- 2103 Human Biology: Physiology**
(3-0) 3 hours credit. Prerequisite: BIO 1013, 1103, or consent of instructor.
Physiological processes in human systems.
- 2111 Human Biology: Physiology Laboratory**
(0-3) 1 hour credit.
Concurrent enrollment: AHS 2103.
- 2413 Hematology**
(3-0) 3 hours credit. Prerequisite: AHS 1883 or consent of instructor. Concurrent enrollment: AHS 2422.
Normal and abnormal blood pictures and cell maturations with related clinical analyses, hemoglobinopathies, bone marrows, blood coagulation and all factors.
- 2422 Hematology Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment: AHS 2413. Clinical hematological laboratory.
- 2533 Parasitology and Urinalysis**
(3-0) 3 hours credit. Prerequisite: AHS 1883.
Study of human parasitology, urinalysis with correlation to physiological condition.
- 2542 Parasitology and Urinalysis Laboratory**
(0-6) 2 hours credit.
Concurrent enrollment: AHS 2533. Clinical human parasitology and urinalysis.
- 3002 Principles of Practice**
(2-0) 2 hours credit. Prerequisite: Approval of Occupational Therapy Program Director.
Overview of occupational therapy theory and clinical application.
- 3012 Introductory Pathology**
(2-0) 2 hours credit. Prerequisites: BIO 1103, 1112, or AHS 2103.
Concepts of disease and diagnosis of pathological conditions.
- 3113 Kinesiology**
(3-0) 3 hours credit. Prerequisite: AHS 2083 and 2103. Primarily designed for students majoring in physical education.
A study of the principles of human motion.
- 3164 Human Gross Anatomy for Occupational Therapy and Physical Therapy**
(4-0) 4 hours credit. Prerequisite: Approval of the appropriate Allied Health Program Director.
Lectures and demonstrations on the structure of the human body.
- 3174 Human Gross Anatomy Laboratory**
(0-12) 4 hours credit.
Concurrent enrollment: AHS 3164.
Includes prosections, demonstrations and dissections of human material.
- 3201 Physical Therapy: History and Philosophy**
(1-0) 1 hour credit.
The history and philosophy of Physical Therapy. Includes presentations on various aspects of the profession.
- 3213 Occupational Therapy Media I**
(0-9) 3 hours credit. Prerequisite: Consent of instructor.
Use of tools in Handcrafts.
- 3232 Occupational Therapy Media II**
(0-6) 2 hours credit. Prerequisite: AHS 3213 and consent of instructor. Use of machinery in crafts and occupational therapy.

3302 Physical Therapy Procedures

(2-0) 2 hours credit. Prerequisite: Consent of the instructor.
Fundamental concepts for basic patient care and management.

3311 Physical Therapy Procedures Laboratory

(0-3) 1 hour credit. Concurrent enrollment: AHS 3302.

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.

3754 Dynamics of Motion I

(4-0) 4 hours credit. Prerequisites: AHS 3164 and approval of the appropriate Allied Health Program Director.
Study of the application of biomechanical, kinesiological and neurological principles to the control of individual and combined joint movements, including the analysis of normal human movement patterns.

3773 Clinical Chemistry

(3-0) 3 hours credit. Prerequisite: BIO 3513.
Physiological systems in normal and diseased processes and their correlation with clinical chemistry laboratory.

3782 Clinical Chemistry Laboratory

(0-6) 2 hours credit.
Concurrent enrollment: AHS 3773.
Analytical clinical chemistry techniques and automated clinical instrumentation with quality controls and blood analyses.

3793 Occupational Therapy Theory I

(3-0) 3 hours credit. Prerequisite: Approval of Occupational Therapy Program Director.
Study of psycho-social problems and treatment methods as related to Occupational Therapy.

3802 Clinical Medicine I

(2-0) 2 hours credit. Prerequisite: Approval of appropriate Allied Health Program Director.
Analysis of psychiatric theory and clinical application.

3812 Clinical Seminar

(2-0) 2 hours credit.
Analysis of treatment modalities related to clinical treatment.

3863 Immunohematology and Serology

(3-0) 3 hours credit. Prerequisites: AHS 2413 and BIO 4743.
Discussion of bloodbanking antigens and antibodies, cross-matching, and clinical serological assays in regard to normal and diseased states.

3872 Immunohematology and Serology Laboratory

(0-6) 2 hours credit.
Concurrent enrollment: AHS 3863.
Bloodbanking techniques and serological assays including radio immune assay procedures.

3881 Therapeutic Concepts and Procedures in Physical Therapy

(1-0) 1 hour credit. Prerequisite: Approval of Physical Therapy Program Director.
Theory and application of the use of physical agents in patient treatment.

3892 Therapeutic Concepts Laboratory

(0-6) 2 hours credit.
Concurrent enrollment: AHS 3881.

3902 Occupational Therapy Skills Laboratory I

(0-6) 2 hours credit. Prerequisites: AHS 3793 and approval of Occupational Therapy Program Director.
Applied therapeutic techniques in psycho-social dysfunction.

3922-6 Clinical Field Work Experience — Level I

Variable hours credit. Prerequisite: Approval of appropriate Allied Health Program Director.

Observation and Level I participation in the delivery of health care services. This course is taught on a credit/no credit basis only. Students completing this course will receive a grade of CR or NC.

4003 Clinical Medicine II

(3-0) 3 hours credit. Prerequisites: AHS 3012 and approval of the appropriate Allied Health Program Director.

The study of medical and surgical conditions treated by Physical and Occupational Therapy.

4013 Clinical Medicine III

(3-0) 3 hours credit. Prerequisites: AHS 4003 and approval of the appropriate Allied Health Program Director.

The study of medical and surgical conditions treated by Physical and Occupational Therapy. A continuation of AHS 4003.

4023 Occupational Therapy Skills Laboratory II

(0-9) 3 hours credit. Prerequisite: Approval of the Occupational Therapy Program Director. Concurrent enrollment: AHS 4053.

The application of theory to physical disabilities.

4033 Occupational Therapy Skills Laboratory III

(0-9) 3 hours credit. Prerequisite: Approval of the Occupational Therapy Program Director.

The use and analysis of developmental assessment techniques as related to Occupational Therapy.

4043 Occupational Therapy Media III

(0-9) 3 hours credit. Prerequisite: AHS 3232 and Approval of the Occupational Therapy Program Director.

Crafts used in the Occupational Therapy Clinical Programs.

4053 Occupational Therapy Theory II

(3-0) 3 hours credit. Prerequisite: Approval of the Occupational Therapy Program Director. Concurrent enrollment: AHS 4023.

The study of physical disabilities as related to treatment modalities.

4104 Normal and Abnormal Aspects of Human Development

(4-0) 4 hours credit. Prerequisites: AHS 3164, 4471, and approval of appropriate Allied Health Program Director.

Physical and behavioral maturation of the human organism from fetal life to geriatrics. Emphasizes normal and abnormal motor development in infancy and childhood and the relationship to cognitive, emotional, and social development.

4222 Advanced Concepts and Procedures in Physical Therapy

(2-0) 2 hours credit. Prerequisite: Approval of Physical Therapy Program Director.

Offers the opportunity to gain advanced training in developing rehabilitation treatment plans for comprehensive patient care.

4231 Advanced Concepts and Procedures in Physical Therapy Laboratory

(0-3) 1 hour credit.

Must be taken concurrently with AHS 4222.

4301 Clinical Education

(0-1) 1 hour credit. Prerequisite: Approval of appropriate Allied Health Program Director.

Offers the opportunity for supervised training in a clinical setting. May be repeated for a total of 4 hours credit. This course is taught on a credit/no credit basis only. Students completing this course will receive a grade of CR or NC.

4313 Therapeutic Exercise I

(2-6) 3 hours credit. Prerequisites: AHS 4104, 4463 and approval of Physical Therapy Program Director.

Emphasis on exercise techniques that are based on neurosciences and human development patterns.

4323 Therapeutic Exercise II

(2-6) 3 hours credit. Prerequisites: AHS 4313 and approval of Physical Therapy Program Director.

Emphasis on exercise techniques that are based on neurosciences and human development patterns. A continuation of AHS 4313.

4413 Mammalian Physiology

(3-0) 3 hours credit. Prerequisites: BIO 3413, 3422, and consent of instructor.

Physiology of mammalian organs and organ systems.

4421 Mammalian Physiology Laboratory

(0-3) 1 hour credit.

Concurrent enrollment: AHS 4413.

4463 Human Neurosciences

(3-0) 3 hours credit. Prerequisite: BIO 3413 or AHS 3463.

Structure and function of the human nervous system.

4471 Human Neurosciences Laboratory

(0-3) 1 hour credit.

Concurrent enrollment: AHS 4463.

4501 Seminar in Rehabilitation

(1-0) 1 hour credit. Prerequisite: Approval of appropriate program director.

Presentation and discussion of current scientific literature and/or issues.

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.

4803 Occupational Therapy Theory III

(3-0) 3 hours credit. Prerequisite: Approval of Occupational Therapy Program Director.

Overview of life tasks and adaptive skills of the developing human; treatment planning procedures with field observations.

4823 Allied Health Management and Consultation

(3-0) 3 hours credit. Prerequisite: Approval of appropriate Allied Health Program Director.

Planning, organizing, supervising, and implementing occupational therapy services as a line function and as a consultant; legal and ethical considerations.

4843 Advanced Clinical Microbiology

(2-6) 3 hours credit. Prerequisite: Approval of Medical Technology Program Director.

An integrated lecture and laboratory with emphasis on abnormal microbial flora found in diseased humans.

4854 Advanced Clinical Chemistry

(2-9) 4 hours credit. Prerequisite: Approval of Medical Technology Program Director.

An integrated lecture and laboratory with emphasis on special clinical chemistries, toxicology, and clinical chemistry of abnormal or diseased states.

4863 Advanced Clinical Hematology

(2-6) 3 hours credit. Prerequisite: Approval of Medical Technology Program Director.

An integrated lecture and laboratory with emphasis on blood pictures, bone marrows and hematological findings of diseased states.

4884 Advanced Immunohematology and Seriology

(2-9) 4 hours credit. Prerequisite: Approval of Medical Technology Program Director.

An integral lecture and laboratory with emphasis on unusual antibodies and incompatibilities.

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.

4923 Special Project

(2-9) 3 hours credit. Prerequisite: Consent of Program Director.

Offers the opportunity to accomplish an intensive supervised student research project.

4942-9 Clinical Field Work Experience — Level II

Variable hours credit. Prerequisites: Approval of appropriate Allied Health Program Director.

In depth experience in and responsibility for the delivery of health care. May be repeated for the required hours of the specific Allied Health degree. When necessary, may be elected for up to 12 hours in a single semester. This course is taught on a credit/no credit basis only. Students completing this course will receive a grade of CR or NC.

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 Applied Science or Chemistry. 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 APPLIED SCIENCE

The Bachelor of Science in Applied Science has three major goals: (1) to provide the student with the opportunity to prepare for employment in one of the option areas (Applied Geology, Applied Physics, Environmental Science, Polymer Science), (2) to offer the student the opportunity to take the fundamental courses and apply for to transfer to The University of Texas at Austin to complete a degree program in Civil Engineering, Environmental Engineering, Chemical Engineering, Electrical Engineering, Engineering Science, or Mechanical Engineering, and (3) to offer the student the opportunity to gain the background necessary for graduate study in a variety of science and engineering specialty areas.

