THE UNIVERSITY OF TEXAS AT EL PASO

2004-2006 UNDERGRADUATE CATALOG

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WELCOME TO UTEP

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General Information

Welcome to the University of Texas at El Paso (UTEP)! UTEP is an outstanding institution where the faculty and staff are wholly dedicated to your academic success. We are a university where a vast array of academic programs are offered, students are encouraged to become involved in the discovery and creation of knowledge, and relationships are easy to develop with fellow students, staff members, and faculty. The following pages of this catalog introduce you to our policies and procedures, degrees, majors, and minors, and curricula. Through your perusal of this catalog, we hope our commitment to you of offering the highest quality of education in a supportive community of faculty and staff is evident.

OUR HISTORY

The University of Texas at El Paso (UTEP) has created a foundation of academic excellence as strong as the rugged Rocky Mountain foothills that are the University's home. Located on the U.S.-Mexico border in the world's largest binational metropolitan area of more than two million people, UTEP is the largest Mexican-American-majority university in the United States. In this unique multicultural setting, the University offers a wide scope of academic programs and outstanding support services, providing academic excellence through opportunity for students of the Southwest.

UTEP, the second oldest academic component of The University of Texas System, was founded by the Texas legislature in 1913 as the Texas State School of Mines and Metallurgy to train professionals in the mining industry. From its inception, the campus has featured architecture derived from the style of buildings in the Himalayan kingdom of Bhutan. UTEP's unique buildings are the only examples of this ancient architecture in the Western Hemisphere. The motif, characterized by thick, sloped outer walls accented with a band of elaborate brickwork, was inspired by Kathleen Worrell, the wife of the college's first dean, after seeing photographs of Bhutanese monasteries in an issue of *National Geographic*. Noted El Paso architect Henry Trost designed the first buildings, and architects have continued the theme through more than 80 years of campus expansion.

The college's curriculum expanded in 1927 with the addition of liberal arts courses. The first master of arts degree was established in 1940. The institution was renamed Texas Western College in 1949 and the University of Texas at El Paso in 1967.

Since then, enrollment has grown to over 18,500 and the scope of programs has expanded to include 72 bachelor's, 72 master's, 12 doctoral degrees and 4 combined degrees (Bachelors/Masters or Masters/Masters) to meet the needs of an increasingly industrialized West Texas region. The 367-acre UTEP campus consists of 81 buildings, including the 52,247-seat Sun Bowl Stadium, the 11,767-seat Don Haskins Center, a modern fine arts complex with galleries and recital halls, and a museum of natural and cultural history. A new 125,000 square-foot Undergraduate Learning Center features multimedia-enriched computer and distance learning technology, and the Larry K. Durham Sports Center.

With its pivotal setting on the U.S.-Mexico border, UTEP is a nationally recognized leader for creating excellent academic opportunities for a largely first-generation student population. Quality academic programs and a robust research agenda mark UTEP as an innovative force in American higher education for the 21st century.

OUR VISION

The University of Texas at El Paso (UTEP) commits itself to providing quality higher education to a diverse student population. Classified as a Doctoral/Research-Intensive university, UTEP seeks to extend the greatest possible educational access to a region which has been geographically isolated with limited economic and educational opportunities for many of its people. The University will ensure that its graduates obtain the best education possible, one which is equal, and in some respects superior, to that of other institutions, so that UTEP's graduates will be competitive in the global marketplace. UTEP also envisions capitalizing on its binational location to create and maintain multicultural, inter-American educational and research collaborations among students, faculty, institutions, and industries, especially in northern Mexico.

The UTEP community - - faculty, students, staff, and administrators- - commits itself to the two ideals of excellence and access. In addition, the University accepts a strict standard of accountability for institutional effectiveness as it educates students who will be the leaders of the 21st Century. Through the accomplishment of its mission and goals via continuous improvement, UTEP aspires to be an educational leader in a changing economic, technological, and social environment: a new model for Texas higher education**.**

OUR MISSION

The University of Texas at El Paso (UTEP) is dedicated to teaching and to the creation, interpretation, application, and dissemination of knowledge. UTEP prepares its students to meet lifelong intellectual, ethical, and career challenges through quality educational programs, excellence in research and in scholarly and artistic production, and innovative student programs and services, which are created by responsive faculty, students, staff, and administrators.

As a component of The University of Texas System, UTEP accepts as its mandate the provision of higher education to the residents of El Paso and the surrounding region. Because of the international and multicultural characteristics of this region, the University provides its students and faculty with distinctive opportunities for learning, teaching, research, artistic endeavors, cultural experiences, and service.

OUR GOALS

Goal 1 — Learning and Teaching: To prepare UTEP students to meet lifelong intellectual, ethical and career challenges and to be the leaders of the 21st Century.

Student Achievement: To graduate students who have a command of communicative, mathematical, and computer skills; core knowledge in the natural and social sciences, humanities, and arts; knowledge, attitudes, and skills of their academic major or profession; and additional knowledge and skills to be gained from capitalizing on UTEP's special setting.

Curriculum: To maintain a core curriculum for all undergraduate students and major/professional curricula which provide students with the knowledge, attitudes, and skills to be productive citizens and to meet future intellectual, ethical, and career challenges.

Educational Programs: To provide a wide array of quality academic programs appropriate to a comprehensive university and the educational requirements of El Paso's binational metropolitan area and to develop new graduate degree programs based on needs and opportunities of our setting and institutional strengths.

Faculty: To recruit, orient, support, and retain a highly qualified, diverse faculty which is dedicated to teaching and which uses effective instructional practices, such as directed practical experiences and technological innovations, for the enhancement of student learning.

Student Services: To provide comprehensive programs and services which strengthen UTEP students' academic achievement and develop their leadership skills.

Pre-College Preparation of Students: To work collaboratively with schools, the community, and employers to ensure that young people and their families are informed about the necessity of higher levels of academic preparation for admission to and success in the University, and to support collaborative efforts to improve pre-college education.

Student Recruitment: To inform and assist qualified potential students in seeking admission to the University in order to fulfill their aspirations for higher education.

Goal 2 - Research, Scholarship and Artistic Production: To create, interpret, evaluate, apply, and disseminate knowledge; to encourage the addition of perspectives based on UTEP's geographic and social setting; and to contribute to the formation of a broader intellectual and artistic foundation for the 21st Century.

Generation of Knowledge: To advance knowledge through research, scholarship, and artistic production.

Application of Knowledge: To develop research, scholarship, and artistic activities which apply UTEP's expertise and resources to the search for solutions to regional, national, and international problems.

Integration with Teaching: To expand the linkages between University instruction with research, scholarship, and artistic activities whenever appropriate and to expand opportunities for both graduate and undergraduate students to participate in these endeavors.

Faculty: To recruit, orient, support, and retain a highly qualified, diverse faculty dedicated to the advancement, dissemination, and application of knowledge.

Goal 3 - Public Service: To work in partnership with public and private agencies, institutions and organizations, including business and industry, to improve the quality of life in our region and world by providing appropriate University expertise and leadership.

Community Education: To encourage lifelong learning and to provide educational courses and activities in response to local and regional needs.

Preparation of Professionals in Critical Areas: To educate and prepare for licensure and certification critically needed professionals, such as teachers and providers of health care and human services.

Economic Development Analysis and Technical Assistance: To provide needs assessment services, data collection and analyses, training, and technical assistance supportive of regional economic development.

Culture: To provide cultural activities consistent with the goals of the University and to work collaboratively with other groups supportive of regional cultural activities.

Recreation: To provide recreational activities consistent with the goals of the University and to work collaboratively with other groups in the support of regional recreational activities.

Athletics: To provide intercollegiate athletic activities consistent with the goals of the University and to work collaboratively with other groups in the support of regional athletic activities.

Goal 4 - Administration: To support the achievement of UTEP's mission in learning, teaching, research, scholarship, artistic production and public service through responsive, effective and efficient administrative and staff services.

Strategic Planning: To contribute to the achievement of UTEP's mission and goals through the University's planning, institutional research, and evaluation system.

Financial and Material Resources: To plan, manage, and supervise the physical facilities and grounds, materials management, purchasing, and campus security in order to provide the necessary support services conducive to learning, teaching, research, artistic production, and public service.

Institutional Advancement: To advance academic and co-curricular programs through voluntary support of university initiatives, increase alumni participation in the life of their university, and enhance on-campus and public visibility of UTEP successes.

Information and Telecommunications Services: To expand and integrate state-of-the-art technology and telecommunications throughout the campus, emphasizing their application to instruction and student learning, and to improve information and telecommunication services for essential administrative functions (e.g., student and alumni records, purchasing, facilities management).

Staff: To hire, train, support, and retain well-qualified staff members who work to ensure the achievement of the university's mission and goals.

OUR COLLEGES

UTEP has eight colleges that work collaboratively to insure that students experience a positive college environment and have the opportunity to explore a myriad of academic disciplines: University College, Graduate School, College of Business Administration, College of Education, College of Engineering, College of Health Sciences, College of Liberal Arts, and College of Science.

The University College is an administrative unit that is wholly dedicated to the needs of entering students and providing them with a seamless blend of student support services to enhance their success as they enter the University. The Graduate School is wholly dedicated to serve and respond to the needs and issues of graduate students.

UTEP's six academic colleges—business administration, education, engineering, health sciences, liberal arts, and science—comprise some 44 academic departments and offer 86 baccalaureate degrees. Graduate degrees offered by UTEP include 80 master's degrees in disciplines from all six colleges. Doctoral degrees are offered in Biological Sciences, Civil Engineering, Computer Engineering, English Rhetoric and Composition, Environmental Science and Engineering, Geological Science, History,

International Business, Materials Science and Engineering, Psychology, and an Ed.D. degree is offered in Educational Leadership and Administration.

Each of the six colleges contributes to UTEP's vast array of academic programs:

- With programs accredited by AACSB – the International Association for Management Education, the **College of Business Administration** plays a dynamic role in preparing UTEP students to compete in a global economy.
- The **College of Education** plays an active role in several local, regional, and national projects to improve teacher education and public school administration, including the graduation of better-prepared science and math teachers.
- Strengthening its roots in the fields of **science** and **engineering**, UTEP added its first doctoral program in geological sciences in 1974 and developed a Ph.D. in computer engineering in 1991. Capitalizing on major grants from the National Science Foundation and other bodies, UTEP has concentrated in recent years on developing state-of-the-art science laboratories, where undergraduate and graduate students participate in research that is relevant to the border region.
- The **College of Health Sciences** and several cooperative programs with other institutions provide the region with a broad spectrum of degree opportunities in Clinical Laboratory Sciences, Family Nurse Practice, Health Sciences, Kinesiology, Nursing, Occupational Therapy, Pharmacy, Physical Therapy, Public Health, and Speech-Language Pathology.
- UTEP also continues to develop its **liberal arts and social sciences** offerings in response to the needs of the bilingual/bicultural community the University serves. To serve this goal, UTEP has added a Ph.D. program in History that focuses on the U.S./Mexico Borderlands.

OUR STUDENT BODY

Students who attend UTEP come from a varied mix of social, cultural, and economic backgrounds that closely mirror the population of the El Paso/ Ciudad Juárez region. Approximately 70 per cent of UTEP's students are Hispanic, almost 70 percent work while in college, and about half are first-generation college students. UTEP students typically represent more than 45 states and 82 countries, with about 10.6 percent coming from Mexico.

ACCREDITATION

The University of Texas at El Paso is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097/ telephone number: 404-679-4500) to award bachelor's, master's, and doctoral degrees. Information concerning accreditation by separate accrediting bodies for specific programs is shown in the related college section of this catalog.

Board of Regents

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RITA C. CLEMENTS, Vice-Chairman
WOODY L. HUNT, Vice-Chairman
CYNDI TAYLOR KRIER, Vice-Chairman
FRANCIE A. FREDERICK, Counsel and Secretary

MEMBERS

Terms Expire February 1, 2005:
ROBERT A. ESTRADA, Ft. Worth
WOODY L. HUNT, El Paso
ROBERT B. ROWLING, Dallas

Terms Expire February 1, 2007:
RITA C. CLEMENTS, Dallas
JUDITH L. CRAVEN, M.D., Houston
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Terms Expire February 1, 2009
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OFFICE OF THE CHANCELLOR

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TERESA A. SULLIVAN, Executive Vice Chancellor for Academic Affairs
KENNETH I. SHINE, Executive Vice Chancellor for Health Affairs
SCOTT C. KELLEY, Executive Vice Chancellor for Business Affairs

Administrative Officers

DIANA S. NATALICIO, *President*, 1971
B.S., St. Louis University; M.A., Ph.D., University of Texas at Austin

RICARDO ADAUTO III, *Vice President for Institutional Advancement,* 1988
B.S., University of Texas at El Paso; J.D., University of California at Berkeley School of Law

PABLO ARENAZ, *Interim Vice President for Academic Affairs*, 1984
B.S., M.S., University of Nevada at Reno; Ph.D., Washington State University

GILBERT CASTRO, *Vice President for Health Affairs*, 2004
B.S., Lamar State College; M.S., University of Arkansas; Ph.D., University of Texas Medical Branch, Galveston

PAUL MAXWELL, *Vice President for Research and Sponsored Projects,* 1999
B.S., University of Texas at El Paso; M.S., Ph.D., Stanford University

RICHARD PADILLA, *Vice President for Student Affairs*, 1994
B.A., Bellarmine College; M.Div., Catholic Theological Union;
Ed.D., University of Houston

STEPHEN RITER, P.E., *Vice President for Information Resources and Planning*, 1980
B.A., B.S.E.E., Rice University; M.S., Ph.D., University of Houston

CYNTHIA VILLA, **CPA**, *Vice President for Finance and Administration*, 1986
B.B.A., University of Texas at El Paso

CHARLES H. AMBLER, *Dean, Graduate School*, 1984
B.A., Middlebury College; M.A., Ph.D., Yale University

MAGGY SMITH, *Dean, University College*, 1987
B.A., M.A., State University of New York, Fredonia; Ph.D., Rensselaer Polytechnic Institute

GARY J. MANN, *Interim Dean, College of Business Administration*, 1986
B.B.A., M.B.A., University of Texas at El Paso; Ph.D., Texas Tech University

JOSEFINA V. TINAJERO, *Dean, College of Education*, 1981
B.S., M.Ed., University of Texas at El Paso; Ed.D., Texas A & M University

BARRY BENEDICT, *Dean, College of Engineering,* 2003
B.S., M.S., Ph.D., University of Florida

LESLIE O. SCHULZ, *Dean, College of Health Sciences*, 2004
B.A., University of North Dakota; M.S., North Dakota State University; Ph.D., Cornell University

HOWARD C. DAUDISTEL, *Dean, College of Liberal Arts*, 1974
B.A., M.A., Ph.D., University of California at Santa Barbara

MICHAEL P. EASTMAN, *Interim Dean, College of Science*, 2004
B.A., Carleton College; Ph.D., Cornell University

Academic Calendar

Listed below are the tentative 2004-2006 academic calendars. For detailed information or changes, students should refer to the academic calendar website found at http://www.utep.edu/register.

For mini term dates, students should refer to each term's printed ***Class Schedule***, or access the term calendars found at http://www.goldmine.utep.edu/gmschedule.html, or contact the Registrar's Office at (915) 747-5550/5544.

	Fall 2004	**Fall 2005**
Undergraduate admission application priority due date ($15.00 late fee begins)	July 1	July 1
Undergraduate admission date for international applicants (all documents due)	July 1	July 1
Telephone and Web Registration	April 5-26	April 4-25
Undergraduate admission document due date	July 31	July 31
Late Registration and schedule adjustment prior to classes	Aug. 19-20	Aug. 18-19
Classes begin	Aug. 23 (Mon.)	Aug. 22 (Mon.)
Late Registration and schedule adjustment – continued	Aug. 23-26	Aug. 22-25
Last day of class	Dec. 2 (Thur.)	Dec. 1 (Thur.)
Last day of Final Examinations	Dec. 10	Dec. 9
	Wintermester 2004 and Spring 2005	**Wintermester 2005 and Spring 2006**
Undergraduate admission application priority due date ($15.00 late fee begins)	Oct. 1	Oct. 1

Undergraduate admission date for international applicants	Oct. 1	Oct. 1
Telephone and Web Registration for Wintermester and Spring	Nov. 1-22	Oct. 31-Nov. 21
Undergraduate admissions document due date	Nov. 30	Nov. 30
Late Registration for Wintermester	Dec. 10	Dec. 9
Classes begin for Wintermester	Dec. 13	Dec. 12
Last day of class	Dec. 22	Dec. 22
Last day of Final Examinations for Wintermester	Dec. 24	Dec. 23
Late Registration and schedule adjustment prior to classes for Spring	Jan. 6-7	Jan. 5-6
Classes begin for Spring	Jan. 10 (Mon.)	Jan. 9 (Mon.)
Late Registration and schedule adjustment - continued	Jan. 10-13	Jan. 9-12
Last day of class	April 28 (Thur.)	April 27 (Thur.)
Last day of Final Examinations	May 6	May 5
	Maymester and Summer 2005	**Maymester and Summer 2006**
Undergraduate admission application priority due date ($15.00 late fee begins)	March 1	March 1
Undergraduate admission date for international applicants (all documents due)	March 1	March 1
Telephone and Web Registration for Maymester and Summer I and II	April 4-25	April 3-24

Undergraduate admission document due date	April 30	April 30
Late Registration and schedule adjustment prior to classes for Maymester	May 6	May 5
Classes begin for Maymester	May 9	May 8
Last day of class	May 19	May 18
Last day of Final Examinations for Maymester	May 20	May 19
Late Registration and schedule adjustment prior to classes for Summer I and 8 week	May 27	May 26
Classes begin for Summer I and 8 week	May 31(Mon.)	May 30 (Tues.)
Late Registration and schedule adjustment – continued	May 31	May 30
Last day of class for Summer I	June 23	June 22
Last day of Final Examinations for Summer I	June 24	June 23
Late Registration and schedule adjustment prior to classes for Summer II	June 24	June 23
Classes begin for Summer II	June 27	June 26
Late Registration and schedule adjustment-continued	June 27	June 26
Last day of class for Summer II and 8 week	July 22	July 21
Last day of Final Examinations for Summer II and 8 week	July 25-26	July 24-25

ENDOWMENTS, TRUSTS AND MEMORIAL FUNDS

What’s Inside

Endowments

Trusts

Memorial Funds

Endowments, Trusts and Memorial Funds

The University of Texas at El Paso is indebted to the generosity of private citizens for many fine endowments, trusts and memorial funds. These permanent funds, invested under trusteeship of the Regents of The University of Texas System or held by other trustees, provide scholarships, purchase library books, underwrite important research, and in many ways enrich the educational experience. The University makes grateful acknowledgment for the following permanent funds:

JAMES AND TRULA ABERNATHY ENDOWED ENHANCEMENT FUND FOR THE OFFICE OF DISABLED STUDENTS
—Established in 1996 by Ann and Bill Kiely in honor of Ann's parents, James and Trula Abernathy, who have dedicated their lifetimes to helping those who could not help themselves. Income from this permanent endowment fund will be used to provide direct student support to the Office of Disabled Students with special consideration for the visually impaired.

MARGARET JEAN ABERNETHY SCHOLARSHIP FUND
—Established in 1997 by Dr. Lonnie L. Abernethy in loving memory of his wife, Margaret Jean Abernethy. Income earned from this endowment will provide scholarships to students who are National Merit Scholars and are pursuing undergraduate or graduate degrees in Engineering.

MANUEL ACOSTA MEMORIAL ART SCHOLARSHIP
—Created in 1994 by the El Paso Natural Gas Company (now the El Paso Corporation) in memory and honor of local artist, Manuel Acosta. Income from the fund provides an annual scholarship to a student majoring in Art.

THE ADKINS FAMILY ENDOWED STUDENT EXCELLENCE FUND
—Established in 1999 by the A. Sam Adkins Family, the David A. Adkins Family, the J. Michael Adkins Family and the J.C. Currey Family in honor of Al and Grace Adkins. Earnings from this fund will be used at the discretion of the Dean of the College of Business Administration to enhance the academic experience of business students.

ADOLPH COORS COMPANY ENDOWED SCHOLARSHIPS FOR TEACHERS
—Established in 1990 by the Adolph Coors Company, the earnings from this fund provide academic scholarships for students who have completed 60 hours in preparation for a teaching career, and who declare an intent to teach in areas with predominantly Hispanic populations upon graduation.

MARY FRANCES AND HUNTER AKARD ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Carroll and John Akard in loving memory of John's parents, Mary Frances and Hunter E. Akard. Income from this endowed fund will provide annual scholarship support to deserving students.

ALPHA PHI OMEGA SOCIAL FRATERNITY ENDOWED FUND
—Established in 1989 by Alpha Phi Omega, a social fraternity formed at the Texas College of Mines and Metallurgy in 1919, whose members were primarily Engineering and Geology students. Income from the endowment is used by the College of Engineering and the Department of Geological

Sciences for three annual student awards, two of which are made in memory of College of Engineering faculty members, Dean Eugene M. Thomas and Dr. Walter R. Roser.

ALUMNI ACADEMY OF CIVIL ENGINEERS ENDOWMENT
—Established in 2002 by the Board of Directors of the Alumni Academy of Civil Engineers (AACE). Funds distributed from the endowment are used at the discretion of the Chair of Civil Engineering, in cooperation with the Board of Directors of AACE and the Dean of Engineering.

ALUMNI ASSOCIATION OF UTEP ENDOWED SCHOLARSHIP FUND
—Established in 1986 by the Board of Directors of the Alumni Association of the University of Texas at El Paso. Income earned is used to award an annual scholarship under the Presidential Scholarship Program.

AMERICAN GARMENT FINISHERS ENDOWED EXCELLENCE FUND FOR ENTREPRENEURIAL DEVELOPMENT, ADVANCEMENT, RESEARCH AND SUPPORT
—Established in 1992 by Mr. Moshe Azoulay and his company, American Garment Finishers. Income from the endowment is utilized by the Dean of the College of Business Administration to support activities that stimulate, aid and encourage entrepreneurial and/or small business development in El Paso.

THE AMERICAN SOCIETY FOR QUALITY CONTROL SECTION 1401 SCHOLARSHIP FUND
—Established in 1993 by a gift from the Rio Grande Section of the American Society for Quality Control in El Paso, Texas. Income earned from the endowment is used to provide a scholarship to a student attending the University of Texas at El Paso who is the winner of the society's El Paso/Rio Grande Section annual essay competition on quality assurance. Should the essay competition cease, the income from the endowment is to be used for a scholarship in Engineering, Business Administration or Science for a student whose educational objective is a professional position in the field of total quality assurance.

WYNN AND KYM ANDERSON DESERT GARDENS FUND
—Established in 1998 by Wynn and Kym Anderson for the maintenance and support of the Chihuahuan Desert Gardens botanical collections of UTEP's Centennial Museum. A former UTEP administrator, Wynn Anderson was the guiding force behind the creation of the Desert Gardens and is now the botanical curator for the Centennial Museum.

THE ANHEUSER-BUSCH CHARITABLE TRUST SCHOLARSHIP FUND
—Established in 1983 on behalf of the Board of Control of the Anheuser-Busch Charitable Trust under Mr. August A. Busch III. Interest from the fund provides scholarships to undergraduate students under the Presidential Scholarship Program.

VICTOR APODACA, SR. ENDOWED MEMORIAL FUND
—Established in 2001 by Mr. Victor Apodaca, Jr., in honor of his father, Victor Apodaca, Sr., to provide unrestricted support for the ongoing needs of the University Library, with particular emphasis on the acquisition and implementation of technology.

J.S. ARMIJO-STEINMETZ SCHOLARSHIP FUND IN METALLURGICAL ENGINEERING
—Established in 1984 by the General Electric Foundation to honor Dr. J.S. Armijo, a 1959 UTEP alumnus, for being one of six General Electric employees to win the Charles P. Steinmetz Award for Technical Achievement. Income earned from the endowment is used to provide a scholarship in Metallurgical Engineering for a junior or senior student.

LAURENCE E. BAKER MEMORIAL SCHOLARSHIP FUND
—Established in 1987 by a bequest from the Estate of Martha Hodgin Baker in memory of Laurence E. Baker. Income from the endowment provides scholarships for deserving undergraduate Pre-medical students.

VIRGINIA G. BANOS ENDOWED SCHOLARSHIP FUND
—Established in 2000 by the Estate of Virginia G. Banos to award scholarships to students who speak Spanish.

DR. THOMAS G. BARNES PHYSICS FUND
—Established in 1985 by alumni and friends of UTEP to honor Dr. Thomas G. Barnes, who officially retired in 1981 as Professor Emeritus of Physics. His distinguished career included teaching, counseling and serving as Director of the Schellenger Research Laboratories. Dr. Barnes passed away in 2001. Income earned from the endowment provides undergraduate and graduate scholarships, as well as equipment and supplies in the Department of Physics.

GRACE ANN BEAL PERMANENT MEMORIAL FUND
—Established in 1959 in memory of Dr. Grace Ann Beal by her sister, Miss Virginia Beal, and friends. Income from the endowment fund provides scholarship aid to Pre-medical and Nursing students.

LAURA BEARD AND SARAH REISER MEMORIAL ENDOWED SCHOLARSHIP
—Established in 2001 by Linda Reiser, and David and Marilu Beard in memory of their daughters, Laura Beard and Sarah Reiser, to provide scholarships to students pursuing undergraduate degrees in Music.

CARL A. BEERS MEMORIAL PRESIDENTIAL SCHOLARSHIP FUND
—Established in 1984 by Carl and Donna Milburn in memory of their great-uncle, longtime El Paso resident and businessman Mr. Carl A. Beers. Income from this permanent endowment fund provides a Presidential Scholarship for a worthy and deserving qualified student from the College of Science.

BELDING-DE WETTER SCHOLARSHIP FUND
—Originally established in 1953 by Mr. and Mrs. C.D. Belding, prominent members of El Paso's real estate and insurance industry. Over the years, the endowment has grown through generous contributions made in loving memory of Mr. and Mrs. Belding by their son-in-law and daughter, Mr. and Mrs. Peter de Wetter. Peter de Wetter, a longtime friend and benefactor of the University, died in 1999. The endowment provides Presidential Scholarships without restriction as to field of study.

CATHERINE CROWELL BELK ART SCHOLARSHIP FUND
—Established in 1995 by the children of Catherine Crowell Belk in memory of their mother, who earned her Master's degree in Fine Arts before passing

away in 1994. Income from the endowment supports scholarships for graduate or undergraduate Art students, with preference given to those returning to UTEP to pursue an Art degree after a hiatus in their studies.

ESTHER AND LOUIS BENSON ENDOWED SCHOLARSHIP FUND
—Established in 1995 by Drs. Steven and Susan Benson in honor of Esther and Louis Benson. Income from the fund provides scholarships to senior and graduate Nursing students in the College of Health Sciences who are pursuing careers in a community-health-related field.

DR. ANTON H. BERKMAN ENDOWED FUND
—Established in 1989 by friends and former students of Dr. Anton H. Berkman and a challenge grant from National Medical Enterprises, Inc., (now Tenet Healthcare Corp.). This fund is used in support of the Department of Biological Sciences to encourage excellence in teaching and student research. Dr. Berkman taught at the University from 1927 until 1966. During that time, he also served as Dean of Arts and Sciences, Chairman of Biological Sciences and, in August 1960, as interim president of Texas Western College.

THE JIMMIE VOKES BERNARD ENDOWED SCHOLARSHIP FUND
—Established in 1993 through the El Paso Speech, Language and Hearing Association by family and friends in memory of Jimmie Vokes Bernard, a UTEP alumna. Income from the endowment provides a scholarship to a full-time Speech-Language Pathology graduate student.

ELAYNE AND JULIAN BERNAT ENDOWED PRESIDENTIAL SCHOLARSHIP FUND
—Two Presidential Scholarships, the first established in 1991 and the second in 1993, by Elayne and Julian Bernat, longtime friends of the University. Income earned from this permanent endowment is used to award scholarships to undergraduate or graduate students who are citizens or permanent residents of the United States or Mexico, and meet the requirements of the Presidential Scholarship Program at the University of Texas at El Paso. There is no restriction as to major or field of study.

BHUTANESE STUDENTS ENDOWED SCHOLARSHIP FUND
—Established in 2001 by Louis W. Cope to provide scholarships to students who are pursuing degrees in Engineering, Geological Sciences, or Environmental Science and Engineering, with preference given to students who are from the Kingdom of Bhutan or Southeast Asia.

JOHN C. BIRKHEAD AND DICK SHINAUT MEMORIAL SCHOLARSHIP IN KINESIOLOGY OR SPORTS STUDIES
—Established in 1994 in memory of John C. Birkhead and Dick Shinaut by gifts from the El Paso Athletic Hall of Fame and the Birkhead and Shinaut families. Income from the fund provides an annual scholarship to a student majoring in Kinesiology or Sports Studies whose intention is to teach and/or coach.

J.B. AND MARGARET BLAUGRUND LIBRARY FUND
—Established in 1973 by Mrs. Alvin J. Marks in memory of her parents, J.B. and Margaret Blaugrund. The income from this endowment fund is used for acquisition of Judaica and related materials to be housed in the University Library's Department of Special Collections.

LIL BLUM GOLF SCHOLARSHIP FUND
—Established in 1990 by Frank Blum in memory of his wife, Lil Blum, who was a well-known and greatly admired golfer in the El Paso-area. Mrs. Blum helped start the Fort Bliss Women's Golf Association and was elected to the El Paso Golf Hall of Fame in 1988. Income earned from this endowment is used to annually award a scholarship to a member of the UTEP Women's Golf Team.

JANE WEINERT BLUMBERG ENDOWMENT FUND
—Established in 1992 by a bequest from the Estate of Jane Weinert Blumberg, a former member of the U.T. System Board of Regents and friend of the UTEP Library. Income from the fund provides educational materials for the University Library.

JANE WEINERT BLUMBERG UNIVERSITY ENDOWED SCHOLARSHIP FUND
—Established in 1983 by the UTEP Development Board and the President's Associates to honor Jane Weinert Blumberg, who served on the U.T. System Board of Regents from 1977 to 1983 and assisted UTEP in many ways. Income earned from the endowment is used to provide an undergraduate scholarship under the Presidential Scholarship Program for a student, primarily, from an El Paso high school, either public or private.

PROFESSORSHIP FOR BORDER TRADE ISSUES
—Established in 1996 by the Center for the Study of Western Hemispheric Trade through the Texas A&M Research Foundation in College Station, Texas, with grant funding provided by the U.S. Customs Service. Income from this endowment is used for the appointment of an outstanding faculty member with professional and academic credentials in the Center for Inter-American and Border Studies.

BOTHWELL RHO SIGMA TAU PRESIDENTIAL SCHOLARSHIP
—Established in 2002 by Robert W. Bothwell, a 1948 chemistry graduate of the Texas College of Mines and Metallurgy (now UTEP), on behalf of Rho Sigma Tau Building Association Inc. This endowment provides an annual scholarship pursuant to the UTEP Presidential Scholarship Program.

GERALD LAMAR BOYKIN MEMORIAL ATHLETIC SCHOLARSHIP FUND
—Established in 1990 in memory of Gerald Lamar Boykin, by his wife, Jeanne, and many friends and admirers. Mr. Boykin, a local businessman, died in 1988 at the age of 54. He was a 1961 graduate of UTEP with a degree in Business Administration. He was very active in supporting the University's athletic programs and fund raising efforts. Interest earned from this endowment is used to provide an athletic scholarship at the University.

BRISTOL/MAYBERRY ENDOWED AWARD FUND
—Established in 2001 by Dr. Russell Broaddus, a 1987 microbiology graduate of UTEP, in honor of Dr. Jack Bristol, a UTEP Professor Emeritus of Biological Science, and Dr. Lillian Mayberry, Director of the University Honors Program, to provide competitive awards based on research proposals or scholastic achievements to honor the most outstanding biology or microbiology students who have completed 60 or more undergraduate hours.

KATHLEEN BRUCE/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 1997 by Harry and Patricia Bruce, and family, in loving memory of their daughter, Kathleen Bruce. Matching funds were provided by

The Coca-Cola Foundation. Income from this endowment provides scholarships to students in the College of Business Administration.

BRUMBELOW-MOORE MEMORIAL SCHOLARSHIP FUND
—Established in 1978 in memory of Mike Brumbelow and Ross Moore, two prominent figures in the University's athletic history, by their families and friends. Funds distributed from this endowment provide a scholarship for a sophomore, junior or senior student-athlete or trainer with an outstanding academic record.

THE MICHAEL P. BURNS MEMORIAL SCHOLARSHIP FUND
—Established in 1979 by an Executive Committee comprised of family, friends and representatives of the Disabled American Veterans, the sponsoring organization of the fund, as a memorial to Sgt. 1st Class Michael P. Burns (MIA Vietnam), who attended UTEP in 1966-67. Income from the endowment provides scholarships to undergraduate students who are U.S. citizens or permanent residents and who are studying to earn a degree in Special Education, Speech-Language Pathology, Physical Therapy or related fields working with disabled children.

RUBY V. BURNS ENDOWED FUND FOR MUSIC
—Established in 1993 by the bequest of Ruby V. Burns, a reporter and society columnist who wrote for El Paso newspapers. Income from the fund supports the Music Department.

COLLEGE OF BUSINESS ADMINISTRATION ENDOWMENT
—Established in 2000 by various donors to benefit the College of Business Administration.

HUGHES BUTTERWORTH, JR. AND FAMILY PRESIDENTIAL LEADERSHIP FUND
—Established in 1994 in honor of UTEP President Diana Natalicio, income from this endowment is used to support activities and programs with emphasis on the promotion of international relations and educational and economic development within the El Paso community.

ERIC J. BYMARK MEMORIAL FUND
—Established in 1981 in memory of Eric J. Bymark, a former UTEP student and prominent El Paso citizen, by his wife, Lillian H. Bymark, and family. Income from this permanent endowment provides resources for the Department of Intercollegiate Athletics.

PAUL H. CARLTON EXCELLENCE FUND FOR ACCOUNTING
—Established in 2003 to honor the memory of Mr. Paul H. Carlton by his wife, Mrs. Elouise Carlton, and daughter, Mrs. Edy Carlton Chambers. Mr. Carlton, a champion Miner Track athlete and 1940 business graduate of the University, was an accountant and 18-year member of the El Paso Independent School District Board of Trustees, and recipient of UTEP's 1981 Distinguished Alumni Award. Mrs. Carlton graduated from the University, earning her bachelor's degree in History in 1943. Income from this endowment is used at the discretion of the Accounting Department Chair to support student enrichment and activities for Accounting students.

MAGDALENA SALGADO CARROLL ENDOWED SCHOLARSHIP FUND FOR FUTURE TEACHERS
—Established in 1997 in memory of Magdalena Salgado Carroll, a longtime resident of San Elizario, by her daughter, Alice C. Serna, and family. Magdalena was a community-service volunteer throughout her lifetime, freely giving of herself to help others. The income from this fund provides scholarships to students who plan a career in teaching.

CHARLES R. AND DOROTHY S. CARTER CHAIR IN BUSINESS ADMINISTRATION
—Established in 1985 by Mrs. Dorothy S. Carter in memory of her husband, a distinguished business leader, as the first endowed chair in the College of Business Administration. This endowment provides income for an outstanding faculty member with superior professional and academic credentials. Mrs. Carter, who was a member of the U.T. System Chancellor's Council, is now deceased.

CHARLES R. CARTER MEMORIAL ATHLETIC ENDOWMENT FUND
—Established in 1983 by Dorothy S. Carter in memory of her husband, Charles R. Carter, a prominent El Paso businessman and owner of the Carter Petroleum Company. Income earned from the endowment provides a full scholarship to a student-athlete. Mrs. Carter, who was a member of the U.T. System Chancellor's Council, is now deceased.

EL PASO CENTENNIAL MUSEUM FUND
—Established in 1986 by alumni and friends of the UTEP Centennial Museum in celebration of the museum's 50th anniversary. Income earned from the endowment is used for the operation of the museum and acquisition of new materials. The museum is an academic support and outreach unit of the University focusing on the natural history and the indigenous, colonial, pre-urban and folk cultures of the border regions of the southwestern United States and Mexico.

TEXAS SESQUICENTENNIAL ENDOWMENT FOR THE CENTENNIAL MUSEUM
—Established in 1989 by the El Paso Committee of the Texas Sesquicentennial, jointly sponsored by the City and County of El Paso, from funds contributed by local citizens to create a local remembrance of the Sesquicentennial celebration. More than six and a half decades ago, UTEP's Centennial Museum itself was established by the citizens of El Paso in celebration of the Centennial of Texas in 1936. The Sesquicentennial Endowment provides the museum with unrestricted resources to improve its overall programs and operations.

THE CENTER FOR INTER-AMERICAN AND BORDER STUDIES ENDOWED FUND
—Established in 2003 by Dr. Jon Amastae, Director of the Center for Inter-American and Border Studies, and other contributors. Earnings from this endowment are used at the discretion of the Director to support the Center.

CENTER FOR LIFELONG LEARNING ENDOWMENT FUND
—Established in 1997 by the Executive Board of the Center for Lifelong Learning. Income from this endowment provides direct support to the furtherance of the academic mission of the University, including, but is not limited to, scholarships, tuition, books, equipment, supplies and the general academic enhancement of any academic department or program sponsored by the University.

CHAIR FOR THE STUDY OF TRADE IN THE AMERICAS
—Established in 1996 by the Texas A&M Research Foundation in College Station, Texas, through a grant from the U.S. Customs Service as a permanent endowment. Income from this fund provides financial support for the Center for the Study of Western Hemispheric Trade, including compensation for highly qualified scholars.

THE SHIGEKO K. CHAN DISTINGUISHED PROFESSORSHIP IN MATHEMATICAL SCIENCES
—Established in 1999 by Dr. James Y. Chan in memory of his beloved wife, Shigeko K. Chan, to attract and/or retain talented and promising academicians in the field of Mathematical Sciences.

THE ROY AND KEITH CHAPMAN ENDOWED PRESIDENTIAL SCHOLARSHIP FUND
—Established in 1997 by University alumni Roy and Keith Chapman. Income from this endowment provides Presidential Scholarships to top scholars pursuing graduate degrees.

CHASE BANK PROFESSORSHIP IN BUSINESS ADMINISTRATION
—Established in 1991 by Texas Commerce Bank (now Chase Bank). Income earned from the endowment is used by the College of Business Administration to attract and retain a high-quality academician who teaches, conducts a research program in business or undertakes scholarly studies for publication and distribution.

ABRAHAM CHAVEZ, JR. PROFESSORSHIP FUND IN MUSIC
—Established in 1992 by a major gift from The El Paso Symphony Orchestra Association and a matching gift from the University of Texas at El Paso. Income from the endowment will be used to support the individual named to fill the Abraham Chavez, Jr. Professorship in Music at the University.

THE CHEVROLET SCHOLARSHIP
—This fund was established in 1994 with gifts from the Chevrolet Motor Division of General Motors Corporation, made over several years, in honor of various UTEP student athletes. Income earned from the endowment is used to provide scholarship support to UTEP students.

GEORGE CHRISS ENDOWED SCHOLARSHIP FUND
—Established in 2000 by the Freedom Forum, Inc., in honor of UTEP alumnus George Chriss to provide scholarships to students, with preference to El Paso High School (El Paso, Texas) graduates.