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is dependent upon the option elected: Applied Geology, 129 semester hours; Applied Physics, 130 semester hours; Environmental Science, 136 semester hours; and Polymer Science, 129 semester hours.⁵³

All candidates for the degree must complete the following core of 26 semester hours (minimum) in the sciences and mathematics:

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	1714	Introduction to Computer Science
MAT	1214	Calculus I
MAT	1223	Calculus II
PHY	1903	Technical Physics I
PHY	1911	Technical Physics I Laboratory
PHY	1923	Technical Physics II
PHY	1931	Technical Physics II Laboratory

In addition, students must complete a minimum of 61 semester hours selected with approval of the student's Advisor from one of the following Applied Science options.

⁵³Thirty-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.

Applied Geology

A. 55 semester hours in Applied Geology, 24 of which must be at the upper-division level.

1. 43 semester hours of required courses are:

- GEO 1003 Introduction to Geology
- GEO 1011 Introduction to Geology Laboratory
- GEO 1023 Earth History
- GEO 1031 Earth History Laboratory
- GEO 2002 Earth Materials I
- GEO 2012 Earth Materials I Laboratory
- GEO 2022 Earth Materials II
- GEO 2031 Earth Materials II Laboratory
- GEO 2063 Introduction to Paleontology
- GEO 2071 Introduction to Paleontology Laboratory
- GEO 3042 Earth Materials III
- GEO 3052 Earth Materials III Laboratory
- GEO 3083 Stratigraphy
- GEO 3103 Structural Geology: Map and Photo Analysis
- GEO 3111 Structural Geology: Map and Photo Analysis Laboratory
- GEO 3123 Surface Processes and Sedimentary Geology
- GEO 3131 Surface Processes and Sedimentary Geology Laboratory
- GEO 3943 Field Methods in Geology
- GEO 4946 Field Geology

2. 12 additional semester hours of approved *elective* courses in Applied Geology and Applied Science at the upper-division level are required from the following:

- AS 4603 Fundamentals of Hydraulic Engineering
- AS 4911-3 Independent Study
- AS 4923 Special Project
- AS 4931-3 Practicum in Applied Science
- AS 4953 Special Studies in Applied Science
- GEO 2951-3 Special Interest Topics
- GEO 3143 Economic Geology I: Metals and Industrial Minerals
- GEO 3163 Oceanography
- GEO 3182 Economic Geology II: Fuels
- GEO 3191 Economic Geology II: Fuels — Laboratory
- GEO 4023 Engineering Geology
- GEO 4063 Principles of Environmental Geology
- GEO 4113 Geomorphology
- GEO 4121 Geomorphology Laboratory
- GEO 4623 Hydrogeology

B. 6 semester hours of *support work* at the upper-division level with the consent of the advisor.

Applied Physics

A. 56 semester hours in the option.

1. 29 semester hours of required courses are:

- AS 3293 Thermodynamics
- AS 4923 Special Project
- AS 4933 Practicum in Applied Science
- PHY 2002 Workshop in Applied Physics

230 / BACHELOR OF SCIENCE DEGREE IN APPLIED SCIENCE

- PHY 2403 Electronics
- PHY 2412 Electronics Laboratory
- PHY 3203 Dynamics
- PHY 3263 Microphysics
- PHY 3313 Materials Physics
- PHY 3321 Materials Physics Laboratory
- PHY 4403 Electricity and Magnetism II

2. 27 additional semester hours of approved *elective* courses in Applied Science⁵⁴ at the upper-division level are required to be chosen from either Applied Physics, Applied Geology or Applied Science courses with the consent of the Advisor.
- B. 3 semester hours of required *support work* in Applied Geology (GEO 1003 Introduction to Geology).
- C. 3 semester hours of electives.

Environmental Science

- A. 48 semester hours in the option. Required courses are:
 - AS 2203 Statics
 - AS 3503 Alternative Energy Sources
 - AS 3663 Fluid Mechanics
 - AS 3673 Municipal and Rural Sanitation
 - AS 4603 Fundamentals of Hydraulic Engineering
 - AS 4633 Water and Wastewater Treatment
 - AS 4643 Air Pollution and Industrial Hygiene
 - AS 4933 Practicum in Applied Science
 - BIO 1103 Principles of Biology
 - BIO 1112 Principles of Biology Laboratory
 - BIO 1213 Principles of Ecology
 - ENV 3023 Man and His Natural Resources
 - ENV 4603 Environmental Quality Analysis and Monitoring
 - GEO 1003 Introduction to Geology
 - GEO 1011 Introduction to Geology Laboratory
 - GEO 4063 Principles of Environmental Geology
 - GEO 4623 Hydrogeology
- B. 11 semester hours of *support work*. Required courses are:
 - AHS 1053 Introductory Microbiology
 - AHS 1061 Introductory Microbiology
 - CHE 2103 Elementary Organic and Biochemistry
 - CHE 2111 Organic and Biochemistry Laboratory
 - CHE 3103 Analytical Chemistry
- C. 6 semester hours of approved *elective* courses at the upper-division level.
- D. 3 semester hours of electives.

Polymer Science

- A. 34 semester hours in the option, all of which must be at the upper-division level.

⁵⁴With the consent of the student's Advisor, up to 9 hours may be in upper-division Mathematics, Computer Science, Systems Design, Chemistry, or Biology courses.

1. 20 semester hours of required courses are:
 - AS 4923 Special Project
 - AS 4933 Practicum in Applied Science
 - PS 3603 Polymer Science I
 - PS 3612 Polymer Science I Laboratory
 - PS 3623 Polymer Science II
 - PS 3632 Polymer Science II Laboratory
 - PS 4653 Polymer Technology
 - PS 4661 Polymer Technology Laboratory
2. 14 additional semester hours of approved *elective* courses in Applied Science and Polymer Science at the upper-division level to be chosen from the following:
 - AS 2203 Statics
 - AS 3213 Mechanics of Solids
 - AS 3241 Materials Laboratory
 - PS 3643 Natural and Synthetic Organic Polymers
 - PS 3651 Natural and Synthetic Organic Polymers Laboratory
 - PS 4623 Coatings Technology
 - PS 4643 Polymer Processing
 - PS 4703 Organic Chemistry of Coatings
 - PS 4743 Industrial and Commercial Applications of Polymers
- B. 24 semester hours of *support work*.
 1. 18 semester hours of required courses are:
 - CHE 2203 Organic Chemistry I
 - CHE 2212 Organic Qualitative Analysis
 - CHE 3003 Organic Chemistry II
 - CHE 3012 Organic Quantitative Analysis
 - CHE 3203 Physical Chemistry I
 - CHE 3212 Physical Chemistry Laboratory
 - CHE 3223 Physical Chemistry II
 2. 6 additional semester hours of upper-division coursework are required in an area of applied science, biology and/or chemistry, with the consent of the advisor.
- C. 3 semester hours of electives.

COURSE DESCRIPTIONS

APPLIED 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, tectonics, 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 constitution. 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.

2002 Earth Materials I

(2-0) 2 hours credit. Prerequisites: GEO 1003 and 1011. Concurrent enrollment: GEO 2012.

Crystallography, chemistry, physical properties and origin of minerals.

2012 Earth Materials I Laboratory

(0-4) 2 hours credit. Concurrent enrollment: GEO 2002.
Laboratory study of crystal models, crystals and minerals.

2022 Earth Materials II

(2-0) 2 hours credit. Prerequisites: GEO 2002 and 2012. Concurrent enrollment: GEO 2031. Principles and methods of optical crystallography.

2031 Earth Materials II Laboratory

(0-3) 1 hour credit. Prerequisites: GEO 2002 and 2012. Concurrent enrollment: GEO 2022.
Use of the petrographic microscope for the identification of minerals in immersion liquids and in thin sections.

2063 Introduction to Paleontology

(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, 1023 and 1031. Concurrent enrollment: GEO 2071.

Study of fossil animals and plants. Emphasis on invertebrate animals. Systematics, biostratigraphy, paleoecology, and evolution of fossil organisms.

2071 Introduction to Paleontology Laboratory

(0-3) 1 hour credit. Prerequisites: GEO 1003, 1011, 1023 and 1031. Concurrent enrollment: GEO 2063.

Study of fossil specimens, collection and preparation techniques.

2951-3 Special Interest Topics

1-3 hours credit.

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.

3042 Earth Materials III

(2-0) 2 hours credit. Prerequisites: GEO 2022 and 2031. Concurrent enrollment: GEO 3052.

Description, occurrence, and origin of igneous, metamorphic, and sedimentary rocks.

3052 Earth Materials III Laboratory

(0-4) 2 hours credit. Prerequisites: GEO 2022 and 2031. Concurrent enrollment: GEO 3042.

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.

3103 Structural Geology: Map and Photo Analysis

(3-0) 3 hours credit. Prerequisites: GEO 1003 and 1011. Concurrent enrollment: GEO 3111.

Response of earth materials to natural stresses. Description and origin of rock structures.

3111 Structural Geology: Map and Photo Analysis Laboratory

(0-2) 1 hour credit. Prerequisites: GEO 1003 and 1011. Concurrent enrollment: GEO 3103.

Laboratory study of structural interpretation using maps, cross-sections, air photos, and descriptive geometric and stereographic methods.

3123 Surface Processes and Sedimentary Geology

(3-0) 3 hours credit. Prerequisites: GEO 3022 and 3031. Concurrent enrollment: GEO 3131.

Processes of erosion, transportation and deposition that transform the surface of the continents and form bodies of sedimentary rock and their primary structures.

3131 Surface Processes and Sedimentary Geology Laboratory

(0-3) 1 hour credit. Prerequisites: GEO 3022 and 3031. Concurrent enrollment: GEO 3123.

Field trips and laboratory studies of sedimentary processes and their products.

3143 Economic Geology I: Metals and Industrial Minerals

(3-0) 3 hours credit. Prerequisites: GEO 1003 and 1011.

Ore and industrial mineral genesis. Description and distribution of the major mineral deposits.

3163 Oceanography

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

General oceanography, with emphasis on marine geology and especially the continental margins.

3182 Economic Geology II: Fuels

(2-0) 2 hours credit. Prerequisites: GEO 1003, 1011, 1023, and 1031. Concurrent enrollment: GEO 3191.

Geology of petroleum, natural gas, coal, uranium; geothermal energy sources.

3191 Economic Geology II: Fuels Laboratory

(0-3) 1 hour credit. Prerequisites: GEO 1003, 1011, 1023, and 1031. Concurrent enrollment: GEO 3182.

Laboratory studies of samples, maps and logs. Preparation of sample logs and subsurface maps.

3943 Field Methods in Geology

(1-6) 3 hours credit. Prerequisites: GEO 1003, 1011, and consent of instructor.

Use of surveying methods and topographic and air photo bases for geologic mapping. Description, recording, and interpretation of field relationships.

4023 Engineering Geology

(3-0) 3 hours credit. Prerequisites: GEO 1003 and 1011.

Geologic factors in the construction of large structures and excavations. Physical properties of natural minerals. Case studies.

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. Concurrent enrollment: GEO 4121.

Interpretation of landforms using geologic techniques.

4121 Geomorphology Laboratory

(0-3) 1 hour credit. Prerequisites: GEO 3083, 3103, and 3111. Concurrent enrollment: GEO 4113.

Interpretation of maps and aerial photographs.

4623 Hydrogeology

(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, and PHY 1923.

Hydrologic cycle and the theory of underground water. Recharge and discharge of aquifers; water quality; exploration and development of ground water supplies.

4946 Field Geology

(0-17) 6 hours credit. Prerequisite: Consent of instructor.

Field mapping and measurements during a six-week period in summer. Field trips required.

COURSE DESCRIPTIONS

APPLIED PHYSICS (PHY)

1703 Energy and the Environment

(3-0) 3 hours credit.

The topics considered, and some of their inter-relations, are: the automobile and mass transportation, common sources of energy, electrical power generation, nuclear, solar and geothermal energy, communications, air, water and noise pollution. Use of mathematics is limited.