CIRCLE K - SUNWORLD FOUNDATION SCHOLARSHIP FUND
—Established in 1982 by the officers and directors of Circle K - Sunworld Foundation, under Chairman Fred Hervey, a longtime member of UTEP's Development Board and primary benefactor. Mr. Hervey died in 1999. Interest from the fund provides scholarships for undergraduate students.

ANNE AND ROLAND W. CLAUDIUS MEMORIAL SCHOLARSHIP FUND
—Established in 1975 in memory of Roland W. Claudius, a former foreign service officer with the U.S. State Department, and his wife, Anne Claudius. Income from this permanent endowment fund provides scholarships to undergraduate students who attended preparatory school in a country other than the United States and who have successfully completed 30 semester hours of study at UTEP.

COCA-COLA CHALLENGE/UTEP ALUMNI SCHOLARSHIP FUND
—Established in 1998 by The Coca-Cola Foundation as a challenge to UTEP alumni. Income from this endowment is used to provide scholarship support for first generation students attending the University of Texas.

ANDY AND SYD COHEN ENDOWMENT FUND
—Established by friends of the late Andy and Syd Cohen brothers, former collegiate and professional athletes, El Paso businessmen, civic leaders and friends of the University. Income from this endowment provides scholarships to student-athletes.

LURLINE H. COLTHARP COLLECTION OF ONOMASTICS
—Established in 1992 by UTEP Professor Emerita of English Dr. Lurline H. Coltharp, who passed away in 1998. Income from the endowment is used to purchase library materials for the study of names.

JOHN G. AND SUE E. COMER MEMORIAL NURSING SCHOLARSHIP FUND
—Established in memory of John G. and Sue Elizabeth Comer, prominent citizens of El Paso, and later of Houston, in 1978. Income from this permanent endowment provides scholarships for upper-level Nursing students.

DR. C. SHARP COOK DISTINGUISHED PROFESSORSHIP IN PHYSICS
—Established in 1987 by alumni and friends of UTEP to honor Dr. C. Sharp Cook, who officially retired in 1985 as Professor Emeritus of Physics, and who passed away in 2001. A challenge grant of $50,000 from Dr. and Mrs. Cook was matched by the El Paso Electric Company and members of the UTEP President's Associates. Mrs. Marian Cook, herself a longtime friend and volunteer of the University, passed away in 2002. Income from the endowment is to be used by an outstanding faculty member of the Physics Department.

C. SHARP COOK GRADUATE SCHOLARSHIP FUND
—Established in 1989 by Dr. C. Sharp Cook , who died in 2001, was a UTEP Professor Emeritus of Physics. Mrs. Cook, a longtime supporter of the University, passed away in 2002. The recipient of this scholarship must be a student working toward a master's or doctoral degree in Physics or any interdisciplinary area of graduate study in which the Physics Department participates.

COORS VETERANS MEMORIAL SCHOLARSHIP FUND
—Established in 1985 by Alan R. Kahn, President of Dickshire Coors Distributing Company, through special promotions in the El Paso area. Income earned provides two or more annual scholarships under the Coors Veterans Scholarship Program at UTEP.

JUAN FELIPE CORDOVA ENDOWED SCHOLARSHIP FUND
—Established in 1996 by Robert Cordova in memory of Juan Felipe Cordova. Income from the endowment provides one or more annual scholarships to students pursuing degrees in Education, with preference given to students graduating from Bowie High School in El Paso, Texas.

FRANK B. COTTON TRUST
—Established in 1937 through the bequest of Frank B. Cotton, a Massachusetts manufacturer and investor, to the Board of Regents for Texas

Western College (now UTEP). The estate's income has provided the University with the Cotton Memorial Building; the Cotton Visiting Professor; financial aid and scholarships to students and faculty; support for the University Library; for organized research and for the Faculty Teaching Improvement Program. The Cotton Fund continues to contribute vitally to the University's overall academic excellence program.

THE JOHN KELLOGG CREIGHTON HISTORY MEMORIAL FUND
—Established in 1984 by former students, colleagues, friends and the Creighton family in memory of Dr. John Kellogg Creighton, former associate professor of history at UTEP. Income earned from this endowment is used to award an annual scholarship to an undergraduate History student. Additional scholarships may be awarded as the fund grows each year.

FREDERICK JAMES CROUCH MEMORIAL SCHOLARSHIP FUND
—Established in 1988 by Mr. and Mrs. James J. Crouch in memory of their son, Frederick James Crouch. Frederick Crouch graduated with honors from Burges High School in El Paso, Texas, in 1974 and died prematurely in 1985. Income from this endowment is used to award scholarships to outstanding students from Burges High School who also have participated in sports and are U.S. citizens or permanent residents. Both Mr. and Mrs. Crouch are graduates of UTEP.

JUDGE AND MRS. ROBERT E. CUNNINGHAM FUND
—Created in 1978 by Judge and Mrs. Robert E. Cunningham, prominent El Paso citizens. Income from this permanent endowment fund provides financial assistance for the annual operation and maintenance of Texas Western Press.

DAVIDSON FAMILY CHARITABLE FOUNDATION PRESIDENTIAL ENDOWED SCHOLARSHIP FUND
—Established in 1983 by the Davidson Family Charitable Foundation under Chairman H.W. Davidson of Fort Worth, Texas. Income earned from the fund is to be used for a Presidential Endowed Scholarship for a resident of the State of Texas.

THE BRUCE DAVIDSON MEMORIAL GRADUATE STUDENT AWARD FUND
—Established in 1985 by students, friends and family of the late Bruce Davidson, who was a graduate student in the Department of Geological Sciences at UTEP.

THE JOEL D. DAVIS MEMORIAL SCHOLARSHIP FUND
—Established in 1992 in memory of Mr. Joel D. Davis by his mother, Mrs. Virginia D. Elliott. Mr. Davis was a student at UTEP who passed away just a few days before his graduation. Income from the endowment is used to award an annual scholarship to an undergraduate student pursuing a degree leading to a career in the field of special education.

YAZBIK AND ROSALIE DAW ENDOWED SCHOLARSHIP
—Established in 2000 by Mr. and Mrs. R. Paul and Patricia Daw Yetter in honor of Mrs. Yetter's parents, Yazbik and Rosalie Daw. Funds distributed from this endowment support a renewable scholarship for undergraduate students who have a demonstrable and quality involvement in student, community, church or other worthwhile activities.

LOLA B. DAWKINS FUND FOR EXCELLENCE IN BUSINESS ADMINISTRATION
—Established in 1986 by alumni, friends and faculty honoring UTEP Professor Dr. Lola B. Dawkins upon her retirement in May 1984. Income earned from the endowment provides scholarships to junior and senior students majoring in Management, Marketing, Accounting and Computer Information Systems, with first preference given to students who intend to teach Business Education at the high school level.

THE BROOKS DAWSON MEMORIAL SCHOLARSHIP
—Established in 1970 by friends of Brooks Dawson, a former UTEP student who was an outstanding football player and student leader. Funds distributed from this endowment provide scholarships for undergraduate students pursuing degrees in the College of Business Administration.

ARTEMIO DE LA VEGA MEMORIAL SCHOLARSHIP FUND
—Established in 1983 by Mr. Federico de la Vega of Juárez, Mexico, in memory of his father, Artemio de la Vega, to provide several endowed scholarships under the Presidential Scholarship Program. Income from this endowment provides scholarships for deserving, qualified students from Mexico, with first preference given to residents of Cd. Juárez.

PETER DE WETTER DISTINGUISHED PROFESSORSHIP IN HEALTH SCIENCES
—Established in 1999 by Tenet Healthcare Foundation in honor of Peter de Wetter, a Tenet Director, Chair of UTEP's Legacy Campaign and a longtime member of the University's Development Board. Mr. de Wetter died shortly after the establishment of the professorship. Funds from this endowment enable UTEP to attract and/or retain talented and promising academicians in the fields of Nursing and Health Sciences at UTEP.

PETER AND MARGARET B. DE WETTER LIBRARY FUND
—Established in 1996 by Peter and Margaret de Wetter as a permanent endowment. Mr. de Wetter, who was an El Paso civic leader and Chairman of UTEP's Legacy Campaign, died in 1999. Mrs. de Wetter is a poet and graduate of the Texas College of Mines and Metallurgy (now UTEP). Income from this endowment will be used to support the de Wetter Literature Collection and to purchase classic and contemporary works, including poetry, drama and fiction, for the UTEP Library.

JAMES D. DEGROAT MEMORIAL LIBRARY FUND
—Established in 1993 by Mary Carolyn DeGroat and other family and friends in memory of James DeGroat, an alumnus of the Texas College of Mines. Income from this permanent endowment is used to purchase books and periodicals for the University Library.

JAMES D. DEGROAT MEMORIAL PRESIDENTIAL SCHOLARSHIP FUND
—Established in 1985 by Mary Carolyn DeGroat in memory of her husband, James D. DeGroat who was President of Carter Petroleum Company and a former outstanding athlete at Texas Western College (now UTEP). Income earned from the endowment is used to award an annual scholarship to qualified athletes under the Presidential Scholarship Program.

DELTA KAPPA GAMMA SOCIETY INTERNATIONAL-ETA KAPPA CHAPTER SCHOLARSHIP FUND
—Established in 1989, this endowment provides scholarships for upper-level students who are members of the Eta Kappa Chapter of the Delta Kappa

Gamma Society International and who are seeking a teaching certificate. The Eta Kappa Chapter of Delta Kappa Gamma, a professional teacher's organization, worked for several years to raise the funds to establish the scholarship, primarily by conducting successful ways-and-means projects.

PATRICK H. DEWITT MEMORIAL PRESIDENTIAL SCHOLARSHIP FUND —Established in 1986 in memory of Patrick H. DeWitt, a prominent realtor and partner of DeWitt and Rearick, Inc. Income earned from the endowment provides a Presidential Scholarship in the College of Business Administration for a qualified student majoring in Real Estate.

DIAMOND JUBILEE FUND FOR ACADEMIC RESOURCES —Established in 1983 by alumni and friends of UTEP in celebration of the University's 70th anniversary. Interest earned from the endowment provides academic resource funds for the Presidential Scholarship Program, the Junior Scholars Program, the Honors Program, the Student Recruitment Program and unrestricted purposes designated by the President.

MATTHEW AND WANDA DIETHELM/COCA-COLA ENDOWED SCHOLARSHIP FUND —Established in 1998 by Matthew and Wanda Diethelm with matching funds from The Coca-Cola Foundation. Income from this permanent endowment is used to provide scholarships to students pursuing degrees in Science, Math or Engineering, with preference for married veterans of the U.S. armed forces.

WEST EL PASO MEMORIAL DISABLED VETERANS SCHOLARSHIP —Established in 1994 by West El Paso Chapter 66 of the Disabled American Veterans, Inc. Income earned is used to provide scholarships, preferably for members and family of members of the Disabled Veterans, Inc.

BERNICE DITTMER ENDOWED PRESIDENTIAL SCHOLARSHIP FUND —Established in 1981 by Mrs. Bernice Dittmer, who was an outstanding alumna of the University and a prominent El Pasoan. Income from this permanent endowment is used to provide Presidential Scholarships to outstanding graduates of El Paso-area high schools who attend UTEP. Mrs. Dittmer passed away in 1998.

BERNICE DITTMER LIBRARY ENDOWMENT FUND —Established in 1981 by Mrs. Bernice Dittmer, who was an outstanding alumna of the University and a prominent El Paso citizen. Income from this permanent endowment provides books for the University Library. Mrs. Dittmer passed away in 1998.

EMIL JAY DITTMER MEMORIAL SCHOLARSHIP FUND —Established in memory of Emil Jay Dittmer, a longtime benefactor of the University, by his wife Bernice Dittmer. Income from this permanent endowment fund provides Presidential Scholarships for qualified students interested in the fields of Art and Humanities. Mrs. Dittmer passed away in 1998.

JOHN DITTMER ENDOWMENT FUND FOR RELIGIOUS STUDIES —Established in 1993 by Mrs. Bernice Dittmer in honor of her son, John Dittmer. Income from the fund is used to support the Religious Studies Program at UTEP. Mrs. Dittmer passed away in 1998.

LES AND HARRIET DODSON ENDOWED EXCELLENCE FUND
—Established in 2000 by a bequest from the Estate of Mrs. Harriet P. Dodson to benefit students attending the University.

SAM A. DONALDSON ENDOWED SCHOLARSHIP FUND
—Established in 1989 by Sam Donaldson, a 1958 Communication graduate of Texas Western College (now UTEP) with a long and distinguished career as a national news reporter and television commentator. Mr. Donaldson was named the University's Outstanding Ex-Student in 1976. Funds distributed from this endowment provide an annual award for a student majoring in Broadcast Journalism at UTEP.

M.S. AND MEEK LANE DOSS ENDOWED SCHOLARSHIP FUND
—Established in 2002 by the Board of Directors of the M.S. Doss Foundation Inc. Income earned from this endowment provides scholarships to undergraduate students who are graduates of high schools located in West Texas or Southeastern New Mexico.

THE DOWNTOWN LIONS/JOHN PHELAN ENDOWED ATHLETIC SCHOLARSHIP FUND
—Established in 1993 with a gift from the El Paso Downtown Lions Club in honor of UTEP alumnus John Phelan, a longtime "Lion" and local sportscaster. Mr. Phelan died in 1994. Income from this endowment provides a scholarship to a full-time student-athlete.

RICHARD M. AND FRANCES M. DUDLEY MEMORIAL PROFESSORSHIP FUND
—Established in 1985 by the bequest of Marion J. Purdy in memory of Richard M. and Frances M. Dudley. Richard Dudley was a former mayor of El Paso and Texas State Representative. Mayor and Mrs. Dudley resided at 711 Cincinnati St., which now serves as the home of UTEP's president. Income earned from the endowment shall be used to establish a professorship in any academic area, to be appointed by the president of the University.

JACK N. DUKE LIBRARY FUND FOR SPECIAL COLLECTIONS
—Established in 2002 by Eleanor Duke, a 1939 Texas College of Mines and Metallurgy (now UTEP) alumna and UTEP Professor Emerita of Biological Sciences, in memory of her husband who passed away in 2002. This endowment is used at the discretion of the University Librarian to support the acquisition and conservation activities of the Library's Special Collections Department.

TOMMYE J. DUNCAN ENDOWED PRESIDENTIAL SCHOLARSHIP
—Established in 1993 by Mrs. Tommye J. Duncan, a longtime friend of the University and a member of UTEP's College of Health Sciences Advisory Board. Income from the endowment provides an annual scholarship to a UTEP student seeking a career in Occupational Therapy or other health-related area. Preference is given to El Paso residents and graduates of El Paso-area high schools who demonstrate financial need and a history of academic excellence.

RICHARD E. DUNLAP MEMORIAL FUND
—Established in 1987 by Mrs. Gisela E. Dunlap in memory of her husband, Richard E. Dunlap. Mr. and Mrs. Dunlap were strong supporters of the UTEP History Department for many years. Mrs. Dunlap passed away in 1997. Income earned from the endowment is used to provide scholarships to worthy and deserving students who are pursuing Master of Arts degrees in History.

THE JAMES H. AND MINNIE M. EDMONDS SCHOLARSHIP ENDOWMENT —In 1990, the University of Texas at El Paso was selected to be one of the recipients of proceeds from the termination of the James H. and Minnie M. Edmonds Education Foundation of Houston, Texas. Income earned from the endowment thus established is used for scholarships and education-related expenses for undergraduate and graduate students. Financial need receives highest priority in selection of the recipients.

HENRY P. AND MARGARET F. EHRLINGER MEMORIAL AWARD IN METALLURGY
—The Henry P. Ehrlinger Award for the Outstanding Graduate in Metallurgical Engineering was originally established by Dr. Ehrlinger in 1959. Since his death in 1976, friends, alumni and colleagues have continued to add to the fund, and, in 1990, it became a permanent endowment through a gift from his daughter, Ann, and her husband, Lester Peterson. Renamed to honor both Dr. and Mrs. Ehrlinger, this memorial award is used to provide an annual cash award to the person selected as the outstanding undergraduate recipient of a degree in Metallurgical Engineering.

JACK EISENBERG/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 2000 by American Finance & Investment Co., Inc., in honor of its Chief Executive Officer, Jack Eisenberg. Matching funds were provided by The Coca-Cola Foundation. Income distributed distributed from this endowment provide annual scholarships to students pursuing degrees in Finance, with preference given to graduates of El Paso High School in El Paso, Texas.

EL PASO ADMINISTRATORS' ASSOCIATION ENDOWED SCHOLARSHIP FUND
—Established in 1984 by the El Paso Administrators' Association to provide scholarships for a graduate or undergraduate student in the College of Education. Income earned from the endowment is used to provide an annual scholarship to a student pursuing a career in Education with the intention of becoming an administrator.

EL PASO ATHLETIC HALL OF FAME FUND
—Established in 1988 by the El Paso Athletic Hall of Fame, an organization that honors outstanding El Paso athletes and actively promotes UTEP Athletics. This endowment provides a scholarship to an undergraduate student-athlete at UTEP, in accordance with general scholarship guidelines.

EL PASO CHAPTER - DATA PROCESSING MANAGEMENT ASSOCIATION SCHOLARSHIP FUND
—Established in 1992 by the El Paso Chapter - Data Processing Management Association, with additional support from the UTEP College of Business Administration. Income from the endowment is used to award one academic scholarship annually to a graduating senior in the College of Business Administration, with preference given to a student majoring in Computer Information Systems.

EL PASO COMMUNITY PROFESSORSHIP IN ACCOUNTING
—Established in 1986 by alumni and friends of the UTEP College of Business Administration's Department of Accounting to enhance and continue academic excellence in that department. Income earned from the endowment is used to support an outstanding faculty member of national reputation.

EL PASO ELECTRIC COMPANY PROFESSORSHIP IN EDUCATION RESEARCH
—Established in 2002 by El Paso Electric Company to provide an interdisciplinary professorship for education research and graduate studies, which will assist the university in responding to critical areas of need in K-16 education at the local, state, national and international levels.

EL PASO HISPANIC SCHOLARSHIP ENDOWMENT FUND
—Established with funds from Univision Television Group, Inc., of Los Angeles, California; Paso del Norte Broadcasting Corporation of El Paso; State National Bank of El Paso; and community donors. The income from this endowment is used to provide one or more annual scholarships to graduates of El Paso-area high schools.

COLLEGE OF ENGINEERING ENDOWMENT
—Established in 2000 by various donors to benefit the College of Engineering.

THE ENGLISH DEPARTMENT GENERAL ENDOWMENT
—Established in 2003 by various contributors. Distributions from this endowment are used at the discretion of the Chair of the Department of English to support programs and activities of the Department.

MYER ERLICH MEMORIAL BASKETBALL SCHOLARSHIP FUND
—Established in 2000 by the Milton D. and Jean Feinberg Philanthropic Fund. Income from this endowment provides scholarships to students who are members of the UTEP Intercollegiate Men's Basketball Team.

ETA KAPPA NU ENDOWED SCHOLARSHIP
—Established in 1991 by the El Paso chapter of Eta Kappa Nu, the national electrical and computer engineering honor society. Income from the endowment is used to provide a scholarship to a junior or senior student majoring in Electrical Engineering.

BILLIE W. ETHERIDGE DEBATE SCHOLARSHIP ENDOWMENT
—Established in 1989 in honor of Professor Billie W. Etheridge by two of her former students, Mr. Charles W. Santaguida and Mr. Robert J. Malone. Professor Etheridge retired from UTEP in 1989 after 22 years on the faculty of the departments of Drama and Speech, Communication and English. As a result of her contributions, the University's Forensics program produces outstanding debate teams and individual competitive speakers. The earnings from this endowment are awarded as scholarships to students participating in the UTEP Debate program who meet the University's scholarship requirements.

MISS FREDERICK LOUISE ETTER MEMORIAL LIBRARY FUND
—Established in 1988 at the bequest of Miss Frederick Louise Etter, who died on August 2, 1987. Income earned from the endowment is used for the University Library's technical books and periodicals, serials on technical subjects, special journals and abstracts in any field.

MANSOUR AND JAMES FARAH MEMORIAL FUND
—Established by Hanna Farah in memory of her husband, Mansour, and her son, James, two prominent figures of El Paso. Income from this endowment fund provides scholarships for upper-level Nursing students.

MILTON D. FEINBERG ENDOWED EXCELLENCE FUND
—Established in 1995 by Stephen Feinberg in memory of his father, Milton Feinberg, the founder and first chairman of Border Steel Rolling Mills, Inc. Income from this fund is used to enhance programs, activities and opportunities for academic excellence in the College of Business Administration for the benefit of students and faculty.

NOBLE "SARGE" FERGUSON ENDOWED FUND
—Established in 1996 by family and friends of Noble "Sarge" Ferguson to honor the memory of this loyal and dedicated friend of UTEP Basketball and former Head Coach Don Haskins. Income from this fund provides scholarships to deserving students on the UTEP Men's Basketball team.

FESSINGER-SPRINGER LECTURESHIP FUND
—Created by the late Mr. and Mrs. Moses D. Springer in memory of Mrs. Springer's parents, Rueben and Leona Fessinger, who came to El Paso in 1903 to open the Grand Leader Dry Goods Store, which existed for over 40 years. This fund is used to bring a nationally recognized lecturer in the field of Science to the University each year. The Lectureship is now supported by their son, Dr. Harry Springer, a UTEP alumnus, who is a surgeon in Illinois.

DR. MICHAEL L. FINERTY SCHOLARSHIP FUND
—Established in 1987 by Dr. Michael L. Finerty, a 1956 Biology graduate of Texas Western College (now UTEP) and prominent California neurologist. Funds distributed from this endowment provide scholarships for outstanding Pre-medicine or Biological Sciences students at UTEP.

MARY L. FISK ENDOWED FUND
—Established in 1995 in memory of Mary L. Fisk, an El Paso educator, by Mr. Howard Shiplett and other friends and family. Mary Fisk taught for 53 years, the last 24 of which were spent at Bel Air High School in El Paso, Texas. Income from the fund supports a student pursuing a degree in Math, Science or Engineering.

JOSEPHINE CLARDY FOX ESTATE FUND
—Established in 1970 by the Estate of Josephine Clardy Fox to provide funds for the University's general use without restriction. Mrs. Fox's estate was extensive, including real estate, valuable antiques, paintings and books, as well as liquid assets. In 1978, in recognition of Mrs. Fox's interest in both the University and the fine arts, the building housing the departments of Art, Music and Theatre Arts was renamed the Josephine Clardy Fox Fine Arts Center.

JOSEPHINE CLARDY FOX SCHOLARSHIP
—Established in 1970 by the bequest of prominent El Pasoan Josephine Clardy Fox. Funds distributed from this endowment provide scholarships for students, as well as unrestricted support for the University's overall academic excellence.

FREEDOM FORUM ENDOWED HISPANIC SCHOLARSHIP FUND FOR JOURNALISM STUDENTS
—Established in 1994 by The Freedom Forum, formerly known as the Gannett Foundation, through the efforts of trustee Josefina Salas-Porras. Ms. Salas-Porras, an alumna and strong advocate of the University, passed away in 2002. This endowment provides an annual scholarship to a Journalism student, with preference given to first-generation college students.

JEANNE M. FRENCH/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 2000 by Ms. Jeanne M. French with matching funds from The Coca-Cola Foundation, to provide scholarships to students enrolled at UTEP who are graduates of Burges High School in El Paso, Texas, with preference given to those who demonstrate active community service and are in need of financial assistance in order to attend the University on a full-time basis.

JEANNE M. FRENCH AND DOROTHY STEPHENSON HASLETT/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 2000 by Ms. Jeanne M. French to provide scholarships to students enrolled at UTEP who are graduates of Jefferson High School in El Paso, Texas, with preference given to those who demonstrate active community service and who are in need of financial assistance in order to attend the University on a full-time basis.

L. MARCUS FRY ENDOWED SCHOLARSHIP FUND
—Established in 2000 by friends and colleagues of L. Marcus Fry, former Chief Executive Officer of Sierra Providence Health Network in El Paso, Texas. Funds distributed from this endowment provide scholarships to student-athletes, with preference given to students who are members of the UTEP Men's or Women's Intercollegiate Track Team.

DR. JOE S. GALATZAN MEMORIAL SCHOLARSHIP FUND
—Established in 1984 by Mrs. Sylvia L. Galatzan in memory of her husband, Dr. Joe S. Galatzan, a well-known civic leader who was the team physician for UTEP athletes for many years. Income earned from the endowment fund is used to provide an annual scholarship under the Presidential Scholarship Program for an outstanding student who has expressed an interest in Pre-medical Studies under the College of Science.

PHILIP J. GALLAGHER MEMORIAL ENDOWED FUND FOR INTELLECTUAL HERITAGE
—Established in 2000 by Mr. William E. Mimmack. The income from this endowment supports faculty development in teaching and research in the Western Cultural Heritage Program.

GHISELLI/HEITZMAN ENDOWED EXCELLENCE FUND
—Established in 1992 by Antonio Ghiselli and Martin Heitzman, dedicated doctors of The El Paso Orthopaedic Group and friends of UTEP. Income from this fund is used to enhance programs, activities and opportunities for academic excellence in the College of Business Administration for the benefit of students and faculty.

KENNETH P. GIFFORD MEMORIAL SCHOLARSHIP FUND
—Established in 1984 by the Kenneth P. Gifford Foundation of El Paso in memory of Kenneth P. Gifford, a longtime businessman and bank executive. Funds distributed from this endowment are awarded under the Presidential Scholarship Program.

ARTHUR GILLES ENDOWED FUND FOR ELECTRICAL ENGINEERING
—Established in 2003 through a bequest from the Estate of Rosalie Gilles in memory of her late husband, Arthur Gilles, a 1951 electrical engineering alumnus of the university. Distributions from the endowment are used at the discretion of the Chair of the Department of Electrical and Computer Engineering as stipulated by Mrs. Gilles' Last Will. Such use includes the

acquisition of research and reference sources in printed, digital or electronic form, as well as the purchase of equipment for laboratory work, which will aid students.

C.H. GLADMAN SCHOLARSHIP FUND
—Established in 1986 by alumni, faculty and friends in honor of Professor Emeritus Charles Herman Gladman, who was a member of the Mathematics Department faculty from 1948 until his retirement in 1986. He served as the first chairman of the department from 1965 to 1968. Funds distributed from this endowment are used to provide scholarships for outstanding undergraduate Mathematics students attending UTEP.

DR. MIMI R. GLADSTEIN ENDOWED SCHOLARSHIP FUND
—Established in 1999 by Dr. Mimi R. Gladstein, a UTEP professor of English, to provide scholarships to students pursuing degrees in English.

THE GNAUCK-FRASIER ENDOWED EXCELLENCE FUND
—Established in 2000 by Cline Frasier and Gretchen Gnauck Fraiser to support the annual Gnauck-Frasier UTEP Awards for Determination, designated for entering freshman students who are graduates of El Paso-area high schools, and who demonstrate financial need and the intense desire to attend and succeed in college.

LEONARD GOODMAN, JR. ENDOWED LIBRARY FUND
—Established in 2000 in loving memory of Leonard Goodman, Jr., by his wife, Eleanor K. Goodman, and daughter, Elizabeth Goodman Levy, to support the University Library.

A. OLIVER GRANT MEMORIAL ENDOWED SCHOLARSHIP
—Established in 1999 by the Katherine E. Grant Trust in memory of Katherine's husband, A. Oliver Grant. Funds distributed from this endowment provide scholarships to deserving students.

YVONNE E. GREEAR AND JULIE GREEAR MACQUEEN MEMORIAL LIBRARY FUND
—Originally established in 1991 in memory of Julie Greear MacQueen by her mother, Yvonne Greear, the former Head of Public Services at the UTEP Library. Following Mrs. Greear's death in 1993, the fund was renamed to honor both Mrs. Greear and her daughter. Income from the endowment is used to develop the collections of the University Library.

DAVIS AND BERTHA GREEN SCHOLARSHIP FUND
—Established in 1962 by Davis and Bertha Green, leading El Paso citizens, the income from this endowment provides scholarships for students majoring in the Sciences.

JOHN M. AND MARY C. GREEN ENDOWED SCHOLARSHIP FUND
—Established in 2003 by Mr. and Mrs. John M. Green to provide scholarships to students in the College of Liberal Arts, with preference for graduates from the Ysleta Independent School District. Further preference is given to undergraduate students majoring in Communication/Journalism.

J. LEIGHTON AND VIRGINIA GREEN ENDOWED SCHOLARSHIP FUND FOR HEALTH-RELATED PROFESSIONALS
—Established in 1991 by Virginia Peeler Green, widow of J. Leighton Green, M.D. Income will be used to award one or more scholarships to undergraduate or graduate students pursuing degrees leading to careers in the health professions. Mrs. Green passed away in 1997.

DR. GLADYS GREGORY/ZETA TAU ALPHA ENDOWED SCHOLARSHIP FUND
—Established in 1998 by the board of Gamma Gamma House Corporation of Zeta Tau Alpha in memory of Dr. Gladys Gregory for her dedication to Zeta Tau Alpha and her belief in education. Income from this fund is used to provide undergraduate or graduate scholarship support for students pursuing any academic discipline, with first preference being given to members of the Zeta Tau Alpha Fraternity at the University of Texas at El Paso. In the event that the Zeta Tau Alpha Fraternity ceases to exist at UTEP, funds shall be used to provide undergraduate or graduate scholarship support for students majoring in Teacher Education.

ELIZABETH GROB HEALTH PROFESSIONALS ENDOWED SCHOLARSHIP FUND
—Established in 1990 by the registered nurses of the Ysleta Independent School District of El Paso, Texas, who have provided grants-in-aid to UTEP Nursing students for many years. Interest from the endowment provides one or more scholarships to high school graduates of the Ysleta Independent School District who meet all of the requirements of the UTEP Scholarship Office and who are enrolled in the College of Health Sciences.

JUDGE ERNEST GUINN AND MARY VANCE GUINN CRIMINAL JUSTICE SCHOLARSHIP FUND
—Established in 1993 in memory of U.S. District Judge Ernest Guinn (1905-1974) and his wife, Attorney Mary Vance Guinn (1916-1976), by family and friends. Judge Guinn spent his entire adult life in the criminal justice system as El Paso's city attorney and county attorney and U.S. district judge. Mary Vance Guinn, an alumna of the Texas College of Mines and Metallurgy (now UTEP), was El Paso's first female attorney, and, in 1957, was named the University's first female Outstanding Ex. The endowment also honors the memory of the Guinn's son, Dick H. (D.H.) Guinn (1942-1975), an El Paso attorney. Funds distributed from this endowment provide a scholarship to a student pursuing a degree and career in Criminal Justice.

TOM GUNNING MEMORIAL ENDOWED SCHOLARSHIP FUND FOR PHARMACY STUDENTS
—Established in 2000 by Gunning Casteel Investments, Inc., in memory of Tom Gunning, Jr., to provide scholarships to students enrolled in the UTEP/UT Austin Cooperative Pharmacy Program and to provide support to the program at the discretion of the director.

HAIGH-SAUER FUND
—Established in 2001 by the Estate of Caroline E. Haigh to provide support to the Department of Geological Sciences, the College of Engineering, the University Library and the Alumni Fund for Excellence.

THOMAS R. AND GIGI G. HANCOCK ENDOWED GEOPHYSICS SCHOLARSHIP FUND
—Established in 2001 in memory of Thomas R. Hancock by his wife, Gigi G. Hancock, and friends to provide scholarships to undergraduate students studying Geophysics at UTEP. Mr. Hancock died in 2000.

FRANK AND WILMA HANLEY PROFESSORSHIP IN BUSINESS ADMINISTRATION
—Established in 1993 by a remainder trust funded by Mrs. Wilma Hanley. Income from the fund supports a Professorship in the College of Business Administration. When the professorship is vacant, funds may be used at the discretion of the Dean of Business Administration for equipment, facilities and other materials and services.

GEORGE FRED AND MABEL HARDY SCHOLARSHIP FUND
—Established in 1982 by George Fred and Mabel Hardy, prominent El Paso citizens. Income from this endowment fund provides one or more scholarships to Rainbow Girls from the Rainbow Girl Assemblies in the El Paso area.

JULIE DITTMER HART ENDOWED FUND FOR MUSIC
—Created in 1988 by the late Mrs. Bernice Dittmer to honor her daughter, Julie Dittmer Hart, upon her graduation in May from the UTEP College of Liberal Arts. Income from the endowed fund provides unrestricted financial resources for the Department of Music.

DR. WADE HARTRICK FUND
—Established in 1980 by former students, friends and colleagues of Dr. Wade James Hartrick, Professor Emeritus of Business, for his assistance to students during his 34 years as a teacher, advisor and administrator. The annual income from this permanent endowment provides the College of Business Administration with funds for teaching excellence awards, student scholarships, business books and academic program materials.

MARK HASKINS MEMORIAL ENDOWED FUND
—Established in 2001 by Nolan Richardson Jr. and friends of Hall of Fame Basketball Coach Don Haskins, who led UTEP's basketball program from 1961 to 1999, and his wife, Mary Haskins. Mr. Richardson, a 1965 alumnus of the university and former Miner basketball player, is the former Head Coach of the University of Arkansas Men's Basketball Team and UTEP's 1994 Distinguished Alumni Award recipient. Income from the endowment, which honors Coach and Mrs. Haskins' son, who passed away in 1994, is used at the discretion of the UTEP Men's Intercollegiate Basketball Head Coach for the benefit of the program.

HAZEL COOPER HAYNSWORTH/COCA-COLA PRESIDENTIAL SCHOLARSHIP FUND
—Established in 2001 by Mr. Robert F. Haynsworth, in honor of his wife, Mrs. Hazel Cooper Haynsworth. Matching funds were provided by the Coca-Cola Foundation. Income from this endowment provides Presidential Scholarships for qualified students.

HERBERT K. HEASLEY/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 1999 by Mr. Robert C. Heasley, a 1953 alumnus and longtime friend and volunteer of the university, with matching funds from The Coca-Cola Foundation. Income from this endowment, which honors Mr. Heasley's brother who passed away in 1994, provides scholarships for UTEP students.

ROBERT C. HEASLEY ENDOWED SCHOLARSHIP IN BUSINESS ADMINISTRATION
—Established in 1997 by Steve and Martini DeGroat, both UTEP alumni and recipients of the College of Business Administration Gold Nugget Award, in honor of their friend and mentor, Robert C. Heasley, also an alumnus of the university. Income from this endowment provides scholarships to El Paso High School and other El Paso-area high school graduates pursuing degrees in the UTEP College of Business Administration.

BOB AND MARY LOU HEASLEY ENDOWED EXCELLENCE FUND IN HONOR OF PRESIDENT DIANA NATALICIO
—Created in 1993 by alumni Robert C. "Bob"and Mary Lou Heasley in honor of UTEP President Diana Natalicio. Income from the endowment will be used at the discretion of the president to support activities and programs that enable UTEP to remain responsive to community needs.

DONALD BERRY HENDERSON MEMORIAL GOLF ENDOWED FUND
—Established in 1996 by Donald S. Henderson, Margie Henderson and their children to honor the memory of their son and brother, Donald. Income from the endowment promotes activities of the UTEP Men's Intercollegiate Golf Program. If the Golf Program at UTEP is terminated, the distributable funds will be used to support programs at the discretion of the Dean of the College of Business Administration.

PERCIVAL HENDERSON GIFT FOR ENGINEERING DIVISION
—Established in 1951 by the bequest of Percival Henderson to provide scholarships for Engineering students at the University of Texas at El Paso.

LELAND AND BESS HENRY MEMORIAL STUDENT ENHANCEMENT FUND
—Established in 1996 by Robert Craig and Leila Prichard as a tribute to their parents, Leland and Bess Henry. Leland Henry spent many exciting years with the Schellenger Research Laboratories, and, in his work with faculty and students, he participated in research of lasting impact. Income from this endowment shall be used to support educational/research activities for Engineering students by providing work experience in a laboratory environment.

DR. MARY FRANCES HERNANDEZ MEMORIAL EXCELLENCE FUND FOR TEXAS WESTERN PRESS
—Established in 1999 by Dr. John W. Hernandez in memory of his wife, UTEP Professor Emerita of English Dr. Mary Frances Hernandez. Funds distributed from this endowment support Texas Western Press.

CHARLES E. HERSHBERGER ENDOWED SCHOLARSHIP
—Established in 1992 by a bequest by Mrs. Nettie Hershberger in memory of her son, Charles Hershberger. Income from this endowment is used to provide scholarships to worthy students.

THE CARL HERTZOG ENDOWMENT FUND
—Established in 1986 by alumni, faculty and friends at UTEP in memory of Dr. J. Carl Hertzog, internationally known as "The Printer at the Pass" (1902-1984). Income earned from the endowment is used to develop the Hertzog Collection in the Special Collections section of the UTEP Library. The Hertzog Collection of printing and design has considerable research value.

BETTE D. HERVEY ENDOWED FUND FOR THE UTEP CHEMISTRY DEPARTMENT
—Established in 1998 by Bette D. Hervey, a longtime friend and supporter of the University. Income from this fund provides support for the continued maintenance and upgrade of equipment in the Chemistry Department Laboratory.

GEORGE HERVEY MEMORIAL SCHOLARSHIP FUND
—Established in 1987 by Bette D. Hervey in memory of her husband. George Hervey was a prominent El Paso businessman and civic leader who founded the El Paso Association of Home Builders. Income earned from the endowment provides a university-endowed scholarship for a qualified student in the College of Business Administration.

HAZEL HERVEY ENDOWED FUND
—Established in 1987 by the late Mrs. Hazel Hervey, a prominent El Paso civic leader. Income from this endowed fund provides resources for the History Department and the Department of Biological Sciences. Outstanding speakers on Middle Eastern and Islamic history and special research on migratory bird parasites are supported from this fund on an annual basis.

JACOB S. AND NANCY F. HEYDEMANN ENDOWED STUDENT EXCELLENCE FUND
—Established in 1999 by Dr. and Mrs. Jacob S. (Nancy F.) Heydemann to enhance the academic experience of UTEP students.

DANIEL L. HILL SCHOLARSHIP
—A perpetual scholarship endowed by family and friends in memory of Daniel L. Hill. The endowed scholarship is awarded annually to a deserving student of Accounting.

WILLIAM K. HILL ENDOWED SCHOLARSHIP FOR MUSIC
—Established in 1996 through a bequest from the estate of William Keith Hill to honor his interest in music. In addition, the University was the recipient of an extensive music collection from his estate. Income from the endowment provides support to deserving students with a major in Piano Performance.

DR. JOHN M. HILLS MEMORIAL FUND IN GEOLOGY
--Established in 1991 by Mrs. Sally Hills, in honor of her husband, the endowment also includes gifts from faculty and friends of Dr. John M. Hills. Dr. Hills joined the faculty in the Department of Geological Sciences at UTEP in 1967 and retired in 1980. He died in 1988. Mrs. Hills passed away in 2001. Income from the endowment is for the unrestricted use of the Department of Geological Sciences.

DR. JOHN M. HILLS MEMORIAL LIBRARY FUND
—Established in 1993 by Mrs. Sally Hills, family and friends to honor the memory of Dr. John M. Hills, a respected Petroleum Consultant and UTEP Professor Emeritus in the Department of Geological Sciences who died in 1988. Mrs. Hills passed away in 2001. Income from this endowment fund is used to purchase books and periodicals for the University Library.

LUCY CLAIRE HOARD SCHOLARSHIP FUND
—Established in 1951 by the Kappa Chapter of Delta Kappa Gamma in memory of Lucy Claire Hoard. Funds distributed from the endowment provide scholarships to students majoring in Education.