1803 Physics for Life Sciences I

(3-0) 3 hours credit. Prerequisite: Working knowledge of high school algebra. Concurrent enrollment in PHY 1811 recommended.

The principles of physics with applications and problem solving useful to biology and pre-medical students. Mechanics and wave phenomena.

1811 Physics for Life Sciences I Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1803. Laboratory to accompany PHY 1803.

1823 Physics for Life Sciences II

(3-0) 3 hours credit. Prerequisite: PHY 1803. Concurrent enrollment in PHY 1831 recommended.

The principles of physics with applications and problem solving useful to biology and pre-medical students. Electricity and magnetism, optics and modern physics.

1831 Physics for Life Sciences II Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1823. Laboratory to accompany PHY 1823.

1903 Technical Physics I

(3-0) 3 hours credit. Prerequisite or concurrent enrollment: MAT 1214. Concurrent enrollment: PHY 1911.

The basic concepts and methods of physics. Mechanics, wave phenomena, and heat.

1911 Technical Physics I Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1903. Laboratory to accompany PHY 1903.

1923 Technical Physics II

(3-0) 3 hours credit. Prerequisite: PHY 1903. Prerequisite or concurrent enrollment: MAT 1223.

A continuation of PHY 1903. Electricity and magnetism, optics, and an introduction to modern physics.

1931 Technical Physics II Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 1923. Laboratory to accompany PHY 1923.

1941 Problems in Technical Physics I

(1-0) 1 hour credit. Concurrent enrollment: PHY 1903.

Advanced applications to problems in mechanics, wave phenomena and heat. Intended primarily for physics and engineering students.

1951 Problems in Technical Physics II

(1-0) 1 hour credit. Concurrent enrollment: PHY 1923.

Advanced applications to problems in electricity and magnetism, optics, and modern physics. Intended primarily for physics majors and engineering students.

2002 Workshop in Applied Physics

(1-3) 2 hours credit. Prerequisite: PHY 1923.

The opportunity to develop of skills in Applied Physics. Problem solving methods. Fundamentals of experimental techniques.

2223 Musical Acoustics

(3-0) 3 hours credit. 1 year Music Theory desirable.

Sound vibration and transmission, interference, resonance, combinatorial tones, string and wind instruments and architectural acoustics.

2403 Electronics

(3-0) 3 hours credit. Prerequisite: PHY 1923. Concurrent enrollment in PHY 2412 recommended.

Introduction to DC and AC circuits, electric components and their uses in basic circuits for instrumentation.

2412 Electronics Laboratory

(0-6) 2 hour credit. Prerequisite or concurrent enrollment: PHY 2403.

Laboratory to accompany PHY 2403. Construction and testing of electronic circuits and devices.

2424 Network Theory

(3-3) 4 hours credit. Prerequisites: PHY 1923, 1931, and MAT 3613.

Basic network principles; steady state response to DC and AC signals; simple transient response; nodal and loop analysis.

2433 Introduction to Solid State Electronics

(3-0) 3 hours credit. Prerequisite: PHY 2403 or consent of instructor.

Principles of solid state materials and solid state devices; elementary applications of solid state devices to electronic systems.

3203 Dynamics

(3-0) 3 hours credit. Prerequisite: PHY 1923. Prerequisite or concurrent enrollment: MAT 2213.

Kinematics and dynamics of systems of particles, rigid body motion. Applications are emphasized.

3263 Microphysics

(3-0) 3 hours credit. Prerequisite: PHY 1923. Prerequisite or concurrent enrollment: MAT 2213.

Atomic and molecular physics; elementary principles of quantum mechanics; Bohr model; theory of the hydrogen atom; atomic, diatomic, and molecular spectra.

3273 Modern Physics

(3-0) 3 hours credit. Prerequisite: PHY 3263.

Nuclear radiation and particle physics; theories of interactions between fundamental units; application of theory to materials.

3293 Statistical Mechanics

(3-0) 3 hours credit. Prerequisites: PHY 1923 and AS 3293.

Statistical methods. Molecular models of macro systems. Distributions; Fermi, Bose and Boltzmann statistics; application of theory to materials.

3313 Materials Physics

(3-0) 3 hours credit. Prerequisite or concurrent enrollment: PHY 3263.

Mechanical, electrical, thermal and optical properties of solid state materials, crystalline structures, lattice vibrations, electron theory.

3321 Materials Physics Laboratory

(0-3) 1 hour credit. Concurrent enrollment: PHY 3313.

Determination and methods of evaluating the electrical, thermal, and optical properties of crystalline materials.

3363 Biophysics

(3-0) 3 hours credit. Prerequisites: BIO 1103, CHE 2003, PHY 1823 or PHY 1923, and MAT 1223.

Study of biological systems from the physicist's point of view; introduction to atomic structure, molecular bonds, concepts of molecular biophysics, macro-molecules, survey of physical experimental techniques in molecular biophysics.

3373 Biomaterials

(3-0) 3 hours credit. Prerequisite: PHY 3363.

Study of biological systems from a physicist's point of view; molecular transformations and methods of regulation, macroscopic biostructures and their physical properties, thermodynamics of living systems, interaction of radiation with biological materials.

3383 General Geophysics

(3-0) 3 hours credit. Prerequisites: GEO 1003, 1011, PHY 1923 and consent of instructor.

Geomagnetism, gravity, seismology, and heat flow. Interior of the earth and tectonics.

3423 Electricity and Magnetism I

(3-0) 3 hours credit. Prerequisite: PHY 1923.

Electrostatics, magnetostatics, Ampere's and Faraday's laws.

3443 Optics

(3-0) 3 hours credit. Prerequisite: PHY 3423. Concurrent enrollment in PHY 3452 recommended.

Wave motion and its applications primarily in physical optics. Optical correlation techniques, lasers, holography, fiber optics, magneto- and electro-optical phenomena and their applications.

3452 Optics Laboratory

(0-6) 2 hours credit. Prerequisite or concurrent enrollment: PHY 3443.

Measurement of physical optical phenomena, laser techniques, scattering and diffraction.

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 Dynamics

(3-0) 3 hours credit. Prerequisite: PHY 3203.

Advanced methods in mechanics, Lagrangian and Hamiltonian formulations, special relativity, oscillations; applications to materials physics.

4223 Acoustics

(3-0) 3 hours credit. Prerequisites: PHY 1923 and MAT 2213. Concurrent enrollment in PHY 4231 recommended.

Applications of infrasound and ultrasound, including sonar and biomedical applications. Noise suppression methods.

4231 Acoustics Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PHY 4223.

Generation and measurement of acoustical signals.

4263 Introduction to Quantum Mechanics

(3-0) 3 hours credit. Prerequisites: PHY 3203 and MAT 3613, or consent of instructor.

Schrodinger equation, matrix methods, interactions of atoms with radiation, Dirac equation, applications to materials.

4303 Advanced Materials Physics

(3-0) 3 hours credit. Prerequisite: PHY 3313.

Advanced studies in the bulk and surface properties of materials. Special aspects of crystalline and amorphous solids.

4382 Exploration Geophysics

(2-0) 2 hours credit. Prerequisite: PHY 3383. Concurrent enrollment: PHY 4391.

Principles of geophysical prospecting. Magnetic, gravity and seismic methods.

4391 Exploration Geophysics — Laboratory

(0-3) 1 hour credit. Concurrent enrollment: PHY 4382.

Planning and execution of exploration programs and interpretation of the results of magnetic, gravity and seismic surveying.

4403 Electricity and Magnetism II

(3-0) 3 hours credit. Prerequisite: PHY 3423.

Theory and applications of electromagnetic fields; Maxwell's equations; plasmas.

4503 Topics in Astrophysics

(3-0) 3 hours credit. Prerequisite: PHY 1923.

Significant astrophysical topics will be presented. Topics include: General Astrophysics, Astronomical Dynamics, Quantum Processes, Structure of the Universe. May be repeated for credit when topics vary.

COURSE DESCRIPTIONS

APPLIED SCIENCE (AS)

1103 Introduction to Engineering

(3-0) 3 hours credit.

Engineering as a career. Case studies which illustrate the scope and nature of the professional activities of engineers. Alternative approaches to engineering problem solving and design through use of engineering principles.

1802 Engineering Graphics

(1-3) 2 hours credit.

Freehand and instrument drawing; shape and size description; pictorial methods; freehand lettering; charts and graphs.

2203 Statics

(3-0) 3 hours credit. Prerequisites: PHY 1903 and MAT 1223.

Vector algebra, force systems, free body diagrams. Engineering applications of equilibrium, centroids, moments of inertia.

3213 Mechanics of Solids

(3-0) 3 hours credit. Prerequisites: AS 2203 and CHE 2003.

Internal forces and deformations in solids; stress; strain in elastic and plastic solids; application to simple engineering problems.

3241 Materials Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: AS 3213.

Laboratory study of principles of mechanics including stress and strain in elastic and plastic solids.

3293 Thermodynamics

(3-0) 3 hours credit. Prerequisites: PHY 1923, CHE 2003, and MAT 2213.

Heat, kinetic theory of gases, laws of thermodynamics and their practical applications to thermodynamic devices including engines.

3503 Alternative Energy Sources

(3-0) 3 hours credit. Prerequisites: PHY 1923 and CHE 2003.

Solar, nuclear, wind, geothermal and tidal energy. Energy storage problems. Principles, current technology and economic considerations.

3663 Fluid Mechanics

(3-0) 3 hours credit. Prerequisites: AS 2203 and MAT 1223.

Fluid properties; fluid statics, concepts and equations of fluid flow; similitude; viscous effects; compressible fluid flow.

3673 Municipal and Rural Sanitation

(3-0) 3 hours credit. Prerequisites: BIO 1213, CHE 2003, and upper-division standing.

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. Formerly BIO 3233. Credit cannot be earned for both AS 3673 and BIO 3233.

4603 Fundamentals of Hydraulic Engineering

(3-0) 3 hours credit. Prerequisite: AS 3663 or consent of instructor.

Examination of various components of the hydrologic cycle in the atmosphere and outer crust of the earth. Emphasis on surface waters through analysis of hydrologic data relating to rainfall, runoff, infiltration, and evaporation.

4612 Hydraulic Engineering Laboratory

(0-6) 2 hours credit. Prerequisite or concurrent enrollment: AS 4603 or consent of instructor.

Laboratory studies in static and dynamic fluid properties and phenomena.

4633 Water and Wastewater Treatment

(3-0) 3 hours credit. Prerequisites: CHE 2003 and AS 3663 or consent of the instructor.

The application of chemical, biochemical, physical and mathematical processes to water treatment, wastewater treatment and pollution control.

4643 Air Pollution and Industrial Hygiene

(3-0) 3 hours credit. Prerequisites: BIO 1213, CHE 2003 and upper-division standing. Discussion of the sources, quantities, effects of sampling and control of airborne pollutants in ambient air, and in urban and industrial environments. Formerly BIO 4493. Credit cannot be earned for both AS 4643 and BIO 4493.

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.

4923 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.

4931-3 Practicum in Applied Science

1-3 hours credit. Prerequisite: Consent of Division Director.

A program of research and/or supervised applications of theory in a research, industrial or government environment. 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 Applied 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.

COURSE DESCRIPTIONS

POLYMER SCIENCE (PS)

3603 Polymer Science I

(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; polymer degradation and stabilization.

3612 Polymer Science I Laboratory

(0-6) 2 hours credit. Prerequisite or concurrent enrollment: PS 3603.

Laboratory projects illustrating and extending the concepts discussed in PS 3603.

3623 Polymer Science II

(3-0) 3 hours credit. Prerequisite: CHE 3003 or consent of instructor.

Structural and physical aspects of polymers; molecular basis for polymer properties and behavior; the rubbery, glassy and crystalline states; viscoelasticity and rubber elasticity; glass transition; structure, morphology, mechanical, optical and electrical properties.

3632 Polymer Science II Laboratory

(0-6) 2 hours credit. Prerequisite or concurrent enrollment: PS 3623.

Laboratory projects illustrating and extending the concepts discussed in PS 3623.

3643 Natural and Synthetic Organic Polymers

(3-0) 3 hours credit. Prerequisites: PS 3603 and CHE 3003.

Preparation, structure and properties of addition and condensation polymers; polymerization by ring opening; block and graft polymers. Structure and properties of cellulose, proteins, rubber and their derivatives.

3651 Natural and Synthetic Organic Polymers Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PS 3643.

Laboratory projects illustrating and extending the concepts discussed in PS 3643.

4623 Coatings Technology

(3-0) 3 hours credit. Prerequisite: PS 3623.

Convertible and nonconvertible coatings; solvents, plasticizers, lacquers, varnishes, formulation, pigmentation; film properties, chemical resistance, adhesion, hardness, flexibility, abrasion resistance, strength, color, opacity gloss; electrocoating; radiation and photo-curing. Pigmented coatings; extender pigments; decorative paints and industrial finishes; corrosion and chemical resistant paint systems.

4643 Polymer Processes

(3-0) 3 hours credit. Prerequisite: PS 3623.

Fundamentals of extrusion, injection, compression and blow molding, fiber spinning, calendaring and film formation; mixing processes; heat and mass transfer; elastic phenomena; simple flow models and stability of flow; process development and design.

4653 Polymer Technology

(3-0) 3 hours credit. Prerequisites: PS 3643 and 3651.

Finishing of polymers; thermosets; molding powders, laminates; polymer foams; coatings, drying oils, alkyds, epoxy resins, urethanes, natural and synthetic rubber processing; vulcanization and oxidation of polyolefins and polydienes; polymer latices. Film and fiber formation; melt, wet and dry spinning, orientation; adhesion; adhesive systems, polymer-plasticizer interaction, polymer-fiber interactions, reinforced systems, packaging materials.

4661 Polymer Technology Laboratory

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: PS 4653.

Laboratory projects illustrating and extending the concepts discussed in PS 4653.

4703 Organic Chemistry of Coatings

(3-0) 3 hours credit. Prerequisites: PS 3623 and CHE 3003.

Chemistry of autoxidation, glyceride oils; varnishes; and resins, including alkyd, epoxy, amino and phenol formaldehyde, rubber and silicone resins; acrylic and vinyl coatings; polyurethanes and copolymers. Radiation curing, electrodeposition, photo-curable coatings.

4743 Industrial and Commercial Applications of Polymers

(3-0) 3 hours credit. Prerequisite: PS 3623.

Mechanical, electrical and thermal properties of engineering plastics; applications as materials of construction; polymers in biology and biomedical engineering; space technology; specialty polymers for high temperature applications, environmental effects on polymers; rain erosion, weathering, corrosive environment, biological environment; radiation effects.

ENGINEERING

The University of Texas at San Antonio does not offer a degree in engineering. However, the Applied Science Curriculum offers an opportunity for students to obtain a major part of their engineering education at The University of Texas at San Antonio. For example, with a minimal amount of additional work the program enables UT San Antonio graduates in Applied Science to earn a second bachelor's degree at The University of Texas at Austin in Petroleum, Environmental and Civil Engineering (Applied Geology), Electrical Engineering, Engineering Science, or Mechanical Engineering (Applied Physics) or Chemical Engineering (Polymer Science).

For those students who plan to transfer to an engineering curriculum prior to completing the Bachelor of Science in Applied Science degree, a sequence of courses, tailored to the engineering program of interest, will be recommended by the Engineering Advisor.

BACHELOR OF SCIENCE DEGREE IN CHEMISTRY

The minimum number of semester hours required for this degree, including the 42 semester hours of General Education Requirements, is 128⁵⁵. All candidates for the degree must complete:

A. 38 semester hours of required courses in Chemistry.

- CHE 1103 Introductory Chemistry
- CHE 2003 Chemical Principles
- CHE 2012 Inorganic Qualitative and Quantitative Analysis
- CHE 2203 Organic Chemistry I
- CHE 2212 Organic Qualitative Analysis
- CHE 3003 Organic Chemistry II
- CHE 3012 Organic Quantitative Analysis
- CHE 3103 Analytical Chemistry
- CHE 3203 Physical Chemistry I
- CHE 3212 Physical Chemistry Laboratory
- CHE 3223 Physical Chemistry II
- CHE 3232 Instrumental Analysis
- CHE 4263 Inorganic Chemistry I
- CHE 4923 Special Project in Chemistry or CHE 4913 Independent Study
- CHE 4971 Proseminar

B. 15 additional semester hours of approved elective courses.

1. 6 semester hours to be selected from:

- BIO 3513 Biochemistry
- CHE 4243 Organic Chemistry III
- PS 3603 Polymer Science I or PS 3623 Polymer Science II

2. 9 additional semester hours of approved *elective* Chemistry at the upper-division level are required.

C. A minimum of 27 semester hours of *support work* in Science and Mathematics.

Required courses are:

- CS 1073 Introductory Computer Programming for Scientific Applications or
- CS 1714 Introduction to Computer Science
- MAT 1214 Calculus I
- MAT 1223 Calculus II
- MAT 2213 Calculus III or CS 1723 Data Structures I
- PHY 1903 Technical Physics I
- PHY 1911 Technical Physics I Laboratory
- PHY 1923 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. 6 semester hours of *electives*.

⁵⁵Thirty-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.

COURSE DESCRIPTIONS

CHEMISTRY (CHE)

1003 General Chemistry for Allied Health Sciences

(3-0) 3 hours credit.

Introduction to atomic structure, chemical bonding, stoichiometry, states of matter, inorganic chemical reactions, acids and bases. For majors in occupational therapy, pre-nursing, and dental hygiene. May not be applied to a major in chemistry, biology, or medical technology.

1103 Introductory Chemistry

(3-0) 3 hours credit.

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

(0-3) 1 hour credit. Prerequisite or concurrent enrollment: CHE 1003.

Introduction to chemical laboratory techniques. For majors in occupational therapy, pre-nursing, and dental hygiene. May not be applied to a major in chemistry, biology, or medical technology.

1122 Introductory Chemistry Laboratory Workshop

(1-3) 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. CHE 1122 is recommended. Primarily for science majors.

Elementary inorganic and physical chemistry: a continuation of descriptive inorganic chemistry, coordination chemistry, solutions and electrolytes, redox processes, elementary thermodynamics, chemical kinetics, and elementary electrochemistry and nuclear chemistry; introduction to organic chemistry.

2012 Inorganic Qualitative and Quantitative Analysis

(0-6) 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

(0-3) 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, vitamins.

2203 Organic Chemistry I

(3-0) 3 hours credit. Prerequisites: CHE 2003 and 2012. Primarily for science majors.

An elementary study of structure, reactions, and reaction mechanisms associated with organic compounds, e.g., aliphatic and aromatic hydrocarbons, alcohols, ethers, organic halogen compounds, aldehydes, and ketones.

2212 Organic Qualitative Analysis

(0-6) 2 hours credit. Prerequisite or concurrent enrollment: CHE 2203. Primarily for science majors.

Determination of physical constants of organic compounds; separation methods: vacuum distillation, crystallization, column chromatography, and gas chromatography; organic elemental analysis, functional group study and qualitative analysis.

3003 Organic Chemistry II

(3-0) 3 hours credit. Prerequisite: CHE 2203; Prerequisite or concurrent enrollment: CHE 2212.

Continuing study of fundamentals of structure, stereo-chemistry, reactions and reaction mechanisms of carbonyl compounds and their derivatives; organic compounds containing nitrogen, phosphorus and sulphur; poly-functional organic compounds; including an introduction to biochemistry. A continuation of CHE 2203.

3012 Organic Quantitative Analysis

(0-6) 2 hours credit. Prerequisite: CHE 2212. Prerequisite or concurrent enrollment: CHE 3003 or consent of instructor.

Continuing laboratory study of quantitative analysis of organic reactions and molecular structure; qualitative and quantitative use of infrared, ultra-violet, and proton nuclear magnetic resonance spectrometry; introduction to mass spectrometry.

3103 Analytical Chemistry

(1-6) 3 hours credit. Prerequisites: CHE 2003 and 2012.

A detailed study of wet chemical and basic instrumental analysis including gravimetric, volumetric, spectrophotometric, pH and specific ion determinations, electrochemistry.

3153 Chemistry and Cosmetics

(3-0) 3 hours credit. Prerequisite: upper-division standing. May not be applied to a major in chemistry.

A survey of the chemical components of cosmetics and toiletries. Correlation between these chemical compounds and their physiological properties.

3173 Alchemy and the Sources of Modern Science

(3-0) 3 hours credit. Prerequisite: upper-division standing. May not be applied to a major in chemistry.

Scientific content of magic, witchcraft, alchemy, and iatrochemistry. Origins and development of ideas concerning composition and transformation of matter. Evolution of modern scientific method. Readings will include primary materials selected from Renaissance and modern literary and scientific sources.

3193 Physical Chemistry for Life Sciences

(3-0) 3 hours credit. Prerequisites: CHE 2203, BIO 3413, 3422, and MAT 1214.

May not be applied to a major in chemistry.

Selected topics from physical chemistry with special emphasis on biological systems and applications, including thermodynamics, energetics, kinetics, spectroscopy, nuclear chemistry and macromolecules.

3203 Physical Chemistry I

(3-0) 3 hours credit. Prerequisites: CHE 2003, 2012, MAT 1223, PHY 1923, 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: 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 3012, 3212, and 3223. Electrochemical methods; use of modern spectrometric and chromatographic instrumentation in separation, purification, and/or quantitative characterization of chemical systems.

3252 Chemistry in Industry

(2-0) 2 hours credit. Prerequisites or concurrent enrollment: CHE 3003, 3203, or consent of instructor.

The roles and problems of chemistry and chemists in the chemical industry: laboratory and operations management; basic research and product development; production, quality control, pollution and waste materials control, and safety; advertising, sales, and patents; the governmental/industrial interface; economic considerations, employment practices, and professional societies will also be explored.

3301 Physical Chemistry Problem Solving I

(1-0) 1 hour credit. Concurrent enrollment: CHE 3203.

Development of problem solving skills in physical chemistry.

3311 Physical Chemistry Problem Solving II

(1-0) 1 hour credit. Concurrent enrollment: CHE 3223.

A continuation of CHE 3301.

3373 Geochemistry

(3-0) 3 hours credit. Prerequisites: 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.

4223 Advanced Biochemistry

(3-0) 3 hours credit. Prerequisites: BIO 3513, 3521 and CHE 3003, 3012.

Chemical aspects of regulation and control mechanisms; membrane-related phenomena; oxidative phosphorylation and photosynthesis; transport mechanisms; 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 3012; CHE 3203 or consent of instructor.

Advanced mechanistic and synthetic aspects of organic reactions. Molecular rearrangements, organic molecular orbital theory and its application to pericyclic reactions. A continuation of CHE 3003.

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, multi-step 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 3012.

Identification of functional groups and the determination of the structure of compounds by spectral techniques including IR, NMP, 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. Prerequisite: CHE 3012. 4243, 4273, 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) 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.

4923 Special Project in Chemistry

3 hours credit. Prerequisite: Consent of Division Director.

A special laboratory research or library readings project 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: 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.

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.

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. Concurrent enrollment in AST 1023 is recommended.

Exercises in the use of the telescope and certain other astronomical instruments to include simple observations, measurement and photography.