ALBERT S. HOLBERT ENDOWED SCHOLARSHIP FUND
—Established in 2001 by Sydna Holbert Gordon and Don Gordon in honor of Sydna's father, Albert S. Holbert, a 1949 alumnus of the University. Funds distributed from this endowment provide scholarships for undergraduate Metallurgical and Materials Engineering students. If in any year there is not a qualified candidate in that discipline, then the scholarship may be awarded to a student in Geological Sciences or any Engineering field.

PHILIP C. HOLT MEMORIAL SCHOLARSHIP FUND
—Established in 1982 in memory of Philip C. Holt by his wife, family and student friends. Philip C. Holt was an outstanding senior in the College of Engineering who lost his life in an automobile accident. Interest earned from the endowment fund is to be expended for a scholarship for an undergraduate Engineering student of sophomore standing or above.

HORWITZ ENDOWMENT FUND
—Established in 1979 by Mr. Abe Horwitz, a prominent member of El Paso's business community, and further endowed by a bequest in his estate in tribute to the Hispanic-American people who worked in his family enterprises. Income from this endowment provides for scholarships and grants-in-aid based on need for disadvantaged students at UTEP.

HOUSTON ENDOWMENT HONORS PROGRAM
—Established in 1997 by a grant from the Houston Endowment, Inc. The Honors Program, which has been an important component of the University since 1992, was designed to stimulate and "polish" UTEP's best and brightest students to ensure their University experiences prepare them for strategic career paths and leadership roles. Income from this endowment provides funds to insure the continued success of this program.

HOUSTON ENDOWMENT, INC. PRESIDENTIAL ENDOWED SCHOLARSHIP FUND
—Established in 1983 by the Trustees of the Houston Endowment, Inc., a philanthropy endowed by the late Mr. and Mrs. Jesse H. Jones of Houston, Texas. Income earned from the endowment fund will be used to provide a four-year scholarship, renewable annually, to an outstanding undergraduate student in accordance with the Presidential Scholarship Program.

HOUSTON ENDOWMENT PROFESSIONAL AND LEADERSHIP DEVELOPMENT FUND
—Established in 1997 by a grant from the Houston Endowment, Inc. The Houston Endowment has provided educational opportunities to deserving UTEP students for many years. This Development Program will support the promotion of professional development and leadership for students with demonstrated exceptional academic and leadership capabilities.

ROBERT H. HOY III DISTINGUISHED PROFESSORSHIP IN HEALTH SCIENCES
—Established in 2000 by Robert H. Hoy, Jr., and his wife, Rose Ann, in loving memory of their son, Robert H. Hoy III, who was a nurse. Funds distributed from the endowment will be used to attract and retain talented and promising academicians in the College of Health Sciences, with preference given to the field of nursing.

JACK AND DOROTHY HUNT ENDOWMENT FOR ENTREPRENEURSHIP
—Established in 1994 by the Cimarron Foundation of El Paso, Texas, in honor of Jack and Dorothy Hunt. Income earned from the endowment is used at the discretion of the Dean of the College of Business Administration to promote and enhance formal and informal activities that support the development of entrepreneurs.

VERNON G. AND JOY HUNT ENDOWED SCHOLARSHIP FUND IN GEOLOGY
—Established in 1991 by a gift from Vernon G. and Joy Hunt of Tyler, Texas. Mr. Hunt, a 1950 alumnus of the University, passed away in 2001. Income earned from the fund is used to provide an annual scholarship to a graduate student in Geological Sciences who meets the basic scholarship requirements of the University, subject to approval by the Chair of the Department of Geological Sciences.

LETTIE GODFREY HUSSMANN AND CORA GODFREY GOLDING MEMORIAL STUDENT EXCELLENCE FUND
—Established in 1999 by Mr. and Mrs. Tom G. (Anne M.) Hussmann, as a lasting tribute to Tom's mother, Lettie Godfrey Hussmann, and aunt, Cora Godfrey Golding. Anne Hussman passed away in 2001. Funds distributed from this endowment are used to enhance the academic experience of students enrolled in the College of Health Sciences.

JOHN H. AND MILDRED M. IMMING ENDOWED SCHOLARSHIP FUND
—Established in 1999 by a bequest from John H. Imming. Funds distributed from the endowment are used to provide annual scholarships to students who are in need of financial assistance in order to attend UTEP on a full-time basis.

INTERNATIONAL CITY DEVELOPERS, INC. ENDOWED EXCELLENCE FUND FOR THE COLLEGE OF BUSINESS
—Established in 1999 by International City Developers, Inc., as a permanent endowment. Income from this fund is used to enhance programs, activities and opportunities for academic excellence in the College of Business Administration for the benefit of students and faculty.

INTERNATIONAL MINING DAYS SCHOLARSHIP
—Established in 1988 by John Shaw and Frank Weidner, co-chairs of the International Mining Days Committee of the El Paso Chamber of Commerce. Income earned from this endowment provides scholarships to students from the colleges of Science and/or Engineering who are U.S. citizens or permanent residents.

MIGUEL IZQUIERDO TEACHING EXCELLENCE AWARD FUND
—Established in 1992 by a Tribute Committee of family, friends, faculty and students in memory of UTEP Engineering Professor Miguel Izquierdo. Income earned from the endowment provides a Teaching Excellence Award to an outstanding professor of Electrical Engineering or Physics, with the award to alternate annually between the two departments.

FORREST K. JACKSON ENDOWED MEMORIAL SCHOLARSHIP FUND
—Established in 2003 by the family of Mr. Forrest K. Jackson, a 1986 UTEP alumnus who passed away in 2001. Funds distributed from this endowment are used to award scholarships to junior students majoring in Biological Sciences with an emphasis in Environmental Studies.

DR. W. TURRENTINE JACKSON HISTORY FUND
—Established in 1988 by Dr. W. Turrentine Jackson, a prominent professor of History at the University of California at Davis, and a 1935 graduate of the Texas College of Mines and Metallurgy (now UTEP) who received the Gold Nugget Award for Alumni Leadership in the College of Liberal Arts in 1984. Dr. Jackson died in 2000. Income from this endowment provides a graduate-level scholarship in History.

DR. EILEEN M. JACOBI SCHOLARSHIP FUND
—Established in 1986 upon the retirement of Dr. Eileen M. Jacobi as Dean of the University's College of Nursing and Allied Health. Contributions from alumni, friends and colleagues honored her 50 years of service to the nursing profession. Dr. Jacobi passed away in 1996. Funds distributed from this endowment provide scholarships to qualified Nursing students under the Presidential Scholarship Program and also to graduate Nursing students in UTEP's College of Health Sciences.

C.D. JARVIS TRIBUTE SCHOLARSHIP FUND
—Established in 1987 by El Paso High School alumni and friends of C.D. Jarvis, who retired in 1985 after an outstanding career of 40 years serving as a basketball coach and teacher. Income earned from the endowment is used to provide an annual scholarship for students from El Paso High School who attend UTEP.

EDGAR JIMENEZ/COCA-COLA ENDOWED SCHOLARSHIP FUND
—Established in 1999 by Mr. Edgar Jimenez with matching funds from The Coca-Cola Foundation, to provide annual scholarships to upper-level (junior or senior) undergraduate students or graduate students pursuing degrees in Metallurgical Engineering who are in need of financial assistance to attend UTEP on a full-time basis. Preference is given to students who are the first in their families to pursue post-secondary education.

AGNES T. JIROU MEMORIAL LIBRARY FUND
—Established in 1985 at the bequest of Mrs. Agnes T. Jirou, who died May 16, 1985. She was a member of the Chancellor's Council of the UT System. Income earned from the endowment is used to purchase new books for the Univeristy Library.

BEN L. JIROU SCHOLARSHIP IN SCIENTIFIC RESEARCH
—Established in 1969 by Mrs. Ben L. Jirou as a memorial to her husband. The income from the endowment provides an annual scholarship to a deserving student in the College of Science. Mr. Jirou, an official of the International Boundary and Water Commission, was a resident of El Paso from 1920 until his death in 1967.

THE JUAN AND CARMEN JOB SCHOLARSHIP FUND
—Established in 2003 by Mr. Juan Roberto Job, who received his bachelor's and master's degrees in Education from UTEP and currently sits on the university's Development Board, in honor of his parents. Funds from the endowment provide scholarships to students majoring in Education.

LOUISE E. JOHNSON ENDOWED SCHOLARSHIP FUND
—Established in 1995 by Mr. Alvin T. Johnson in honor of his wife, Louise, a successful corporate owner and administrator. Income from this fund provides a renewable scholarship, in accordance with the requirements of

the UTEP Scholarship Office, for a student pursuing any discipline, with preference given to a freshman or upperclassman who has graduated from an El Paso high school.

GLADYS JOHNSTON MEMORIAL FUND
—Established in 1971 through the bequest of Miss Gladys Johnston of El Paso who died in 1971. Funds from this endowment are used to purchase books and equipment for the Library.

JESSE H. JONES AND MARY GIBBS JONES ENDOWMENT FUND FOR SCHOLARSHIPS IN LIBERAL ARTS
—Established in 1996 by a grant from the Houston Endowment, Inc., a philanthropy endowed by the late Mr. and Mrs. Jesse H. Jones of Houston, Texas. Income is used to provide scholarships to students in the College of Liberal Arts who demonstrate strong academic achievement and financial need.

CHIP JORDAN LITERARY FESTIVAL FUND
—Originally established in 1975 in memory of Chip Jordan, son of Mrs. Winifred T. Jordan, formerly of El Paso, the fund was endowed in 1987 as the "Chip Jordan Literary Festival Fund." Income earned from the endowment provides for the sponsorship of an annual festival, summer writers' conference, and other programs in the reading and creative literature field.

THE JUNIOR LEAGUE ENDOWED SCHOLARSHIP FUND
—Established in 1997 by the Junior League of El Paso, Inc., an organization of women committed to promoting volunteerism and improving the community through the action and leadership of trained volunteers. Income from this endowment provides a scholarship to a student who resides in El Paso County, exhibits leadership qualities and has a demonstrated commitment to developing the leadership and role of women in the El Paso community.

JOSHUA N. AND FRANCES L. KAHN ENDOWED STUDENT ENHANCEMENT FUND
—Established in 1997 by Joshua N. and Frances L. Kahn as a permanent endowment. Income from the fund is used to provide direct support to academically worthy students who are in need of financial assistance in order to attend UTEP on a full-time basis.

ERNEST R. KASTL MEMORIAL ENDOWED SCHOLARSHIP FUND
—Established in 1999 by friends and family of Ernest R. Kastl as a lasting memorial to the former UTEP student to provide annual scholarships for full-time students pursuing degrees in Mechanical Engineering who are in need of financial assistance. Preference is given to students who are currently employed. Applicants shall be U.S. citizens or permanent residents.

A. BRUCE AND DOROTHY B. KECKLEY ENDOWED LIBRARY FUND
—Established in 1991 by Mr. and Mrs. Jeffery B. (Mary W.) Keckley of El Paso, Texas, in honor of A. Bruce and Dorothy B. Keckley. Income earned from the endowment supplements the needs of the Reference Department of the University Library.

HELEN O'SHEA KELEHER MEMORIAL PRESIDENTIAL ENDOWED SCHOLARSHIP FUND
—Endowed in 1982 by the bequest of Mrs. Helen O'Shea Keleher. Mrs. Keleher was born in Denver, Colorado, and came to El Paso when she was three years old. Her father, John O'Shea, was the conductor of the first train to pull into El Paso's Union Depot when it opened in 1906. Together with her mother, Agnes O'Shea, Mrs. Keleher ran the Rio Vista Farm, a safe haven for the poor, from 1929 until its closing in 1964. Funds distributed from the endowment provide Presidential Scholarships for Texas residents who attend UTEP and study in the field of Business, Education, Engineering, Science or Nursing.

HENRY, JULIA, AND JERRY KELLEN HOLOCAUST SURVIVORS ENDOWED FUND
—Established in 1998 by Henry Kellen, a Holocaust survivor and founder of the El Paso Holocaust Museum and Study Center, as a lasting tribute to his beloved wife, Julia, and son, Jerry. Income distributed from this endowment is used at the discretion of the Dean of the College of Liberal Arts to support education in the College about the Holocaust.

PATRICK DAVID KIRKLAND ENDOWED MEMORIAL SCHOLARSHIP FUND
—Established in 2002 by Michael Kirkland to provide scholarships to upper-class students pursuing degrees in Mathematics.

DR. EDWIN J. KNAPP MEMORIAL FUND
—Established in 1982 in memory of Dr. Edwin J. Knapp, UTEP Professor Emeritus of Physics, who served the University for 38 years. Dr. Knapp's sons, R.A. and R.E. Knapp, and alumni, friends and associates created this permanent fund to provide scholarships to undergraduate Mathematics and Physics students and students preparing to teach mathematics or physics in secondary schools. Funds distributed from the endowment also provides for the purchase of mathematics and physics books for the University Library, and support for the Department of Physics.

ROBERT E. KOLLINER MEMORIAL FUND
—Established in 1986 by Border Steel Mills, Inc., in memory of Robert E. Kolliner, former El Paso City Alderman and active Southwestern Sun Carnival member. Kolliner worked for Prudential Life Insurance Company in El Paso for more than 20 years. Income earned from this endowment provides an annual scholarship for Track and Field athletes at UTEP.

KRESGE FOUNDATION ENDOWMENT
—Established in 2000 by Kresge Foundation for the upkeep of the Nuclear Magnetic Resonance (NMR) facility.

KRUSZEWSKI FAMILY ENDOWED PROFESSORSHIP IN POLITICAL SCIENCE
—Established in 1992 by Dr. Zbigniew Anthony Kruszewski, a UTEP Professor of Political Science, and his wife, June Kruszewski, an alumna of UTEP. The endowment memorializes Dr. Kruszewski's father, Tadeusz, and mother, Irena Grabowska-Kruszewska, a victim of the Ravensbruck Nazi concentration camp. It also honors Dr. Kruszewski's brother, Janusz, and sister-in-law, Irena. Income from the endowment supports an outstanding faculty member in the Department of Political Science conducting research and teaching in the sub-field of International Relations and Comparative Politics of the Slavic Nation-states. This is the first endowed professorship in the social sciences.

FELIX LAIDLAW MEMORIAL SCHOLARSHIP FUND
—Established in 1986 by the bequest of Felix Laidlaw, who died June 8, 1986. Income from this endowment provides a scholarship to a qualified student under the UTEP Presidential Scholarship Program.

THE LANWARD FOUNDATION ENDOWED GRADUATE FELLOWSHIP FUND
—Established in 1998 by the Lanward Foundation. Income distributed from this endowment is used to provide fellowships to full-time graduate students.

LANWARD FOUNDATION ENDOWED SCHOLARSHIP FUND IN HONOR OF NESA AZAR
—Established in 1992 by the Lanward Foundation to honor Mrs. Nesa Azar, one of the original founders of the foundation. Mrs. Azar passed away in 2002. Income from the endowment is used to award one annual scholarship to an undergraduate student pursuing a degree in Business, Engineering or Science.

BERNARD S. AND JUDITH LAUTERBACH SCHOLARSHIP IN ACCOUNTING
—Established in 1998 by Bernard S. and Judith Lauterbach. Income distributed from the endowment is used to provide scholarship support for junior or senior Accounting students in the College of Business Administration.

THE ALBERT LAUTS MEMORIAL SCHOLARSHIP FUND
—Established in 2001 by Enedina Lauts to award scholarships to students who have graduated from high school or preparatory school in El Paso, Texas, or Juárez, Chihuahua, Mexico. Students must be in need of financial assistance to attend UTEP on a full-time basis, although they need not meet state or federal tests for proving financial need.

SARAH AND TOM LEA AWARD
—Established in 1997 by internationally renowned artist and author Tom Lea and his wife, Sarah, with the hope of encouraging aspiring artists to pursue a career in art. Income from the endowment provides an annual cash award to a UTEP art student who creates the most outstanding life drawing or painting at the Department of Art's Annual Juried Student Exhibition, to be determined by a panel of judges. Tom Lea passed away in 2001.

THE C.H. LEAVELL-GEORGE MATKIN SCHOLARSHIP FUND
—Established in 1983 by the Development Board of the University of Texas at El Paso to honor C.H. Leavell and George G. Matkin, two longtime members of the Development Board, upon their retirement on Aug. 31, 1983. Income earned from the endowment is used to provide an undergraduate scholarship to a worthy and deserving student under the Presidential Scholarship Program.

CHARLES H. AND SHIRLEY T. LEAVELL ENDOWED CHAIR IN NURSING AND HEALTH SCIENCES
—Created in 1995 by longtime supporters of the University Charles H. and Shirley T. Leavell to establish, in perpetuity, a chair of excellence for an outstanding scholar and teacher who will strengthen and enhance the University's Nursing and Health Sciences program. Mr. Leavell, who passed away in 2000, was the recipient of the 1997 Gran Paseno Award, the highest honor UTEP bestows on friends of the University.

CHARLES H. AND SHIRLEY T. LEAVELL ENDOWED CHAIR II IN NURSING AND HEALTH SCIENCES
—Established in 2002 through a division of the original Charles H. and Shirley T. Leavell Endowed Chair in Nursing and Health Sciences, which was created in 1996 by Mr. and Mrs. Leavell, both longtime suporters and volunteers of UTEP. Income from this endowment provides a faculty position for a top-echelon educator and researcher to further strengthen the College's position as a model for community health care education. Mr. Leavell, a recipient of the Gran Paseno Award, the highest honor bestowed on friends of the University, passed away in 2000.

DR. R. MILTON LEECH ENDOWED FUND FOR DRAMA
—Established in 1985 by alumni, friends and associates of Dr. R. Milton Leech. This permanent endowment pays tribute to Dr. Leech for 35 years of outstanding service to the University as Costumer, Theatre Director, Professor, Department Chairman, Dean of Administration, Vice President for Academic Affairs and acting President. Income earned from the endowment fund is used to provide scholarships for Theatre Arts students.

LEGACY CAMPAIGN POOLED ENDOWED FUND
—Established in 2000 by alumni, faculty, staff and friends of the University to be used for student awards and recognition.

DR. MORTON H. AND JUDITH LEONARD/COCA-COLA ENDOWED SCHOLARSHIP FUND FOR PHYSICAL THERAPY
—Established in 1998 by Dr. Morton H. and Mrs. Judith Leonard, with matching funds provided by The Coca-Cola Foundation. Dr. Leonard, who passed away in 2002, was El Paso's first hand surgeon. Income from this endowment provides scholarships to students pursuing degrees in Health Sciences with a concentration in Physical Therapy.

THE JOHN M. LEVOSKY ENDOWED SCHOLARSHIP FUND FOR MECHANICAL AND INDUSTRIAL ENGINEERING
—Established in 1996 by friends, former students and colleagues in honor of UTEP Professor Emeritus of Mechanical Engineering Dr. John M. Levosky. This endowment provides an annual scholarship to an undergraduate Mechanical Engineering student.

FORREST O. LEWIS ELECTRICAL ENGINEERING ENDOWED FUND
—Established in 1990 by Mrs. Henrietta "Penny" Lewis in honor of her husband's career in electrical engineering. Mr. Forrest O. Lewis, who died in February 1989, was a 1950 graduate of the University who had a long record of support for the College of Engineering. Income from this endowment is used to augment the teaching activities of the Department of Electrical Engineering.

THE FORREST O. AND HENRIETTA LEWIS PROFESSORSHIP OF ELECTRICAL ENGINEERING
—Established in 1995 by Mrs. Henrietta "Penny" Lewis in memory of her husband, Forrest, an alumnus of Texas Western College (now UTEP), in appreciation of his instructors and mentors. Income from this fund supports the Professorship in the Department of Electrical Engineering and assists new faculty members in establishing their career paths in quality teaching and research excellence.

DR. JIM LEWIS MEMORIAL SCHOLARSHIP FUND
—Established in 2000 in memory of Dr. Jim Lewis by his wife, Dr. Judy H. Lewis, to provide scholarships to students who are members of UTEP's Intercollegiate Athletic teams.

LIBRARY EXCELLENCE ENDOWMENT FUND
—Established in 1985 by alumni and friends of the University through the "Campaign for Library Excellence," held in response to a challenge grant from the Burlington Northern Foundation which celebrated the new Library building. Interest earned form the endowment is expended for the purchase of books and library materials.

LIBRARY POOLED ENDOWMENT FUND
—Established in 1966 by friends of the University Library as a means of honoring or memorializing alumni, faculty, organizations and friends of the University. Through contributions to this fund, donors create a lasting tribute to their friends and loved ones. Their gifts provide new books for the Library that are marked by special bookplates carrying the name of the person or group being honored or memorialized.

THE EVELYN LINCOLN SCHOLARSHIP FUND
—Established in 1977 through the bequest of Mrs. Evelyn Lincoln Archer, a 1934 alumna of the Texas College of Mines and Metallurgy (now UTEP) who died in 1972. Income from this endowment provides an annual scholarship to a student majoring in Drama and Speech at UTEP.

EL PASO DOWNTOWN LIONS CLUB MEMORIAL FUND
—Established in 1980 by the El Paso Downtown Lions Club as a means of honoring and memorializing the Club and its members. This permanent endowment provides support for the UTEP Department of Intercollegiate Athletics.

ANNA M. LITTLETON MEMORIAL SCHOLARSHIP FUND
—Established in 1984 by the late Burton F. Littleton and friends in memory of his wife, Anna M. Littleton. Income from this permanent endowment provides a scholarship to a worthy and deserving undergraduate student under the Presidential Scholarship Program.

E. RAY LOCKHART LIBRARY MEMORIAL FUND
—Established in 1971 by alumni and friends in memory of E. Ray Lockhart, a Distinguished Alumnus who attended the University from 1929 to 1932. Income earned from the endowment provides funds to purchase engineering books for the University Library.

ROBERT P. AND MARGARET LOVE LIBRARY FUND
—Established in 1993 by Robert P. Love, along with family and friends, in memory of his wife, Margaret Love, who passed away in 1992. Income from the endowment is used to purchase books and periodicals for the University Library.

DOROTHY J. LOVETT ENDOWED SCHOLARSHIP FUND
—Established in 1999 by the Estate of Dorothy Marian Johnson Lovett to provide scholarships for disadvantaged students. Mrs. Lovett was a 1953 alumna of Texas Western College (now UTEP).

BETTY M. MACGUIRE PROFESSORSHIP IN BUSINESS ADMINISTRATION
—Established in 1985 by Betty M. MacGuire, a 1948 graduate of the Texas College of Mines and Metallurgy (now UTEP) and a leading El Paso citizen. Income earned from this fund is used to enhance the teaching and research activities of the College of Business Administration and provide salary support for a distinguished business professor.

JOHN T. MACGUIRE PROFESSORSHIP IN MECHANICAL AND INDUSTRIAL ENGINEERING
—Established in 1985 by John T. MacGuire, a prominent El Paso civic leader who died in 2001, to enhance the teaching activities of a distinguished professor in Mechanical and Industrial Engineering.

REVEREND DR. CHARLES C.G. MANKER MEMORIAL FUND
—Established in 1973 by the congregation of the First Unitarian Church of El Paso to honor their late minister, the Rev. Dr. Charles C.G. Manker. The earnings from this endowment are used to provide scholarships in Music.

DEXTER R. MAPEL, JR. AND GRACE MILLER MAPEL MEMORIAL SCHOLARSHIP FUND
—Established in 1984 in memory of Dexter R. Mapel, Jr., and Grace Miller Mapel by their daughter, Lemire Ann Mapel; sons, Dexter M., Ronald and Jameson Mapel; and friends to pay tribute to these longtime El Pasoans. Income from this permanent endowment will provide undergraduate scholarships for students in the Department of Art under the Presidential Scholarship Program.

ANN AND ALVIN J. MARKS SCHOLARSHIP FUND
—Established by the J.B. and Margaret Blaugrund Foundation and the family of Alvin J. Marks, an El Paso civic leader and businessman. The income from the endowment provides one or more scholarships each year to deserving students.

PHILLIP R. MARTINEZ ENDOWED SCHOLARSHIP FUND
—Established in 2002 by the Honorable Philip R. Martinez, a U.S. District Judge and 2002 UTEP Distinguished Alumnus, to provide annual scholarships, with preference given to students participating in the Center for Law and Border Studies.

JAMES G. MASON ENDOWED EXCELLENCE FUND FOR KINESIOLOGY
—Established in 1997 by Fran Mason in honor of her husband's 47-year career in higher education and sports management. Dr. James G. Mason, who passed away in 2001, was a UTEP Professor Emeritus of Health Sciences. Income from this endowment is used at the discretion of the Director/Coordinator of the Kinesiology and Sports Studies Program in the College of Health Sciences to enhance projects and opportunities for faculty and students within the program.

GEORGE G. MATKIN ENDOWED SCHOLARSHIP FUND
—Established in 1981 by the late George G. Matkin, Chairman Emeritus of State National Bank of El Paso (now Wells Fargo) and longtime member of the University Development Board. Income from this endowment provides scholarships for superior El Paso-area high school students who attend UTEP.

JAMES MAURICE ENGINEERING FUND
—Established in 1985 by the late James Maurice, a U.S. Bureau of Mines executive and a 1940 Metallurgical Engineering graduate of the Texas College of Mines and Metallurgy (now UTEP). Income from this endowment provides unrestricted funds to improve the quality of the academic programs under the College of Engineering.

JAMES M. MAURICE MEMORIAL METALLURGICAL ENGINEERING SCHOLARSHIP FUND
—Established in 1988 upon the death of James M. Maurice, Texas College of Mines and Metallurgy (now UTEP) Class of 1940, to provide scholarships to outstanding graduate and undergraduate Metallurgical Engineering students under the Presidential Scholarship Program.

THE MAXON FAMILY ENDOWED SCHOLARSHIP FUND
—Established in 1999 by Jack G. and Carroll Maxon, prominent El Paso business leaders and longtime friends of the University. Funds distributed from this endowment provide annual scholarships for deserving students who demonstrate financial need to attend UTEP on a full-time basis.

SIDNEY AND ELEANOR MAYER SCHOLARSHIP FUND
—Established in 1996 through the Estate of Helen K. Scott to honor the memory of Sidney and Eleanor Mayer. One or two unrestricted scholarships are awarded each year to qualified students who are U.S. citizens or permanent residents.

ELLIS MAYFIELD FAMILY PRESIDENTIAL SCHOLARSHIP FUND
—Established in 1984 by Ellis O. Mayfield, a prominent El Paso attorney, and his wife, Susan. Income from this permanent endowment provides a Presidential Scholarship for superior El Paso-area high school students who attend UTEP.

ELLIS AND SUSAN MAYFIELD PROFESSORSHIP FUND
—Established in 1986 by longtime friends and major benefactors of UTEP Mr. and Mrs. Ellis O. (Susan) Mayfield as a “Challenge Grant” for the Alumni Fund for Excellence Campaign. Income from the endowment provides support for a faculty member in the College of Business Administration to carry out a dynamic research program or undertake scholarly pursuits to ensure outstanding teaching and to advance the body of knowledge in that college.

ROBERT W. MCAFEE ENDOWED PRESIDENTIAL LEADERSHIP FUND
—Established in 2001 upon the termination of the Robert W. McAfee Testamentary Trust. Funds distributed from this endowment are used at the discretion of the President of the University to improve the caliber of teaching, scholarship and academic performance at UTEP.

DR. WILLIAM MCANULTY MEMORIAL FUND
—Established in 1979 in memory of UTEP Professor Emeritus of Geology Dr. William McAnulty by alumni, friends and associates. This permanent endowment pays tribute to Dr. McAnulty’s 15 years as a member of the UTEP faculty and as Chairman of the Department of Geological Sciences. Income earned from the endowment is used for cash grants to graduate students in Geological Sciences and for departmental expenses.

MARTHA M. MCDONALD/RAINBO BAKING SCHOLARSHIP FUND
—Established in 1973 by Mr. Kenneth McDonald of Hampton, Virginia, in memory of his wife, Martha M. McDonald, a 1959 graduate of the University. Rainbo Baking Company of El Paso completed the endowed fund in 1988. Income from the endowment provides scholarships to Music students.

ARLENE SMITH MCKINNON ENDOWMENT FOR ART
—Established in 1993 by Dr. Andrew and Mrs. Valerie Bernat in memory of Valerie's mother, Arlene Smith McKinnon. Dr. Bernat is a UTEP Professor of Computer Science. Income earned from this endowment provides stipends for the purchase of award-winning student works so recognized at the Department of Art's Annual Juried Student Exhibition. These works will be added to the permanent University Student Art Collection, available for viewing in public areas on the UTEP campus.

G. DOUGLAS MEYERS ENDOWED SCHOLARSHIP FUND
—Established in 2000 by Ms. Barbara A. Meyers in honor of her brother, UTEP Professor of English Dr. G. Douglas Meyers. Income provides scholarship support to academically outstanding undergraduate students preparing for careers as teachers of English/language arts at the middle school or secondary level. Recipients must be majoring in English and American Literature or Creative Writing in the Department of English, as well as a minor in Secondary Education.

JOHN JUDY MIDDAGH MEMORIAL LIBRARY FUND
—Established in 1992 in memory of John Judy Middagh, a UTEP Journalism professor, by his wife, Winifred McVey Middagh, family and friends. Income earned from this fund is used to purchase books relating to journalism and history for the University Library.

J.W. MILLER MEMORIAL GEOPHYSICS ENDOWMENT FUND
—Established in 1980 by R.O. Anderson of the Atlantic Richfield Company Foundation in memory of J.W. Miller, founder and former president of Gus Manufacturing Company. Income earned from the endowment is used for the unrestricted support of research in Geophysics and related earth sciences.

RICHARD W. AND FRANCES M. MITHOFF ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Richard W. and Frances M. Mithoff as a permanent endowment. Mr. Mithoff, a prominent civic leader and advertising businessman who passed away in 2002, was a 1946 graduate of the University and UTEP's 1990 Distinguished Alumnus. Income earned from this fund provides annual scholarships to outstanding students pursuing careers in communication, with preference for students concentrating their studies in Advertising or Pubic Relations.

DR. HASKELL M. MONROE, JR. LIBRARY FUND
—Established in 1987 by the Southwestern Bell Foundation, alumni, students and friends in honor of Dr. Haskell M. Monroe Jr.'s seven years of service as president of UTEP. Income earned from the endowment provides for yearly purchases of books, which are marked in Dr. Monroe's honor, so that future readers will know of his influence and love for the University Library.

DR. AND MRS. HASKELL MONROE PRESIDENTIAL ENDOWED SCHOLARSHIP FUND
—Established in 1984 by the UTEP President's Associates in honor of Dr. and Mrs. Haskell (M. Joann) Monroe, Jr., for establishing the Presidential Scholarship Program at the University. Dr. Monroe served as president of UTEP from 1980 to 1987. Income earned from the endowment provides Presidential Scholarships to worthy and deserving students.

RUBEN MONTIEL, JR. MEMORIAL SCHOLARSHIP FUND FOR CIVIL ENGINEERING
—Established in 1986 by Mrs. M. Lorraine Montiel, and friends, in memory of her husband, Ruben Montiel, Jr., who died of leukemia on April 9, 1986. Montiel earned a Bachelor of Science degree in Civil Engineering in 1980 and a Master's in Civil Engineering in 1986 from UTEP. Income earned from the endowment provides an annual scholarship for a Civil Engineering student under the UTEP Presidential Scholarship Program.

CAROLINA FLORES MORALES ENDOWED SCHOLARSHIP FUND
—Established in 1999 by Ramon S. Santiesteban in honor of his mother, Carolina Flores Morales. Income earned from this fund provides scholarships to junior, senior or graduate students who are pursuing degrees in Electrical Engineering or Physics, and are in need of financial assistance in order to attend UTEP on a full-time basis.

R.C. MORGAN SCHOLARSHIP FUND
—Established in 1988 by the Government Employees Credit Union of El Paso upon the retirement of R.C. Morgan from the credit union. Morgan was a pioneer in the national credit union movement. Income earned from this endowment provides scholarships to outstanding students from the El Paso metropolitan area who attend UTEP and major in Business Administration.

EVERETT F. AND THELMA MORRIS ENDOWED SCHOLARSHIP FUND
—Established in 1995 by longtime friends of the University Mr. Everett F. and Mrs. Thelma Morris to support an undergraduate student pursuing a degree in Chemistry, Biological Sciences, Physics, Mathematics, Engineering or any computer-related field, with first preference given to a first-generation college student attending UTEP. Recipient must be a U.S. citizen or permanent resident. If there is no scholarship candidate who meets the above criteria, the scholarship may be awarded to a qualified student pursuing a degree in the academic area with the greatest need of scholarship funding. Mrs. Morris passed away in 2002.

THELMA E. MORRIS ENDOWED GRADUATE SCHOLARSHIP FUND
—Established in 1995 by Mrs. Thelma Morris, a longtime friend of the University who passed away in 2002. Income earned from this fund supports a student pursuing a graduate degree in Chemistry, Biological Sciences, Physics, Mathematics or Engineering, especially Metallurgical and Materials Engineering. Recipient must be a U.S. citizen or permanent resident demonstrating financial need. If there is no scholarship candidate who meets the above criteria, the scholarship may be awarded to a qualified student pursuing a degree in the academic area with the greatest need of scholarship funding.

THELMA E. MORRIS ENDOWED GRADUATE SCHOLARSHIP FOR PATHOBIOLOGY
—Established in 2000 by Mrs. Thelma E. Morris, a longtime supporter of UTEP who passed away in 2002, to provide a renewable scholarship to a graduate student in need of financial assistance in order to attend the University. Recipient must be a U.S. citizen or permanent resident, and first preference shall be given to a student pursuing a graduate degree in the field of Pathobiology. If no such student qualifies, then the scholarship may be awarded to a student pursuing a degree in one of the following fields, listed in the order of preference: Physical Therapy, Pharmacy or a graduate degree in Nursing.

THELMA ELENOR MORRIS ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Mrs. Thelma Elenor Morris, a longtime friend and major benefactor of the University who died in 2002. Income earned from this fund provides a renewable scholarship to an undergraduate student, with first preference given to a student pursuing a degree in Biological Sciences who intends to continue his or her studies at the graduate level in the field of Pathobiology. Second preference is for a student pursuing a degree in Physical Therapy. If no candidate meets these criteria, the scholarship may be awarded to a qualified Nursing student.

M. JAYNE AND ELINOR MORRISON ENDOWED NURSING SCHOLARSHIP FUND
—Established in 2000 in memory of M. Jayne and Elinor Morrison by the Estate of Dr. Robert K. Morrison, a veterinarian, to provide scholarships to undergraduate or graduate students in the College of Nursing and Health Sciences.

THE FRANK AND POLLY ANN MORROW OUTSTANDING INTERNATIONAL STUDENT AWARD
—Established in 1985 by Frank and Polly Ann Morrow, members of the UT System Chancellor's Council. Income earned from this endowment provides annual resources for a cash award and a plaque to the year's most outstanding international student. Both Mr. and Mrs. Morrow passed away in 1991.

DR. JAMES K. P. MORTENSEN ENDOWED SCHOLARSHIP IN ENGLISH AND AMERICAN LITERATURE
—Established in 1998 by Dr. James K. P. Mortensen, UTEP associate professor emeritus of English. Income distributed from this endowment is used to award scholarships to junior and senior students who are majoring in English and American Literature.

WILLIAM JOSEPH MULDOWNEY MEMORIAL ENDOWED LIBRARY FUND
—Established in 1992 by the Estate of William Joseph Muldowney, a 1950 Business Administration alumnus of the University who worked as an auditor in El Paso and Austin, Texas, and California. Income from the endowment is used by the University Library for the purchase of "great books" and "classics."

FRANK MUNOZ, R.Ph., AND MATILDE MUNOZ QUIROZ MEMORIAL SCHOLARSHIP FUND
—Established in 1997 by Alejandrina Gonzalez and Maria Avelina G. Munoz in memory of their brother, Frank Munoz, and sister, Matilda Munoz Quiroz. The fund provides an annual scholarship to a student pursuing a degree in Pharmacy or a science discipline, with preference given to a graduate of Bowie High School in El Paso, Texas.

MR. AND MRS. MACINTOSH MURCHISON CHAIR (I) IN ENGINEERING
—Established in 1985 by the late Mrs. MacIntosh (Louise B.) Murchison to recruit to the faculty an outstanding researcher in the field of Manufacturing Engineering or Materials Science. Mrs. Murchison died in November 1986.

MR. AND MRS. MACINTOSH MURCHISON CHAIR (II) IN ENGINEERING
—Established in 1986 by Mrs. MacIntosh (Louise B.) Murchison to support an outstanding faculty member whose work will contribute to the economic development and progress of the El Paso region and be involved in the teaching of undergraduate students. Mrs. Murchison died in November 1986.

MR. AND MRS. MACINTOSH MURCHISON CHAIR (III) IN ENGINEERING
—Established in 1987 following the death of Mrs. MacIntosh (Louise B.) Murchison, to support outstanding faculty members whose work will contribute to the economic development and progress of the region. Mrs. Murchison died in November 1986.

MR. AND MRS. MACINTOSH MURCHISON CHAIR (IV) IN ENGINEERING
—Established in 1987 after the death of Mrs. MacIntosh (Louise B.) Murchison, who provided for the endowment fund to support outstanding faculty members whose work contributes to the economic development and progress of the region, and who is involved in the teaching of undergraduate students. Mrs. Murchison died in November 1986.

RANDOLPH S. JR. AND LUCILLE M. MURRAY ENDOWED FUND FOR STUDENT ENHANCEMENT
—Established in 1994 by Mr. and Mrs. Randolph S. (Lucille M.) Murray, Jr., longtime friends and benefactors of the University. Mrs. Murray passed away in 2001. Income earned from this fund provides direct support to academically worthy students in need of financial assistance in order to attend UTEP on a full-time basis. Such support may include scholarships, tuition, room, board, books, supplies and fees; grants for the purchase of supplies and materials; stipends and/or grants to assist with travel and related expenses for academic competitions and presentations; or teaching assistantships, research apprenticeships or other work/study arrangements.

MARSHALL G. MUSTAIN SCHOLARSHIP FUND
—Established in 1989 by the Estate of Marshall G. Mustain, a principal consultant for Standard Oil Company of California who attended the Texas College of Mines and Metallurgy (now UTEP) from 1927 to 1929 and was co-captain of the 1929 football team. This endowed fund provides scholarships to worthy undergraduate students who are involved in chemical process studies in Civil, Mechanical or Metallurgical Engineering.

PHOEBE AND REUBEN MUTNICK SCHOLARSHIP FUND
—Established in 1990 by friends, alumni and colleagues of Phoebe and Reuben Mutnick. Mrs. Mutnick, who retired from the University in 1982 as a teacher of classical piano, died in 1993. Together with her husband, a retired physician, she was actively involved in El Paso's music community for many years. Following his wife's death, Dr. Mutnick continued to be a supportive friend of the University's Music Department until he passed away in 2003. Interest earned from the endowment provides a scholarship for a graduate or undergraduate keyboard student in the Department of Music.

W.P. NASH SCHOLARSHIP FUND
—Established in 1978 by W.P. Nash, who served as Chairman and Chief Executive Officer of GeoSurveys, Inc., and was a 1958 Geology graduate of Texas Western College (now UTEP). Mr. Nash died in 1995. Income earned from this endowment provides scholarships for upper-level undergraduate Geological Sciences students. Special consideration is given to students who work part or full time and are supporting themselves and other members of their families.

DIANA S. NATALICIO ENDOWED SCHOLARSHIP FOR FUTURE TEACHERS
—Established in 1997 by UTEP's President Dr. Diana Natalicio. Income earned from this endowment provides scholarship support for students pursuing careers in Education.

L. JEAN NEESSEN/ALVIN F. PARNELL MEMORIAL PRESIDENTIAL EXCELLENCE FUND
—Established in 2002 by Dennis R. and Donna R. Neessen to be used at the discretion of the President of UTEP to support the students, faculty, activities and programs of the University in furtherance of its academic mission.

LLOYD A. NELSON PROFESSORSHIP IN GEOLOGY
—Established in 1964 by friends and associates of the late Dr. Lloyd A. Nelson, the University's 1956 Distinguished Alumnus and member of the faculty from 1920 to 1964. Dr. Nelson was one of the first three graduates of the University (then called the Texas College of Mines and Metallurgy) in 1916, earning a degree in Mining. Funds distributed from this endowment enable UTEP to install an eminent geologist as the Lloyd A. Nelson Professor of Geology.

HENRY AND MABEL NG ENDOWED SCHOLARSHIP FUND
—Established in 2000 by Henry and Mabel Ng to award scholarships to graduate students who are pusuing degrees in Civil Engineering with a structural option. Mr. Ng received his bachelor's and master's degrees in Civil Engineering from UTEP in 1977 and 1981, respectively.

GORDON B. OKUM ENDOWED DRAMA SCHOLARSHIP FUND
—Established in 1991 by a bequest from Gordon B. Okum of El Paso who died in January 1990. Income earned from the endowment provides scholarships to undergraduate or graduate students majoring in Drama.

FRANCIS E. AND CATHERINE B. O'MALLEY ENDOWED LIBRARY FUND
—Established in 2000 by the Estate of Catherine B. O'Malley, a 1935 History graduate of the University. Income earned from the endowment is used for the benefit of the University Library.

VERNA O'NEILL AND HELEN LAWRENCE INDIO MOUNTAINS RESEARCH STATION ENDOWMENT FUND
—Established in 1995 by Dr. Joseph "Jody" and Mrs. Diana Lawrence in memory of their mothers, Helen Lawrence and Verna O'Neill. Income from the endowment supports educational/research activity for UTEP faculty and students working at the Indio Mountains Research Station in areas of animal and plant ecology, physiological ecology, biosystematics, eco-toxicology, paleontology, sedimentation, structural geology, geomorphology, archeology and/or for improvements to the Indio Mountains Research Station site.

BULAH LILES PATTERSON MEMORIAL PRESIDENTIAL SCHOLARSHIP FUND —Established in 1987 by a bequest from Bulah Liles Patterson, who died in 1986. She was a professor of mathematics serving UTEP from 1927 to 1967. Income from the endowment fund provides scholarships for students majoring in Mathematics, Engineering, Nursing and Allied Health who qualify under the Presidential Scholarship Program.

JC PENNEY COMPANY INC. ENDOWED SCHOLARSHIP FUND —Established in 2002 by J C Penney Company Inc. to provide annual scholarships to students pursuing degrees in business administration, with preference given to students in need of financial assistance in order to attend UTEP on a full-time basis, although they need not meet the state or federal tests for proving financial need.

BLACK JACK PERSHING ENDOWED SCHOLARSHIP FUND —Established in 1996 by The Association of Old Crows. The group dates its history from 1964 at the time of its first reunion of a handful of men trained as electronic countermeasures (ECM) specialists during WWII. It is now an international organization of more than 25,000 members in 91 worldwide chapters. Income earned from the fund provides scholarships for junior or senior students majoring in Electrical Engineering, Computer Science, Physics or Mathematics, with preference given to students from Texas or New Mexico.

PHELPS DODGE PROFESSORSHIP IN METALLURGICAL ENGINEERING —Established in 1998 by George Bailey on behalf of Phelps Dodge as a permanent endowment. Phelps Dodge has been a valued partner of UTEP since 1978. Income distributed from this fund is used to recruit or retain a professor recognized for his or her outstanding academic accomplishments, or to attract a talented and promising academician in the early phase of his or her teaching career who will stimulate and promote excellence within the Metallurgical Engineering Department.

PHI KAPPA TAU HOME HOLDING CORPORATION ENDOWED LIBRARY FUND —Established in 1999 by Phi Kappa Tau Home Holding Corporation of El Paso to support and enhance the Southwest and Border Studies Collection of the University Library.

D.L. AND LUCILLE PILLOW LIBRARY FUND —Established at the bequest of Lucille Pillow, a prominent El Paso woman who left her estate to the University upon her death in 1986. Her husband, D.L. Pillow, organized the D.L. Pillow Company, which he operated for 30 years as one of the community's most important businesses. Funds distributed from this endowment provide for the purchase of new books and materials for the University Library.

GEORGE B. POWELL NOVA MEMORIAL FUND —Established in 1993 by a bequest from Mrs. Anna Martha Doak Powell. Income from the fund supports UTEP's magazine, NOVA Quarterly.

PRESIDENTIAL SCHOLARSHIP PROGRAM —Established in 1982 by alumni, friends and associates of the University. Interest earned from the endowment is expended for one or more academic scholarships under the Presidential Scholarship Program.

THE PRESIDENT'S ASSOCIATES ENDOWMENT FUND
—Established in 1972 by the UTEP President's Associates. Income earned from the endowment is used to support University programs at the discretion of UTEP's President.

DR. HOWARD E. QUINN GEOLOGY LIBRARY MEMORIAL FUND
—Established in 1982 by alumni, friends and associates of Dr. Howard E. Quinn in memory of the longtime chairman of the Geology Department, and in honor of his 40 years of service to the University and its students. Dr. Quinn died in 1976. Income earned from the endowment is used for the purchase of geology books for the Library.

DR. HOWARD E. QUINN MEMORIAL FUND
—Established in 1987 by alumni, friends, colleagues and corporations in memory of Dr. Howard E. Quinn, former Chair of the UTEP Geological Sciences Department, for his dedicated service to the University. Dr. Quinn died in 1976. Income earned from the endowment is used to promote the Department of Geological Sciences and to encourage additional funding for endowing a professorship.

RAINBO BAKING/ANHEUSER-BUSCH SCHOLARSHIP FUND
—Established in 1988 by the Anheuser-Busch Companies, Inc., of The Woodlands, Texas, and one of its El Paso, Texas, subsidiaries, Rainbo Baking Company. Income earned from this endowment is used to award an annual undergraduate scholarship.

ELLA KATE AND WALLACE RALSTON NURSING STUDENTS SCHOLARSHIP FUND
—Originally established in 1985 as a loan fund for Nursing students through a bequest by Ella Kate Ralston. In 1991, the fund was modified to allow for the awarding of scholarships to Nursing students studying at UTEP.

VINCENT M. RAVEL COLLECTION OF JUDAICA
—Established in 1981 by friends of Dr. Vincent M. Ravel as a memorial to the prominent El Paso physician who made many contributions to the University Library during his lifetime. After Dr. Ravel's death in 1969, his widow gave to the University their collection of books on Jewish history, culture and customs. Income from the endowment is used for additional purchases to be added to the collection.

LOUISE MAXON REA ENDOWED SCHOLARSHIP
—Established in 2003 by Mr. Robert G. Maxon in memory of his mother, Mrs. Louise Maxon Rea, a 1938 alumna of the University who passed away in 1995. Income from the endowment provides annual scholarships to students pursuing degrees in Journalism.

THE MARY HANNER REDFORD MEMORIAL FUND
—Established in 1981 by Mr. Tyler H. Haynes, Jr., in memory of his aunt, Mary Hanner Redford. Income earned from the endowment is used by Texas Western Press for publishing works dealing with the history of the Southwestern United States.

RHO SIGMA TAU - ROBERT L. SCHUMAKER ENDOWED PROFESSORSHIP IN PHYSICS
—Established in 1991 by the Rho Sigma Tau Building Association, Inc., and friends, colleagues and former students of Professor Robert L. Schumaker.

The endowment was created to honor Professor Schumaker, who retired in May 1989 with 43 years of service to the University. In addition, he was directly involved in the development of the Schellenger Research Labs, served as director of the University's first Computer Center and was Director of Admissions. Income from the endowment is used to recognize and reward a faculty member from the Department of Physics who is chosen for his or her excellence in teaching.

RINTELEN/EHRLINGER METALLURGICAL ENGINEERING SCHOLARSHIP —Established in 1977 by Donald and Ann McGehee, both former students of the University, in honor of the late Drs. Joseph Rintelen and Henry Ehrlinger, UTEP professors of Metallurgical Engineering. Funds distributed from this endowment provide a scholarship for an outstanding senior majoring in Metallurgical Engineering.

RODERICK MEMORIAL SCHOLARSHIP FUND
—Established in 1981 by a bequest from Dorrance D. Roderick, a longtime benefactor of the University and prominent El Paso business leader, to provide scholarships for Music students selected by the University and the Musical Director of the El Paso Symphony Orchestra.

DORRANCE D. RODERICK FOUNDATION PROFESSORSHIP IN ENGLISH —Established in 1989 by a gift from the Dorrance D. Roderick Foundation and the El Paso Community Foundation. Mr. Roderick was owner of the El Paso Times from 1930 until 1972 and its president and publisher for 46 years. He was a philanthropist and civic leader in El Paso until his death in 1981. This fund established the first endowed professorship in the College of Liberal Arts. Income earned from the endowment supports the Professorship in the Department of English.

NELLIE POLLARD RODGERS MEMORIAL LIBRARY FUND
—Established in 1999 by Pollard "Barstow" and Patricia R. Rodgers, in memory of Barstow's mother, Nellie Pollard Rodgers. Mr. Rodgers is actively involved with the UTEP Alumni Association. Funds distributed from the endowment benefit University Library collections.

JIMMY ROGERS, JR. ENDOWED FOOTBALL SCHOLARSHIP
—Established in 1995 by the John Hancock Mutual Life Insurance Company to honor Jimmy Rogers, Jr., for his devoted service to the Sun Carnival Bowl Game and festivities. This fund provides scholarship support for a student or students who play on the UTEP Miner Football Team.

MACINTOSH MURCHISON ROGERS ENDOWMENT FUND FOR STUDENT ENHANCEMENT
—Established in 1994 in memory of MacIntosh Murchison Rogers by family and friends. The income from the endowment supports costs associated with the participation of Business or Engineering students in national and international competition, presentation or other professional development opportunities.

THE PATRICK ROMANELL LIBRARY FUND
—Established in 1974 by Dr. Patrick Romanell, a former H.Y. Benedict Professor of Philosophy at UTEP, for the purchase of books on the history and philosophy of medicine for the University Library.

MIGUEL ROSALES ENDOWED STUDENT EXCELLENCE FUND
—Established in 2000 by Miguel "Mike" Rosales, a 1966 alumnus of the University. Funds distributed from this endowment are used at the discretion of the Dean of the College of Business Administration to enhance the academic experience of students attending the University.

SALLY W. ROSEN ENDOWED SCHOLARSHIP IN FOREIGN LANGUAGE EDUCATION
—Established in 1998 by Sally W. Rosen. Income earned from this fund provides scholarship support for academically qualified Education students with expressed interest in Language or Linguistics and the intention of becoming a foreign language educators. Mrs. Rosen passed away in 1998.

DR. WALTER R. ROSER MEMORIAL SCHOLARSHIP
—Established in 1987 by alumni, friends, relatives, colleagues and corporations in memory of Dr. Walter R. Roser, who died in 1984 after serving in the UTEP Department of Metallurgical Engineering for 18 years. Income earned from the endowment provides an annual scholarship to an outstanding junior in Metallurgical Engineering.

JULIA ANN ROSS MEMORIAL SCHOLARSHIP
—Established in 1998 by Mrs. Julia Ann Ross, an El Paso school teacher and alumna of the University, who bequeathed a portion of her teacher's retirement fund to provide scholarships to students who are in need of financial assistance to attend UTEP.

ROTARY CLUB OF NORTHEAST EL PASO PRESIDENTIAL SCHOLARSHIP FUND
—Established in 2000 by the Rotary Club of Northeast El Paso to provide scholarships to UTEP students pursuant to the Presidential Scholarship Program. The scholarships are awarded to students who are residents of the service area of the Northeast Rotary Club.

DR. J.M. ROTH MEMORIAL SCHOLARSHIP FUND
—Established in 1956 in memory of Dr. J.M. Roth by friends of the former Chairman of the UTEP departments of Philosophy and Psychology. Income earned from this endowment provides scholarships to students of Philosophy and Psychology.

REESE ROWLING ENDOWED FUND FOR GEOLOGY
—Established in 1994 by Mr. Reese Rowling, a 1951 graduate of Texas Western College (now UTEP) and recipient of the 1993 College of Science Gold Nugget Award, the highest honor bestowed on alumni of the College. Mr. Rowling, a Corpus Christi, Texas oilman and Omni Hotels' developer, passed away in 2003. Income earned from this fund provides a stipend to aid a graduate or undergraduate student in the field of Geological Sciences who demonstrates financial need.

ROBERT RUBIO MEMORIAL ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Celia and the late Antonio Rubio in loving memory of their son, Robert Rubio who died in 1997. Mr. Robert Rubio was Public Service Director at KDBC-TV Channel 4 in El Paso and a performer with the UTEP Dinner Theatre. Mr. Antonio Rubio passed away in 2001. Income from this endowment provides an annual scholarship to a junior or senior Drama student.

MARY MISIEWICZ SADOWSKI MEMORIAL SCHOLARHSIP AND RESEARCH FUND —Established in 1999 by Dr. and Mrs. Z. Anthony Kruszewski to honor the memory of Maria Misiewicz Sadowski, an American woman who risked her life in support of the Polish anti-Nazi resistance movement during World War II. Income from this endowment provides scholarships and research grants for upper-level undergraduate and graduate Political Science majors who are pursuing study and/or research of Polish politics, and to facilitate student exchanges with Poland.

THE JOSEFINA A. SALAS-PORRAS ENDOWED MEMORIAL SCHOLARSHIP FUND —Established in 2002 by the family of Ms. Josefina A. Salas-Porras, a 1946 alumnus and good friend of the university. Income from the endowment provides scholarships to freshmen students majoring in Education.

TOMAS T. AND ERNESTINE SANTOSCOY ENDOWMENT FUND —Established in 1999 by Dr. and Mrs. Thomas G. (Lori) Santoscoy in honor of Dr. Santoscoy's grandparents, Tomas T. and Ernestine Santoscoy, to provide scholarships to qualified students who are in need of financial assistance in order to attend UTEP on a full-time basis, and who are the first generation of their families to attend college on a full-time basis.

DR. ELLERY S. SCHALK MEMORIAL STUDENT EXCELLENCE FUND IN HISTORY —Established in 2001 in memory of Dr. Ellerys Schalk by his wife, Mrs. Ninon Schalk, and friends. Income from this endowment is used at the discretion of the Chair of the History Department to enhance the academic experiences of History students attending the University, and especially (but not exclusively) to support travel by students outside the United States for educational or research purposes.

SCHELLENGER PROFESSORSHIP IN ELECTRICAL RESEARCH —Established in 1982 from the Schellenger Foundation Trust and a bequest by Emma H. Schellenger to create a professorship in electrical research in the Department of Electrical Engineering. Income from the endowment is used by a faculty member occupying the professorship to stimulate and promote funded research by providing seed money, travel, wages and salaries for support staff.

SCHILLINGER RHO SIGMA TAU ENDOWED MUSIC GIFT FUND —Established in 2002 by the Rho Sigma Tau Building Association Inc. Funds distributed from the endowment are used at the discretion of the Director of the UTEP symphony for the benefit of the Symphony.

DAVID WADDELL SCHILLINGER SCHOLARSHIP —Established in 1970 by Mr. and Mrs. William C. (Peggy) Schillinger in memory of their son, David Waddell Schillinger. Income earned from the endowment provides scholarships each year for one or more students who display financial need and are U.S. citizens or permanent residents.

THE EDWARD AND EVELYN SCHWARTZ ENDOWED AWARD FOR THE INNOVATIVE TEACHER OF THE YEAR —Established in 1998 by Edward and Evelyn Schwartz, prominent members of the Popular Dry Goods Family of El Paso. Income from this endowment provides an annual cash award to an outstanding teacher in the El Paso-area public schools who is a recent UTEP graduate. The award is given each year in May, in conjunction with the College of Education's pre-Commencement activities.

GEORGIE K. SCHWARTZ ENDOWED SCHOLARSHIP IN SOCIAL WORK
—Established in 1991 by a bequest from the Estate of Georgie K. Schwartz of El Paso. Income earned from the endowment is used to award scholarships to Social Work students with special expertise in social work services for children and families.

HEDWIG MATHIAS AND MAURICE SCHWARTZ FAMILY ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Herbert Schwartz, Albert Schwartz and Frances Blumenthal in memory of their parents, Hedwig Mathias and Maurice Schwartz. Income from this fund provides scholarships to students who have accrued 60 or more credit hours and who are in need of financial assistance to attend UTEP full time.

JONATHAN D. AND ETHEL M. SCHWARTZ FOOTBALL SCHOLARSHIP FUND
—Established in 1997 by the late Ethel M. Schwartz in recognition of her husband Jonathan's years as a collegiate football player at Purdue University. Mrs. Schwartz passed away in 2001. Income from this endowment provides scholarships to student players of UTEP's intercollegiate Football Team.

STUART AND SHARI SCHWARTZ EXCELLENCE ENDOWMENT FOR LAW AND BORDER STUDIES
—Established in 2001 by Mr. Stuart R. Schwartz an El Paso attorney, and his wife,Mrs. Shari S. Schwartz. Funds distributed from this endowment are used to support the Center for Law and Border Studies at the discretion of the Director. If the Center ceases to exist, the endowment will be used to support a law school—if one exists at UTEP—or a program similar to the Center for Law and Border Studies that promotes a better awareness of cross-border legal issues between the U.S. and Mexico, or that prepares undergraduate students for law school.

COLLEGE OF SCIENCE ENDOWMENT
—Established in 2001 by various donors to benefit the College of Science.

THE GEORGE W. AND HELEN KEFFER SCOTT SCHOLARSHIP FUND
—Established in 1996 by the Estate of Helen K. Scott, this endowment provides one or more annual scholarships for qualified Pre-medical students who are U.S. citizens or permanent residents.

JUANA SERNA ENDOWED SCHOLARSHIP FUND
—Established in 1996 by Juana Serna, this endowment provides undergraduate scholarships in Mathematics or Science to graduates of Bowie High School in El Paso, Texas. Among equally qualified applicants, preference is given to female students.

MELISSA WEHMANN SEWELL ENDOWED SCHOLARSHIP FUND
—Established in 1995 in memory of Melissa Wehmann Sewell by her husband, Dr. Granville Sewell; sons, Kevin and Christopher; and other family and friends. Income from this fund provides a scholarship for an undergraduate Engineering or Science student.

THE MICHAEL J. SHEA MEMORIAL SCHOLARSHIP FUND
—Established in 1980 by the family and friends of Lt. Michael J. Shea,

United States Marine Corps, a 1972 graduate of the University who lost his life in the final evacuation of Americans and refugees from Saigon, South Vietnam during the Vietnam War. Income earned from this endowment provides a scholarship for a student majoring in Physics or Mathematics.

THE SHELTON FAMILY ENDOWED SCHOLARSHIP FUND
—Established in 2001 by Carroll S. Maxon to provide scholarships to deserving students attending UTEP.

SHEN-LEE ENDOWMENT FUND
—Established in 1995 by Helen H. Lee and Anne L. Leahey to honor their parents, Mrs. Chao-Hswan Lee and the late Mr. Ye-Tsen Shen, and their lifetime dedication to education. Income from the endowment supports activities promoting understanding of East Asia, and provides competitive academic scholarships to academically outstanding, full-time Mathematics or Accounting graduate students who demonstrate financial need.

SHIELDS ENGINEERING SCHOLARSHIP
—Established in 1997 by a bequest from Dr. Jacqueline Shields, this endowment provides an annual scholarship for a sophomore, junior, senior or graduate Engineering student, with preference given to an eligible female student. Dr. Shields earned her Master's degree in Civil Engineering from UTEP by attending classes in the evening while working full-time during the day and as a graduate teaching assistant at night. It was during the latter experience that she found her passion for teaching, which continued throughout her lifetime.

SHILOFF FAMILY FOUNDATION ENDOWED SCHOLARSHIP FUND
—Established in 2000 by the Shiloff Family Foundation to provide scholarships for incoming freshmen who graduated in the top 15 percent of their classes from El Paso-area high schools and who are in need of financial assistance.

BILL AND JO SIEDHOFF STAFF SCHOLARSHIP ENDOWMENT
—Established in 1993 by UTEP President Dr. Diana Natalicio to honor her parents, Bill and Jo Siedhoff. Mr. Siedhoff passed away in 2000. Income from the endowment is used to award staff scholarships at the University.

J. ERNEST AND ELIZABETH ROUSE SIPES ENDOWED SCHOLARSHIP
—Established in 1992 by J. Ernest and Elizabeth Rouse Sipes. Mrs. Sipes was a professor in the College of Business Administration from 1966 to 1989 and is an alumna of UTEP. Mr. Sipes, who died in 1993, received his Master's in Civil Engineering from UTEP in 1969. Income from the fund is used to award an annual scholarship to an undergraduate student who is majoring in either Business or Engineering.

ROBERT E. AND JACQUELINE SKOV ENDOWED PROFESSORSHIP IN BUSINESS ETHICS
—Established in 1999 by Mr. and Mrs. Robert E. Skov to create the Robert E. and Jacqueline Skov Endowed Professorship in Business Ethics. Funds distributed from the endowment are used to attract and/or retain talented and promising academicians who research, design, implement and teach undergraduate courses addressing fundamental values and ethics for future business leaders.

D.B. SMITH MEMORIAL SCHOLARSHIP FUND
—Established in 1975 in memory of Mr. David B. Smith, a 1952 graduate of the University, by his family, friends and business associates. Funds distributed from the endowment provide scholarships to students majoring in Geological Sciences.

JEAN F. SMITH AND KAREN JEAN SMITH ENDOWED SCHOLARSHIP FUND
—Established in 1998 by a bequest from Jean F. Smith, a UTEP alumna, in memory of her daughter, Karen Jean Smith. Income from this fund provides scholarship support to deserving students.

JUDITH K. SOLIS MEMORIAL SCHOLARSHIP
—Established in 1994 by alumni, R. Paul and Patricia Daw Yetter, in memory of former Assistant Dean of Students Dr. Judith K. Solis. Income from this endowment supports a renewable scholarship for a freshman or upperclassman who demonstrates quality involvement in student, community, church or other worthwhile activities.

C.L.SONNICHSEN ENGLISH DEPARTMENT ENDOWED SCHOLARSHIP FUND
—Established in 1993 by the family and friends of Dr. C.L. Sonnichsen, Professor Emeritus of English who died in 1991. Income earned from the endowment provides scholarships to graduate or undergraduate students studying English or American Literature.

C.L. SONNICHSEN SOUTHWEST PUBLICATIONS FUND
—Established in 1978 by friends, former students and colleagues, under the leadership of Lady Margaret Brand, in honor of the late Dr. C.L. Sonnichsen, Professor Emeritus of English and noted Southwestern author who introduced thousands of students to the literary heritage of the Southwest. The income from this endowment provides a unique annual award to the best writer of non-fiction in Southwestern history, art or culture as determined by the Texas Western Press Editorial Board.

SOUTHWESTERN BELL PROFESSORSHIP IN THE COLLEGE OF BUSINESS
—Established in 2000 by the SBC Foundation to create the Southwestern Bell Professorship in the College of Business. Funds distributed from the endowment are used to recruit and retain faculty in the Information Technology program in the UTEP College of Business Administration.

SOUTHWESTERN BELL TELEPHONE SCHOLARSHIP FUND
—Established in 1985 by the Southwestern Bell Telephone Company and the Southwestern Bell Foundation (now the SBC Foundation) to provide scholarships to qualified students in accordance with the UTEP Presidential Scholarship Program.

SOUTHWESTERN BELL PROFESSORSHIP IN ENGINEERING
—Established in 2001 by the SBC Foundation to recruit and retain outstanding faculty in the Information Technology program.

THE HARRY SPITZ MEMORIAL SCHOLARSHIP FUND
—Established in 1983 in memory of Harry Spitz, a prominent businessman and El Paso resident for 52 years, by his late widow, Mrs. Mildred Lefkowitz Spitz, and his daughter, Mrs. Leona Spitz Lakehomer. Mrs. Lakehomer, a 1945 alumna of the University, passed away in 2003. Funds distributed from the endowment provide a scholarship to a Pre-medical student who is a U.S. citizen.

WILLIAM L. STALEY FUND
—Established in 1960 by the late Dr. E.W. Rheinheimer, a prominent El Paso physician and trustee for the Estate of William L. Staley. Income earned from this fund provides scholarships to competitively selected undergraduate students for research in human life sciences, with preference for Pre-medical majors, and to provide research support to these selected students.

LYDIA STARK MEMORIAL SCHOLARSHIP IN SPEECH-LANGUAGE PATHOLOGY
—Established in 1970 in memory of Lydia Stark, a distinguished El Paso civic leader and teacher. Income earned from this endowment fund provides scholarships for students who plan careers in Speech-Language Pathology.

STATE FARM INSURANCE COMPANY ENDOWED SCHOLARSHIP FUND
—Established in 2000 by the State Farm Insurance Company. Income from this endowment provides annual scholarships to students pursuing degrees in Business Administration.

THE HELEN M.C. STERN AND J. EDWARD STERN ENDOWED PROFESSORSHIP IN PSYCHOLOGY
—Established in 1993 by the late Drs. J. Edward and Helen M.C. Stern. Income from this endowment is used to recruit or retain a professor recognized for his or her outstanding academic accomplishments who stimulates and promotes excellence within the Psychology Department.

J. EDWARD AND HELEN M.C. STERN ENDOWED PROFESSORSHIP IN NEURO-SCIENCE
—Established in 1990 by the late Drs. J. Edward and Helen M.C. Stern. Edward and Helen were highly respected for their medical practice in El Paso — dating back to the late 1940's — specializing in the areas of neurology and psychiatry. Income from the endowment supports an individual whose scholarship and/or research focuses on the basic and applied neuro-psychiatric sciences and related or associate fields and areas of interest.

SJOERD STEUNEBRINK SCHOLARSHIP ENDOWMENT
—Established in 1998 by a bequest from Sjoerd Steunebrink, an immigrant from Holland and a Houston doctor. Income from this permanent endowment provides scholarship support for students who demonstrate proven academic ability and financial need.

LUCILLE T. STEVENS ESTATE FUND
—Established in 1945 by the bequest of Mrs. Lucille T. Stevens. Income earned from the fund provides scholarships to students who have outstanding academic records; are seeking higher education for special lines of work as ministers, physicians, lawyers, scientists or engineers; and are striving to elevate themselves to become leaders of their country.

WILLIAM S. STRAIN MEMORIAL GEOLOGY FUND
—Established in 1974 by alumni and friends of the late Professor Emeritus William S. Strain. The income from this endowment provides support for the Department of Geological Sciences to improve its teaching program and to provide undergraduate scholarships in tribute to Dr. Strain's 37 years as an outstanding teacher of the Earth Sciences.

SUNTURIANS ENDOWED SCHOLARSHIP FUND
—Established in 1984 by the Sunturians of El Paso, a young businessman's organization. Income earned from the endowment provides undergraduate scholarships under the Presidential Scholarship Program.

ANTHONY J. TARQUIN ENDOWED SCHOLARSHIP IN CIVIL ENGINEERING
—Established in 1994 by Mr. and Mrs. Peter (Mei) Chan and their respective employers, Parkhill, Smith & Cooper, and Sierra Medical Center, in honor of UTEP Professor of Civil Engineering Dr. Anthony J. Tarquin. Income from the fund is used to award scholarships to Engineering students.

DR. ARLEIGH B. TEMPLETON PROFESSORSHIP IN FINANCIAL MANAGEMENT AND BANKING FUND
—Established in 1981 by alumni, friends, foundations and associates of former University President Dr. Arleigh B. Templeton to create a professorship in honor of his retirement in 1980.

TENET HEALTH SYSTEM AND SIERRA PROVIDENCE HEALTH NETWORK ENDOWED FUND FOR COMMUNITY HEALTH OUTREACH
—Established in 1996 by Tenet Health System (now Tenet Healthcare) and Sierra Providence Health Network. Distributions from this fund provide stability and continuity for the various community health outreach programs of the UTEP College of Health Sciences.

TEXAS INSTRUMENTS FOUNDATION ENDOWED SCHOLARSHIP
—Established in 2001 by the Texas Instruments Foundation to provide scholarship support to students in Electrical and Computer Engineering.

TEXAS INSTRUMENTS FOUNDATION PROFESSORSHIP IN DIGITAL SIGNAL PROCESSING
—Established in 2001 by Texas Instruments Foundation to provide support to faculty in Digital Signal Processing. Digital Signal Processing is an essential component of today's business and personal communications and is among the fastest growing segments of the semiconductor industry. The professorship will help increase the number of engineers needed to fuel the state's rapidly growing high-tech industry.

THETA DELTA LAMBDA CHAPTER, ALPHA PHI ALPHA FRATERNITY, INC. SCHOLARSHIP FUND
—Established in 1991 by the Theta Delta Lambda Chapter of the Alpha Phi Alpha Fraternity, Inc. Income from the endowment provides an annual scholarship to an undergraduate student with financial need. Alpha Phi Alpha is a social/service fraternity that has been active at UTEP for more than 20 years, principally serving the needs of African-Americans on campus.

THE GEORGE D. THOMAS ENDOWED EXCELLENCE FUND FOR THE CENTER FOR ENTREPRENEURIAL DEVELOPMENT, ADVANCEMENT, RESEARCH AND SUPPORT (CEDARS)
—Established in 1996 by friends and colleagues of George D. Thomas to provide support to the Center for Entrepreneurial Development, Advancement, Research and Support (CEDARS). Funds distributed from this endowment may be used to provide (but are not limited to) tuition for aspiring entrepreneurs with limited financial resources, and to provide speakers for public presentations to spread the word about the expertise available to the El Paso business community.

DR. E.A. THORMODSGAARD VOCAL MUSIC FUND
—Established in 1991 in honor of Dr. E.A. Thormodsgaard by his niece, Mrs. Beulah Herbold, and other family members. Mrs. Herbold, an El Paso Music teacher, passed away in 2003. Income from the endowment provides resources for UTEP's Vocal Music Program.

THE DR. AND MRS. W. H. TIMMONS BORDERLANDS OF HISTORY ENDOWED FUND
—Established in 1995 by Dr. and Mrs. W. H. (Laura) Timmons and friends and former students of "Doc" Timmons. Income from this endowment provides funds for a member of the Department of History in the area of Borderlands Studies who is appointed to the position for a term; to bring to campus a scholar in the field as a visiting professor; or to bring a scholar to campus for a period to give lectures, teach classes or conduct research.

LEE TREVINO ENDOWMENT FUND
—Established in 1972 by professional golfer Lee Trevino. Income from the endowment supports the Golf program at UTEP for use at the department's discretion.

TROPICAL SPORTSWEAR INTERNATIONAL ENDOWED FUND FOR ENTREPRENEURSHIP
—Established in 1998 by Savane International Corporation of Tampa, Florida. Income from this fund is used at the discretion of the Dean of the College of Business Administration to promote entrepreneurship.

UNIVISION DEPARTMENT OF COMMUNICATION ENDOWED SCHOLARSHIP FUND
—Established in 1998 by the UTEP Department of Communication and the Univision Television Group. Income from this endowment provides scholarships for qualified students majoring in Communication.

IGNACIO URRABAZO, JR. AND YOLANDA URRABAZO ENDOWED SCHOLARSHIP FUND
—Established in 2000 by Mr. and Mrs. Ignacio (Yolanda) Urrabazo, Jr., to provide annual scholarships to students pursuing degrees in Business Administration, English or Spanish and who are in need of financial assistance to attend the University full time. Preference is given, in order, to students from Laredo, Texas; Del Rio, Texas; San Antonio, Texas; South Texas; or El Paso, Texas.

UTEP ALUMNI ASSOCIATION - STUDENT ASSOCIATION ENDOWED SCHOLARSHIP FUND
—Established in 1986 by the UTEP Alumni Association and the UTEP Student Association (now Student Government Association). Income from the endowment provides an annual scholarship for a junior or senior student who has demonstrated service to the University and El Paso through involvement in student and community activities.

UTEP PARTNERS STAFF SCHOLARSHIP ENDOWMENT FUND
—Established in 1994 by UTEP faculty and staff members, led by the President of the University, Dr. Diana Natalicio. Income earned from the endowment supports scholarships for UTEP staff.

UTEP STUDENT GOVERNMENT ASSOCIATION ENDOWED SCHOLARSHIP FUND
—Established in 2001 by the UTEP Student Government Association to provide non-renewable scholarships to students who were involved in high school Student Government.

THE CAPTAIN JAMES R. VALTR MEMORIAL SCHOLARSHIP FUND
—Established in 1971 by Robert and the late Ollie Valtr in memory of their son, Capt. James R. Valtr, a 1968 UTEP graduate who was killed in action in Vietnam on June 15, 1971. Funds distributed from this endowment provide a scholarship to an advanced ROTC student from the Department of Military Science.

RICHARD E. VAN REET, M.D. MEMORIAL SCHOLARSHIP FUND
—Established in 1987 in memory of Dr. Richard E. Van Reet by his wife, Dr. Patricia Strickbine-Van Reet; son, Alan R. Van Reet; and parents Mr. and Mrs. Leo (Inis M.) Van Reet. Dr. Richard Van Reet was a 1973 UTEP graduate. Mr. Leo Van Reet passed away in 2000. Income earned from the endowment provides an annual scholarship for students classified as Pre-medical or doing research in the sciences.

WAKEFIELD ENDOWED PROFESSORSHIP IN THE COLLEGE OF HEALTH SCIENCES
—Established in 1999 by Betty Ruth Wakefield Haley. Income distributed from this fund is used to attract and/or retain talented and promising academicians in the Health Sciences. The professor will strive to make UTEP a premier institution and conduct research in Health Sciences or undertake professional studies for publication or distribution, in addition to teaching in the College of Health Sciences.

TEXAS S. WARD ENDOWED SCHOLARSHIP FUND
—Established in 1998 in honor of Texas S. Ward by Mrs. Texas S. (Miladean) Ward, her children and many special friends. Income from this fund provides scholarships for students in any academic discipline, with emphasis on financial need.

MILTON T. & BERTHA L. WARDEN UTEP BASKETBALL ENDOWMENT FUND
—Established in 1995 by a bequest from the Estate of Bertha Warden. Income earned from this fund provides support for the UTEP Basketball program.

ESTHER W. WASHINGTON SCHOLARSHIP IN NURSING
—Established in 1993 by Robert L. Washington, an alumnus of the University, in memory of his mother, Esther W. Washington. Income from the fund provides scholarships to students in the field of Nursing.

SYLVIA AND AARON WECHTER ENDOWED EXCELLENCE FUND FOR THE COLLEGE OF BUSINESS ADMINISTRATION
—Established in 1995 by Aaron and Sylvia Wechter. Mr. Wechter is a prominent El Paso real estate developer and an active leader in the community. Income from this fund is used at the Dean of Business Administration's discretion to support the College.

THE ROBERT A. WELCH CHAIR IN CHEMISTRY
—Established in 1998 by The Welch Foundation. Income from this fund provides a faculty position for an active, effective research scientist of good standing, thus further increasing the level of basic scientific research in chemistry and allied sciences in the state.

CHAIR FOR THE DIRECTOR OF THE CENTER FOR THE STUDY OF WESTERN HEMISPHERIC TRADE
—Established in 1996 by the Texas A&M Research Foundation in College Station, Texas, through a grant from the U.S. Customs Service. Income from this fund is used to designate a faculty member in the College of Business Administration who is appointed by the UTEP President to serve as the director of the Center for the Study of Western Hemispheric Trade.

PROFESSORSHIP FOR THE WESTERN HEMISPHERIC TRADE POLICY STUDIES
—Established in 1996 by the Texas A&M Research Foundation through the U.S. Customs Service to provide financial support for a faculty member in the College of Liberal Arts conducting studies on the impact of governmental policies affecting Western Hemispheric Trade.

WELLS FARGO ENDOWED PROFESSORSHIP OF FINANCIAL SERVICES
—Established in 2002 by Wells Fargo Bank Texas, N.A., to attract and retain talented and promising academicians who will design, implement and teach courses that give students skills in financial services, and perform research in related areas.

WELLS FARGO PRESIDENTIAL ENDOWED SCHOLARSHIP FUND
—Established in 1982 by the State National Bank of El Paso (subsequently renamed Norwest Bank of El Paso, and now Wells Fargo Bank Texas, N.A., El Paso). Income from this endowment provides a Presidential Scholarship to a UTEP student.

WELLS FARGO UNIVERSITY ENDOWED SCHOLARSHIP FUND
—Established in 1982 by the State National Bank of El Paso (subsequently renamed Norwest Bank of El Paso, and now Wells Fargo Bank Texas, N.A., El Paso) to provide scholarships through the UTEP Presidential Scholarship Program to worthy and deserving students from El Paso-area schools.

WESTERN HEMISPHERIC TRADE RESEARCH PROFESSORSHIP (I)
—Established in 1996 by the Texas A&M Research Foundation in College Station, Texas, through a grant from the U.S. Customs Service. Income from this endowment is used for the appointment of an outstanding faculty member engaged in Western Hemispheric Trade research.

WESTERN HEMISPHERIC TRADE RESEARCH PROFESSORSHIP (II)
—Established in 1996 by the Texas A&M Research Foundation in College Station, Texas, through a grant from the U.S. Customs Service. Income from this endowment is used for the appointment of an outstanding faculty member engaged in Western Hemispheric Trade research.

JOHN AND VIDA WHITE ENDOWMENT FUND
—Established in 1982 by John S. and Vida L. White. Mr. White, who died in 1999, was Registrar and Director of Admissions at Texas Western College (now UTEP) from 1948-54. Mrs. White, who died in 1994, received her Bachelor's and Master's degrees in Education from the University and was

an El Paso school teacher. Income earned from this endowment funds an awards program in the Department of English's Creative Writing Program for the best nonfiction, prose, travel-related manuscript submitted by a member of the UTEP faculty or staff. It also funds an awards program in the Department of Geological Sciences for the best geography-related composition submitted by a student or students of the University. Additionally, the fund provides scholarships to senior Fine Arts and Creative Writing students.

SISTER ALOYSIUS WILLIAMS LECTURESHIP FUND
—Established in 1986 by alumni, friends and colleagues of Sister Aloysius Williams upon her retirement and in honor of her many years of service. Sister Williams who passed away in 2003, served as Director of the Hotel Dieu School of Nursing and as Director of Continuing Nursing Education at UTEP's College of Nursing and Allied Health (now College of Health Sciences).

JOHN D. WILLIAMS COMPANY ENDOWMENT
—Established in 2002 by the John D. Williams Company. Funds distributed from the endowment shall be used at the discretion of the Dean of the College of Business Administration.

THE B. MARSHALL WILLIS LIBRARY MEMORIAL ENDOWMENT
—Established in 1968 by friends of B. Marshall Willis, the University's 1967 Distinguished Alumnus, and El Paso businessman and civic leader. Mr. Willis died in 1968. Income from the endowment is used to purchase books in his memory each year for the University Library.