DIVISION OF MATHEMATICS, COMPUTER SCIENCE, AND SYSTEMS DESIGN

The division offers a Bachelor of Science Degree in Mathematics, Computer Science, and Systems Design in which the student may select one of six emphases: Actuarial Science, Computer Science, Mathematics, Statistics, Systems Design, or Distributed. It also offers a Bachelor of Science Degree in Mathematics designed for students interested in obtaining a secondary teaching certificate.

BACHELOR OF SCIENCE DEGREE IN MATHEMATICS, COMPUTER SCIENCE, AND SYSTEMS DESIGN

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 126.⁵⁶

All candidates for the Bachelor of Science degree in Mathematics, Computer Science, and Systems Design, regardless of emphasis, must complete the following 26 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	Matrix Algebra
STA 3513	Probability and Statistics
STA 3523	Statistical Methods
CS 1714	Introduction to Computer Science
CS 1723	Data Structures I

In addition, a candidate for the Bachelor of Science in Mathematics, Computer Science, and Systems Design degree must complete the course requirements for the emphasis declared by the candidate.

ACTUARIAL SCIENCE EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the actuarial science emphasis are:

A. The following 27 semester hours:

MAT 2913	Problems in Actuarial Science I
MAT 3613	Differential Equations I
MAT 3633	Numerical Analysis I
MAT 3923	Financial Mathematics
MAT 3933	Mathematics of Life Insurance
MAT 3953	Problems of Actuarial Science II
MAT 3963	Problems in Actuarial Science III
SD 4613	Operations Research I
SD 4623	Operations Research II

B. An additional 9 semester hours chosen from among the following courses:

⁵⁶Thirty-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 SCIENCE DEGREE IN MATHEMATICS, / 247
COMPUTER SCIENCE, AND SYSTEMS DESIGN

- CS 2733 Introduction to Computer Organization
- CS 2743 Data Structures II
- CS 3733 Systems Programming
- CS 3743 Data Base Management
- CS 4753 Operating Systems and Computer Architecture I

C. An additional 9 semester hours chosen from among the following courses:

- STA 3313 Introduction to Sample Survey Theory and Methods
- STA 3543 Applied Non-Parametric Statistics
- STA 4643 Introduction to Stochastic Processes
- STA 4713 Applied Regression Analysis
- STA 4723 Design and Analysis of Experiments
- STA 4733 Statistical Design and Model Building

D. 16 semester hours of electives

COMPUTER SCIENCE EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the computer science emphasis are:

A. The following 26 semester hours:

- CS 2733 Introduction to Computer Organization
- CS 2743 Data Structures II
- CS 3233 Discrete Mathematical Structures
- CS 3723 Introduction to Programming Languages
- CS 3733 Systems Programming
- CS 3773 Programming Methodology
- CS 4753 Operating Systems and Architecture I
- SD 2815 Digital Systems I

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.

C. 23 semester hours of electives.

MATHEMATICS EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the mathematics emphasis are:

- A. MAT 3213 Foundations of Analysis
CS 3233 Discrete Mathematical Structures

B. 18 semester credit hours chosen from the following courses:

Students should follow one of these three suggested guidelines.

- i) Students desiring a broad background in mathematics should take at least 12 hours from Group I and 6 hours from Group II.
- ii) Students desiring a concentration which emphasizes pure mathematics should take at least 6 hours from Group I and 12 hours from Group II.
- iii) Students desiring a concentration which emphasizes applied mathematics should take all 18 hours from Group I.

Group I

- MAT 3223 Complex Variables
- MAT 3243 Calculus for Applications
- MAT 3613 Differential Equations I

248 / BACHELOR OF SCIENCE DEGREE IN MATHEMATICS,
COMPUTER SCIENCE, AND SYSTEMS DESIGN

MAT	3623	Differential Equations II
MAT	3633	Numerical Analysis I
MAT	3643	Numerical Analysis II
STA	4723	Design and Analysis of Experiments
SD	4613	Operations Research I
SD	4623	Operations Research II

Group II

MAT	4213	Real Analysis I
MAT	4223	Real Analysis II
MAT	4233	Modern Abstract Algebra I
MAT	4243	Modern Abstract Algebra II
MAT	4253	Number Theory
MAT	4263	Geometry
MAT	4273	Topology

- C. Any 7 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.
- D. 30 semester hours of electives

STATISTICS EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the statistics emphasis are:

- A. An additional 12 semester hours chosen from the following courses:

STA	3013	Multivariate Methods for the Life and Social Sciences
STA	3313	Introduction to Sample Survey Theory and Methods
STA	3433	Applied Nonparametric Statistics
STA	4643	Introduction to Stochastic Processes
STA	4713	Applied Regression Analysis
STA	4723	Design and Analysis of Experiments
STA	4733	Statistical Design and Model Building
STA	3813	Discrete Data Analysis and Bioassay

- B. An additional 6 semester hours chosen from the following courses:

MAT	3213	Foundations of Analysis
MAT	3223	Complex Variables
MAT	3613	Differential Equations I
MAT	3923	Finance Mathematics
MAT	3933	Mathematics of Life Insurance
SD	4613	Operations Research I
SD	4623	Operations Research II
SD	4633	Simulation

- C. Any 13 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.
- D. 30 semester hours of electives.

SYSTEMS DESIGN EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the systems design emphasis are:

- A. The following 22 semester hours:

**BACHELOR OF SCIENCE DEGREE IN MATHEMATICS, / 249
COMPUTER SCIENCE, AND SYSTEMS DESIGN**

SD	2815	Digital Circuits Design I
SD	2835	Digital Circuits Design II
SD	3823	Data Acquisition and Distribution
SD	3833	Real-Time Digital Control
SD	3843	Minicomputer Systems Architecture
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 Studies
SD	3853	Instrumentation Circuits Design
SD	3863	Real-Time Operating Systems for Minicomputers
SD	3873	Analog Simulation
SD	4813	Microprocessor Laboratory II
SD	4823	System Analysis
SD	4833	Optimal Control
SD	4853	Computer Interfaces
MAT	3633	Numerical Analysis I
MAT	3643	Numerical Analysis II

C. Any 3 upper division hours of approved elective courses in the Division of Mathematics, Computer Science, and Systems Design.

D. 27 semester hours of electives.

DISTRIBUTED EMPHASIS

Additional Bachelor of Science in Mathematics, Computer Science, and Systems Design Degree Requirements for the distributed emphasis are:

A. The following 32 semester hours:

CS	2733	Introduction to Computer Organization
CS	2743	Data Structures II
CS	3233	Discrete Mathematical Structures
CS	3723	Programming Languages
MAT	3243	Calculus for Applications
MAT	3613	Differential Equations I
MAT	3633	Numerical Analysis I
SD	2815	Digital Circuits Design I
SD	3823	Data Acquisition and Distribution
SD	4613	Operations Research I

B. Any 9 additional upper-division hours of approved elective courses in the Division of Mathematics, Computer Science, and Systems Design.

C. 20 semester hours of electives.

BACHELOR OF SCIENCE DEGREE IN MATHEMATICS

The minimum number of semester hours required for this degree, including the 42 hours of General Education Requirements, is 126.⁵⁷ The student who is not prepared to begin MAT 1214 must take MAT 1093, Precalculus.

⁵⁷Thirty-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.

250 / COMPUTER SCIENCE

All candidates for the degree must complete:

A. 32 required semester hours listed below:

CS	1714	Introduction to Computer Science
CS	1723	Information Structures I
CS	3233	Discrete Mathematical Structures
MAT	1214	Calculus I
MAT	1223	Calculus II
MAT	2213	Calculus III
MAT	3213	Foundations of Analysis
MAT	4263	Geometry
STA	3513	Probability and Statistics
STA	3523	Statistical Methods

B. In addition to the required courses, students must take 9 credits of approved math electives, at least 6 of which must be at the upper-division level. It is recommended that students select either MAT 4233 and MAT 4243 Modern Abstract Algebra I and II or MAT 4213 and MAT 4223 Real Analysis I and II as the 6 upper-division credits.

C. 43 semester hours of electives chosen to satisfy the Teacher Certification Requirements.

COURSE DESCRIPTIONS COMPUTER SCIENCE (CS)

1043 Computer Programming for Business Applications

(3-0) 3 hours credit. Concurrent enrollment: STA 1064.

Program development and testing; computer applications; plotting, solution of equations, probability distributions, random variate generation, matrix operations, numeric integration and differentiation and computing statistics. Students majoring in the Division of Mathematics, Computer Science, and Systems Design receiving credit for CS 1043 may not also receive credit for CS 1063 nor for CS 1073.

1063 Introduction to Problem-Solving and Programming

(3-0) 3 hours credit.

A problem-solving approach to computer programming. Stress is on problem definition, problem-solving techniques and algorithm development. Students majoring in the Division of Mathematics, Computer Science, and Systems Design receiving credit for CS 1063 may not also receive credit for CS 1043 nor for CS 1073.

1073 Introductory Computer Programming for Scientific Applications

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

1133 Computer Literacy I

(3-0) 3 hours credit.

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.

1714 Introduction to Computer Science

(4-0) 4 hours credit. Prerequisite: MAT 1183.

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.

1723 Data Structures I

(3-0) 3 hours credit. Prerequisite: CS 1714.

Common data structures, operations, applications and alternate methods of data representation. Pointers, linear structures (lists, queues, stacks, strings), arrays and array address calculations, trees, and graphs.

2133 Computer Literacy II

(3-0) 3 hours credit. Prerequisite: CS 1133.

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. Concurrent enrollment: SD 2815.

The characteristics of, and relationships between I/O devices, control units, and storage devices; the organization of modules into a system; the relationship between computer organization and software.

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), and analysis of algorithms.

3133 Computers and Society

(3-0) 3 hours credit. Prerequisite: CS 1063, 1043, 1073, 1133, or CS 1714, 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. Prerequisite: CS 1723 and MAT 2213.

Survey and development of theoretical tools suitable for describing algorithmic applications. Propositional logic and proofs, set theory, algebraic structures, groups, graphs, lattices, Boolean algebra, finite fields, and computability.

3321 Topics in Problem Solving Using High Level Languages

(1-0) 1 hour credit. Prerequisite: CS 1714.

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. Prerequisite: CS 2743.

An introduction to the philosophy and features of high-level programming languages; elementary aspects of computer and run-time considerations, problem solving ability, syntax, semantics, and examples.

3733 Systems Programming

(3-0) 3 hours credit. Prerequisite: CS 2733.

An introduction to system software. Internal representation of data and programs, addressing techniques, I/O, macros, and utilities; introduction to operating systems.

3743 Data Base Management

(3-0) 3 hours credit. Prerequisite: 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. Prerequisite: CS 2743.

Discussion of modular (structured) programming methods, programming style and program verification techniques.

3793 Introduction to Artificial Intelligence

(3-0) 3 hours credit. Prerequisite: CS 2743 and 3233.

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 Mathematics, Computer Science and Systems Design.

4313 Automata, Computability and Formal Languages

(3-0) 3 hours credit. Prerequisite: CS 1714 and 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. Prerequisite: 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. Prerequisite: 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, scanners, parsing techniques, symbol table management, code generation, and code optimization.

4753 Operating Systems and Computer Architecture I

(3-0) 3 hours credit. Prerequisite: CS 3733.

A study of the relationship between operating systems and computer architecture. Instruction sets, memory organization and management, process management, multiprogramming systems, protection, and file systems.

COURSE DESCRIPTIONS MATHEMATICS (MAT)

1023 Calculus for the Social Sciences

(3-0) 3 hours credit. Prerequisite: MAT 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 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.