THE JUDITH AND ABRAHAM WINTERS - B'NAI B'RITH WOMEN SCHOLARSHIP ENDOWMENT
—Established in 1992 by the B'nai B'rith Women, El Paso Chapter 540, and the combined funds of the Abraham Winters Memorial Scholarship at UTEP and the Judith Winters Scholarship. Funds distributed from this endowment provide an annual scholarship to a UTEP student.

VERA WISE MEMORIAL SCHOLARSHIP FUND
—Established in 1989 in memory of Vera Wise, who joined the University faculty in 1939 and served as the first chair of the Art Department. In addition to teaching, she devoted much of her time to the members of the Chi Omega sorority, many of whom took an active role in establishing this endowment. Interest earned from the fund provides one or more annual scholarships to upper-level students in the Department of Art who have exhibited outstanding talent.

THE WOMAN'S AUXILIARY OF UTEP ENDOWED ATHLETIC SCHOLARSHIP FUND
—Established in 1985 by members of the Woman's Auxiliary of UTEP. Income earned from the endowment provides athletic scholarships in accordance with the National Collegiate Athletic Association's rules and regulations.

WOMAN'S AUXILIARY OF UTEP ENDOWED SCHOLARSHIP FUND
—Established in 1985 by the Woman's Auxiliary of UTEP. Income earned from the endowment provides annual scholarships to qualified students in accordance with the Presidential Scholarship Program.

THE WOMAN'S AUXILIARY OF THE UNIVERSITY OF TEXAS AT EL PASO ENDOWMENT MEMORIAL SCHOLARSHIP FUND
—Established in 1992 by the Woman's Auxiliary of UTEP in memory of past members of the organization. Income earned from this fund provides scholarships to deserving students at UTEP.

WOMAN'S AUXILIARY OF UTEP LIBRARY ENDOWMENT FUND
—Established in 1969 by the Woman's Auxiliary of UTEP for the acquisition of new books and related material for the University Library. The Auxiliary contributes each year to the growth of the fund.

THE MR. AND MRS. WILLIAM HENRY WOOLDRIDGE LIBRARY FUND
—Established in 1971 by the late Mr. and Mrs. Emil Jay Dittmer in honor of Mr. and Mrs. W. Henry Wooldridge of El Paso. The income from this endowment is used annually to purchase books for the University Library.

NANCY AND KARL O. WYLER, JR. ENDOWED FUND FOR ART HISTORY
—Established in 1999 by Mr. and Mrs. Karl O. (Nancy) Wyler, Jr., to support Art History education in the College of Liberal Arts. Mrs. Wyler earned a bachelor's degree in History from the University. Mr. Wyler passed away in 2000.

THE JESSE O. YATES ENDOWMENT FUND FOR HEALTH RELATED PROGRAMS
—Established in 1999 by the Estate of Lucile Yates in memory of her former husband, Jesse O. Yates, owner and operator of the Del Camino Drug Store and longtime resident and good citizen of El Paso, Texas. Mrs. Yates passed away in 1998. Income earned from this endowment provides books and tuition for students of UTEP's Pharmacy Program.

R. PAUL AND PATRICIA DAW YETTER ENDOWED SCHOLARSHIP FUND
—Established in 2000 by R. Paul and Patricia Daw Yetter to support a renewable scholarship for a freshman or upperclassman who is involved in student, community, church or other worthwhile activities. Mr. Yetter is a 1980 UTEP alumnus and Top 10 Senior. Mrs. Yetter received her Bachelor's degree in Secondary Education from UTEP in 1981.

RICHARD AND LOLLIE YETTER ENDOWED SCHOLARSHIP
—Established in 2000 by R. Paul and Patricia Daw Yetter in honor of Mr. Yetter's parents, Richard and Lollie Yetter. R. Paul Yetter is a 1980 UTEP alumnus and Top 10 Senior. Patricia Daw Yetter received her Bachelor's degree in Secondary Education from UTEP in 1981. Funds distributed from this endowment support a renewable scholarship for an undergraduate student who demonstrates quality involvement in student, community, church or other worthwhile activities.

YOUNG MATRON'S AUXILIARY OF THE WOMAN'S CLUB OF EL PASO ENDOWED SCHOLARSHIP FUND
—Established in 1998 by Linda Troncoso, acting on behalf of the Young Matron's Auxiliary of the Woman's Club of El Paso. Mrs. Troncoso is a past-president of the UTEP Alumni Association and an active volunteer for KCOS public television. Income from this fund provides undergraduate or graduate scholarship support for students pursuing any academic discipline at UTEP.

LLOYD Y. YOUNG ENDOWED EXCELLENCE FUND FOR THE PHARMACY PROGRAM
—Established in 2000 by Dr. Lloyd Y. Young to be used at the discretion of the Director of the UTEP/UT Austin Cooperative Pharmacy Program for the enhancement of the program. Dr. Young served as the first director of the program.

YSLETA VOLUNTEER FIRE DEPARTMENT SCHOLARSHIP FUND
—Established in 1970 by the Ysleta Volunteer Fire Department to provide one or more annual scholarships to entering freshmen who are graduates of Ysleta High School in El Paso, Texas.

SUE AND CHARLES ZALTZ ENDOWED SCHOLARSHIP FUND
—Established in 2003 by Dr. Charles Zaltz, whose wife, Sue, is a 1982 Finance graduate of UTEP. Income from this endowment provides annual scholarships to student athletic trainers.

UNIVERSITY COLLEGE

What's Inside

University College Administration

University College Departments

- Admissions and Recruitment
- Financial Aid
- Student Assessment and Testing
- Student Success Programs
- Academic Advising Center
- Registration and Records
- Tutoring and Learning Center
- Student Support Services Program
- Developmental Education Program

University College Administration

The University College houses both UTEP's enrollment services departments and programs for entering students. Eight departments comprise the College: Academic Advising, Admissions , Financial Aid, Student Success Programs (New Student Orientation, Honors and Junior Scholars Program, National Student Exchange, Visitors Center), Registrar's Office, Student Assessment and Testing, Tutoring and Learning Center, and University Studies. Coupling the enrollment process with academic components has created a multifaceted, comprehensive approach to student success, with a focus on the student's best interest and a singular management of resources.

Created as the natural outgrowth of a decade of institutional endeavors to enhance the experiences of entering students, the University College was developed to strengthen undergraduate education, help students make more informed choices, and increase student retention. The College's activities guide students from recruitment and admissions through placement, academic advising and registration to enrollment in their first Entering Student Program class. These efforts highlight our institutional commitment to students, particularly those in their freshman year.

MAGGY SMITH, *Dean*
102 Academic Services Building
(915) 747-5151
msmith@utep.edu

MIGUEL SIFUENTES, *Associate Dean/Registrar*
103 Academic Services Building
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DIANA GUERRERO, *Director*
Enrollment Evaluation and Technology
102C Academic Services Building
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REBECCA DURAN, *Assistant to the Dean*
102 Academic Services Building
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rduran@utep.edu

University College Departments

Admissions and Recruitment

101 Academic Services Building
Phone: (915) 747-5890
Fax: (915) 747-8893
futureminers@utep.edu
www.utep.edu/admit

DIRECTOR: Tammie Aragón Campos

UNDERGRADUATE ADMISSION

The Admissions Office assists prospective students and/or their parents with enrollment to the University by informing them of admission requirements and procedures, financial resources, academic program offerings, and general information about the UTEP campus. In addition, this office is responsible for determining an applicant's eligibility for admission and the evaluation of transfer credit according to standards set by Texas law, the Board of Regents of the University of Texas System, and UTEP faculty.

Admission applications are available in the Admissions Office, in the counseling offices of most El Paso area high schools, and on the office's website at www.utep.edu/admit. Applicants may also submit the Texas Common Application which is available at www.applytexas.org.

Application Dates and Fees

Applications for admission are due by the following Priority Dates:

Applicant Type	Fall	Spring	Summer
Freshman	May 1	October 1	March 1
Transfer	May 1	October 1	March 1
Summer Guest	N/A	N/A	March 1
International	May 1	October 1	March 1

Late applications from non-international students will be considered after the Priority Date if the student submits:

- all documents required to make the admission decision prior to July 31st for Fall, November 30 for Spring, or April 30 for Summer, and
- a non-refundable $15 late application fee made payable to The University of Texas at El Paso.

All applications and documents from international students must be received by the Priority Date and must be accompanied by a non-refundable $65 check or money order (U.S. dollars) made payable to The University of Texas at El Paso. If due to extenuating circumstances, an international application is considered after the Priority Date, a non-refundable $15 late application fee will also be required.

An admission file that becomes complete after the International Document Due Date will be considered for admission to the next semester.

Admission Policies and Procedures

The requirements for undergraduate admission to the University are described below and are based on an individual's academic achievements. An applicant whose academic background does not meet the requirements for regular or provisional admission will be carefully reviewed on an individual basis, and the applicant will then be notified of the subsequent admissions decision.

Secondary Admission Requirements. Admission to the University does not assure admission into any of the professional colleges (Business Administration, Education, Engineering, or Health Sciences) or programs that may have secondary admission requirements. Check with the appropriate department to determine what other requirements must be met.

Admission Documents. All admission documents must be submitted directly to the Admissions Office. Official transcripts should be sent directly from the schools involved, and official test scores should be sent directly from the appropriate testing agency. All transcripts in languages other than English or Spanish must be accompanied by a certified English translation. All documents submitted to the University become part of the official files of the University and cannot be released or returned to the student or another institution.

Complete academic records. Applicants who have earned credit at another collegiate institution may not disregard any part of his or her academic record, regardless of the amount of work completed or intent to have the credit transferred. Credit earned at institutions not declared on the admissions application cannot be used toward a degree at UTEP. Failure to provide complete information will be considered grounds for denial of admission, denial of transfer credit, cancellation of registration, or appropriate disciplinary action.

Suspension periods. The University honors suspension and dismissal periods imposed by other colleges and universities. An applicant who is ineligible to return to a previous institution or whose official records will not be released is not eligible for admission to UTEP until eligibility for readmission has been re-established or until the official documents have been released.

The following sections on freshman and transfer admission apply to citizens and permanent residents of the United States. International students should refer to the sectionon International Student Admission for their admission requirements.

Freshmen Admission

Students who have never attended another college or university, who have been enrolled in dual credit programs, who have earned credit by examination, or who may have earned college credit through non-traditional methods should apply for freshman admission.

Documents Required:To be considered for admission as a freshman, an applicant must submit the following:

- A completed application for admission,
- Official SAT (Scholastic Assessment Test), ACT (American College Test), GED (Test of General Educational Development), TOEFL (Test of English as a Foreign Language), or PAA (Prueba de Aptitud Academica) scores, as described in the testing section below, and
- A final, official high school transcript indicating adequate high school preparation, rank, and graduation date.

- Official transcript verifying advanced placement credit, if applicable [official college transcript; AP (Advanced Placement), CLEP (College Level Examination Program), SAT I i (Subject Exam), DANTES, or UTEP departmental examination scores; military transcript]

High School Graduation. The University welcomes applications from individuals who are graduates of high schools recognized by state, private, or regional accrediting agencies and who have the academic preparation necessary to pursue a baccalaureate degree. Admission of students who have never attended another college or university is based on high school academic preparation, final high school rank, and test scores. For early notification of acceptance, an applicant should have verification of test scores, expected date of graduation, and a transcript sent directly from the high school to the Admissions Office. After graduation, a final, official transcript must be submitted.

High School Preparation

High school students who intend to enroll at the University should take a college preparatory curriculum. All new freshmen admitted to UTEP within five years of their graduation from a Texas high school must have completed the Recommended High School Program . The Recommended Program consists of 24 credits, including the 16 credits in the core listed below. Completion of the Recommended High School Program also makes students eligible for consideration for the need-based TEXAS Grant Program. Graduates of non-Texas high schools, private schools, or home schools must meet the 16 credit core requirement, in addition to any other requirements set by their schools. Students whose high school preparation varies from that described will be reviewed on an individual basis.

SUBJECT	CREDITS*
English	4
Mathematics (Algebra I and II and Geometry)	3
Students in Science and Engineering need an additional year of credit in Pre-calculus, Trigonometry, Analytic Geometry, or Elementary Analysis.	1
Natural Science (Biology, Chemistry, Physics, or Principles of Technology)	3
Social Studies (1 credit each of U.S. History, World History, and World Geography; ½ credit each of Economics and U.S. Government)	4
Language Other Than English (2 years of the same language)	2

* One year's work in a subject counts as one credit; a semester's work counts as a half credit. (The Recommended High School Program also includes credits in Health and Physical Education, Fine Arts, Speech, Technology Applications, and Electives.)

Texas high school graduates ranked in the top 10% of their class. In accordance with Texas Education Code 51.803, students are admissible to the University as first-time freshmen if they graduated from a Texas high school in the top 10% of their class and submit all required credentials by the appropriate deadline.

Texas high school graduates ranked in the top 10% of their class and all graduates of out-of-state high schools. Freshmen who rank in the top half of their graduating class or who score a minimum SAT Total of 920 or an ACT Composite of 20 are admissible to UTEP upon submission of the appropriate admission documents. This policy includes admission of graduates of accredited Texas high schools who ranked in the top 25% of their high school class, as described in the Texas Education Code 51.804.

START Program

First-time students who are residents of Texas and who do not meet the requirements for freshman admission are eligible for provisional admission through the University's START Program. START students enroll in the College of Liberal Arts as START majors, must attend Orientation, must be advised in the Academic Advising Center, and must earn a minimum 2.0 grade point average in at least 9 hours of prescribed University courses. Enrollment in the summer SmartSTART Program is recommended.

During the first semester at UTEP, a START student must complete at least 9 semester hours with a minimum grade of "C" or "S" in each course selected from at least two of the following areas: English, mathematics, natural science, foreign language, social sciences, or humanities. A minimum cumulative grade point average of 2.0 must also be maintained. Once these requirements have been met, the student becomes fully admitted to the University and may change majors.

If the student does not clear provisional admission during the first semester but has at least a 1.5 cumulative GPA, an additional START semester will be allowed to clear the conditions of admission. Students who do not satisfy the conditions of their provisional admission have two options if they wish to re-enroll at UTEP:

1. Apply for readmission and reinstatement by the Academic Advising Center after at least 2 calendar years have elapsed since the end of the last period of attendance, or
2. Apply for readmission after attending another college or university where a minimum of 12 semester hours of college level work with grades of "C" or better in each course were earned while a minimum cumulative 2.0 GPA was maintained.

Under extenuating circumstances, an ineligible START student may petition for reinstatement through the Academic Advising Center.

Freshman Testing Requirements

High school instruction in English. The SAT or ACT must be taken by applicants whose high school education was in English and who graduated from high school within the past five years. An SAT total of 920 or higher, with a minimum of 480 on the Verbal, is required. Students taking the ACT must score a minimum Composite of 20 with a minimum of 18 on the English section.

High school instruction in a language other than English. Graduates of high schools outside the United States must demonstrate proficiency in English that will enable them to pursue university-level work successfully. The TOEFL must be taken by applicants whose high school education was not in English; a minimum score of 500 is required on the paper based exam; a score of 173 is required on the computer-based exam.

High school instruction in Spanish. The PAA should be taken by applicants whose high school education was in Spanish and who are not proficient enough in English to pass the TOEFL; a minimum score of 1,000 is required. Applicants admitted on the basis of PAA scores enroll as Programa Interamericano Estudiantil (PIE) majors in the College of Liberal

Arts, must enroll in bilingual Spanish and ESOL. (English for Speakers of Other Languages) courses. Once ESOL 1610 has been completed with a grade of "C" or better, the student may change majors.

Graduates of U.S. high schools-five or more years ago. Freshmen who graduated from U.S. high schools five or more years ago are not required to take an admissions test. TOEFL scores of 500 or higher (173 on the computer-based exam) or PAA scores of 1,000 or higher may be required of applicants whose high school education was in a language other than English.

Students with Non-traditional High School Preparation

Students who did not graduate from high school. Applicants who received a high school equivalency certificate are eligible for admission if they submit an official GED report with an average standard score of 45 or higher. A minimum composite SAT score of 920 or a minimum ACT score of 20 is required of applicants whose high school class would have graduated within the past 5 years and who pass the English version of the GED. All applicants passing the Spanish version of the GED must submit scores of 1,000 or higher on the PAA. Applicants who meet the Spanish GED and PAA requirements are admitted into the bilingual Programa Interamericano Estudiantil (PIE).

Gradutes of unaccredited high schools. Graduates of unaccredited high schools may seek admission through individual review. In addition to the documents required for freshman admission, the applicant should also provide as much supporting information as possible, including an academic profile of the school attended.

Homeschooled students. Homeschooled students may seek admission through individual review. In addition to the documents required for freshman admission, information about the curriculum used and as much supporting information as possible (such as awards, honors or recognitions received) should also be submitted.

Individual Review. First-time applicants who do not meet the requirements for freshman admission described above may seek admission as outlined in the Reviewed Admissions section of this catalog.

Transfer Admission

Transfer Center

The University welcomes applications from qualified individuals who have begun their college work at other accredited institutions of higher education. The Transfer Center located in 101 Academic Services Building, provides an environment that facilitates the admission process for students who plan to transfer to UTEP. Transfer counselors are available to assist prospective students with the admissions application and course transferability information. Additional direction is provided regarding orientation, financial aid, scholarships, testing, and academic advising. The Transfer Center staff may be reached at (915) 747-5777 or by e-mail at transfercenter@utep.edu.

Documents Required: To be considered for admission as a transfer student, an applicant must submit the following:

- A completed application for admission,
- A complete, official transcript from EACH college or university attended,

- Official SAT or ACT scores and an official high school transcript (required of students who graduated from high school within the past 5 years and have not earned 12 hours of transfer credit), and
- Official TOEFL or PAA scores (may be required of students whose high school education was in a language other than English).

Applicants who have completed 12 semester hours. Transfer applicants who have completed a minimum of 12 semester hours of college level work with grades of "C" or better and who have maintained a minimum overall 2.0 ("C") grade point average are eligible for admission to UTEP.

Applicants who have completed fewer than 12 semester hours. Transfer applicants who have earned fewer than 12 semester hours of college level work are eligible for admission to UTEP if they earned grades of "C" or better in all courses taken, maintained a minimum cumulative 2.0 GPA, and meet the requirements for regular freshman admission.

Individual Review. Transfer applicants who do not meet the requirements for transfer admission described above may seek admission as outlined in the Reviewed Admissions section of this catalog.

Information regarding the transferability of credit can be found in the Transfer Policies section of this catalog and at http://academics, utep.edu/DesktopDefault.aspx?tabid=2989.

Reviewed Admissions

Freshmen and transfer applicants who do not meet the requirements for regular admission, for admission into the START Program, or whose individual circumstances are highly unusual with respect to their academic credentials will be reviewed on an individual basis. This review gives primary consideration to the applicant's high school and college record, with regard to the types of courses taken and the grades earned in specific courses. Performance on standardized tests is also considered. Applicants may submit additional material for consideration in evaluating their potential for success at UTEP. Such material can document, for example, the applicant's work experiences and achievements, extracurricular and community activities, strengths and talents that might not be apparent from the academic record, and experiences in surmounting obstacles to their further pursuit of higher education. Letters of recommendation from high school teachers, counselors, supervisors, and activity leaders are also appropriate.

Documents Required:

- A completed application for admission,
- Academic documents available,
- Test Scores, if applicable, and
- A letter of petition, if requested

The decision resulting from the individual review of each application will be one of the following:

1. To approve admission without condition, or
2. To approve conditional admission, which requires students to take preliminary or concurrent course work to strengthen their academic foundation in preparation for the regular UTEP curriculum, or
3. To deny admission.

INTERNATIONAL STUDENT ADMISSION

The University welcomes applications from qualified international students whose academic backgrounds indicate a high probability for successful completion of the desired UTEP academic program. The high school preparation or its equivalent that would qualify the applicant for admission to recognized universities in the home country must be completed.

The University must receive complete, official, or school-certified transcripts of high school and university work sent directly from each institution involved. If the original documents are in the student's possession, copies certified by the school, college, university, or consulate may initially be submitted and the originals presented to the Admissions Office when the student arrives on campus. All transcripts in languages other than English or Spanish must be accompanied by certified English translations.

A transfer applicant attending another institution on a student visa (I-20) will be considered for admission to UTEP if the requirements for transfer admission have been met and if the applicant has completed a minimum of 12 semester hours or its equivalent each long semester while in the United States. Failure to maintain this student status will result in denial of admission to UTEP.

Financial assistance for international students is extremely limited. Each student must furnish a statement of financial support from parents or sponsors stating that they are able to finance the student's education while in this country; this must be done before the student can be admitted. Citizens of Mexico who meet the requirements of the PASE (Programa de Asistencia Estudiantil) Program may qualify to pay Texas resident tuition. For additional information, contact the Office of International Programs at (915) 747-5664.

The admission credentials of all international students will be evaluated on the basis of the admission requirements described below. International students who have attended other colleges or universities should also refer to the Transfer Policies section of this catalog under Transfer Credit for additional information about the transferability of credit.

Documents Required. To be considered for admission as an international student, an applicant must submit the following:

- A completed application for admission, accompanied by $65 admission evaluation fee,
- Satisfactory SAT, ACT, PAA, or TOEFL scores as described below,
- A complete, official high school transcript,
- Complete, official transcripts from EACH college or university attended (transfer applicants),
- An acceptable statement of financial support, and
- An immunization record.

International Freshman Admission

A high school graduate whose academic credentials would grant admission to recognized universities in the home country will be considered for admission to the University if all other admission requirements are met. The academic average in areas related to the desired field of study should be equivalent to a 3.0 on a 4.0 scale.

International Transfer Admission

An applicant from an accredited or nationally recognized college or university who has a minimum overall grade point average of 2.0 or its equivalent and who is eligible to return to all previous institutions attended will be considered for admission to the University if all other admission requirements have been met.

International Student Test Score Requirements

All international students who have not earned a baccalaureate degree from a college or university in the United States must submit entrance examination scores. Applicants who have successfully completed the University's English Language Institute meet the language proficiency requirement for regular admission.

High school instruction in English. The SAT or ACT must be taken by applicants whose high school education was in English or who are proficient in English. An SAT total of 920 or higher, with a minimum of 480 on the Verbal, is required. Students taking the ACT must score a minimum Composite of 20 with a minimum of 18 on the English section. The TOEFL may be submitted by applicants whose high school education was in English but for whom the SAT or ACT is unavailable in the home country.

High school instruction in a language other than English. The TOEFL must be taken by applicants whose high school education was not in English; a minimum score of 500 is required (173 is required on the computer-based exam).

High school instruction in Spanish. The PAA (Prueba de Aptitud Academica) should be taken by applicants whose primary language is Spanish and who are not proficient enough in English to pass the TOEFL; a minimum score of 1,000 is required. Applicants accepted with PAA scores are admitted into the bilingual Programa Interamericano Estudiantil (PIE). Students admitted into the program must enroll in bilingual Spanish and ESOL (English for Speakers of Other Languages) courses. Once ESOL 1610 has been completed with a grade of "C" or better, the student may change majors.

Applicants whose academic background is unusual or is not described above should contact the Admissions Office to determine which test is most appropriate. The Student Assessment and Testing Web site at www.utep.edu/testing contains information about test dates and registration.

SPECIAL ADMISSIONS PROGRAMS

Programa Interamericano Estudiantil (PIE)

The Programa Interamericano Estudiantil is designed for students from Spanish-speaking countries who wish to attend UTEP but who need to improve their English. The Programa Interamericano coordinates first-level content courses taught in Spanish (for example, U.S. History) that students take while enrolling in other courses to increase their English language proficiency. Once ESOL 1610 has been completed with a grade of "C" or better, students may change majors, enroll in any undergraduate degree program offered by the University, and use the courses taken toward their graduation requirements. To further academically assist PIE students, academic advising is required every semester in the Academic Advising Center.

Summer Guest Program

Undergraduates who are pursuing degrees at other colleges and universities during the long semester and who wish to continue their studies at UTEP during the summer only, may be admitted as Summer Guest (transient) Students and may take coures for which they have the prerequisites. Official transcripts are required, and students should indicate which summer courses they wish to take at UTEP for prerequisite evaluation purposes. A Summer Guest Student who wishes to be admitted to the University on a regular basis must apply for admission as a transfer student.

Junior Scholars Program

The Junior Scholars Program is a cooperative effort between The University of Texas at El Paso and El Paso area public and private schools that allows qualified students to enroll in regular University courses while attending high school. Hours earned in this way will count as University credit and some courses may also be approved to apply toward high school graduation requirements. Persons interested in this program should contact the Student Success Programs at (915) 747-5858.

Early Admission Program

The University's Early Admission Program allows students who are enrolled in their last semester of high school and who meet the requirements for regular freshman admission to enroll concurrently in University courses for which they have the appropriate background. Students interested in early admission must submit a letter of recommendation from their high school counselor or principal. Continued high school enrollment and high school graduation are conditions of the Early Admission Program.

Flexible Admission Program (FLEX)

The Flexible Admission Program is designed for first-time, non-traditional students who have had no exposure to a university environment and who do not intend to pursue a degree at the time of their admission. FLEX students may take selected basic undergraduate courses to achieve personal educational objectives or to complete courses in a particular field for professional reasons.

To qualify for the FLEX Program, an individual must be at least 23 years of age, must be a citizen or permanent resident of the United States, have had no previous college or university experience, and must complete the FLEX application for admission. Individuals admitted under this option are subject to the same tuition, fees, and regulations as degree-seeking students.

A maximum of 30 semester hours may be accumulated while in the FLEX Program, and the Director of Admissions must approve any FLEX enrollment beyond 30 hours. A student who changes from FLEX to degree-seeking status is required to meet all the requirements for regular admission to the University. The late application fee does not apply to FLEX applicants, and admission into a non-degree program such as FLEX precludes participation in federally funded financial aid programs.

Academic Fresh Start Program

An applicant for undergraduate admission who is a Texas resident may elect to enter UTEP pursuant to the Academic Fresh Start statute, *Texas Education Code*, §51.931. When the applicant informs the Admissions Office

in writing of the election, the institution will not consider in the admissions decision any academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who elects to apply under this statute may not receive any course credit for courses taken 10 or more years prior to enrollment under the Academic Fresh Start.

The courses excluded for Academic Fresh Start purposes for continuing UTEP students may not be counted toward a degree, may not be counted in the cumulative GPA calculation, may not be used to remove any existing high school deficiencies, and may not be used to meet prerequisite requirements. However, these courses and grades will remain on the student's official UTEP academic transcript, and notation will be made on the student's academic transcript indicating that portion of the record that is to be involved in computing requirements for graduation.

An applicant who has earned a baccalaureate degree under this program statute and applies for admission to a postgraduate or professional program will be evaluated on only the grade point average of the course work completed for that baccalaureate degree and the other criteria stated herein for admission to the postgraduate or professional program.

The Academic Fresh Start Acknowledgement must be returned to the Admissions Office before the Document Due Date of the semester for which the student is applying.

READMISSION

The following students must submit applications for readmission to the University:

- Former UTEP students who last attended the University prior to January 1, 1984
- Junior Scholars who have graduated from high school and wish to continue at UTEP as regular students
- Summer Guest students who want to transfer to UTEP
- Students seeking a second bachelor's degree

Students who have attended other colleges or universities since last attending UTEP must submit complete, official transcripts of that work so it can be evaluated and added to the UTEP academic record.

TRANSFER POLICIES

Evaluation of Transfer Credit

Once a student has been admitted to the University, the Admissions Office prepares a generic evaluation of all undergraduate transfer work completed. Evaluation of course credit by the Admissions Office does not constitute approval of the credit for use toward a degree. The applicability of all courses toward the degree, including those with grades of "D", is determined by the student's academic dean or designate. Each student should have the academic dean's office prepare a degree plan by the time 60 semester hours have been earned. Policies governing the evaluation of transfer credit include the following:

1. Transfer credit is generally awarded for academic courses completed at regionally accredited or nationally recognized institutions, or from institutions that are candidates for regional accreditation if the credit was earned during the candidacy period.

2. In general, only academic courses that are comparable in content to those offered at UTEP are transferable, and transfer credit is treated as if the work had been completed at UTEP. Whenever possible, equivalent course numbers are given; if there are no numerical equivalents, elective (TR) credit is given.
3. Only courses with grade of A, B, C, D, Credit, or Pass are evaluated, and quarter hours are converted to semester hours by multiplying the quarter hours by two-thirds.
4. Developmental and remedial courses, and courses classified below freshman level by the sending institution are not transferable.
5. Junior and community college courses transfer as lower division (freshman or sophomore) credit.
6. Undergraduate courses from senior level institutions transfer at the same level (lower- or upper-division) as they were taken.
7. Graduate-level coursework is not transferable as undergraduate credit.
8. There is no limit placed on the total amount of transfer credit accepted from either junior- or senior level institutions. However, a maximum of 66 semester hours of credit from two-year institutions is applicable toward a degree at UTEP.
9. Grades earned at other institutions are not averaged with grades earned at UTEP. A transfer grade point average is not computed, and only credit hours transfer to the University.
10. Equivalent transfer credit for engineering courses is granted only for work completed at ABET-accredited institutions.
11. Equivalent transfer credit for upper division business courses is granted only for work completed at AACSB-accredited institutions.
12. Completion of the core curriculum, or blocks within the core, at another Texas institution is considered as completion of the core, or appropriate blocks within the core, at UTEP.

Resolution of Transfer Disputes

If the University refuses to accept lower-division credit earned at another Texas public institution of higher education, the student and the sending institution will be given written notice that the transfer credit was denied. If the non-transfer of credit is disputed, the University will attempt to resolve the issue with the student and the sending institution according to applicable rules and guidelines of the Texas Higher Education Coordinating Board. If the dispute is not resolved to the student's or sending institution's satisfaction within 45 days of the initial notificatiion, the University will notify the Coordinating Board of the denial of the transfer credit and the reason for the denial. The Coordinating Board will resolve the dispute and notify the parties of its findings.

Questions concerning the evaluation of transfer credit should be referred to the Admissions Office. UTEP students who have difficulty having UTEP credit accepted at other Texas public institutions should contact the Director of Admissions at UTEP for initiation of the transfer dispute resolution process.

Credit by Examination

The University recognizes academic achievement acquired through means other than performance in organized classes. Course credit may be

earned through successful performance on the College Entrance Examination Board's Advanced Placement (AP) Examinations, College Level Examination Program (CLEP) tests, SAT II Subject Tests, DANTES Subject Examinations, and Departmental Examinations prepared, administered, and scored by the academic departments teaching the course. Official score reports must be sent directly to the Admissions Office from the testing agency. Departmental test results and recommendations, with the approval of the department chair and the academic dean, must be sent directly to the Records Office. Credit earned by examination is recorded on the official UTEP academic record after the student's first enrollment at the University.

Credit by Examination Policies

1. Credit earned by examination will be awarded only to enrolled and formerly enrolled UTEP students who meet credit by examination eligibility requirements as described in (2) below.
2. Credit by examination may be earned for any subject listed below unless the student (a) has earned credit for a higher level course in that subject area, or (b) has enrolled in the course and received a grade other than "W".
3. Credit earned by examination satisfies degree requirements in the same way as credit earned by instruction. There is no limit to the amount of credit that may be earned by examination, and credit by examination can be used to meet prerequisites for higher level courses.
4. Students must submit original test scores to the University to apply for credit by examination. If a student has received credit by examination at another institution, and has completed more advanced work in that subject area with a grade of "C" or higher, credit will be allowed on the basis of the other institution's transcript and official scores are not required.
5. Credit earned by examination does not fulfill the UTEP degree requirement for completion of 30 semester hours in residence.
6. Credit earned by examination is recorded as a grade of "CR" and is not included in the grade point average calculation.
7. All decisions regarding specific tests for credit or placement, cut-off scores, and eligibility to take examinations are made by the appropriate academic department with the concurrence of the academic dean. Changes made in the regulations, tests, and cut-off scores become effective at the end of the semester in which the change is approved.

UTEP is pleased to offer university credit based on successful completion of the nationally recognized and departmental examinations listed below. There may be other departmental examinations approved by individual academic departments and the academic deans that are not listed below. Contact the appropriate academic departments for the availability of such departmental examinations.

Examination	Credit Granting Score	Credit Hours Granted	UTEP Credit	
CEEB Advanced Placement (AP)				
Art History	3	3	ARTH	1300
Studio Art	3 and portfolio review	6	ARTF	1301, 1302
Biology	3	6	BIOL	1305, 1306
Chemistry	3	6	CHEM	1305, 1306
Computer Science A	3	4	CS	1401
Computer Science AB	3	4	CS	1401
Macroeconomics	3	3	ECON	2303
Microeconomics	3	3	ECON	2304
English Language and Composition	3	6	ENGL	1311, 1312
English Literature and Composition	3	6	ENGL	1311, 1312
Environmental Science	3	3	ESCI	1301
French Language	3	12	FREN	1301, 1302, 2301, 2302
French Language	4	15	FREN	1301, 1302, 2301, 2302, 3357
French Language	5	18	FREN	1301, 1302, 2301, 2302, 3355, 3357
French Literature	3	12	FREN	1301, 1302, 2301, 2302
French Literature	4	15	FREN	1301, 1302, 2301, 2302, 3301
French Literature	5	18	FREN	1301, 1302, 2301, 2302, 3301, 3357
German Language	3	12	GERM	1301, 1302, 2301, 2302
Human Geography	3	12	GEOG	1310
European History	3	6	HIST	6 hrs elective
U.S. History	3	6	HIST	1301, 1302
World History	3	6	HIST	2301, 2302
Latin Literature	3	14	LATN	2303
Latin: Vergil	3	14	LATN	2304
Calculus AB	3	4	MATH	1411
Calculus BC	3	7	MATH	1411, 1312
Music Theory	3	3	MUST	1311
Physics B	3	8	PHYS	1403, 1404
Physics C	3	8	PHYS	2420, 2421
Psychology	3	3	PSYC	1301
Comparative Gov't. and Politics	3	3	POLS	3 hrs elective
U.S. Government and Politics	3	3	POLS	2310

Spanish Language	3	12	SPAN	1301, 1302, 2301, 2302
Spanish Language	4	15	SPAN	1301, 1302, 2301, 2302, 3355
Spanish Language	5	18	SPAN	1301, 1302, 2301, 2302, 3355, 3357
Spanish Literature	3	12	SPAN	1301, 1302, 2301, 2302
Spanish Literature	4	15	SPAN	1301, 1302, 2301, 2302, 3357
Spanish Literature	5	18	SPAN	1301, 1302, 2301, 2302, 3357, 3300
Statistics	3	3	STAT	2380

SAT II Subject Tests

Biology	550	3	BIOL	1305
Chemistry	550	3	CHEM	1305
Writing (with essay; through 01/05)	550	3	ENGL	1311
Literature	550	3	ENGL	3 hrs elective
French	550	6	FREN	1301, 1302
French with Listening	550	6	FREN	1301, 1302
German	550	6	GERM	1301, 1302
German with Listening	550	6	GERM	1301, 1302
U.S. History	550	3	HIST	3 hrs elective
World History	550	3	HIST	3 hrs elective
Mathematics Level IIC	550	5	MATH	1508
Physics	550	3	PHYS	3 hrs elective
Spanish	550	6	SPAN	1301, 1302
Spanish with Listening	550	8	SPAN	1301, 1302

CLEP (College Level Examination Program)

Principles of Accounting	50	6	ACCT	2301, 2302
Biology	50	6	BIOL	1305, 1306
Introductory Business Law	50	3	BLAW	3 hrs elective
Chemistry	50	3	CHEM	1305
Info Systems and Computer Appl	50	3	CIS	2320
Principles of Macroeconomics	50	3	ECON	2303
Principles of Microeconomics	50	3	ECON	2304
Intro to Educational Psychology	50	3	EDPC	3 hrs elective
American Literature	50	3	ENGL	3 hrs elective
Analysis and Interpret Literature	50	3	ENGL	3 hrs elective
Composition & Literature	50	3	ENGL	3 hrs elective
English Composition	52	3	ENGL	3 hrs elective
English Literature	50	3	ENGL	3 hrs elective

Freshman College Composition	50 and essay approval	3-6	ENGL	1311

(Students who score 72 or higher may submit a research paper to the Director of First-year Composition for possible ENGL 1312 credit.)

French Language	50	6	FREN	1301, 1302
German Language	50	6	GERM	1301, 1302
Natural Sciences	50	3	GSCI	3 hrs elective
U.S. History I	50	3	HIST	1301
U.S. History II	50	3	HIST	1302
Western Civilization I	50	3	HIST	2301
Western Civilization II	50	3	HIST	2302
Humanities	50	3	HUMN	3 hrs elective
Calculus	50	4	MATH	1411
College Algebra	50	3	MATH	3 hrs elective
College Algebra-Trigonometry	50	3	MATH	3 hrs elective
Trigonometry	50	3	MATH	3 hrs elective
Principles of Management	50	3	MGMT	3303
Principles of Marketing	50	3	MKT	3300
American Government	50	3	POLS	2310
Introductory Psychology	50	3	PSYC	1301
Human Growth & Development	50	3	PSYC	2310
Introductory Sociology	50	3	SOCI	1301
Social Sciences and History	50	3	SOSC	3 hrs elective
Spanish Language	50	6	SPAN	1301, 1302

DANTES Examinations

Prin. of Financial Accounting	47	3	ACCT	2301
General Anthropology	47	3	ANTH	3 hrs elective
Art of the Western World	48	3	ART	1300
Astronomy	48	3	ASTR	3 hrs elective
Business Law II	52	3	BLAW	3301
Introduction to Business	46	3	BUSN	3 hrs elective
Business Mathematics	45	3	MATH	3 hrs elective
Civil War and Reconstruction	47	3	HIST	3 hrs elective
Fund of College Algebra	47	3	MATH	3 hrs elective
Intro to Computing	45	3	CIS	3 hrs elective
Mgmt. Information Systems	46	3	CIS	3 hrs elective
Criminal Justice	49	3	CRIJ	3 hrs elective
Money and Banking	48	3	ECON	3320
Foundations of Education	46	3	EDUC	3 hrs elective
Technical Writing	47	3	ENGL	3357
Environment and Humanity	46	3	ESCI	3 hrs elective
Personal Finance	46	3	FIN	3 hrs elective
Principles of Finance	47	3	FIN	3310
Human/Cultural Geography	48	3	GEOG	1310
Princ Of Physical Geology	50	3	GEOL	1301
Cntmp Western Europe 1946-1990	45	3	HIST	3 hrs elective

History of the Viet Nam War	44	3	HIST	3 hrs elective
Rise and Fall of Soviet Union	45	3	HIST	3 hrs elective
Here's to Your Health	48	3	HSCI	3 hrs elective
Intro to Modern Middle East	47	3	HUMN	3 hrs elective
Human Resource Mgmt.	48	3	MGMT	3311
Organizational Behavior	48	3	MGMT	3304
Principles of Supervision	46	3	MGMT	3 hrs elective
Ethics in America	46	3	PHIL	3 hrs elective
Princ Of Physical Science I	47	3	PSCI	3 hrs elective
Fundamentals of Counseling	45	3	PSYC	3 hrs elective
Life Span Devel Psychology	46	3	PSYC	2310
Intro to World Religions	48	3	RS	1301
Drug and Alcohol Abuse	49	3	SOWK	3 hrs elective
Principles of Statistics	48	3	STAT	2380

UTEP Departmental Examinations

Art	Portfolio review	6	ARTF	1301, 1302
General Chemistry	C	3	CHEM	1305
General Chemistry	C	3	CHEM	1306
College French	35	varies	FREN	Varies*
College German	19	varies	GERM	Varies*
Nutrition	70	3	HSCI	2302
College Spanish	varies	varies	SPAN	Varies*

* If the course into which the student places is completed with a "C" or better, credit is given for all prerequisite courses.

Credit for Non-Traditional Educational Experiences

Credit for non-traditional educational experiences is awarded based on American Council on Education (ACE) recommendations published in the National Guide to Educational Credit for Training Programs and the Guide to the Evaluation of Educational Experiences in the Armed Services when such recommendations parallel courses offered at UTEP. Direct course equivalents are given for freshman and sophomore-level ACE recommendations where applicable. Lower-division or advanced elective credit will be given for other ACE recommendations where appropriate. The student's academic dean or department will determine the applicability of elective credit to the student's degree plan. Official records verifying course completion from the appropriate source or from the ACE Registry of Credit Recommendations must be submitted to the Admissions Office. If an Army/American Council on Education Registry Transcript System (AARTS) transcript is not available for military experience, official copies of the certificates of completion must be submitted.

Financial Aid

Union Building, 202 West
Phone: (915) 747-5204
Fax: (915) 747-5631
financial@utep.edu
www.utep.edu/faidschl

DIRECTOR: Raul H. Lerma

The Office of Student Financial Aid assists qualified students to meet the costs of a college education. No person is excluded from participating on the basis of race, color, national origin, religion, sex, age, veteran status, disability, or sexual orientation. The Office of Student Financial Aid welcomes inquiries by mail or telephone but recommends that applicants visit the office personally so that availability and conditions of programs can be fully explained. Appropriate forms are available from counselors' offices at El Paso area high schools and at the Office of Student Financial Aid.

FINANCIAL AID POLICY

The amount and type of financial assistance will be provided through educational loans, grants, and college work-study in keeping with existing laws and regulations governing financial aid programs. Priority is given to undergraduate students with documented need, who meet academic eligibility criteria, who are enrolled on a full-time basis (12 hours or more), and whose applications are received by the priority date of March 15.

Financial aid awards are based on financial need and academic merit and are operated within existing federal, state, and local regulations and policies. The difference between the cost of attending the University (student budget), the student's/family resources (family and/or student contribution), and estimated financial assistance (includes all non-Title IV Scholarships, grants, loans, or other assistance not received under Title IV, including Veterans Educational Benefits) determines financial need. For a detailed breakdown of direct and indirect educational costs, students should contact the Financial Aid Office for written material.

All financial aid applicants are required to submit a free Application for Federal Student Aid to determine their financial need for the aid period.

Students subject to Selective Service registration will be required to file a statement that the student has registered or is exempt from Selective Service registration in order to be eligible to apply for federal financial aid. In addition, effective January 1, 1998, the Selective Service requirement is also applicable to students applying for financial assistance funded by State revenue – H.B. 2061.

APPLICATION PROCESS

March 15 is the priority date for each school year. All forms and other required documents are due, COMPLETELY PROCESSED, and on file with this office by this date. Students should be aware that computer processing of forms may be in excess of four weeks. Late applications will be considered only on the basis of available funds.

Information obtained from the need analysis is used to determine the student's financial need and the types of awards for which the student qualifies. Awards made through this office fall into two categories: (1) gift aid, which includes grants and (2) self-help funds, which include the College Work Study Program and long-term educational loans. The amount offered as a financial aid award plus the student's resources and those of the parents, if the student is dependent on parents for support, cannot exceed the student's budget.

Once documented need is established, the Office of Student Financial Aid will make every effort to meet this need. The financial aid award will be packaged from a variety of sources and will be based on the financial need and program eligibility of the student and the available funds. In some instances, due to fund limitation, program eligibility requirements, etc., the total award may be less than the documented need.

Transfer students and/or students applying for financial assistance for the spring semester, upon submission of all financial aid documents, will be considered for assistance based on the availability of funds.

For non-need emergency loan fund programs, students should refer to the Tuition and Fees Emergency Loan section.

SATISFACTORY ACADEMIC PROGRESS (SAP) CRITERIA

The University of Texas at El Paso is mandated to establish minimum standards of "satisfactory progress" for students receiving financial assistance. This requirement applies to a students entire academic history whether financial aid was received or not and to all types of aid: grants, loans, and workstudy. The standards for determining progress at The University of Texas at El Paso are comprised of three separate measurements: grade point average, measurable progress, and accumulated hours, as described below.

Grade Point Average

Grade point average (GPA) is the quantitative measurement used for academic work at this University. For financial aid purposes, a student must maintain at least a 2.0 as an undergraduate student, 2.5 for certificate/ endorsement, and 3.0 as a graduate student.

Measurable Progress

Measurable progress is the completion of 75% of attempted hours each academic year. An academic year is defined as two long semesters plus the summer session. Students who repeat courses to improve their GPA should be cautioned that, in some cases, previously earned hours remain on their record but NOT counted toward total hours earned and therefore could affect their measurable progress. In addition, the following are not considered credit hours completed:

F-Failure	N-No Grade	P/F-Pass/Fail	
I-Incomplete	P-In Progress	W-Withdrawal	U-Unsatisfactory

Accumulated Hours

Students receiving aid at The University of Texas at El Paso are allowed 170 attempted undergraduate hours to complete a baccalaureate degree. Master's candidates are allowed 45 attempted and doctoral candidates are allowed 80 attempted hours. Transfer hours, as well as all UTEP hours, are used in determining attempted hours.

Students are responsible for determining in which courses they should enroll in order to comply with this requirement. Students reaching the hour limits and not receiving a degree may be considered for an extension if they have extenuating circumstances that prevented them from the completion of their degree. An appeal process is available through the Office of Student Financial Aid for these cases.

Special Consideration

1. **Non-Degree Seeking** - To be considered for financial aid, a student must be enrolled in a degree granting program.
2. A student enrolled in a program required by a state for teacher certification or recertification at the elementary or secondary level may apply for a Stafford Loan.
3. **Second Degree Seeking** - A student who is enrolled in a program which leads to a second undergraduate or graduate degree is eligible to apply for state grants and a Stafford Loan and is subject to satisfactory progress requirements.
4. **Transfer Students** – A student who begins his/her academic career at another school, and then transfers to UTEP, must have his/her transcript evaluated by this institution's Office of Admissions. For these students, financial aid eligibility is identical to that of UTEP students with comparable credit hours, and all accepted transfer hours will be added to UTEP hours whether or not they are used in the students' current degree plan.
5. **Option II/Academic Fresh Start** - Students who take one of these options should be cautioned that semesters for which they received financial aid will still affect their measurable progress.

Appeal Process

An appeal process is available to any student who has been determined to be ineligible for continued aid that may have had extenuating circumstances that prevented them from making satisfactory progress. If there are grounds for an appeal, an appeal application, along with a degree plan for students who have completed sixty hours or more, and a typed explanation of the circumstances which brought about the ineligibility and what has been done to remedy the situation, are to be submitted to this office.

However, an appeal is not available if the student has already attempted or will be reaching 150% of the total amount of hours required by their degree.

All items are to be presented to a Student Financial Aid Administrator (FAA). Those that are denied by the FAA may be forwarded to the Financial Aid Internal Review (FAIR) Committee at the student's request. The committee meets monthly and makes its recommendations to the Director of the Office of Student Financial Aid who will make the final decision. Any student anticipating the necessity of making an appeal should be prepared to pay his or her own registration fees in the event the appeal is not approved or is approved after the deadline for paying registration fees. Results are available and distributed within a week.

TYPES OF FINANCIAL ASSISTANCE

The following summaries of financial aid are provided for information only and are subject to legislative acts. Complete details of the programs are available through the Office of Student Financial Aid.

Grants

Pell Grant: The Federal Pell Grant Program is a federal student aid program designed to assist students in pursuing their first undergraduate degree. The purpose of the Federal Pell Grant is to provide eligible students with a foundation of aid to help pay the cost of attending school. Students who have applied for the Federal Pell Grant will receive a Student Aid Report (SAR) within six weeks after submitting the application. Undergraduate students must apply each year for the Federal Pell Grant. Students must maintain satisfactory academic progress in order to remain eligible for the program.

Supplemental Educational Opportunity Grant (SEOG): The Federal SEOG is available for students who are enrolled and in good academic standing, making satisfactory academic progress, and demonstrating exceptional financial need. Priority will be given to students enrolling full-time and observing the application submission deadlines.

Leveraging Educational Assistance Partnership Program (LEAPP): This is a state-matched grant to be awarded based on financial need. Applicants may be graduate or undergraduate students and must be enrolled part-time or more. It is necessary to file a separate application for this grant.

Toward EXcellence, Access, and Success Grant Program (TEXAS Grant): This is a state program that provides financial assistance to students with demonstrated financial need and who have graduated from a public or accredited high school in Texas in 1998 or later. Students must also have completed the Recommended High School Curriculum or higher to be considered for this program.

Texas Public Education Grant (TPEG): This grant provides financial assistance to undergraduate and graduate students with financial need who are enrolled at least half-time.

Student Employment (Federal College Work-Study Program): The Federal College Work-Study Program provides jobs for students who have documented financial need and who wish to earn part of their educational expenses while going to school. Jobs cannot exceed fifteen hours per week at both on-campus and off-campus worksites and range from clerical worker to research assistant. The student will be paid at the prevailing minimum wage rate, as prescribed by federal law. Graduate and undergraduate students demonstrating financial need are eligible for participation in this program as long as they are enrolled on a full-time basis.

Loans

The Office of Student Financial Aid offers assistance to students through various long-term loan programs. All recipients of a long-term loan are required to attend Pre-Loan Counseling or Review Session through this office prior to receipt of loan funds. Loan repayment begins at the end of a grace period or after the student ceases being at least a half-time student. If payment is not made after the grace period, the student's loan is in default. The lending agency can then take necessary action to obtain payment to include use of a collection agency or court action. If this type of action is taken, the individual is required to repay the entire loan plus costs of collection.

The long-term educational loans available through the Financial Aid Office have many repayment benefits of which the prospective borrower should be aware. All of these loans defer payment while the borrower is enrolled in a course of study at least half-time. Loans may not be released and remaining loan amounts will be canceled if the borrower drops below half-time. Repayment is made on a monthly basis, over a period not exceeding ten (10) years. Students should refer to the most current Financial

Aid brochure for repayment information. Specific descriptions of the various loan programs are listed below.

Federal Perkins Loan: This loan requires evidence of financial need for eligibility. The interest is 5% and does not accrue while the student is enrolled at least half-time. There are provisions for partial cancellation and deferral for designated public service.

Federal Subsidized Stafford Student Loan: This loan requires evidence of financial need for eligibility and is offered through participating lending institutions. It has a variable interest rate CAPPED at 8.25% and the Federal Government will pay the interest as long as the student is enrolled at least half-time. Under this plan, the student is responsible for selecting a bank or lending institution that participates in the Federal Family Education Loan Program. This loan is available for both undergraduate and graduate students.

Federal Unsubsidized Stafford Student Loan: Unlike the Federal Subsidized Stafford Loan, this loan does not require evidence of financial need for eligibility. In addition, the student is responsible for the interest on the loan while in school.

Tuition and Fees Loans: These loans are available to students who need assistance in meeting the costs of tuition and fees. They are available to resident, non-resident, and international students, and documentation of need as described elsewhere in this section is not required for these loans. The loan must be repaid during the semester in which it is obtained and there is a 5% per annum interest charged. A special application form is available from the Financial Aid Office. Students should refer to the current *Class Schedule* for times and locations.

Emergency Cash Loans: Emergency student loan funds are maintained to assist students who are temporarily in need of funds for books or other expenses. All regularly enrolled students who do not have an outstanding emergency loan are eligible. Loans must be repaid during the semester in which the loan is obtained. There is a $250 limit and a $10 service charge is added to each loan. The web site is www.utep.edu/faidschl/emergency_loans.htm.

Hazlewood Act

Persons who have resided in Texas for at least twelve months prior to the date of registration, and who were citizens of Texas at the time of entry into military service, and who served in the Armed Forces or in certain of the auxiliary services in World War II (except those who were discharged because of being over the age of 38 or because of a personal request), the Korean War, and for more than 180 days during the Cold War, and were honorably discharged therefrom, and who are not eligible to receive benefits provided for veterans by the United States government, are exempt from the payment of tuition and certain required fees, but not from the payment of deposits. To obtain this exemption, the veteran must complete an application through the Financial Aid Office. A certified copy of the veteran's service record (Form DD-214) must be submitted with the application. Students must also complete a Free Application for Federal Student Aid (FAFSA) to determine Pell eligibility and obtain student loan history. Students who have defaulted on a Federal Student Loan or have attempted 150 credit hours under the act are not eligible for this program. The benefits may also be extended to the children of members of the armed forces who are missing in action or whose death is documented by the armed services as being directly caused by illness or injury connected with services in the armed forces, and to orphans of members of the Texas National Guard who were killed while on active duty since January 1, 1946. For more information, students should contact the Financial Aid Office.

UNDERGRADUATE SCHOLARSHIPS

The University of Texas at El Paso has an excellent scholarship program designed to attract and retain bright scholars to the University. These competitive scholarships are awarded for academic merit and are intended to recognize students for their outstanding academic accomplishments and future potential. Academic scholarships are offered for qualified freshmen, college transfers, and currently enrolled undergraduate and graduate UTEP students. The awards are made possible through the generosity of foundations, corporations, community groups, and philanthropic individuals. Scholarships vary in amount and type of award and are given to the most qualified applicants.

Scholarship Requirements

High school students are considered for an award on the basis of their high school cumulative grade average, class rank, SAT and/or ACT scores and, to a lesser degree, extracurricular achievements. Students who are currently enrolled, who have transferred from another university, or who are graduate students at UTEP must have a 3.0 cumulative grade point average and must be enrolled full-time to be considered for a scholarship. Undergraduate students must submit a brief narrative description of a minimum of 250 words stating their educational goals and objectives. All freshmen and transfer students must also submit an academic transcript with their scholarship application. All incoming freshmen who have followed the recommended high school curriculum should make sure that their transcript is noted as such as this could qualify them for additional funding. A large number of scholarships require students to demonstrate financial need as determined by completing the Free Applications for Federal Student Aid (FAFSA).

Priority Deadlines

Complete applications must be received by the Office of Scholarships by the dates below:

November 1	Presidential Excellence and Presidential Awards (Incoming freshmen only)
March 1	All other programs

Late applications are accepted and kept on file. They are considered on the basis of available funds in all categories awarded. A non-awarded or late scholarship application is kept on file as long as the applicant enrolls full-time each Fall and Spring semester and maintains a minimum 3.0 cumulative GPA.

General Scholarships

Many of the general scholarships have specific requirements such as classification, financial need, major, or Texas residency. A student normally receives one academic scholarship; however, a student may also be eligible for outside scholarships, service awards, and/or research awards and may also be eligible for aid from state and federal need-based programs.

Types of Scholarships

Presidential Scholar Programs: The Scholarship Committee will select recipients for these scholarships from a pool of eligible applicants.

Presidential Excellence Scholarships are $12,000 awards over a four-year period ($3,000 per year)

Students must meet at least two of the following first three requirements:

- Top 3% of high school graduating class
- High school grade point average of 96 or better on 100-point scale

- 1220+ SAT or 27+ ACT test scores
- Evidence of exceptional leadership abilities and achievements

Presidential Scholarships are $8,000 awards over a four-year period ($2,000 per year)

Students must meet two of the following three requirements:

- Top 3% of high school graduating class
- High school grade point average of 96 or better on 100-point scale
- 1220+ SAT or 27+ ACT test scores

Academic Scholarships are $4,000 awards over a four-year period ($1,000 per year)

Initial requirements are as follows:

- Top 5% of high school graduating class
- High school grade point average of 93 or better on a 100-point scale
- 1140+ SAT or 25+ ACT test scores

Merit Scholarships are $3,000 awards over a four-year period ($750 per year)

Initial requirements are as follows:

- Top 10% of high school graduating class
- High school grade point average of 90 or better on 100-point scale
- 1030+ SAT or 22+ ACT test scores

Renewal Information

Most scholarships are renewable for a total of eight semesters provided that academic requirements are met. Transfer students and first-time UTEP non-freshmen are awarded for the period specified on the award letter. Renewal letters are mailed in June after spring grades are posted. It is the responsibility of the student to know whether or not he/she has met the necessary requirements.

Service Awards

Scholarships based on participation in a University organization (music groups, athletic teams, etc.) are service awards. To apply for these awards, students should contact the department involved.

Graduate Scholarship Information

The graduate scholarships are merit-based awards available from the UTEP Graduate School, academic departments, and external sources. Graduate students are also encouraged to access databases that are available through the Internet in order to identify opportunities for scholarships and fellowships. For more information, students should contact the Graduate School at (915) 747-5491.

International Scholarships

Students entering the University as international students are encouraged to submit an application to the Office of Scholarships for consideration. For additional scholarship opportunities, students should contact the Office of International Programs.

Non-Resident Waivers

A non-resident who receives a competitive scholarship of $1,000 or more per year qualifies to pay resident tuition for each semester in which the scholarship is awarded. To qualify for the waiver, the student must have competed with Texas residents for the scholarship and the award must be administered by the Office of Scholarships.

Appeal Process

A student not meeting necessary scholarship requirements may appeal to the Scholarship Appeals Committee. They may appeal either because they have failed to maintain the appropriate grade point average or will be deficient in credit hours. A student on a renewable scholarship may also file for an appeal to request an extension for one more semester of scholarship eligibility beyond that originally stipulated in the award letter. All appeals are due in the Office of Scholarships by June 5.

Athletic Aid and Academic Scholarships

There are many scholarships offered in the area of athletics. A student interested in applying should contact the coach of that sport or the athletics director. For information, students should contact the Department of Intercollegiate Athletics, UTEP, El Paso, TX 79968, (915) 747-5347.

For additional information, students can visit the website at http://www.utep.edu/schp or, for outside scholarship information, visit http://www.fastweb.com.

Student Assessment and Testing

210 Education Building
Phone: (915) 747-5009
Fax: (915) 747-8013
Email: testing@utep.edu
Web: www.utep.edu/testing
Test Registration: http://testing@utep.edu

DIRECTOR: Tammie Aragón Campos

The Student Assessment and Testing Office serves as the test administration center for college admissions test programs, assessment and placement test programs, and for several state and national professional, licensure, and certification test programs. The office also provides information about testing services for various state-wide and national testing programs and correspondence test services.

Prospective and current UTEP students can also save time and money by taking advantage of the credit-by-examination programs, which include Advanced Placement (AP), College-Level Examination Programs (CLEP) and DANTES testing programs. The UTEP credit policy for credit-by-examination test programs are provided in the Admissions section of the catalog.

Students with disabilities should inquire about special testing accommodations. Arrangements can be made through the Disabled Student Services Office.

ADMISSIONS TESTS

The Student Assessment and Testing Office administers the ACT (American College Test), TOEFL (Test of English as a Foreign Language), PAA (Prueba de Aptitud Académica) and the MAT (Miller Analogies Test). Scores on these admission tests are only applicable for admission to UTEP. The Admissions Office or the Graduate School will determine admission test requirements. Please see the Admission section of this catalog for information about admission test requirements. Contact the Student Assessment and Testing Office for information on admission test dates and registration procedures.

ACCUPLACER PLACEMENT TESTS (MATH, ENGLISH, READING)

The Student Assessment and Testing Office administers the Accuplacer test battery for two purposes. The Accuplacer tests are used for placement into English, math and reading-intensive courses. The Accuplacer tests are also used to meet the Texas Success Initiative pre-enrollment assessment requirement. Students can meet two test requirements by taking the Accuplacer test battery.

All entering students that do not have college-level credit in math, English, or reading-intensive courses must take Accuplacer tests. Transfer students that have college-level credit in math, English or reading-intensive courses may be exempt from placement test requirements, but must satisfy the pre-enrollment Texas Success Initiative assessment requirement. Students should contact the Admissions Office to determine test requirements.

Placement scores are subject to change. Score reports will provide the most current course placement information. Contact the Student Assessment and Testing Office or the Academic Advising Center for current information.

TEXAS SUCCESS INITIATIVE ASSESSMENT

All entering students must satisfy the Texas Success Initiative assessment requirements before enrolling in classes at UTEP. Students can meet the Texas Success Initiative assessment requirement by taking the Accuplacer test, the Texas Higher Education Assessment test (THEA), the Quick THEA test, or the Computer-Administered THEA. The Office of Admissions will determine if students are exempt from the Texas Success Initiative pre-enrollment assessment requirement.

The Student Assessment and Testing Office administers the QuickTHEA test program. The QuickTHEA test battery can be used to meet teacher preparation THEA test requirements. However, students will also need to complete the Accuplacer test for course placement purposes. Contact the Student Assessment and Testing Office for information on THEA, QuickTHEA test dates and registration procedures.

For additional information about the Texas Success Initiative view the Academic Advising Center Section of the catalog.

SECONDARY LEVEL ENGLISH PROFICIENCY – ESOL PLACEMENT TESTS

The Secondary Level English Proficiency (SLEP) test is required of all students whose secondary education was not in English and who took the TOEFL (and scored <600) or the PAA for admission. Students enrolling in the ESOL Program are expected to complete the appropriate sequence of courses. Students may retake the SLEP only if they have not enrolled in an ESOL course during the 12 months following the test date, or with approval of the ESOL Coordinator. Contact the Student Assessment and Testing Office for information on SLEP test dates and registration procedures.

ACADEMIC DEPARTMENT PLACEMENT TESTS

The Student Assessment and Testing Office administers several course placement tests according to the academic policy set in the various academic departments. Required placement test requirements are determined by the students' academic program requirements. Students should meet with academic advisors to determine what placement tests are required. Contact the Student Assessment and Testing Office for information on placement test dates and registration procedures. Following is a list of the department placement tests administered at the Student Assessment and Testing Office.

Placement Test	Score Range	Course Placement
Computer Information Systems	0-55	CIS 2320
	56-80	Exempt from CIS 2320
French Part A	0-34	FREN 1301
	35-44	FREN 1302
	45-50	Take French Part B test
French Part B	0-41	French 2301
	42-53	French 2302
	54-60	See Lang and Ling Dept
Nutrition	0-69	HSCI 2302
Prerequisite of BIOL 1305	70-100	Exempt from HSCI 2302
Spanish *The Spanish test tracks you as a non-native speaker*.	0-18	SPAN 1301
	19-27	SPAN 1302
	28-35	SPAN 2301
	36-44	SPAN 2302
	45-50	Any course numbered 33xx
Spanish *The Spanish test tracks you as a native speaker.*	0-73	SPAN 2303
	74-83	SPAN 2304
	84-100	Any course numbered 33xx
Speech	0-69	COMM 1301
	70-100	Qualify for oral test

Note: Minimum scores required for course placement are subject to change. For current information, contact the Student Assessment and Testing Office.

Student Success Programs

Honors House
(Behind Academic Services Bldg.)
Phone: (915) 747-5858
honors@utep.edu/honors
www.utep.edu/honors

DIRECTOR: Gary Edens

University Honors Program

The University Honors Program offers students a richer, more intense and challenging academic experience, as well as closer, more personalized contact with faculty and fellow students. Enrollment in Honors classes is limited to 20. Students must apply to participate in the Program. To be eligible, entering freshmen must have graduated in the top 15% of their high school class or have obtained a superior score on the SAT or ACT. A cululative 3.3 grade point average is the criterion for admitting current or transfer students. Members must earn honors credits in a minimum of one course per year and maintain a specified GPA to remain active in the Program. The Program offers the University Honors Degree or the University Honors Certificate. Review the Academic Honors section of this catalog for descriptions of the Honors Degree and Certificate.

Junior Scholars Program

The Junior Scholars Program is a cooperative effort between The University of Texas at El Paso and El Paso area public and private schools that allows qualified students to enroll in regular University courses while attending high school. Hours earned in this way will count as University credit and some courses may also be approved to apply toward high school graduation requirements. Program requirements for the Junior Scholars Program are as follows:

- currently in grades 9-12
- minimum SAT total of 1030 or ACT Composite of 22
- completion of university required examinations

National Student Exchange

UTEP is a member of the National Student Exchange (NSE) Program that is a consortium of more than 170 colleges and universities. The program offers students the opportunity to broaden their academic and cultural awareness in different geographic settings across the United States and its territories and Canada. Students are able to enroll at a host university for up to one academic year and pay in-state tuition rates.

To qualify, a student must be full-time at the time of the application and the semester prior to the exchange, have a cumulative grade point average (GPA) of 2.5, and be a sophomore or junior at the time of the exchange. For additional information, log on to htte://www.nse.org.

New Student Orientation

Success in any college is determined not only by the quality of your academic work but also how quickly you make connections and fit into your new home on campus. UTEP's New Student Orientation program is designed to help you start making connections. During orientation you will meet with an academic advisor, register for classes, and receive information on financial aid and student services. Sessions are offered throughout the year at no cost to participants.

Student Leadership Institute

UTEP provides abundant opportunities for you to develop leadership skills. The University College coordinates the Student Leadership Institute, which is a unique yearlong experience that prepares students for employment in a variety of on-campus positions. Training topics include time management, communication skills, leadership theory, UTEP history, risk-taking, and group management. The Student Leadership Institute runs from September through April.

Visitors and Information Center

The Visitors and Information Center provides information to visitors to our campus about UTEP's history, events, and meetings as well as general information concerning the University. The Center offers guided tours for elementary and middle school students and all other visitors to the University; brochures and pamphlets; maps for self-guided walking tours; and campus directions. Prospective students and their families, current students, and all individuals interested in UTEP's rich history and present activities are welcome.

Academic Advising Center

Academic Services Building, Second Floor
Main Phone: (915) 747-5290
Fax: (915) 747-5297
advising@utep.edu
www.utep.edu/advising/

DIRECTOR: Pat Caro

The Academic Advising Center assists students in developing class schedules and curricular plans in relation to career and life goals that express their interests, abilities, and values. This advising model helps students take into account their transitions, new roles, and new responsibilities in relation to both short- and long-term decision-making about curricular and co-curricular choices.

The Center provides advising services to:

- General Studies (undecided majors) students
- TSI-required students
- START (provisionally admitted) students
- PIE (Programa Interamericano Estudiantil) students

- Pre-Nursing and Pre PT students
- UT Austin Coordinated Admission Program students
- Guest students
- Transfer students
- Arbitur students

TEXAS SUCCESS INITIATIVE (TSI)

The Academic Advising Center advises students every semester who have not successfully completed the Texas Success Initiative (TSI). The purpose of the Texas Success Initiative is to ensure that students entering a Texas public college or university are prepared for college-level math, writing, and reading-intensive courses. Entering students must take the Texas Higher Education Assessment (THEA) or an approved alternative test prior to enrolling in any college courses at a Texas public college or university. The Texas Success Initiative replaces the Texas Academic Skills Program (TASP).

The following students are exempt from the Texas Success Initiative:

1. Students who make an ACT composite score of 23 with a minimum of 19 on both the English and mathematics sections within the last five years
2. Students who score 1070 on the SAT with a minimum of 500 on both the English and math sections within the last five years.
3. Students who score 1770 on the TAAS test, with a Texas Learning Index (TLI) of 86 on the math test and 89 on the reading test, within the last three years.
4. Students who have associate's or baccalaureate's degrees.
5. Students enrolled certificate programs of one year or less at public junior colleges, public technical institutes, or public state colleges.
6. Students on active duty as members of the armed forces, the Texas National Guard, or reserve forces for at least three years before enrolling.
7. Students honorably discharged, retired, or released from active duty as members of the armed forces, Texas National Guard, or reserve forces after August 1, 1990.
8. Students who are not seeking a degree or a certificate.

To satisfy Texas Success Initiative requirements, entering students may take Accuplacer, which also serves as a placement test for math and English courses. Students who don't pass one or more sections of the test will be advised by the Academic Advising Center into an appropriate course of remediation according to UTEP's Developmental Education Accountability Plan.

Students complete the Texas Success Initiative when they have passed the reading, writing, and math sections of THEA or Accuplacer, or when they have received a "C" or better in a college-level writing, math, and reading-intensive course. Reading-intensive courses include HIST 1301 and 1302, POLS 2310 and 2311, SOCI 1301, and PSYC 1301.

Education majors must take and pass all sections of THEA, not Accuplacer, for acceptance into the teacher certification program.

Students with disabilities should inquire about special testing accommodations.

For further information about the Texas Success Initiative, students should contact the Academic Advising Center in the Academic Services Building Room 201 or call (915) 747-5290.

Registration and Records

103 Academic Services Building
Phone: (915) 747-5544
Fax: (915) 747-8764
registrar@utep.edu
www.utep.edu/register

REGISTRAR: Miguel Sifuentes

The Registrar's Office houses several functions: 1) **Scheduling** coordinates faculty and classroom assignments; 2) the **Records Office** is responsible for the maintenance of student records and all registration transactions. This office also processes enrollment certifications, transcript requests, graduation applications, and diplomas; and 3) the **Veterans Affairs Office** serves the needs of students who are veterans or dependents of veterans. This office is also responsible for creating and maintaining records that support certification of a student's status with the Veterans Administration. The office is located in the Academic Services Building, Room 107. The office telephone number is (915) 747-5342; the office e-mail is veterans@utep.edu.

Registration is a process every student must successfully complete each semester. Although every effort is made to advise students academically, final responsibility for registration rests with the student. Students can attend only those classes for which they are officially enrolled. A student is not enrolled in a course and will not receive a grade for it unless the proper fees are paid by the deadlines published in the *Class Schedule* or unless arrangements have been made for deferral of payment with the Student Business Services Office. After registration, class enrollments can be verified with the Records Office.

LATE REGISTRATION

Any student who, with proper permission, registers after the appointed days for regular registration will be required to pay a special charge of $20.00 for the late telephone and Web registration process, $30.00 for in-person late registration, and $50.00 on or after the first class day. A new student will have the late registration fee waived as long as registration is made prior to the first official school day for the term. Late registrants are subject to the same regulations and course requirements as students who enroll on time. Each class missed because of late registration will be counted as an absence, and class or laboratory work missed will be counted as a zero unless the instructor grants permission to make up the work.

AUDIT REGISTRATION

Courses may be audited under the following provisions:

1. No grades will be provided, no credit will be awarded, and no records will be maintained for audited courses. The extent of class participation is at the discretion of the instructor. Credit by examination for audited courses will not be permitted unless tuition and all appropriate fees are paid.

2. The following courses are not available for audit: clinical, laboratory, studio activity, individual instruction, private lessons, or courses specified in a student's degree plan.
3. Audit-only students will be afforded use of the Library through the purchase of a community user card and access to campus parking through the purchase of a parking decal, but they may not enjoy other student privileges such as ID's, tickets to events, and the health service.
4. Audit registration must be filed after classes have begun and prior to the twelfth day of class during the long semesters, and, by the fourth day of class during the summer session. Students should report to the Records Office counter to obtain an Audit Registration form.
5. The Audit Registration form must then be signed by the instructor teaching the course and the department chair. Students then should bring the completed form to the Student Business Services Office, located in the Academic Services Building, for payment. Students should leave the "paid" Audit Registration form with the Cashier. The Audit Registration form will be filed with the Records Office. A copy of the audit form, stamped "paid," will be forwarded to the instructor.
6. Audit Fees:
   a. $5.00 per course for students concurrently enrolled at UTEP for other credit courses
   b. $25.00 per course for students not concurrently enrolled at UTEP for other credit courses
   c. No charge for persons over 65 years of age

The audit fees are charged to defray the expense of administering the audit and are non-refundable.

STUDENT-INITIATED REGISTRATION CHANGES

The student should refer to the Academic Calendar at the beginning of this catalog or in the *Class Schedule* to identify the period during which adds, drops, withdrawals, and pass/fail registration may be accomplished. All student changes in registration must follow the procedures outlined in the *Class Schedule*.

Withdrawal from Courses

If a student withdraws from a course prior to the official census date of any semester, the course will be deleted from the student's record. Withdrawal from a course initiated by a student after the census date but prior to the course drop deadline, as outlined in each term's *Class Schedule*, will result in a grade of "W". After the course drop deadline, withdrawal from a course initiated by a student will result in a grade of "F". A grade of "W" can be assigned after the course drop deadline only under exceptional circumstances and only with the approval of the instructor and the academic dean for the course. The student must petition for the "W" grade in writing and provide the necessary supporting documentation.

It is the student's responsibility to officially drop any course that he or she no longer wishes to attend. Failure to do so may result in a grade of "F" on the student's academic record. Students dropping all classes are withdrawing from the University and should consult the below paragraphs titled Withdrawal from the University.

At the discretion of the instructor, a student may be dropped from a course because of excessive absences or lack of effort with a grade of "W" before the course drop deadline and with a grade of "F" after the course drop deadline. A copy of the Faculty Drop Form will be mailed to the student by the Records Office. A grade of "F" received due to the disciplinary sanction imposed by the University overrides a grade of "W" received through a student-initiated withdrawal.

Withdrawal from the University

Withdrawal from the University must be done through the Records Office. If the withdrawal is completed prior to the deadline for student-initiated course drops, the student will receive "W"s. If the withdrawal is completed after that deadline, instructors will determine grades of "W" or "F."

STUDENT EDUCATIONAL RECORDS

Family Educational Rights and Privacy Act (FERPA)

The *Family Educational Rights and Privacy Act (FERPA)*, 20 U.S.C. §1232g and the *Texas Public Information Act*, *Texas Government Code,* § 552.001 et seq. are respectively a federal and state law that provide students with the following rights with respect to their student educational records:

- to inspect and review the student's education records;
- to consent to disclosure of the student's education records to third parties, except to the extent that FERPA authorizes disclosure without consent;
- to request amendment of the student's education records to ensure that they are not inaccurate or misleading;
- to be notified of the student's privacy rights under FERPA;
- to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA.

The University of Texas System and The University of Texas at El Paso has implemented a student records policy pursuant to these laws.

Annual Notification

Students in attendance at The University of Texas at El Paso will be notified annually of their rights pursuant to FERPA. This notice will be provided by The University of Texas at El Paso in a manner reasonably likely to inform students of their rights and the procedures for exercising their rights.

Definitions

"Student" means an individual who is or who has been in attendance at a University of Texas at El Paso. It does not include persons who have been admitted but did not attend The University of Texas at El Paso. For the purposes of this policy "attendance" includes attendance in person or by correspondence (including electronic correspondence) and the period during which a person is working under a work-study program.

"Education Records" include records directly related to a student that are maintained by the University. Education records do not include:

- Records of instructional, administrative, and educational personnel that are in the sole possession of the maker (i.e. file notes of conversations),

are used only as a personal memory aid, and are not accessible or revealed to any individual except a temporary substitute;

- Records of the University campus police;
- Student medical and counseling records created, maintained, and used only in connection with provision of medical treatment or counseling to the student, that are not disclosed to anyone other than the individuals providing the treatment. (While a student may not inspect his or her medical records, these records may be reviewed by a physician of the student's choice);
- Employment records unrelated to the student's status as a student; or
- Alumni records.

"Directory Information" means information in a student's education record that would not generally be considered harmful or an invasion of privacy if disclosed. The University of Texas at El Paso's policies will designate the following minimum information as directory information: student's name; local and permanent address; email address; telephone number; date and place of birth; field of study; dates of attendance; enrollment status; student classification; degrees, certificates and awards (including scholarships) received; photographs; participation in officially recognized activities and sports; weight and height of members of athletic teams; and the most recent previous educational agency or institution attended.

"University official with a legitimate educational interest" is a person employed by the University in an administrative, supervisory, academic, or support staff position (including law enforcement unit and health staff); a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); a member of Board of Trustees; or a person assisting another university official in performing his or her tasks; who needs to review an education record in order to fulfill his or her professional responsibility.

Disclosure of Education Records

Disclosure without Prior Consent of the Student

The University will not disclose personally identifiable information from a student's education records without prior written consent of the student, except as authorized by FERPA. FERPA's authorizations for release without consent include the following:

Directory Information. Directory information (as defined above) may appear in public documents and may otherwise be disclosed without student consent unless a student submits a written request to the registrar during the first twelve (12) days of class of a fall or spring semester, the first four (4) class days of a summer semester, to withhold such information from disclosure. Requests to withhold directory information will be honored by the University for only the current enrollment period; therefore, a request to withhold Directory Information must be filed each semester or term in the Office of the **Registrar**.

University Officials. University officials with legitimate educational interests in the student's education records are allowed access to student education records. Inter-institutional disclosures may be made between institutions that administer or participate in joint programs or activities, in accordance with legitimate educational interest criteria. For example, if a student is concurrently enrolled in one component of the University of Texas and in another institution, or in two components of the University, or receives services from one component of the University and from another institution, or from two components of the University (or UT System), information from the student records of that

individual may be disclosed by one University component to the other, or by the University component to the other institution, without obtaining the written consent of the student in accordance with legitimate educational interest criteria. This provision includes institutions participating in UT TeleCampus Programs.

Other Institutions. The University may release a student's education records to officials of other educational institutions in which that student seeks or intends to enroll or is enrolled.

Audit or Evaluation of Federal or State education programs. Authorized representatives of the Comptroller General of the United States, the Attorney General of the United States, the Secretary of Education and state and local educational authorities may have access to student records in connection with the audit and evaluation of Federal or State supported education programs, or in connection with the enforcement of Federal law which relates to such programs.

Financial Aid. The University may release a student's education records to persons or organizations in connection with that student's application for, or receipt of, financial aid, but only to the extent necessary for such purposes as determining eligibility, amount, conditions, and enforcement of terms or conditions of such financial aid.

State and local officials pursuant to statute concerning juvenile justice. The University may release education records to state and local officials that are authorized by statute to access student education records to efficiently serve the student.

Organizations conducting studies. To organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction, if such studies are conducted in a manner which will not permit the personal identification of students and/or their parents by individuals other than representatives of the organization, and the information will be destroyed when no longer needed for the purposes for which the study was conducted. The term "organizations" includes, but is not limited to, Federal, State, and local agencies, and independent organizations.

Accrediting Organizations. To accrediting organizations in order to carry out their accrediting functions.

Parents of Dependents. Parents of a student who is a dependent for federal tax purposes, as defined by Section 152 of the Internal Revenue Code of 1954, may have access to that student's education records without prior consent of the student. Parents may demonstrate the tax dependency of a student only by submitting to the University a copy of their most recently filed federal income tax return. Alternatively, a student may demonstrate tax dependency, and thus allow parental access to the student's records without prior consent of the student, by submitting to the University a signed statement of his or her tax dependency. If a dependent student's parents are divorced, both parents may have access to the student's records, so long as at least one parent claims the student as a dependent.

Judicial order or subpoena. Information concerning a student shall be released in response to a judicial order or lawfully issued subpoena. The University will make reasonable efforts to notify the student of an order or subpoena before complying with it, except that the University shall not notify a student of a subpoena if it is from a federal grand jury or is for law enforcement purposes, and it provides that the University shall not disclose to any person the existence or contents of the subpoena or any information

furnished in response to the subpoena. Education records may be disclosed to the U. S. Attorney General or his or her designee in response to an *ex parte* order concerning an authorized investigation or prosecution of domestic or international terrorism, without prior notice to the student.

Health and Safety. The University may disclose student information to persons in an emergency in order to protect the health and safety of the student or others in the University community.