1093 Precalculus

(3-0) 3 hours credit. Prerequisite: MAT 1183 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 geometry and algebra.
- 1183 Intermediate Algebra**
(3-0) 3 hours credit.
Exponents, arithmetic and factorization of polynomials; rational expressions; negative and rational exponents; scientific notation; radicals solving linear and quadratic equations; complex numbers; linear inequalities; absolute values; Cartesian coordinates, distance formula, linear equations; relations; functions, graphing functions.
- 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.
- 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 Matrix 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.
- 2913 Problems in Actuarial Science I**
(3-0) 3 hours credit. Prerequisite: MAT 2213. Prerequisite or concurrent enrollment: MAT 2233.
Problem solving in problems from advanced calculus and linear algebra which apply to actuarial science.
- 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.
Geometrical concepts with emphasis on an axiomatic, deductive approach to plane geometry; 3-dimensional and topological aspects.
- 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; limits; continuity. 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.

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 1714 or 1073.

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 1023 or 1183.

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.

3953 Problems in Actuarial Science II

(3-0) 3 hours credit. Prerequisite: STA 3523 or concurrent enrollment.

Problem solving in probability and statistics applied to actuarial science.

3963 Problems in Actuarial Science III

(3-0) 3 hours credit. Prerequisite: MAT 3923 and 3633 or concurrent enrollment.

Problem solving in the theory of interest and in basic numerical analysis applied to actuarial science.

3973 Problems in Actuarial Science IV

(3-0) 3 hours credit. Prerequisite: MAT 3933 or concurrent enrollment.

Problem solving in life contingencies.

4113 Mathematical Subjects for Elementary Teachers

(3-0) 3 hours credit. 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 3113. 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.

An in-depth study of the calculus of functions of several variables. The Bernstein Polynomial Theorem, Stone-Weierstrass Theorem and the derivative in \mathbb{R} .**4223 Real Analysis II**

(3-0) 3 hours credit. Prerequisite: MAT 4213.

The Riemann-Stieltjes integral and related subjects including the bounded convergence theorem, the Riesz representation theorem and the main theorems of integral calculus in \mathbb{R} and \mathbb{R}^p .

4233 Modern Abstract Algebra I

(3-0) 3 hours credit. Prerequisite: MAT 2213. CS 3233 recommended.
An in-depth study of groups and rings.

4243 Modern Abstract Algebra II

(3-0) 3 hours credg. Prerequisite: MAT 4233.
Topics in field theory and vector spaces.

4253 Number Theory

(3-0) 3 hours credit. Prerequisites: 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 2213.
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.

COURSE DESCRIPTIONS

STATISTICS

(STA)

1053 Basic Statistics

(3-0) 3 hours credit. Prerequisite: MAT 1033 or 1183.

Descriptive statistics: histograms, measures of location and dispersion. Elementary probability theory. Random variables. Binomial and normal distributions. Interval estimation and testing hypothesis. Simple linear regression and correlation. Applications of the chi-square distribution.

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 3513.

Matrix algebra preliminaries, the multivariate normal distribution, tests on means, discrimination analysis, cluster analysis, principle 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 3513 or 1993.

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 3513 or consent of instructor.

Tests of location. Goodness of fit tests. Rank tests. Tests based on nominal and ordinal data for both related and independent samples. Measures of association.

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.

Principles and methodology of estimation and testing hypotheses. Chi-square tests. Linear regression. Nonparametric tests. Analysis of variance.

3813 Discrete Data Analysis and Bioassay

(3-0) 3 hours credit. Prerequisite: STA 3523 or 1993.

Methods especially useful for problems arising in the life sciences. Analysis of count data. Contingency tables. Probit analysis.

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 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.

4723 Design and Analysis of Experiments

(3-0) 3 hours credit. Prerequisite: STA 3513.

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 3523.

Elements of model building. Fitting linear models to data. Factorial designs. Response surface methodology.

COURSE DESCRIPTIONS SYSTEMS DESIGN (SD)

2815 Digital Circuits Design I

(3-4) 5 hours credit. Prerequisites: CS 1723 and MAT 1214.

An introduction to modern integrated digital computer circuits. Basics of DTL, TTL, and MOS technologies. Hardware realizations of logical equations. Implementation of digital arithmetic.

2835 Digital Circuits Design II

(3-4) 5 hours credit. Prerequisite: SD 2815.

Design of synchronous sequential circuits. State minimization techniques. Design of small synchronous processor.

3823 Data Acquisition and Distribution

(2-2) 3 hours credit. Prerequisite: CS 1714.

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.

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 Minicomputer Systems Architecture

(3-0) 3 hours credit. Prerequisite: SD 2835.

A presentation of the hardware organization and systems architecture of state-of-the-art minicomputer systems. Instruction decoding and central processor organization, memory organization, floating-point processor organization, input-output functions and direct memory access, writable control store organization and micro-programming.

3853 Instrumentation Circuits Design

(3-0) 3 hours credit. Prerequisites: SD 2815, 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. Prerequisites: SD 3823 or CS 3733.

A study in the design of real-time operating systems for minicomputers. Memory management. Task scheduling in a multitask environment, input/output scheduling, and spooling.

3873 Analog Simulation

(2-2) 3 hours credit. Prerequisite: MAT 1223.

Operational amplifier principles, summers, integrators, multipliers, magnitude and time scaling, the inverse function principle for operational amplifiers. Techniques for simulation of mechanical, electrical, and biological systems.

4613 Operations Research I

(3-0) 3 hours credit. Prerequisites: 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 analysis, Markov chains, queuing models.

4633 Simulation

(3-0) 3 hours credit. Prerequisite or concurrent enrollment: SD 4623.

Construction and use of simulation models on a digital computer. Monte Carlo techniques and associated statistical methods.

4803 Microprocessor Laboratory I

(0-6) 3 hours credit. Prerequisite: SD 3843.

Principles of large-scale integration. Organization and systems architecture of state-of-the-art microprocessors. Large scale integration of random access memory and programmable read-only memory. Assemblers, compilers, and operating systems for microprocessors.

4813 Microprocessor Laboratory II

(0-6) 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 process control.

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 analysis 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 discrete systems. Formulation of the optimal control problem. Pontryagin's maximum principle. 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, multiplexers and other devices for computer communications and teleprocessing.

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. 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 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.

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 Admissions 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 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 Allied Health and 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.

260 / PREPROFESSIONAL COURSES OF STUDY IN LAW AND THE HEALTH FIELDS

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 Allied Health and Life Sciences.

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

- I. 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 Option 1. Entering students who have completed two units (two years) of a single foreign language will follow Option 2.

Option 1: 6 semester credit hours in a single foreign language equivalent to completion of UTSA's second semester (1023) in a given language.

Option 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 2013 Intermediate French I
GER 2013 Intermediate German I
FL 2013 Intermediate Foreign Language
RUS 2013 Intermediate Russian I
SPN 2013 Intermediate Spanish I
SPN 2043 Spanish for the Health Care Fields
SPN 2053 Spanish for the Business/Management Fields
SPN 2063 Spanish for the Criminal Justice 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):

262 / APPROVED GENERAL EDUCATION REQUIREMENTS COURSES

ANT 3143 Peoples and Societies of Latin America
BBL 3003 Biculturalism 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
HIS 2533 Latin America Since 1492
HIS 2563 The Middle East Since 622 A.D.
HIS 2573 Survey of African History
HIS 3213 France Since 1750
HIS 3223 Russia Since 1682
HIS 3233 Germany Since 1806
HIS 3243 History of Spain
HIS 3303 History of Mexico
HIS 3403 Pre-Hispanic and Colonial Latin America
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 to 18th Century
AHC 2213 Art and Architecture of the Americas I
AHC 2223 Art and Architecture of the Americas II
AHC 3223 Spanish Art and Architecture
AHC 3423 Pre-Columbian Art and Architecture of Mesoamerica
AHC 3453 New World Hispanic Art and Architecture
AHC 4423 Contemporary Art of Latin America and Mexico
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

Option 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

FL 1013 Elementary Foreign Language I*
FL 1023 Elementary Foreign Language II*
FRN 1013 Elementary French I*
FRN 1023 Elementary French II*

*Must be a different foreign language from the one in which two years of high school credit was presented upon admission.

APPROVED GENERAL EDUCATION REQUIREMENTS COURSES / 263

GER 1013 Elementary German I*
GER 1023 Elementary German II*
RUS 1013 Elementary Russian I*
RUS 1023 Elementary Russian II*
SPN 1013 Elementary Spanish I*
SPN 1023 Elementary Spanish II*

Linguistics

COM 2343 Introduction to Mass Communication
COM 3083 Language and Communication Theory
ENG 3353 The Latin and Greek Element in English
LNG 3813 Introduction to Linguistics
LNG 3833 Sociology of Language
LNG 3843 Psychology of Language
LNG 3853 The Languages of the Mexican American

Literature

CSH 1103 Literary Masterpieces of World Culture I
CSH 1113 Literary Masterpieces of World Culture II
CSH 2113 The Foreign Film
CSH 3313 Introduction to Literary Studies
ENG 2213 Introduction to the Study of Literature
ENG 2273 Topics in Popular Literature
ENG 2283 Literary Themes and Motifs
ENG 2513 The Bible as Literature
ENG 2613 Introduction to Literary Genres
ENG 2643 Introduction to Film
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 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 Main Currents in Pre-Industrial American Culture
AMS 3023 Main Currents in Industrial 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
ANT 3673 Origins of Civilization
BBL 3003 Biculturalism in the Southwest
BBL 3023 Mexican-American Biculturalism
BBL 3033 The Mexican American in the Southwest

* Must be a different foreign language from the one in which two years of high school credit was presented upon admission.

264 / APPROVED GENERAL EDUCATION REQUIREMENTS COURSES

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
HIS 2533 Latin America since 1942
HIS 2563 The Middle East since 622 A.D.
HIS 2573 Survey of African History
HIS 2603 Western Civilization to 1648
HIS 2613 Western Civilization since 1648
HIS 3113 The American Indian
HIS 3133 History of Minorities in the Southwest
HIS 3403 Pre-hispanic and Colonial Latin America
HIS 3523 European Cultural History
HUM 3623 National Cultures and Civilizations
POL 2523 Political Behavior
POL 2633 Comparative Politics
POL 3293 Ethnic Politics in the Southwest
POL 3423 Social Conflict in the Third World
POL 3433 Leadership and Modernization in 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 4173 Comparative Family Structures
SSC 3223 The Family

Fine and Applied Arts

ART 1023 The Arts of Vision and Sound
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 and Architecture
AHC 3333 United States Art and Architecture: 19th and 20th Century
AHC 3423 Pre-Columbian Art and Architecture of Mesoamerica
AHC 3453 New World Hispanic Art and Architecture
AHC 3813 History of Photography
AHC 3923 Art of Film
AHC 4113 Contemporary Art of the United States
AHC 4423 Contemporary Art of Latin America and Mexico
MUS 2603 Beginning Guitar
MUS 2613 Intermediate Guitar
MUS 2623 Music Reading and Notation for the Non-Music Major

MUS 2653 Jazz and Rock Music
 MUS 3623 Music of the Americas
 MUS 3643 Masterpieces of Music
 MUS 3701 Madrigal
 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
 HUM 3423 Intercultural Humanities Perspectives
 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 1063 Introduction to Problem Solving and Programming
 CS 1073 Introductory Computer Programming for Scientific Applications
 CS 1133 Computer Literacy I
 CS 2133 Computer Literacy II
 MAT 1023 Calculus for the Social Sciences
 MAT 1033 Algebra with Calculus for Business
 MAT 1093 Precalculus
 MAT 1103 Consumer Mathematics
 MAT 1113 Mathematics for Elementary Education Teachers I
 MAT 1123 Mathematics for Elementary Education Teachers II
 MAT 1183 Intermediate Algebra
 MAT 1214 Calculus I
 MAT 1223 Calculus II
 MAT 2213 Calculus III
 MAT 2233 Matrix Algebra
 MAT 3113 Algebra for Elementary Teachers

266 / APPROVED GENERAL EDUCATION REQUIREMENTS COURSES

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 Social Sciences
STA 1993 Statistical Methods for the Life and Social Sciences
STA 3013 Multivariate Analysis for the Life and Social Sciences

Students whose major is in the Division of Mathematics, Computer Science, and Systems Design must select from the following courses:

CS 1714 Introduction to Computer Science
CS 1723 Data Structures I
MAT 1214 Calculus I
MAT 1223 Calculus II
MAT 2213 Calculus III
STA 3513 Probability and Statistics
STA 3523 Statistical Methods

Sciences

AHS 1053 Introductory Microbiology
AHS 2043 Nutrition
AHS 1061 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
AHS 3012 Introductory Pathology
AS 1103 Introduction to Engineering
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 1021 Introduction to Life Sciences Laboratory
BIO 1103 Principles of Biology
BIO 1112 Principles of Biology Laboratory
BIO 1213 Principles of Ecology
BIO 1222 Principles of Ecology Laboratory
BIO 2003 Human Sex and Reproduction
BIO 3003 Introduction to Oceanography
BIO 3023 Drugs and Society
BIO 3083 Biosocial Genetics
BIO 3243 Field Biology and Ecology
BIO 3251 Field Biology and Ecology Laboratory
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
CHE 3173 Alchemy and the Sources of Modern Science

GEO 1003 Introduction to Geology
 GEO 1011 Introduction to Geology Laboratory
 GEO 1023 Earth History
 GEO 1031 Earth History Laboratory
 PHY 1703 Energy and the Environment
 PHY 1803 Physics for Life Sciences I
 PHY 1811 Physics for Life Sciences I Laboratory
 PHY 1823 Physics for Life Sciences II
 PHY 1831 Physics for Life Sciences II Laboratory
 PHY 1903 Technical Physics I
 PHY 1911 Technical Physics I Laboratory
 PHY 1923 Technical Physics II
 PHY 1931 Technical Physics II Laboratory
 PHY 2223 Musical Acoustics

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 2033 Economic Development and Social Change in the United States Since 1850
 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

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 1073 The Origins of the American Constitutional System
 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 3303 Executive-Legislative Relations in the United States
 POL 3323 Constitutional Law

268 / APPROVED GENERAL EDUCATION REQUIREMENTS COURSES

Applies to the legislative requirement in Texas government

- POL 1133 Introduction to Texas Politics
- POL 1143 Contemporary Public Policy in Texas
- POL 1153 Federalism in the United States and Mexico
- 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 Macroeconomics
- 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
- ENV 3013 Environment and Human Resources Management
- ENV 3523 The Contemporary City

INDEX

- Academic
 - Dismissal, 64
 - Probation, 63
 - Records, Release of, 65
 - Standing, 63
- Accommodations, Living, 44
- Accounting
 - BBA degree, 83
 - concentrations:
 - Accounting, 83
 - Business Data Systems, 84
 - course descriptions, 85
 - Accounting and Business
 - Data Systems, Division of, 83
- Accreditation, 25
- Adding Courses, 56
- Address, Change of, 65
- Administration
 - UT San Antonio, 11
 - UT System, 10
- Administrative Staff, 12
- Admission, 48
 - application dates, 52
 - certification program, 53
 - first-time freshmen, 48
 - high school student, 51
 - international freshmen students, 50
 - international transfer students, 50
 - procedures, 52
 - provisional program for
 - freshmen, 50
 - re-admission, 52
 - special students, 51
 - teacher certification programs, 53
 - transfer students, 49
 - transient students, 51
- Advisement, 43
- Allied Health and Life Sciences
 - Division of, 211
- Allied Health Sciences
 - course descriptions, 222
- American Studies
 - BA degree, 154
 - course descriptions, 155
- Anthropology
 - BA degree, 156
 - course descriptions, 157
- Application Dates, 52
- Application for Degree, 74
- Applied Science
 - BS degree, 228
 - course descriptions, 237
- Architectural Design
 - course descriptions, 112
- Army ROTC, 208
- Art and Design
 - BFA degree, 106
 - concentrations:
 - Architectural Design, 111
 - Art, 106
 - Division of, 106
 - Art, course descriptions, 106
 - Art History and Criticism
 - course descriptions, 109
- Astronomy, course descriptions, 244
- Athletics, 44
- Auditing
 - fee, 34
 - procedures for, 57
- Baccalaureate Degrees, Additional, 73
- Bachelor's Degree Requirements, 68
- Bad Check Charge, 33
- Bicultural-Bilingual Studies
 - course descriptions, 187
 - Division of, 187
- Biology
 - BS degree, 212
 - course descriptions, 217
- Board of Regents, 10
- Bookstore, UT San Antonio, 28
- Business, College of, 82
 - Business Data Systems
 - concentration under
 - BBA in Accounting, 84
 - course descriptions, 86
- Business Law, course
 - descriptions, 95
- Cafeteria, 28
- Calendar, UT San Antonio, 3
- Cancellation of Enrollment, 64
- Career Planning and Placement Center, 44
- Career Planning and Placement
 - Registration Fee, 36
- Catalog of Graduation, 74
- Center for Applied Research and Technology, 27
- Center for Archaeological Research, 26

- Center for Learning and Development
 - Research in Education, 27
- Center for Studies in Business, Economics, and Human Resources, 26
- Certification Programs, Teacher,
 - admission to, 53
- Challenge Examinations
 - UT San Antonio, 61
 - Challenging Undergraduate Courses by Examination Fee, 33
- Change
 - of address, 65
 - of degree, 58
 - of grades, 62
 - of major, 58
 - of name, 65
- Charges
 - bad check, 33
 - replacement of student identification card, 33
 - transcript, 33
- Chemistry
 - BS degree, 240
 - course descriptions, 241
- Class Participation Policy, 62
- Classics, course descriptions, 136
- Classification System, Student, 58
- College Work, previous declaration of, 52
- Communications
 - course descriptions, 136
- Comparative Studies in the Humanities,
 - course descriptions, 152
- Computer Center, 25
- Computer Science
 - course descriptions, 250
- Computer Science/Systems Design
 - course descriptions, 258
- Concurrent Tuition, 31
- Correspondence Courses, 73
- Counseling Center, 42
- Course Numbering System, 58
- Courses
 - adding, 56
 - auditing, 57
 - challenging by examination, 61
 - correspondence, 73
 - dropping, 56
 - enrollment in graduate courses
 - for graduate credit, 73
 - enrollment in graduate courses
 - for undergraduate credit, 73
 - extension, 73
 - repeating, 62
- Credit
 - by examination, 60
 - transfer of, 71
- Credit-No Credit Grading Policy, 60
- Criminal Justice
 - BA degree, 204
 - course descriptions, 205
- Curriculum and Instruction course
 - descriptions, 194
- Deans, 11
- Dean's List, 63
- Debts Owed The University, 39
- Declaration of previous college work
 - attempted, 52
- Degree
 - application for, 73
 - change of, 58
 - fee for application, 32
 - programs, summary of, 78
 - requirements for Bachelor's, 68
- Degrees, Additional
 - Baccalaureate, 73
- Deposit, General Property, 36
- Directory Information, 45
- Dishonesty, Scholastic, 64
- Dismissal, Academic, 64
- Division Directors, 13
- Dropping Courses, 56
- Early Childhood and Elementary Education
 - BA degree, 190
 - course descriptions, 195
- Earth and Physical Sciences
 - Division of, 228
- Economics
 - BA degree, 89
 - BBA degree, 88
 - course descriptions, 89
- Economics and Finance
 - Division of, 88
- Education
 - course descriptions, 196
 - Division of, 189
- Education Requirements, General, 68
- Educational Psychology
 - course descriptions, 198
- Engineering, 239
- English
 - BA degree, 129
 - course descriptions, 129
- English as a Second Language
 - course descriptions, 188
- English, Classics and Philosophy
 - Division of, 129

- Enrollment
 - cancellation of, 64
 - in graduate courses for graduate credit, 73
 - in graduate courses for undergraduate credit, 73
 - verification of, 57
- Environmental Management
 - course descriptions, 202
- Environmental Studies
 - Division of, 202
- Examination
 - challenging courses
 - by, 61
 - credit by, 60
 - fee for challenging courses by, 33
- Examinations
 - Postponement of Final, 63
- Executive Officers, 11
- Exemption from Tuition and Fees, 37
- Extension Courses, 73
- Faculty, 14
- Fee
 - adjustment of, 38
 - auditing, 34
 - career planning and placement
 - registration, 36
 - challenging undergraduate courses
 - by examination, 33
 - degree application, 32
 - duplicate receipt, 36
 - exemption from, 37
 - field trip, 34
 - general, 32
 - laboratory, 33
 - late registration, 33
 - library fee for limited borrower's
 - card, 33
 - parking, 34
 - physical instruction
 - laboratory, 34
 - special, 34
 - student gymnasium and
 - facility use, 35
 - student services, 32
 - Student Union fee, 32
 - supplementary, 34
 - teacher placement service, 37
 - Tennis Center, 35
 - UTSA faculty and staff
 - gymnasium and facility use, 35
- Field Trip Fee, 34
- Finance
 - BBA degree, 92
 - course descriptions, 93
- Financial Aid for Students, 43
- Fine and Applied Arts, College
 - of, 106
- Fines, for Library Materials Overdue, Lost, or Damaged, 33
- Foreign Languages
 - course descriptions, 153
 - Division of, 139
- French
 - BA degree, 139
 - course descriptions, 139
- Freshmen
 - first-time, 48
 - international student, 50
 - provisional admission program for, 50
- Full-time Student, 58
- General Education
 - Requirements, 68
 - List of approved General Education Requirements courses, 261
- General Education Requirements
 - Applied in the College of Business, 82
- General Information,
- Geography
 - BA degree, 160
 - course descriptions, 161
- Geology, Applied
 - course descriptions, 231
- German
 - BA degree, 142
 - course descriptions, 143
- Gifted Student Program, 52
- Grade Reports, 61
- Grades
 - change of, 62
 - explanation of symbols, 59
 - reporting of, 61
 - system of, 58
- Graduation
 - catalog of, 74
 - dates, 75
 - with honors, 74
- Handicapped Students, 46
- Health Education
 - BS degree, 191
- Health and Physical Education
 - course descriptions, 199
- Health Services for Students, 42
- High School Students, Admission of, 51
- History
 - BA degree, 162
 - course descriptions, 163