Disciplinary Hearing Results

Disclosure to Victims: The University may disclose to an alleged victim of any crime of violence (as that term is defined in Chapter 1, Section 16 of Title 18, United States Code), or a non-forcible sex offense, the final results of any disciplinary proceeding conducted by the University against the alleged perpetrator of such crime or offense with respect to such crime or offense, regardless of whether the alleged perpetrator was found responsible for violating the University's rules or policies with respect to such crime or offense.

Disclosure to Third Parties: The University may disclose the final results of any disciplinary proceeding against a student who is an alleged perpetrator of any crime of violence or non-forcible sex offense (as those terms are defined in 34 C.F.R. 99.39), if the student is found responsible on or after October 7, 1998, for violating the University's rules or policies with respect to such crime or offense. Such disclosure shall include only the name of the student, the violation committed, and any sanction imposed by the University on that student. Such disclosure may include the name of any other student, such as a victim or witness, only with the written consent of that other student.

Alcohol and Drug Violations. The University may disclose to a parent or legal guardian of a student, information regarding any violation of any Federal, State, or local law, or of any rule or policy of the University, governing the use or possession of alcohol or a controlled substance, regardless of whether that information is contained in the student's education records, if the student is under the age of 21 at the time of disclosure to the parent, and the University determines that the student is responsible for a disciplinary violation with respect to such use or possession.

Disclosure to the Student

The student has the right, on request to the appropriate University official, to review all materials that are in the student's education records, except:

- Financial information submitted by the student's parents;
- Confidential letters and recommendations associated with admissions, employment or job placement, or honors, to which the student has waived rights of inspection and review (the University is not required to permit students to inspect and review confidential letters and recommendations placed in their files prior to January l, 1975, provided those letters were collected under established policies of confidentiality and were used only for the purposes for which they were collected);
- Education records containing information about more than one student, in which case the University will permit access only to that part of the record that pertains to the inquiring student.

Student education records are maintained at several locations on campus. Principal locations are shown below. Requests for access to specific

student records should be made to the university office or agency concerned with the particular record. The Vice President for Finance and Administration at The University of Texas at El Paso has been designated as the official custodians of records. Requests for assistance in locating individual student records should be directed in writing to the particular custodian of records. Records covered by FERPA will be made available, within forty-five days of the request.

A list of education records and those officials responsible for those records shall be maintained at the Office of the Vice President for Finance and Administration. This list includes:

1. Academic Records
   - Admissions Office: Director
   - Graduate School: Dean
   - Registration and Records: Registrar
   - College, Division, Department, and Faculty Offices
2. Student Services Records
   - University Counseling Services: Director
   - Student Activities Center: Director
   - Student Services: Dean of Student
3. Financial Records
   - Business Office: Vice President for Financial and Administration
   - Financial Aid Office: Director
   - Scholarships Office: Director

Students may have copies of their educational records and this policy. These copies will be made at the student's expense at rates authorized in the Texas Public Information Act except that official transcripts will be $ 5.00. Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at the University.

Disclosure with Prior Consent of the Student

With the student's prior consent, the University will release personally identifiable student information in education records or allow access to those records. Such consent must be written, signed and dated, and must specify the records to be disclosed, the party to whom the records are to be disclosed, and the purpose of the disclosure.

*Research papers and thesis authorized by the student will be available to interested members of the public.

Record of Disclosures

The University will maintain with the student's education records a record for each disclosure request and each disclosure, except disclosures:

- to the student himself or herself;
- pursuant to the written consent of the student;
- to University officials with legitimate educational interests;
- pursuant to a law enforcement subpoena and the issuing court or other issuing agency has ordered that the existence or the contents of

the subpoena or the information furnished in response to the subpoena not be disclosed or the order is concerning an authorized investigation or prosecution of domestic or international terrorism; or

- of directory information.

Requests to Amend Records

A student who believes that his or her education records are inaccurate or misleading, or that the records violate his or her privacy rights, may informally discuss amendment of the record with the university office or agency concerned with the particular record. If agreement is reached with respect to the student's request, the appropriate records will be amended. [Note: The substantive judgment of a faculty member about a student's work, expressed in grades and/or evaluations, is not within the purview of this right to seek amendment of education records.] If the record is not amended pursuant to the student's request, the university will inform the student of its decision and of the student's right to request a formal hearing.

The request must be made in writing to the Vice President for Finance and Administration at The University of Texas at El Paso who within a reasonable period of time after receiving such request, will inform the student of the date, place, and time of the hearing. A student may present evidence relevant to the issues raised and may be assisted or represented at the hearing by one or more persons of the student's choice, including attorneys, at the student's expense. The hearing officer that will adjudicate such challenges will be appointed by the president. The decision of the hearing officer will be final, will be based solely on the evidence presented at the hearing, and will consist of a written statement summarizing the evidence and stating the reasons for the decision, and will be delivered to all parties concerned. If the decision is in favor of the student, the education records will be corrected or amended in accordance with the decision of the hearing officer. If the decision is unsatisfactory to the student, the student may place with the education records a statement commenting on the information in the records or a statement setting forth any reasons for disagreeing with the decisions of the hearing officer, or both. The statement will be placed in the education records, maintained as part of the student's records, and released whenever the records in question are disclosed. Students who believe that the adjudications of their challenges were unfair or not is keeping with the provisions of the Act may request in writing, assistance from the President of the institution.

Disclosure for Directory Information to The Texas Higher Education Coordinating Board (the State of Texas educational governing entity)

FERPA allows, with the student's consent, for the Texas Higher Education Coordinating Board to disclose the number of semester credit hours that the student has taken at The University of Texas at El Paso to other institutions of higher education for the purpose of confirming these hours for transfer and related issues. Students may have all Directory information withheld by notifying the Records Office in writing each semester during the first 12 days of class of a long semester, or the first day of the minimester, or the first four class days of a summer session. Requests to withhold Directory Information will be honored by the University for only the current enrollment period; therefore, a request to withhold Directory Information to THECB must be filed each semester or session in the Records Office.

Collection of Personal Information

With few exceptions, you are entitled on your request to be informed about the information the University of Texas at El Paso collects about you. Under Sections 552.021 and 552.023 of the Texas Government Code, you are entitled to receive and review the information. Under Section 559.004 of the Texas Government Code, you are entitled to have the University of Texas at El Paso correct information about you that is held by us and that is incorrect, in accordance with the procedures set forth in the University of Texas System Business Procedures Memorandum 32. The information that the University of Texas at El Paso collects will be retained and maintained as required by Texas records retention laws (Section 441.180 et seq. of The Texas Government Code) and rules. Different types of information are kept for different periods of time.

Tutoring and Learning Center (TLC)

300 Library Building
Phone: (915) 747-5366
tlc@utep.edu
www.utep.edu/tlc

DIRECTOR: Kathy Stein

Academic success for UTEP students is the goal of the Tutoring and Learning Center (TLC). Services made available by the TLC are focused on helping students successfully meet the high academic standards of UTEP's regular college courses, helping students prepare for and pass various standardized exams, and helping students make up learning deficiencies in course content to prepare themselves for regular college courses. Most services are free to enrolled, eligible UTEP students.

The TLC offers the following services:

Free Peer Tutoring at posted hours in most content areas on a walk-in basis, but especially math, writing, and business and accounting courses. Appointment tutoring is available in foreign languages, and science.

Computer Assisted Instruction in math, reading, writing, standardized test preparation, and other areas is open to all students on a walk-in basis.

Individualized Assistance with learning and study problems is available to all students in the Learning Assistance Lab on a walk-in or appointment basis.

Collaborative Small Group Learning Activities facilitated by trained Peer Tutors provide special topic classes, content study groups, skills workshops, focused labs, language conversation classes, content reviews, and test preparation. Scheduled activities are open to all students. Others may be implemented on demand, resources permitting.

Facilities for Students with Disabilities: All rooms are accessible by wheelchair, and special equipment is available for mobility, vision, and hearing impaired students. Appointment tutoring is available for learning disabled students in any tutoring area, upon referral from the Disabled Student Services Office.

Non-Credit Courses: The TLC offers non-credit courses in college study skills and Supplemental Instruction. Students are placed in these courses by the Academic Advising Center. The following courses are available:

Tutoring and Learning Center (TLC)

0009 Supplemental Instruction (0-0-3)
Provides specialized supplemental instruction to students as part of a START learning community. *Prerequisite*: Department approval.

0101 College Study Skills (0-0-3)
Provides help with goal setting, time management, note-taking, and other basic techniques needed for academic success for START students. *Prerequisite*: Department approval.

0102 Lab for Extended START Students (0-0-3)
Provides Extended START students instruction in study skills. *Prerequisite*: Department approval.

Life Management and Personal Development: A variety of instructional and motivational audio and video tapes are available to help students in such areas as stress management, time management, test anxiety skills, and attitudes for being successful, etc. These are available on a walk-in basis in the Learning Assistance Lab in the TLC.

Graduate Student Services: In addition to the services listed above, the Center offers the following services especially for graduate students:

Standardized Test Preparation Workshops for the GRE and GMAT are made available each long semester. Twelve hours of instruction are provided that include test-taking strategies plus work on the specific sections of the exams. UTEP students may sign up in the TLC. Non-enrolled students must sign up in the Department of Continuing Education for a fee.

Computer Assisted Instruction programs for the GRE and the GMAT are available for individual use in the Center. UTEP students may enroll at the Center.

A Thesis Writing Workshop is offered each long semester. This workshop provides four hours of instruction and is free to UTEP students who may sign up in the TLC. Non-enrolled students must sign up in the Department of Continuing Education and pay a fee.

Support for Faculty: Faculty will find the TLC staff eager to assist them in any way possible. The TLC staff encourages class tours of their Center, presentations to classes about their services, and adjunct study groups. The TLC will consider any reasonable request from a faculty member for assistance or service that can be provided within the limits of their resources and expertise. The TLC will gladly arrange a meeting between faculty and the tutors if there are special procedures or information the tutors should know when working with their students. The TLC depends on faculty referrals for tutors to ensure the quality of tutoring assistance that will meet their academic standards, and welcomes advice and suggestions from the faculty that will help the TLC improve their services to students.

Student Support Services Program (SSSP)

300 Library Building
(915) 747-5349/8602
www.sssp.utep.edu

DIRECTOR: Gladys Shaw

This federally funded program provides intensive academic and personal support for first-generation, economically disadvantaged students. Students may apply for the program in Room 300 of the UTEP Library. The two following courses are open to students in the program.

0021 SSSP Study Skills
For students in the Student Support Services Program only. Course authorization required for enrollment.

0023 SSSP College Reading and Critical Thinking
For students in the Student Support Services Program only. Course authorization required for enrollment.

Developmental Education Program

205 Education Building
(915) 747-5693

DIRECTORS: Cheryl Baker Heller, English
David Harvey, Math

The Developmental Education Program prepares students for college-level work in reading, writing, and mathematics. The program consists of ENGL 0310, 0311, 0111; and MATH 0310, 0311.

You will find detailed information about each of the courses in the English Department or Mathematics Department section of this catalog.

FINANCIAL INFORMATION

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Tuition and Fees

THE UNIVERSITY OF TEXAS AT EL PASO
Summary of Tuition and Fee Charges**
2004-2005

Name of Charge	Classification	Residency	Amount	Notes
Tuition:				
	Undergraduate or Graduates in Liberal Arts, Science, or Education	Resident	$126/sch	Tuition revenue is used to fund general university instructional and operating expenses.
		Non-Resident	$384/sch	Tuition revenue is used to fund general university instructional and operating expenses.
	Graduate in Liberal Arts or Education	Resident	$140/sch	Tuition revenue is used to fund general university instructional and operating expenses.
		Non-Resident	$398/sch	Tuition revenue is used to fund general university instructional and operating expenses.
	Graduate in Engineering, or Science, Nursing, Science, MASE & ESE Majors	Resident	$154/sch	Tuition revenue is used to fund general university instructional and operating expenses.
		Non-resident	$412/sch	Tuition revenue is used to fund general university instructional and operating expenses.
	Graduate in Business or Nursing	Resident	$164/sch	Tuition revenue is used to fund general university instructional and operating expenses.
		Non-Resident	$422/sch	Tuition revenue is used to fund general university instructional and operating expenses.

Name of Charge	Classification	Residency	Amount	Notes
Required Fees:				
Student Services Fee	All Students	All Students	$13.50/ sch up to a maximum of $162	A compulsory fee to fund student-related services such as intramural activities, student government, disabled student organizations, career services, cheerleaders, student publications, health services, intercollegiate athletics, others.
Library Fee	Undergraduate Students Graduate Students	All Students	$4/sch $5/sch	A fee to purchase library materials, to replace maintain and acquire new equipment, and to provide technical support for personal computers and terminals.
Student Union Fee	All Students	All Students	$30/ semester	Fee may be used for finance, construction, operation, and maintenance of a student union building and its programs.
International Education Fee	All Students	All Students	$3/ semester	For funding an international education financial aid fund for University students.
Recreation Fee	All Students	All Students	$12/ semester	Fee for financing, constructing, maintaining, and operating new and existing recreational facilities and programs.
Registration Fee	All Students	All Students	$5/ semester	To defray the costs associated with technology services for telephone registration.

Name of Charge	Classification	Residency	Amount	Notes
Incidental Fees:				
Technology Fee	All Students	All Students	$10/sch, up to a maximum of $150	An incidental fee that provides for development of campus computers and network facilities for students.
Health Center Fee	All Students	All Students	$12/ semester	Fee to provide support and medical services to the student population.
Variety (See Catalog	All Students	All Students	Variable	For specific services such as late registration, library fines, add/drop fees, bad check charges, application processing fees, and others as approved by the governing board.
Laboratory Fees:				
Variety (See Catalog	All Students (depending on courses taken	All Students	Variable	Mandatory charges for certain laboratory courses; may not be less than $2/semester nor more than $30/semester and must not exceed the cost of actual materials and supplies used by a student.
Supplemental Fees:				
Variety (See Catalog	All Students (depending on courses taken	All Students	$10-$50	Charges in addition to regular tuition for certain course-related materials and/or for individual instruction.
Voluntary Fees:				
Variety (See Catalog)	Students desiring the specific service	All Students	Variable	May include such items as parking fees, orientation fees, and installment tuition fees.

****Tuition and fees are subject to change due to legislative and/or institution action and become effective when enacted.**

THE UNIVERSITY OF TEXAS AT EL PASO
Summary of Tuition and Fee Charges
2004-2005 Academic Year

Name of Charge	Undergraduate in Business, Education, Liberal Arts, or Science 12 SCH	Undergraduate in Engineering or Nursing 12 SCH	Graduate in Education or Liberal Arts 9 SCH	Graduate in Business, Engineering, Nursing, or Science 9 SCH
Resident tuition [1**]	1,104.00	1,104.00	828.00	1,080.00
Add: Required Fees [2]				
Student Services Fee	162.00	162.00	121.50	121.50
Library Fee	36.00	36.00	36.00	36.00
Student Union Fee	30.00	30.00	30.00	30.00
Registration Fee	5.00	5.00	5.00	5.00
International Education Fee	2.00	2.00	2.00	2.00
Recreational Fee	12.00	12.00	12.00	12.00
Technology Fee	120.00	120.00	90.00	90.00
Health Center Fee	12.00	12.00	12.00	12.00
Major Fee	0.00	30.00	0.00	30.00
Subtotal-Required Fees	1,483.00	1,513.00	1,136.50	1,418.50
Add: Average for college and course related laboratory, incidental, and supplemental fees, and/or optional student services fees	75.00	75.00	75.00	75.00
Total Charges: Tuition plus subtotal-required fees plus averages for college and course related fees and/or optional student services fees	1,558.00	1,588.00	1,211.50	1,493.50
AVERAGE COST PER SEMESTER CREDIT HOUR	129.83	132.33	134.61	165.94

[1] Resident undergraduate tuition as established by the Texas Legislature is $126/semester credit hours (SCH); non- residents undergraduate tuition is $384/SCH. Graduate tuition might be twice the statutory rates for undergraduate students. For graduate rates, consult the University *Graduate Catalog* or the most current *Class Schedule*.

[2] Required fees, those charged to all students, may be based on semester credit hours or may be per semester. Descriptions of these fees may be found on the following page or in the University catalog.
[3] Averages are given for course-related, laboratory, incidental, and voluntary fees since changes vary according to courses and services chosen. Actual fees are published in the University catalog and in the *Class Schedules*.

Tuition and Fees Increase

Although unlikely, changes in tuition and fees charges may occur after the information is first published. Tuition and fees provided herein represent the figures at the time of publication, are subject to change by regental or legislative action and become effective on the date enacted. The Texas Legislature does not set the specific amount for any particular student fee. The student fees assessed above are authorized by state statute; however, the specific fee amounts and the determination to increase fees are made by the university administration and The University of Texas System Board of Regents. Policies governing the payment or refund of tuition, fees and other charges are approved by the Board of Regents of The University of Texas System and comply with applicable state statutes. Updated information may be obtained from the Student Business Services Office at (915) 747-5116.

The charges shown in this schedule must be paid by all students registering for credit. The amount includes the following:

TUITION

TEXAS RESIDENTS - $126.00 per semester hour.
TEXAS RESIDENT GRADUATE TUITION - Enrolling in courses offered in Business, Engineering, ESE, MASE, Nursing, Science - $154.00 per semester hour.
NON-RESIDENT/INTERNATIONAL TUITION - $384.00 per credit hour. Non-resident/international students will be assessed the actual cost of education per semester hour as determined by the Texas Higher Education Coordinating Board.
NON-RESIDENT/INTERNATIONAL GRADUATE TUITION - Enrolling in courses offered in Business, Engineering, ESE, MASE, Nursing, and Science $412.00 per semester hour.

MANDATORY FEES

HEALTH CENTER FEE - $12.00 per student per semester.
INTERNATIONAL EDUCATION FEE - $3.00 per student for each semester.
INTERNATIONAL STUDENT SERVICE FEE - $25.00 per student per semester.
LIBRARY FEE - $4.00 per semester hour for undergraduates/$5.00 for graduates.
RECREATION FEE - $12.00 per student per semester.
REGISTRATION FEE - $5.00 per student per semester.
STUDENT SERVICE FEE - $13.50 per semester hour, to a maximum of $162.00 (12 credit hours)
STUDENT UNION FEE - $30.00 per student per semester.
TECHNOLOGY FEE - $10.00 per semester credit hour, to a maximum of $150.00 (15 credit hours).
COURSE-RELATED FEES - Assessment of varying amount, based on courses for which the student is enrolled.
CLINICAL LABORATORY SCIENCE MAJOR FEE - $30.00 per semester with a declared major in clinical laboratory science.
ENGINEERING MAJOR FEES - $25.00 per semester with a declared major in civil engineering, computer science, electrical engineering, general

engineering, mechanical and industrial engineering, and metallurgical engineering.

MATERIALS SCIENCE AND ENGINEERING MAJOR FEE - $25.00 per semester with a declared major in materials science and engineering.

NURSING MAJOR FEE -$103.00 per semester with a declared major in Nursing.

OCCUPATIONAL THERAPY MAJOR FEE - $25.00 per semester with a declared major in Occupational Therapy.

UT TELECAMPUS DISTANCE LEARNING TUITION AND FEES*

(MBA, MEd, Other UT TeleCampus Offerings)

Tuition	$ 126.00 sch
Differential Tuition	$ 38.00 sch
Institutional Fees (estimate)	$ 62.00
Assessments based on 3 semester credit hours	$ 554.00
Tuition	$ 378.00
Differential Tuition	$ 114.00
Institutional Fees	$ 62.00

UTEP DISTANCE LEARNING TUITION AND FEES*

(Non-UT TeleCampus Video and Audio Distance Learning, CD based courses)

Tuition	$ 126.00 sch
Differential Tuition	$ 38.00 sch
Library Fee	$ 4.00 sch
Technology Fee	$ 10.00 sch
International Fund Fee	$ 3.00 per semester
Health Center Fee	$ 12.00 per semester
Registration Fee	$ 5.00 per semester
Assessment based on 3 semester credit hours	$ 554.00
Tuition	$ 378.00
Differential Tuition	$ 114.00
Library Fee	$ 12.00
Technology Fee	$ 30.00
International Fund Fee	$ 3.00
Health Center Fee	$ 12.00
Registration Fee	$ 5.00

If enrolled only in Distance Learning courses, the following fees are waived under this program:

Activity Fee
Union Fee
Recreation Fee

* Distance Learning Tuition and Fees subject to change by action of the Texas Legisllature and Texas Higher Education Coordinating Board. Changes will be effective as determined by the governing body.

TUITION AND MANDATORY FEES 2004-2005

Hrs	Resident UG	Non-Resident UG
1	215.50	498.50
2	369.00	910.00
3	522.50	1,321.50
4	676.00	1,733.00
5	829.50	2,144.50
6	963.00	2,556.00
7	1,136.50	2,967.50
8	1,290.00	3,379.00
9	1,443.50	3,790.50
10	1,597.00	4,202.00
11	1,750.50	4,613.50
12	1,904.00	5,025.00
13	2,044.00	5,423.00
14	2,184.00	5,821.00
15	2,324.00	6,219.00
16	2,454.00	6,607.00
17	2,584.00	6,995.00
18	2,714.00	7,383.00
19	2,844.00	7,771.00
20	2,974.00	8,159.00
21	3,104.00	8,547.00

* This table of Tuition and Mandatory Fees does not include incidental fees, course-related fees, or individual major fees. Please refer to other sections in this catalog. Graduate fees are in the Graduate Catalog.

**Tuition and fees are subject to change due to legislative and/or institution action and become effective when enacted.

To the above quoted tuition and fees, the following must be added if you are:

New Student

Student General Property Deposit - $10.00 per student (one time deposit)

Student ID Fee - $6.00 one time issuance fee

Student ID Replacement Fee - $20.00

Student General Property Deposit - $10.00 per student (one time deposit) fee assessed at the time of the student's initial registration at the University. This fee is refundable to the student at the end of his or her University enrollment less any loss, damage, or breakage caused by the student. A property deposit which remains without call for refund for a period of four years from the date of last attendance at the University will be forfeited and will become the property of the Student General Property Deposit Endowment Fund. Such funds will be invested and the income will be used for scholarship purposes.

New Undergraduate Student (one time fee):

New Entering Undergraduate Resident Student - $160.00

New Entering Undergraduate International Student - $180.00

New Entering Undergraduate Transfer Student - $130.00

International Student (ONLY):

International Student Services Fee - $25.00 per student per term

LABORATORY FEES

ARTE	3317, 5322	$ 15.00
ARTF	1301, 1303	$ 10.00
ARTF	1302, 1304	$ 4.00
ARTF	3315	$ 20.00
ARTG	2216, 2306, 2316, 3316, 3326, 3336, 4306, 4316, 4326	$ 25.00
ARTG	5350	$ 20.00
ASTR	1107, 1108	$ 5.00
BIOL	1107, 1103	$ 10.00
BIOL	4195	$ 10.00
BIOL	4298	$ 16.00
BIOL	4198, 4326, 5305, 5318, 5320, 5324	$ 8.00
BIOL	1104	$ 6.00
BIOL	2111, 2113	$ 15.00
BIOL	2117, 3119, 4223, 4398, 5302, 3414, 5502	$ 30.00
BIOL	3330	$ 10.00
BIOL	3427	$ 20.00
BOT	2410	$ 12.00
BOT	3437	$ 8.00
CERM	2304, 2314, 3304, 3314, 3324, 4304, 4314, 4324	$ 15.00
CERM	5350	$ 18.00
CHEM	1105	$ 4.00
CHEM	1106	$ 10.00
CHEM	2161, 3110, 3124, 3125, 3221, 3222, 4212	$ 18.00
CHEM	4165	$ 8.00
CHEM	3151, 3152, 1408	$ 12.00
CHEM	1407	$ 15.00
CHEM	4176, 4376	$ 5.00
COMM	2342	$ 10.00
COMM	3317	$ 20.00
COMM	2371, 3311, 3313, 4311	$ 5.00
COMM	2343, 3331	$ 15.00
COMM	3333	$ 7.00
COMM	3331	$ 15.00
DRAW	2308, 3318	$ 8.00
DRAW	2318	$ 20.00
DRAW	3308	$ 15.00
GEOG	1106	$ 18.00
GEOL	1101, 1102, 3321	$ 18.00
GEOL	4155, 4157, 3325, 4362	$ 20.00
GEOL	2411, 2314	$ 25.00
GEOL	3311	$ 30.00
GEOL	1303, 1304	$ 18.00
GEOL	2412, 3315, 3355, 3405, 4380, 5343, 5344, 5363 5367, 5375, 5376, 5380, 3420, 5405	$ 20.00
GEOP	4332, 4334, 5351, 5357	$ 20.00
GEOP	5362	$ 25.00
KIN	4312, 4313, 4330	$ 10.00
MICR	3128, 4152	$ 8.00
MICR	3449	$ 10.00
MICR	2440, 3443, 4453	$ 30.00
MICR	3445	$ 24.00
MS	1113, 1116	$ 20.00
PHYS	1121, 3243, 1403, 1404	$ 5.00

PHYS	4371	$ 15.00
PNTG	2301, 2331, 3301, 3331, 3341, 4301, 4331, 4341, 5350	$ 12.00
PRNT	2305, 2325, 3305, 3325, 3335, 5350	$ 30.00
PRNT	4305, 4325, 4335	$ 22.00
PSCI	2303, 3304	$ 15.00
PSYC	1301	$ 8.00
PT	5207	$ 2.00
PT	5317, 5319, 5320, 5321, 5327, 5329, 5337, 5408, 5418, 5528	$ 4.00
PT	5311, 5409	$ 5.00
PT	5406	$ 30.00
SCI	1401, 1402	$ 8.00
SCUL	2302, 2332, 3302, 3332, 3342, 4302, 4332, 4342, 5302, 5350	$ 30.00
ZOOL	3464 , 2406	$ 16.00
ZOOL	4155, 4157, 4476, 4478	$ 8.00
ZOOL	4181	$ 30.00
ZOOL	3468	$ 20.00

SUPPLEMENTAL TUITION AND COACHING FEES

ART	5393	$ 10.00
ARTE	5399	$ 10.00
ARTG	5350	$ 10.00
CERM	4304, 4314, 4324, 5350	$ 10.00
DRAW	4310, 4320, 4330, 5350	$ 10.00
MTLS	4303, 4313, 4323, 5350	$ 10.00
MUSA	1281, 1291, 3291, 5281	$ 35.00
MUSA	1381, 1391, 3391, 5381, 5391, 1491, 3491	$ 50.00
PNTG	4331, 4341, 5350	$ 10.00
PRNT	4305, 4335, 5350	$ 10.00
SCUL	4302, 4332, 4342, 5302, 5350	$ 10.00

COURSE SPECIFIC FEES

ART	1300, 3307	$ 5.00
ART	3339	$ 15.00
ART	1310	$ 10.00
ARTE	4347	$ 15.00
ARTH	1305, 1306, 3310, 3329, 4309, 4319, 5329	$ 5.00
ASTR	1107, 1108	$ 5.00
CHEM	4176	$ 10.00
CHEM	4376	$ 20.00
CHIC	3302, 3303	$ 15.00
COMM	2390, 4359	$ 15.00
COMM	4335	$ 10.00
FREN	2301, 2302, 1401, 1402	$ 5.00
GEOL	3311, 3423	$ 20.00
GEOL	4665	$450.00
GEOP	5258	$ 20.00
GERM	2301, 2302, 1401, 1402	$ 5.00
GREK	1405, 1406	$ 5.00
HSCI	2303	$ 10.00
HSCI	2309, 4301, 4311	$ 5.00
KIN	3201, 3202, 3203, 3204, 3205, 3206, 3207, 3209, 3210, 3211, 3318, 4319, 4321	$ 8.00

KIN	4309, 4315	$ 20.00
KIN	4334, 5361, 5371, 5372, 5374	$ 25.00
LATN	2301, 2302, 1401, 1402	$ 5.00
LING	2403, 2404	$ 2.00
MUSA	1143, 1144, 1146, 1271, 1272, 2271, 2272, 1279 2375, 2376, 3371	$ 5.00
OT	4640, 4642, 4644	$180.00
PE	1101, 1104, 1110, 1116, 1122, 1125, 1149, 1151, 1152, 1157, 1161, 1170, 1173, 1186, 1188	$ 8.00
PE	1107, 1164, 1176, 1178, 1180, 1182, 1184, 1191 1194, 1196	$ 12.00
PE	1128, 1129	$ 14.00
PHYS	1120, 1121, 3243, 1403, 1404	$ 5.00
PORT	2301, 2302	$ 5.00
PSYC	5333	$ 25.00
PSYC	4352, 5301	$ 20.00
PSYC	5398, 5399, 6320, 6321	$ 30.00
RUSS	2301, 2302, 1401, 1402	$ 5.00
SPAN	2301, 2302, 2303, 2304, 1401, 1402	$ 5.00
SPED	4330	$ 15.00
SPLP	4340, 5369, 5373	$ 20.00
THEA	1313, 2321, 3342	$ 10.00
THEA	2322, 2390, 4390	$ 25.00
THEA	3302, 3303, 3390, 3391, 3392, 3393, 3394, 3395	$ 15.00
THEA	3341	$ 23.00

INCIDENTAL FEES

ADD/DROP FEE - A fee of $5.00 is assessed per transaction each time a change is made to the initial registration.

AUDIT FEE - A fee of $10.00 per audited course will be assessed to a student who is currently enrolled at the University. For a person who is not enrolled at the University, a fee of 30.00 per course will be assessed.

ART HISTORY MATERIALS FEE - A fee of $5.00 per course will be assessed to defray costs of slides and videos in art history and art appreciation courses. (See above)

ATHLETIC TRAINING FEE - A fee of $30.00 per course will be assessed to defray costs of providing supplies and equipment for academic courses which provide instruction and practical experience in athletic training. (See above)

CATALOG FEE - A fee of $3.00 will be assessed to students who pick up the University Catalog. A fee of $4.50 will be assessed to students that request a University Catalog be mailed. A fee of $1.00 per catalog on CD.

CERTIFICATION DEFICIENCY PLAN PREPARATION FEE - A fee of $20.00 is assessed to defray administrative costs of processing certification deficiency plans for those pursuing teacher certification.

COURSE FEES - A fee of $2.00-$30.00 per course will be assessed to defray the costs of materials. (See above)

DIPLOMA REPLACEMENT FEE - Diplomas are replaced at student's request, if the student has lost the diploma or if the student's name has changed. A fee of $30.00 will be assessed to a student requesting a replacement after one year. A fee of $10.00 is requested within one year of order.

DISSERTATION FEE - A fee of $55.00 will be assessed to defray costs of microfilming and mailing graduate dissertations.

DISTANCE EDUCATION FEE - A $25.00 per semester credit hour will be assessed to defray costs associated with providing distance learning facilities and support for students enrolling in distance learning classes or other off-campus course(s).

EMERGENCY LOAN PROCESSING FEE - A fee of $15.00 will be assessed to defray administrative costs incurred in processing and collecting emergency loan payments.

ENTERING STUDENT ADMINISTRATIVE FEE - To defray costs of service made available to new undergraduate students including student orientation, institutional placement testing, and testing to meet the TASP requirement:

First-time UTEP Students Not Transferring from Another Institution - $160.00
New Transfer Students - $130.00
New International Students - $180.00

EQUIPMENT FEES - A fee of $5.00 - $25.00 per course will be assessed to defray cost of providing equipment for academic courses which provide instruction and practical experience in various courses. (See above)

EQUIPMENT SUPPORT FOR ELECTRICAL AND COMPUTER ENGINEERING - A fee of $25.00 per semester to support cost of open laboratory operations for Electrical and Computer Engineering and Computer Science.

FIELD TRIP FEE -To defray transportation and related costs associated with field trips. (See above)

GRADUATE SCHOOL ADMISSION APPLICATION FEE - A fee of $15.00 will be assessed to all non-international graduate students who apply for admission.

GRADUATE SCHOOL ADMISSION APPLICATION LATE FEE - A fee of $15.00 will be assessed to cover costs of processing late applications.

GRADUATION APPLICATION LATE FEE - A fee of $15.00 will be assessed to all candidates for graduation who make application for graduation after the regular processing period has been completed. This fee is paid each time an application for degree is filed after the processing period deadline and under no circumstances is subject to refund. Veterans attending the University under an exemption defined elsewhere in this section are not exempt from payment of this fee.

GRADUATION FEE - A fee of $30.00 is required of candidates for graduation. This fee must be paid each time an application for degree is filed and under no circumstances is subject to refund. Veterans attending the University under an exemption as defined elsewhere in this section are not exempt from payment of this fee.

HEALTH INSURANCE FEE - (A mandatory insurance required of international students holding nonimmigrant visas and living in the United States.) The amount assessed will match the University Texas System Student Insurance Plan premium.

IN ABSENTIA GRADUATION FEE - A fee of $25.00 per semester will be assessed to graduate students who have completed the degree requirements, including submission of the thesis or dissertation, after the semester deadline, but prior to registration for the following semester, and wish to register for the sole purpose of receiving the degree.

INSTALLMENT TUITION HANDLING FEE - A fee of $17.00 per academic term will be assessed to cover costs related to providing the installment payment option.

INSTALLMENT TUITION DELINQUENCY FEE - A fee of $15.00 per delinquent payment will be assessed to defray costs of handling delinquent installment tuition payment.

INSTRUMENT USERS FEE - Music - A fee of $15.00 will be assessed to students per semester who wish to use musical instruments that are available through the Music Department.

INTERNATIONAL STUDENT APPLICATION FEE - A fee of $65.00 is assessed of all international students who apply for admission to UTEP. Applications not accompanied by a $65.00 check or money order, payable in U.S. funds, will not be considered. An individual who has applied, paid the fee, and been accepted but who does not enroll, will be considered for later admission only upon reapplication including payment of this fee again.

INTERNATIONAL STUDENT SERVICE FEE - $25.00 per long semester and $12.50 per summer session. This fee is assessed to international students to defray the costs of operating the Office of International Programs and supporting the programs that are unique to international students.

LATE ADMISSION APPLICATION FEE - A fee of $15.00 will be assessed to applicants that file after the scheduled deadlines to submit applications for admission to the University.

LATE REGISTRATION FEE - Any student who, with proper permission, registers after the appointed days for registering will be required to pay a special charge of $20.00 for the late telephone registration process, $30.00 for in-person late registration, and $50.00 on or after the first class day. The fee is to defray the cost of the extra services required to effect the late registration.

LIBRARY FEES - To cover costs associated with handling special items, damaged, and/or overdue books, the library charges the following fees:

Overdue Charges:	
Regular Checkouts	$0.25/day ($25.00 max)
Reserve Items	$1.00/day-$1.00/hr ($25.00 max)
Inter-Library Loans	$1.00/request plus any charges from the lending library
Lost Books	Cost of book plus $10.00 processing fee and any fines accrued
Inter-Library Loans	All costs charged by suppliers plus $0.50/ request (or $2.00 per request for rush fee)
Computer Searches	115% of connect time plus any off line print charges
Damaged Book Fee	$10.00
Recall Fee	$1.00/day ($25.00 max)
Media-Charges	Varies depending on type of equipment/ service
Photocopier	$0.05 to $0.50/copy $0.15/microfilm or fiche
Architectural Drawings and Blueprint Reprographic Fee	$5.00 per item plus actual costs
Special Collection Photographic Reproduction Preservation Fee	$5.00 plus actual costs
Student Fee	$3.00 per semester credit hour undergraduate $4.00 per semester credit hour/graduate

PHYSICAL EDUCATION COURSE FEES - A fee of $4.00 to $20.00 will be assessed to defray costs of the purchase of supplies and maintenance of equipment. (See above)

PROFESSIONAL LIABILITY INSURANCE FEE - A fee of $10.00-$80.00 will be assessed to defray costs of insurance for students working in clinical settings in courses in health science, nursing, speech-language pathology, and social work.

PSYCHOLOGY RESEARCH COURSE FEE - A fee of $10.00 to $60.00 will be assessed to all students enrolled in psychology research courses to defray costs of course supplies. (See above)

REGISTRATION FEE - A $5.00 per semester fee will be assessed each registering student to defray costs associated with technology services for telephone registration.

REINSTATEMENT FEE - A $30.00 fee will be assessed to cover costs related to reinstating an enrollment after students have been disenrolled for failure to meet University obligations.

RETURNED CHECK FEE - A fee of $25.00 per check will be assessed to students that issue payment to the University with a check that is returned to the University for insufficient funds.

SCIENCE AND ENGINEERING ENRICHMENT EXPERIENCE - A fee of $50.00 will be assessed to all incoming freshman and transfer students attending the enrichment experience in the College of Science and College of Engineering to defray costs associated with the enrichment program.

SOCIAL WORK HANDBOOK FEE - A $2.00 fee will be assessed to students in Social Work for a handbook required by the Council of Social Work Education

SPECIAL EXAMINATION FEE - A fee of $5.00 per examination is required of persons who wish to take an advanced standing examination, an examination to remove a condition, or an examination to be given at a time other than that for which it is regularly scheduled. Permission of the academic dean must be secured before payment is made.

STUDENT HOUSING DEPOSIT - A $200.00 deposit will be assessed to all students applying for Residence Hall housing. A Student Housing Deposit will be forfeited under any of the following conditions.

a. A Housing Deposit which remains without call for refund for a period of two (2) years from the date of last attendance at the University;

b. For any reason of non-payment of rent and will be applied to the outstanding balance owed to the University and/or applied for repairs and damages (except for reasonable wear and tear) to the unit leased; or

c. Failure of a student to abide by the Terms and Conditions of Occupancy and/or the University Regulations or Residence Hall Regulations resulting in the University terminating a Residence Hall Agreement.

STUDENT IDENTIFICATION CARD ISSUANCE FEE – A fee of $6.00 per student will be assessed for the new Miner Gold I.D. card. The fee is a one-time fee that is only assessed on initial issuance.

STUDENT IDENTIFICATION CARD REPLACEMENT FEE - A fee of $20.00 per card will be assessed students for reissuing a Student I.D. Card due to loss or destruction. Malfunctioning cards or cards that fail to operate will be replaced at no charge.

STUDENT TEACHING FEE - A fee of $50.00 will be assessed to students approved for Student Teaching during the Fall and Spring semesters.

TEACHER CERTIFICATION CREDENTIALS FEE - A fee of $10.00 will be assessed to students enrolled in the Teacher Education Program who are having their academic credentials evaluated for meeting certification requirements set by the Texas Education Agency.

TEST FEE - Students requesting administration of graduate or undergraduate admission testing, professional certification testing, GED testing, or placement and credit testing will be assessed a fee ranging from $5.00 to $42.00 per test based on the test subscription costs.

TRANSCRIPT FEE - A fee of $2.00 will be assessed to students for an unofficial copy of their transcript. A fee of $5.00 will be assessed for an official copy. A fee of $7.00 will be assessed for an official copy with immediate processing.

Tuition for Undergraduate Hours in Excess of 170 or More Credit Hours

Beginning Fall 1999 semester, a resident student who has attempted 170 or more semester credit hours will be charged a higher tuition rate than is charged to other resident students. The higher tuition rate will be the non-resident rate for any credit hours above 169. The higher tuition rate will not be charged to a student enrolled in:

1. Two or more baccalaureate degree programs at the same time;
2. A double major degree program that requires 130 or more semester credits for completion; or
3. A health professional baccalaureate degree program.