- History of UT San Antonio, 23
- Honor Roll, 63
- Honors, Graduation with, 74
- Humanities
 - BA degree, 133
 - course descriptions, 134
- Humanities and Social Sciences,
 - College of, 129
- Identification Card, 45
- Industrial Management, Concentration under BBA in Management, 98
- Information Directory, 274
- Insurance, Professional Liability (malpractice), 37
- International Students, 46
- International Freshmen Students
 - admission of, 50
- International Transfer Students
 - admission of, 50
- John Peace Library, 25
- Laboratory Fee, 33
- Late Registration, 56
- Late Registration Fee, 33
- Law and the Health Fields
 - Preprofessional Courses of Study in, 259
- Library Fee for Limited Borrower's Card, 33
- Library Fines for Overdue Materials and for Lost or Damaged Items, 33
- Library, John Peace, 25
- Linguistics, course descriptions, 142
- Lost and Found, 45
- Lutcher Center, 26
- Major, Change of, 58
- Majors, Multiple, 73
- Management
 - BBA degree, 97
 - concentrations:
 - Industrial Management, 98
 - Marketing, 99
 - Organizational Administration, 97
 - Personnel/Human Resources, 100
 - course descriptions, 101
- Management and Marketing
 - Division of, 97
- Marketing
 - concentration under BBA in Management, 99
 - course descriptions, 104
- Mathematics
 - BS degree, 249
 - course descriptions, 252
- Mathematics, Computer Science, and Systems Design
 - BS degree, 246
 - Division of, 246
- Medical Technology
 - BS degree, 213
- Military Science
 - course descriptions, 209
- Minimum Residence
 - Requirements, 70
- Multidisciplinary Studies
 - College of, 187
- Multiple Majors, 73
- Music
 - BM degree, 115
 - BME degree, 119
 - course descriptions, 123
 - Division of, 115
- Name, Change of, 65
- Numbering System, Course, 58
- Occupational Therapy
 - BS degree, 215
- Officers, Executive, 11
- Organization, UT San Antonio, 24
- Organizational Administration
 - concentration under BBA in Management, 97
- Orientation, 45
- Parking Fees, 34
- Part-Time Student, 58
- Payment and Refund Policies, 30
- Personnel/Human Resources,
 - concentration under BBA in Management, 100
- Petition for Reinstatement, 64
- Philosophy, course descriptions, 137
- Physical Education
 - BS degree, 192
- Physical Instruction Laboratory fee, 34
- Physical Therapy, BS degree, 216
- Physics, Applied
 - course descriptions, 234
- Political Science
 - BA degree, 168
 - course descriptions, 170
- Polymer Science, course descriptions, 238
- Postponement of Final Examination, 63
- Preprofessional Courses of Study in Law and the Health Fields, 259
- Prerequisites, 58
- Probation, Academic, 63
- Provisional Admission Program for Freshmen, 50

- Psychology
 - BA degree, 176
 - course descriptions, 177
- Purpose and Philosophy of UT San Antonio, 23
- Re-admission, 52
- Refund Policy, 38
- Regents, Board of, 10
- Registration
 - general information, 56
 - late, 56
- Regulations, Bachelor's Degree, 67
- Reinstatement, Petition for, 64
- Release of Transcripts and Academic Records, 65
- Repeating Courses, 62
- Research Center for the Arts, 27
- Residence Regulations, 31
- Residence Requirements, Minimum, 70
- ROTC, Army, 208
- Russian
 - BA degree, 146
 - course descriptions, 146
- Scholastic Dishonesty, 64
- Sciences and Mathematics
 - College of, 211
- Social Sciences, course descriptions, 185
- Social Sciences, Division of, 154
- Sociology
 - BA degree, 180
 - course descriptions, 182
- Spanish
 - BA degree, 148
 - course descriptions, 148
- Special Programs, Division of, 204
- Special Students, Admission of, 51
- Staff, Administrative, 12
- Statistics, course descriptions, 255
- Student
 - Classification System, 58
 - Identification Card Charge, 33
 - Services Fee, 32
- Students, Institutional Policies
 - Concerning, 41
 - advisement, 43
 - counseling center, 42
 - directory information, 45
 - financial aid, 43
 - handicapped, 46
 - health services, 42
 - international, 46
 - Responsibilities under the *Rules and Regulations* of the Board of Regents, 42
 - testing center, 42
- Support Areas, Summary of, 77
- System's Design
 - course descriptions, 256
- Teacher Certification Programs
 - admission to, 53
- Teacher Placement Service, 44
 - fee, 37
- Tennis Center Fee, 35
- Testing Center, 42
- Transcripts, UT San Antonio, 64
 - charge for, 33
 - release of, 65
- Transfer of Credit, 71
- Transfer Student, admission of
 - International, 50
- Transient Students,
 - admission as, 51
- Tuition, 30
 - concurrent, 31
 - exemption from, 37
 - payment, 30
 - payment and refund
 - policies, 30
 - penalty for payment of tuition
 - under incorrect residence classification, 32
 - residence regulations, 31
- Undergraduate
 - degree programs, summary of, 78
 - support areas, summary of, 79
- Verification of Enrollment, 57
- Withdrawal Procedures, 57

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. Offices and classrooms of the Division of Continuing Education are located on HemisFair Plaza in downtown San Antonio. The telephone number for the Division is (512) 227-9147.

Academic Advisement

Declared majors College Deans

Undeclared majors Director of Community and Student Affairs

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 Dean of Continuing Education

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 Community and Student Affairs

Health Services Student Health Center

International Students Director of Community and Student Affairs

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 Dean of Students

Teacher Certification Program Director, Office of Teacher
Certification and Placement

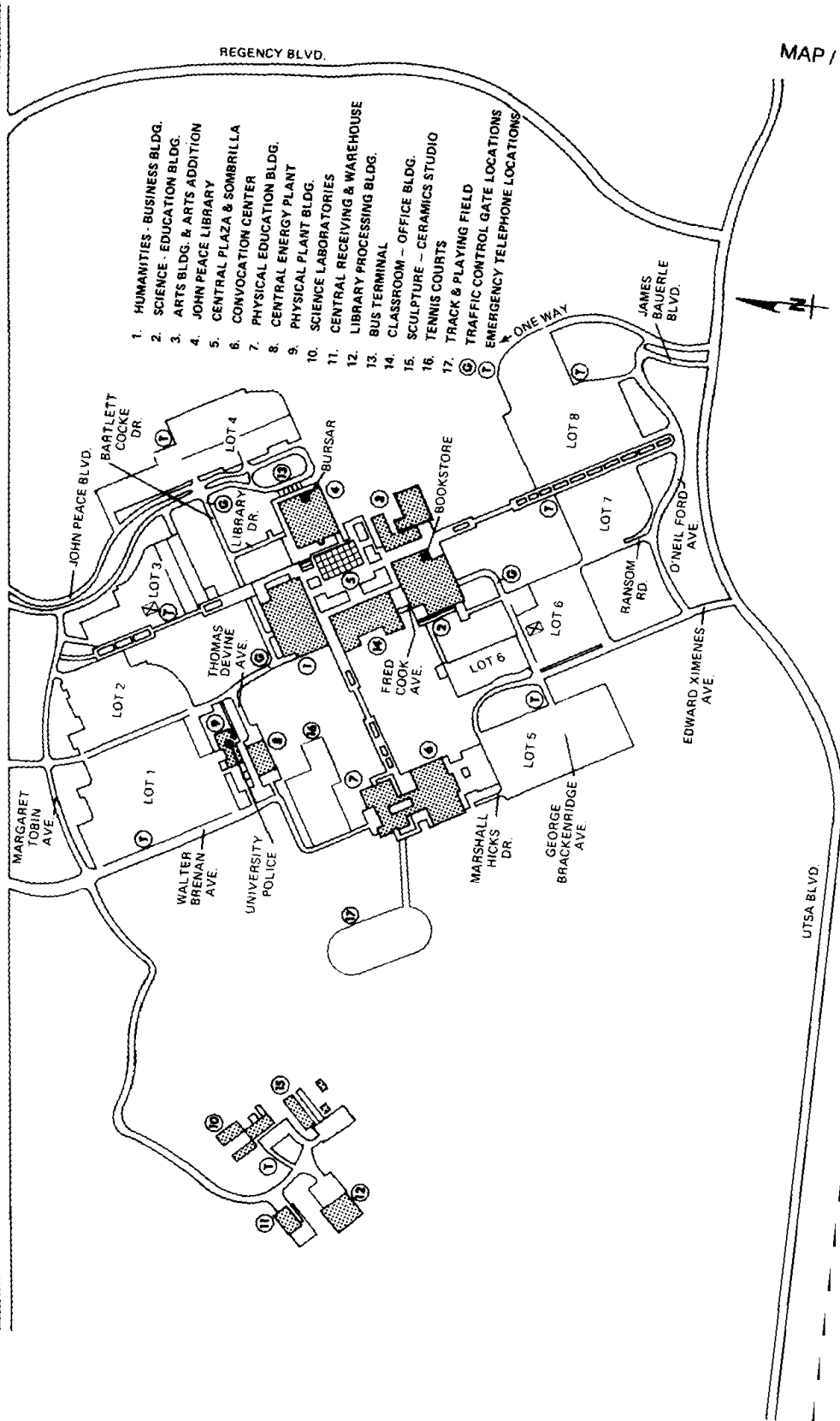
Transfer of Credit Registrar

Transcripts Registrar

Veterans' Affairs Registrar

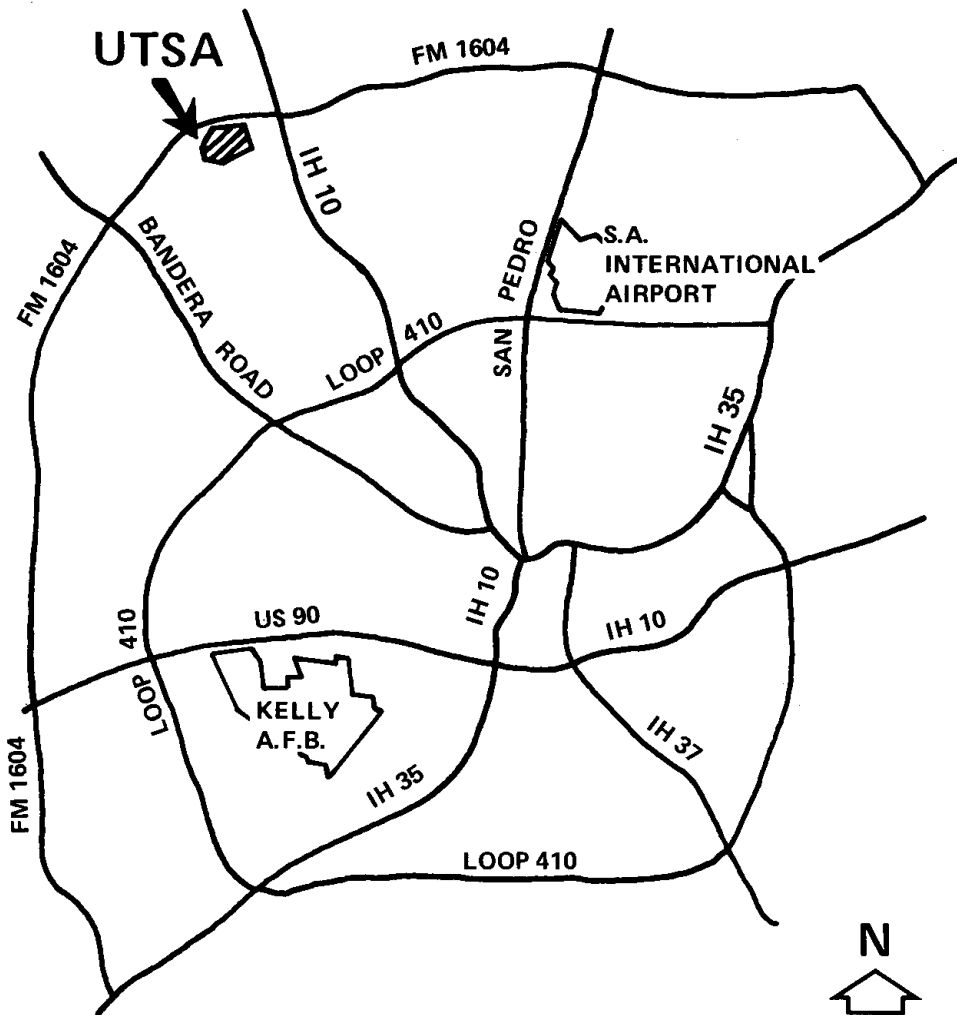
Withdrawal from University Registrar

FM 1604



MAP / 275

THE UNIVERSITY OF TEXAS AT SAN ANTONIO



SAN ANTONIO AREA MAP