In determining whether the student has previously attempted 170 or more semester credit hours, the following credit hours will not be counted:

1. Semester credit hours earned by the student while the student was classified as a nonresident or foreign student for tuition purposes;
2. Semester credit hours earned by the student 10 or more years before the date the student begins the new degree program under the Academic Fresh Start Program of the Texas Educational Code, § 51.931;
3. Semester credit hours earned by the student before receiving a baccalaureate degree that has previously been awarded to the student;
4. Semester credit hours earned by the student by examination or under any other procedure by which credit is earned without registering for a course for which tuition is charged;
5. Credit for a remedial education course or another course that does not count toward a degree program at the institution; and
6. Semester credit hours earned by the student at a private institution or an out-of-state institution.

For more information, students should contact the Registrar's Office at (915) 747-5550.

STUDENT MINER GOLD CARD

Card Issuance

All students must have one Miner Gold Card (identification) issued by the University of Texas at El Paso. The card will be issued upon admission to the university. A current photo ID (e.g., license, state ID, passport) must be shown before the card is issued. The card is the official identification card for the University of Texas at El Paso and will automatically activate with each semester enrollment and will deactivate when not enrolled. The card is valid as long as enrollment in courses exists for the term.

The name printed on the Miner Gold Card is the individual's official name as recorded in the university database. Names on cards will not carry titles. No article of clothing, hats, or sunglasses that, in the judgment of the carding staff, will obscure physical features will be allowed when the photograph is taken for the card.

The Miner Gold Card is the property of the University of Texas at El Paso and is nontransferable. It must be carried at all times and presented and/or surrendered to university officials upon request. Unauthorized use warrants confiscation and/or disciplinary action.

The Miner Gold Card Office is located in the Academic Services Building. The center's telephone number is (915) 747-7334, or e-mail: studentid@utep.edu. The center's web site can be found at: http://minergold.utep.edu

Charges

A one-time nonrefundable fee of $6.00 will be assessed per student at registration.

The Miner Gold Card must be kept in working condition. If it becomes damaged, lost or stolen, the replacement fee is $20.00. If the card is replaced, the replaced card is automatically deactivated and cannot be reactivated. A request of a name change, resulting in the issuance of a replacement card, will also follow the replacement fee. If it is determined that a name is incorrect due to the university's error, no charge will be assessed to the cardholder for a replacement.

Smart Chip

The Smart Chip is used to store electronic dollars on the Miner Gold Card. The money added to the Miner Gold Nugget can be used in vending machines (soda or candy), to purchase photocopies and to use laundry services at Miner Village. Money may be added to the Miner Gold Nugget at any of the cash value center machines located throughout campus. Money added to the chip has a maximum limit of $50. A Pin Number is not used to secure this money; it can be used by anyone should the card be lost. Money on the chip should be considered the same as cash.

Smart Chip Cash balances are NOT refundable unless one of these two conditions is met:

1. **Damaged Cards**: Immediate transfer of the remaining value from a damaged card to the new card will be made ONLY if the chip can be read. The damaged card must be relinquished to the card office.
2. **Separation from the University**: Upon permanently leaving the university, a refund for the balance remaining on the card may be obtained by submitting a written request and surrendering the card within 45 days after the date of graduation or other date established by the university as the permanent departure date. Balances equal to or under $10 will not be refunded. Refund checks for balances in excess of $10 will be processed within 3 work days after the request is received. Any unclaimed balance remaining after the end of the 45-day period shall become the property of the university. All refunds are subject to reduction by the amount of any outstanding debt owed to the university.

Magnetic Strip

The magnetic strip on the back of the Miner Gold Card can be used in several ways: 1) validation for enrollment or employment; 2) access to campus facilities and activities; and 3) storing funds in your Miner Gold Bucks declining balance account. Miner Gold Bucks offers three plans: 1) Bookstore Plan to purchase books and materials; 2) Food Plan to purchase food from any of the Sodexho food areas; and 3) General Plan allows students to purchase from the Bookstore, Sodexho and the Ticket Center. Deposits may be made to your Miner Gold Bucks account by cash, check or credit card at the Miner Gold Card Office during normal business hours.

Bar Code

The bar code on the back of the Miner Gold Card can be used for checking out materials at the UTEP Library and the Music Library, and for other services.

Safeguards

Protect the Miner Gold Card from damage by keeping it in the protective card sleeve or plastic holder provided by the Miner Gold Card Office when the card is not in use. Do not punch holes, affix stickers, or in any other way make modifications to the card. Such practices may create problems when trying to use the card. Report lost, stolen, or damaged cards immediately to the Miner Gold Card Office to avoid unauthorized use. Miner Gold Nugget cash on a lost or stolen card is not refundable. Therefore, the card should be treated as cash and kept in a secure place at all times. Do not lend the card to others.

PARKING FEE

The Board of Regents has approved parking fees as follows for those students desiring to park on the campus:

Classes of Permits and Annual Fees

Perimeter Parking Lots

Allows the holder to park in any perimeter area designated for their particular class of permit.

Class A-P	$40.00	All Students (including Graduates)
	$28.00	If purchased during the Spring Semester
	$16.00	If purchased during the Summer Session

Remote Parking Lots

Allows the holder to park in any remote area designated for their particular class of permit.

Class E	$10.00	All Students

Other Class Permits

Class H	$ -0-	No charge if vehicle is in compliance
Class M	$12.00	All Student motorcycles
	$ 9.00	If purchased during the Spring Semester
	$ 6.00	If purchased during the Summer Session
Class MV	$ -0-	No charge for residents of UTEP Miner Village
Replacement Decal		With remnants of decal (Please contact Traffic for current rates)
Replacement Decal		Without remnants of decal (Please contact Traffic for current rates)

METHODS OF PAYMENT

Cash, Checks, Master Card, Visa, American Express, and Discover will be accepted for payment of tuition and fees. The University offers the following two payment methods during long semesters (Fall and Spring) only.

1. Full payment of tuition and all fees at the time of registration.
2. One half payment of tuition, mandatory and course-related fees at the time of registration, with the remaining two quarters due in equal installments by the sixth and eleventh week of classes.

Items for which payment CAN be deferred under Method 2 include the following:

- Tuition
- Mandatory Fees (Library Fee, Student Services Fee, Student Union Fee, Health Center Fee, International Studies Fee, Technology Fee, Recreational Fee)
- Laboratory Fees
- Course-related Fees (such as Equipment Fees)
- Supplemental Fee for Fine Arts
- Major Fees

Items for which payment MAY NOT be deferred include the following:

- Student General Property Deposit

- Discretionary Fees (Liability Insurance, Health Insurance)
- Optional Fees (such as Parking Decal Fees)
- Amounts due for financial holds or from prior periods
- Optional Incidental Fees (such as Late Registration, Add/Drop, Installment Tuition Handling Fees, etc.)

The following additional policies will apply to deferral of payments:

1. All student account balances due from prior semesters, including items associated with payment deferred, must be paid in full before a student may begin registration for a subsequent semester.
2. A payment plan selected at the time of registration will be binding and will be applied in any subsequent add/drop activities; however, pre-payment of outstanding balances will be accepted. The University shall assess the Installment Tuition Handling Fee of $17.00 for those students choosing payment Method 2; this charge is payable at the time of registration. An Installment Tuition Delinquency Fee of $15.00 will be assessed at the end of the sixth and eleventh week of classes if the payment due for that period is not paid in full.
3. The Office of Student Business Services will send e-mail notifications during the fourth and ninth weeks, as appropriate, to students paying tuition and fees under Method 2.
4. The courses for which a student is enrolled on the official census date-12th class day in a long semester-will be the basis for the student's tuition and fees assessment. Except for students who officially withdraw up to the end of the refund period as indicated in the *Class Schedule*, no reduction in amounts due will be made after this date; further, the student is obligated to pay the assessed amounts whether or not class attendance is subsequently interrupted or terminated.
5. A student who fails to provide full payment of tuition and fees, including any late fees assessed, to the University when the payments are due is subject to one or more of the following:
   a. Bar against registration at the institution;
   b. Withholding of grades, degree, and official transcript; and
   c. All penalties and actions authorized by law.

REFUND OF TUITION AND FEES

Refund policies are established by, and are subject to change by, the Legislature of the State of Texas and are applicable to withdrawals and dropped courses. Refunds of tuition, laboratory fees, general fees, and student services fees will be made under the following conditions.

Withdrawals

Students withdrawing during a long semester will be refunded applicable tuition and fees as follows:

Prior to the first class day	100%	less $15.00
During first five class days	80%	
During second five class days	70%	
During third five class days	50%	
During fourth five class days	25%	
After fourth five class days	No Refund	

Students withdrawing during a summer term will be refunded applicable tuition and fees as follows:

Prior to the first class day	100%	less $15.00
During the first, second, or third class day	80%	
During the fourth, fifth, or sixth class day	50%	
Seventh day of class and thereafter	No Refund	

Note: Percentage of refund is based on total tuition and fees, not on amount paid.

Note: Unless students do a complete withdrawal from school prior to the first official class day, he/she is responsible for a percentage of total tuition and fees. Students should contact the Student Business Services Office at (915) 747-5116 or (915) 747-5105 to address any questions.

Dropped Courses

Refunds of applicable tuition and fees will be made for courses from which students drop within the first twelve class days of a long session semester or an appropriately shorter period for a summer session term, provided the student remains enrolled for that semester or term. Refund of tuition for dropped courses will be made only if the original payment exceeds the established minimum amount.

Refunds of tuition and fees paid in the student's behalf by a sponsor, donor, or scholarship will be made to the source rather than directly to the student who has withdrawn or dropped courses, if the funds were made available through the University. Students who withdraw or drop courses must, in order to qualify for a refund, surrender all applicable privileges, including identification cards and athletic and cultural entertainment tickets. Refunds provided for above will be granted if applied for by the end of the semester in which the withdrawal or drop was appropriately completed. Refunds for students who owe balances in deferred payment of tuition/fees will be credited to the student's account, reduced by the amount of any unpaid charges and a reasonable administrative fee not to exceed the lesser of 5% of the tuition, fees, room and board, and other charges that were assessed for the enrollment period, or one hundred dollars.

Refunding for Student in Title IV Programs

As an institution participating in programs under Title IV of the Higher Education Act of 1965 as amended ("Act"), The University of Texas at El Paso is required to refund unearned tuition, fees, room and board, and other charges to certain students attending the institution for the first time who have received a grant, a loan, or work assistance under Title IV of the Act, or whose parents have received a loan on their behalf under 20 U.S.C. Section 1087-2. The refund is required if the student does not register for, withdraws from, or otherwise fails to complete the period of enrollment for which the financial assistance was intended. No refund is required if the student withdraws after a point in time that is sixty percent of the period of enrollment for which the charges were assessed. A refund of tuition, fees, room and board, and other charges will be determined for students who withdraw prior to this time. The refund is the larger of the amount provided for in Section 54.006, *Texas Education Code* or a pro rata refund calculated pursuant to Section 484B of the Act. If the student charges were paid by Title IV funds, a portion or all of the refund will be returned to these programs.

TUITION AND FEE EXEMPTIONS

DESCRIPTION	ELIGIBILITY	FEES EXEMPTED ***
** Accredited School Scholarship (Permissive), *Texas Education Code* §*54.201*	· Highest ranking graduate of an accredited Texas high school	Tuition during first two semesters (long session) following graduation
Children of Texas veterans, *Texas Education Code* §*54.203*	· For Children of members of the armed forces who were killed in action, who die or died while in service, are MIA, or whose death is documented to be directly caused by illness or injury related to service in the armed forces as listed above · For orphans of members of the Texas National Guard killed since January 1, 1946, while on active duty · Must be Texas resident and reside in the state at least 12 months immediately preceding date of registration	Tuition Laboratory fees General fee **NOT TO EXCEED 150 CREDIT HOURS**
Texas ex-servicemen, *Texas Education Code* §*54.203*	· Resided in Texas for 12 months prior to registration · A bonafide legal resident of Texas at time entered service · Served in armed forces in World War II Korean Conflict, the Cold War, Vietnam, Grenada era, Lebanon, Panama, Persian Gulf · Honorably discharged · Not eligible for federal education benefits	Tuition Laboratory fees General fee **NOT TO EXCEED 150 CREDIT HOURS**
Children of disabled/deceased Texas firefighters and peace officers, *Texas Education Code* §*54.204*	· For children under 21 years of age (or 22 if the student was eligible to participate in special education under Texas Code §29.003) of disabled full-paid or volunteer firefighters, full-paid municipal, county, state peace officers, custodians of the Department of Corrections, or game wardens · Disability/death occurred in the line of duty	Tuition Required fees not to exceed 120 undergraduate credit hours or any semester begun after age 26.
** Disabled Peace Officers (permissive), *Texas Education Code* §*54.2041*	· Texas resident who has resided in Texas for 12 months immediately preceding registration · Permanently disabled as a result of injury sustained in performance of duties as Texas peace officer · Unable to continue duties as peace officer	Tuition Fees excluding class and laboratory fees **NOT TO EXCEED 12 SEMESTERS IN UNDERGRADUATE PROGRAM**

DESCRIPTION	ELIGIBILITY	FEES EXEMPTED ***
Blind and deaf students, *Texas Education Code* §*54.205*	· A blind disabled person, or a person whose sense of hearing is nonfuntional · Must be a Texas resident	Tuition Required fees General property deposit
**Good Neighbor Scholarship (permissive), *Texas Education Code* §*54.207*	· A limited number (as prescribed by the Coordinating Board) of native-born citizens and residents from nations of the Western Hemisphere other than the United States	Tuition
Firefighters enrolled in fire science courses, *Texas Education Code* §*54.208*	· Firefighters enrolled in course offered as a part of fire science curriculum	Tuition Laboratory fees
Prisoners of War, *Texas Education Code* §*54.219* Added by Acts 1999, 76" Leg., CH. 1590, §11 (b), Eff. June 19, 1999.	· Is a resident of Texas and was a resident of Texas at the time of original entry into the armed forces; · Was first classified as a POW on or after January 1, 1999; · Is enrolled for at least 12 semester credit hours.	Tuition and Required Fees Student Housing and Food Contract Cost Textbook Costs **NOT TO EXCEED 120 HOURS**
Children of prisoners of war or persons missing in action, *Texas Education Code* §*54.209*	· Dependent person under 25 years of age who receives majority of support from parent, and whose parent is a resident of Texas active duty military and classified by Department of Defense as a Prisoner of War or Missing in Action at time of the student's registration	Tuition Required fees
**Senior citizen (permissive), T*exas Education Code* §*54.210*	· Individuals 65 years of age or older on space available basis	Tuition **NOT TO EXCEED 6 CREDIT HOURS PER SEMESTER**
	· Individuals 65 years of age or older on space available basis may audit	Tuition
Foster Children *Texas Education Code* §*54.211*	· For individuals who were in foster care or other residential care under the conservatorship of the Department of Protective and Regulatory Services on or after the day preceding the individual's 18th birthday, the day of the student's 14th birthday if the student was eligible for adoption on or after that day, or the day the student received a high school diploma or equivalent · Enrolls not later than the 3rd anniversary of date of discharge from that care or the 21st birthday	Tuition Required fees

DESCRIPTION	ELIGIBILITY	FEES EXEMPTED ***
**Fully Funded Courses (permissive), *Texas Education Code* §*54.217*	· Individuals enrolled in courses that are fully funded by federal or other sources	Tuition and fees for particular course
ROTC Students, *Texas Education Code* §*54.212*	· For individuals admitted to the institution and its Reserve Officers' Training Corps program · Selected by ROTC Selection Committee must become a member of the Texas Army National Guard or the Texas Air National Guard and maintain status as a member in good standing · Possess and maintain academic and personal conduct standards established by institution · Maintain full-time enrollment status · Enter into a contract to serve no less than four years after graduateion as a commissioned officer with Texas Air or Army National Guard · Pass the physical examination and **police records background check**	Tuition Fees Lodging and Board (1st two years of enrollment) **NOT TO EXCEED 4 YEARS**
TANF Students, *Texas Education Code* §*54.212*	· For students who, during the last year of public high school in this state, was a dependent child receiving financial assistance under Chapter 31, Human Resources Code, for not less than six months · Successfully completed the attendance requirements under Section 21.032 · Younger than 22 years of age on the date of enrollment · Enrolls at the institution as an undergraduate student not later than the second anniversary of the date of graduation from a public high school in this state · Has met the entrance examination requirements of the institution before the date of enrollment · Must be a Texas resident	Tuition Fees **NOT TO EXCEED FIRST ACADEMIC YEAR**
Economic Hardship, *Texas Education Code* §*54.503* (e)	· When payment of fee causes undue economic hardship--number of exceptions limited to 5 percent of total enrollment	General fee

Description	Eligibility	FEES EXEMPTED ***
Educational Aides, *Texas Education Code §54.214*	· School employee who worked as an educational aide for at least one year during the 5 years preceding the semester of the exemption · Establish financial need · Pursuing teacher certification · Maintain acceptable GPA · Resident of Texas	Tuition Fees excluding class and laboratory fees
Early High School Graduates, *Texas Education Code §56.201-209*	· Completed Texas high school in not more than 36 consecutive months · Texas resident	Tuition up to $1,000
Surviving Spouse and minor children of certain police, security or emergency personnel killed in the line of public duty. *Texas Government Code §615.0225*	· For the surviving spouse or children of certain public peace officers, probation officers, jailers, police reservists, fire fighters, and emergency medical personnel. T*exas Gov't Code §615.003* · Death occurred in the line of duty as a result of a risk inherent in the duty. · Must be enrolled full time.	Tuition up to $1,000 Student Housing and Food contract costs Textbook costs **NOT TO EXCEED BACHELOR'S DEGREE OR 200 HOURS**

* This information is provided in summary form. For more information, students should contact the Admissions Office and/or refer to *Texas Education Code Section 54.201, et seq.*

** Must have Regental approval.

***Required fees are those required as a condition of enrollment. They do not include room, board, books, transportation, lab fees, or other course specific fees or optional fees. **Last updated June 26, 2003**.

TUITION REBATES FOR CERTAIN BACCALAUREATE RECIPIENTS

The Texas Legislature has authorized a $1,000 tuition rebate for students who complete baccalaureate degrees with no more that three credits in excess of those required for their degrees. The purpose of the program is to provide a financial incentive for students to prepare for university studies while completing their high school work, avail themselves of academic counseling, make early career decisions, and complete their baccalaureate studies with as few courses outside the degree plan as possible. Minimizing the number of courses taken by students results in financial savings to students, parents, and the state.

The Texas Education Code, Section 54.0065, authorizes UTEP to provide a tuition rebate to students who meet all of the following conditions:

a. Have enrolled at UTEP for the first time in the fall semester of 1997or later;

b. Have requested a rebate for semester credit hours achieved toward their first baccalaureate degree;

c. Have been Texas residents, have attempted all course work at a Texas public institution of higher education, and have been entitled to pay resident tuition at all times while pursuing the baccalaureate degree;

d. Have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree in the catalog under which they were graduated, including transfer credits and course credit earned exclusively by examination; and

e. Have applied for rebates prior to receiving their baccalaureate degrees.

Teaching Certificates

If a student chooses to complete the requirements for a teaching certificate, the minimum number of credit hours required for the degree, for purposes of the $1,000 tuition rebate, should be the minimum number of credit hours in which it is possible to satisfy the requirements of both the baccalaureate degree and the teaching certificate.

Outstanding Student Loan

Tuition rebates shall be reduced by the amount of any outstanding student loan, including an emergency loan, owed to or guaranteed by the state, including the Texas Guaranteed Student Loan Corporation. For more details about this Tuition Rebate Program and a student's eligibility and responsibilities, students should contact the Student Business Services Office, Academic Services Building, Room 106 (915-747-5116/5105). Further information on the Tuition Rebate Program can be found on the following websites:

1. www.thecb.state.tx.us/rules/13/13F.htm
2. www.capitol.state.tx.us

TUITION LIMIT IN CASES OF CONCURRENT ENROLLMENT

When a student registers at more than one public institution of higher education at the same time, his tuition charges shall be determined in the following manner:

1. The student shall pay the full tuition charge to the first institution at which he is registered; and in any event he shall pay an amount at least equal to the minimum tuition specified in this code.
2. If the minimum tuition specified in this code for the first institution at which the student is registered is equal to or greater than the minimum tuition specified in this code for the second institution at which the student is registered concurrently, the student shall not be required to pay the specified minimum tuition charge to the second institution in addition to the tuition charge paid to the first institution in addition to the tuition charge paid to the first institution, but shall pay only the hourly rates, as provided in this code, to the second institution.
3. If the minimum tuition specified in this code for the first institution at which the student is registered is less than the specified minimum tuition charge at the second institution (that is, if the second institution has a higher minimum tuition charge specified in this code), then the student shall first register at the institution having the lower minimum tuition and shall pay to the second institution only the amount equal to the difference between his total tuition charge at the second institution and his total tuition charge at the first institution, but in no case shall the student pay to the second institution less than the hourly rates as provided in this code.
4. If a student is considered to be a Texas resident and therefore qualified to pay Texas resident tuition rates by one institution at which he is registered, that student shall be considered a Texas resident at each

of the institutions at which he is concurrently registered for the purposes of determining the proper tuition charges. Nothing in this subsection shall be so construed as to allow a nonresident to pay resident tuition except at institutions covered by Section 54.060 of this code.

GENERAL DEBTS OF STUDENTS OR ORGANIZATIONS

The University is not responsible for any debts contracted by individual students or by student organizations. The University will not assume the role of collection agency for any organization, firm, or individual to which students may owe money, nor will the University adjudicate disputes between students and creditors over the existence or amounts of debts.

DEBTS OWED TO THE UNIVERSITY

In the event of non-payment of debts owed to the University, one or more of the following actions may be taken by the University:

- Bar against registration
- Withhold the student's grades and official transcripts
- Withhold a degree to which the student might otherwise be entitled
- Delinquent accounts will be referred to a Collection Agency and Credit Bureau
- Other penalties and actions authorized by law

RETURNED CHECKS

A student who pays the University a check, draft, or money order for services or goods which is not subsequently honored by payor's bank and the fault is not that of the bank, and who does not pay the University the amount due within ten class days after the receipt of written notice that the bank has refused payment, may be subject to disciplinary action. A student who pays tuition and fees with a check, draft, or money order which is not subsequently honored by payor's bank, the fault not being that of the bank, may be withdrawn from the University for non-payment of tuition and fees if the student fails to pay the University the check amount due plus a $25 returned check fee within ten class days after receiving written notice, student's check will be referred to the County Attorney for collection. All check writers whose check is returned will be assessed a $25.00 fee for each check not honored by payor's bank. This assessment is subject to change without prior notice.

Housing Expenses

UTEP students choosing to live in Miner Village may select to contract for either a 9-month or 12-month contract. Miner Village living offers the following rates on a per resident, per month basis.

Efficiency Unit for two persons	$315 per person* per month
Four-Bedroom Unit	$410 per person* per month
Two-Bedroom Unit	$433 per person* per month
Efficiency Unit for one person	$460 per person* per month

*Monthly rates include utilities paid, furnished units, local telephone service, internet connections, basic cable television, and one parking sticker for the Miner Village area. A $200 Miner Village deposit and a $30 telephone maintenance fee paid once a year is required at the time of reservation and/or check in.

All housing rates are subject to change by action of the Board of Regents, The University of Texas System. For further information about Miner Village, UTEP's apartment-style residence halls, students should contact:

Department of Residence Life
Miner Village, Summit Hall
2401 North Oregon Street
El Paso, TX 79902
(915) 747-5352

Residency Determination

The Admissions Office is responsible for determining residence status of students for tuition purposes. The Office is guided by the Texas Education Code, the Rules and Regulations for Determining Residence Status of the Texas Higher Education Coordinating Board, and University regulations. Under the State statutes and regulations, a student or prospective student is classified as a resident of Texas, non-resident, or a foreign student. A resident is an individual who is either a U.S. citizen, national, permanent resident alien, or an alien who has been permitted by Congress to adopt the U.S. as his or her domicile while in the United States and who has otherwise met the State requirements for establishing residency for tuition purposes. A non-resident is a citizen, national, or permanent resident of the U.S. or an alien who has been permitted by Congress to adopt the U.S. as his or her domicile while in this country and who has not met the State's requirement for establishing residency for tuition purposes. While these State requirements for establishing residency are complex and should be referred to in each particular circumstance, they generally require a minimum of 12 months residence in Texas prior to enrollment. A foreign student is an alien who is not a permanent resident of the U.S. or has not been permitted by Congress to adopt the U.S. as his/her domicile. An individual who is classified as a non-resident or foreign student may qualify, under certain exceptions specified below, for resident tuition rates and other charges while continuing to be classified as a non-resident or a foreign student. The following visa holders are eligible to establish a domicile in the United States and have the same privilege of qualifying for Texas residency as U.S. citizens: A-1, A-2, A-3, E-1, E-2, G-1, G-2, G-3, G-4, G-5, H-1B, H-4 dependents of H-1B, I, K-1, K-2, K-3, K-4 L1a, L1b, L-2 NATO 1-7, O-1, O-2, O-3 dependents of O-1, R-1, R-2, V, OP-1, I-551, or I-688/A/B visas that have not expired. In order for these cardholders to be eligible for resident tuition, residency must be established.

RESIDENCY

Section 54.052, Texas Education Code, (House Bill 1403) provides for an individual to be classified as a Texas resident until the individual establishes a residence outside this state if the individual resided with the individual's parent, guardian, or conservator while attending a public or private high school in Texas and graduated from a public or private high school or received the equivalent of a high school diploma in Texas, resided in Texas for at least

three years as of the date the person graduated from high school or received the equivalent of a high school diploma, registers as an entering student in an institution of higher education not earlier than the 2001 Fall semester, and provides to the institution an affidavit stating that the individual will file an application to become a permanent resident at the earliest opportunity the individual is eligible to do so.

Texas residency for the purpose of paying in-state tuition rates by specific military personnel, spouse and dependent children, is provided through Texas Education Code Section 54.058 (b). These provisions provide for nonresident members of the U.S. Armed Forces, members of Texas units of the Army or Air National Guard, or Commissioned Officers of the Public Health Service who are assigned to duty in Texas to pay the resident tuition rate for themselves, their spouses and dependent children. To qualify, the student must submit once a year a statement from an authorized officer in the services, certifying that he or she (or a parent or court-appointed legal guardian) will be assigned to duty in Texas at the time of enrollment and is not a member of the National Guard or Reserves who will be in Texas only to attend training with Texas units.

In addition, Texas Education Code Section 54.058 (d) also provides resident tuition rates for a spouse or dependent child of a member of the Armed Forces of the United States, who is not assigned to duty in Texas but who has previously resided in Texas for a 6 month period if the member has provided at least one year preceding the first day of the term or semester a document with the applicable military service that is in effect on the first day of the semester. The document must indicate the member's permanent residence address in Texas and designates Texas as the member's place of legal residence for the purpose of income tax purposes. In addition, the member provides documentation that he or she has been registered to vote in Texas for the entire year preceding the first day of the semester and satisfies at least one of the following requirements: 1) Has owned real property in Texas for the entire year preceding the first day of the semester and 2) has had an automobile registered in Texas for the entire year preceding the first day of the semester or at least one year preceding the first day of the semester executed a will that has not been revoked or superseded indicating that the member is a resident of Texas and deposited the will with the county clerk of the county of the member's residence under Section 71, Texas Probate Code.

STUDENT RESPONSIBILITIES

Oath of Residency

Section 54.0521, *Texas Education Code*, provides for an oath of residency. The student is responsible for registering under the proper residence classification and for providing documentation as required by the University. If there is any question as to right to classification as a resident of Texas, it is the student's obligation, prior to or at the time of enrollment, to raise the question with the University's residency officer for official determination. Students classified as Texas residents must affirm the correctness of that classification as part of the admission procedure. If the student's classification as a resident becomes inappropriate for any reason, it is the responsibility of the student to notify the proper administrative officials at the institution. Failure to notify the institution constitutes a violation of the oath of residency and may result in disciplinary action and/or other penalties.

Reclassification as a Non-Resident

Persons who have been classified as residents of Texas will be reclassified as non-resident students whenever they report, or there is found

to exist, circumstances indicating a change in legal residence to another state. If students who have been classified as residents of Texas are found to have been erroneously classified, those students will be reclassified as non-residents and will be required to pay the difference between resident and non-resident fees for the semesters for which they were erroneously classified.

Reclassification as a Resident

Persons classified as non-residents upon first enrollment are presumed to be non-residents while they continue as students. The presumption may be overcome only upon timely application and presentation of the required evidence which must include evidence unequivocally indicative of a fixed intention to reside permanently in the state. In order to have residence status reconsidered, students must complete the University's Residence Questionnaire and submit it with appropriate documentation to the Admissions Office prior to the first day of class of the semester for which the change is sought. After the form and documentation are reviewed, students are notified in writing of the residence decision.

If students have been erroneously classified as non-residents and subsequently prove to the satisfaction of the University's residency official that they should have been classified as resident students, they will be reclassified as residents of Texas and will be entitled to a refund of the difference between the resident and non-resident fees for the semesters in which they were erroneously classified. Normally, the refund must be requested and substantiated during the current term.

All students are expected to pay the tuition assessed on or before the payment date for each semester as established by the University. All residence questionnaires and forms verifying non-resident tuition exemption status must be submitted prior to the first day of class of the term for which the change is sought. To prevent any delay in enrollment, students are encouraged to submit all forms at least two weeks before registration. Students should consult the *Class Schedule* for specific information concerning the submission of non-resident exemption forms.

Exceptions

Waivers of non-resident tuition for non-residents and foreign students are available for

- Participants in the Academic Common Market
- Residents of the eight New Mexico counties that border on Texas
- Recipients of competitive University scholarships of $1,000 or more
- Students whose families transferred to Texas as part of the state's plan for economic development
- U.S. Foreign Service Officers assigned to posts in Mexico
- Mexican citizens with demonstrated financial need
- Military stationed in Texas and their dependents
- NATO forces stationed in Texas and their dependents
- Teaching and research assistants and their dependents
- Higher education teachers and professors and their dependents
- Aliens who are residents of Texas based on high school graduation or receipt of GED (Texas Education Code 54.0521j)

Detailed information on residency, reclassification, tuition exceptions, and waivers is available in the Admissions Office and in the *Class Schedule*.

PENALTIES

Student Compliance with Institutional Rules and Regulations

Each institution has been authorized by statute to assess and collect from non-resident students failing to comply with the provisions of the tuition statute and with these interpretations concerning non-resident fees a penalty not to exceed $10 a semester. In addition, if students have obtained residence classification by virtue of deliberate concealment of facts or misrepresentation of fact, they may be subject to appropriate disciplinary action, in accordance with the rules and regulations of The University of Texas at El Paso.

ACADEMIC REGULATIONS

What's Inside

General Academic Information

- Student Responsibilities
- Classification of Students

Curriculum and Classroom Policies

- Course Information
- Grades and Grade Point Averages

General Requirements for Undergraduate Degrees

Academic Honors

- University Honors Program
- Other Honors Programs

General Academic Information

Current regulations are applicable to every student enrolled, regardless of the date of admission. Interpretations or explanations contrary to the regulations herein set forth shall not be binding upon the University.

STUDENT RESPONSIBILITIES

Students are responsible for being aware of

1. the current academic regulations and calendar of the University;
2. the general and specific degree requirements in the major field;
3. those policies which apply to registration;
4. their academic status including eligibility to re-enroll in the University. An ineligible student who enrolls will be dropped.

General academic regulations are contained in this section of the University Catalog. Degree requirements and those specific to a given major field can be found in the pertinent college and departmental sections. Registration policies, procedures, and schedules can be found in this section and in the *Class Schedule*. Clarification and assistance can be obtained from the academic deans, department chairpersons, and official departmental academic advisors. Students are bound by the academic regulations in effect at the time of each registration, including those recent changes that appear in the *Class Schedule*.

CLASSIFICATION OF STUDENTS

Freshman	Fewer than 30 semester hours of credit
Sophomore	30-59 semester hours of credit
Junior	60-89 semester hours of credit
Senior	90 or more semester hours of credit

Curriculum and Classroom Policies

COURSE INFORMATION

Texas Common Course Numbering (TCCN) System

The University of Texas at El Paso participates in the Texas Common Course Numbering (TCCN) System, which was developed to facilitate the transfer of general academic courses among Texas colleges and universities. Common courses are those freshman and sophomore level courses taught throughout Texas which correspond with the general description of courses or category of courses included in the *Lower Division Academic Course Guide Manual*. A UTEP course determined to be equivalent to a course listed in the *Guide* has the common course number listed below the UTEP course title in the individual course description of this catalog. A Texas state symbol denotes the TCCN course prefix and number. Students interested in transferring can refer to the common course number in each college or university catalog to determine course transferability among institutions.

Course Numbering System

Each course offered by The University of Texas at El Paso is identified by a four-digit course number. The first number indicates the level: 0 = precollege or remedial, 1 = freshman, 2 = sophomore, 3 = junior, 4 = senior, 5 or 6 = graduate. The second number indicates the semester hour value of the course. The last two numbers identify the course within its particular department.

- **Lower-Division Courses** are designated by a 1 or 2 as the first digit of the course number.
- **Upper-Division/Advanced Courses** are designated by a 3 or 4 as the first digit of the course number. The student should refer to the departmental and college requirements for specific conditions, if any, imposed on registration in advanced courses.
- **Graduate Courses** are designed by a 5 or 6 as the first digit of the course number.

Maximum Overload in Course Enrollment Hours

A student is permitted to register each term for the credit hours listed below. Written permission of the academic dean must be secured to take more than the maximum load; students must have a GPA above 2.0 to seek permission.

Fall	=	21 credit hours
Spring (Wintermester)	=	24 credit hours (combined terms), or 21 credit hours for Spring, or 6 credit hours for Wintermester.
Summer (Maymester)	=	15 credit hours (combined terms), or 9 credit hours for Summer, or 6 credit hours for Maymester.

Course Enrollment Hours

Fall and Spring

Full-time	=	12 or more hours per semester
Part-time	=	11 or less hours

Maymester and Wintermester

Full-time	=	3 or more hours per term
Part-time	=	2 or less hours

Summer Sessions

Full-time	=	6 or more hours per term, or 3 hours summer I and 3 hours 8 week, or 3 hours summer II and 3 hours 8 week, or 3 hours summer I and 3 hours summer II
Part-time	=	5 or less hours

Students who are not eligible to enroll without conditions such as those who are on academic probation or academic suspension/dismissal, or who have been readmitted or reinstated from such conditions, or who are in provisional admission status, will have course load conditions imposed by their advisor or dean. Students should see the section entitled Standards of Academic Performance.

Enrollment Verification Guide

For enrollment verification to financial aid, scholarships, loan agencies, insurance companies, etc., the following categories will be followed. Students are encouraged to enroll in the appropriate number of credit hours as required/specified by the agencies. Veteran students are recommended to consult with the campus Veterans Affairs Office.

Fall and Spring:

Full-time	=	12 or more hours per semester
3/4 time	=	9 - 11 hours per semester
1/2 time	=	6 - 8 hours per semester
Less than 1/2 time	=	5 or fewer hours per semester

Maymester and Wintermester:

Full time	=	3 or more hours per term
1/2 time	=	2 hours per term
Less than 1/2 time	=	1 hour per term

Summer Sessions:

Full-time	=	6 or more hours per term, or 3 hours summer I and 3 hours 8 week, or 3 hours summer II and 3 hours 8 week, or 3 hours summer I and 3 hours summer II
3/4 time	=	4 - 5 hours per term
1/2 time	=	3 hours per term
Less than 1/2 time	=	2 or few hours per term

Students participating in the Career and Professional Development Services Cooperative Education Program and are only enrolled in a CO-OP course will be classified as full-time for the semester /term.

Limits on Undergraduate Course Enrollments

In most instances, a student may enroll in an undergraduate class a maximum of three times, **EXCEPT WITH THE PERMISSION OF THE STUDENT'S ACADEMIC DEAN**. A student may enroll more than three times in a variable-topic, studio, performance, workshop, or other course that is identified as "may be repeated for credit." This includes enrollments that result in a grade of "W," "F," "D," or "P." It does not apply to courses taken prior to a student's re-enrolling under "Option 2" as described under the Reinstatement After Extended Absence or Academic Fresh Start portions of this catalog. Individual colleges may have more restrictive policies.

A student may not enroll in a course in which a grade of "C" or higher has been previously earned (except for a variable-topic, studio, performance, workshop, or other course that is identified as "may be repeated for credit"). Moreover, a student may not enroll in a course in which he or she has an unresolved grade of "I".

Courses Taken on a Pass/Fail Basis

Some courses are graded only on a Pass/Fail basis (grade of "S" or "U"). Such courses are identified in the *Class Schedule*. These courses may be presented in fulfillment of degree requirements if so specified on the student's degree plan. In addition, an undergraduate student whose

cumulative grade point average is 2.0 or higher may take courses on a Pass/Fail basis with the following conditions:

1. A maximum of four courses attempted on a Pass/Fail basis may be used in fulfillment of degree requirements, as free electives only.
2. Such courses may not be reserved for graduate credit.
3. Not more than two such courses may be taken in a long semester or one in a summer session.
4. Courses taken on a Pass/Fail basis may not be counted toward the minimum residency requirements.
5. To obtain credit for the course, the student must meet the minimum standard and do all assigned work required for the grade of "A," "B," "C," or "D."
6. No course graded Pass/Fail may be presented in fulfillment of any degree requirement in the College of Engineering.
7. Business majors may not take any course offered by the College of Business Administration on a Pass/Fail basis.

To enroll on a Pass/Fail basis in courses that are not normally graded Pass/Fail, a student must:

1. Obtain a Pass/Fail form and approved signature from the academic dean of his/her college.
2. Submit the approved form to the Records Office by the submission deadline listed in the *Class Schedule*.

Election of the Pass/Fail option is irrevocable after the submissions deadline. Pass/Fail courses are not included in the calculation of the grade point average. There is no assurance that Pass/Fail courses will be accepted as transfer credit by another institution.

Reservation of Work by Undergraduates for Graduate Credit

Ordinarily, undergraduates are not eligible to take graduate courses. A student who already has a baccalaureate degree is not eligible to reserve courses for graduate credit but it is possible for undergraduate seniors to register in graduate courses in their last semester under the following conditions:

1. The undergraduate must lack not more than 12 semester hours (or six semester hours in summer session) of work to complete all requirements for the first baccalaureate degree and must have a grade point average of at least 3.0 in junior and senior-level courses.
2. These 12 hours (or less) must all be completed in the same semester or summer session in which the graduate courses are taken.
3. Total registration for all work must not exceed 15 semester hours (or 9 hours in a summer session).
4. All enrollment in graduate courses must be approved prior to registration by the graduate advisor of the department, the undergraduate dean, and the Dean of the Graduate School.
5. This option is limited to one term.

An undergraduate cannot count credit for graduate courses toward the baccalaureate degree. It will be reserved for credit toward a graduate degree. A form for reserving courses is available in the Graduate School. Approval to reserve work for graduate credit neither constitutes nor implies admission to any graduate program.

Repetition of Courses

Students may repeat courses at UTEP under either of the following conditions:

1. *Repetition of freshman level courses for the first time*: If a grade of "A", "B", "C", "D", or "F" is earned when the course is repeated, the previously earned grade **is automatically excluded from the GPA calculation.** Both grades earned remain on the academic record and the record will be annotated with the symbol (E) next to the first grade.
2. *Repetition of non-freshman level courses and repetition of freshman level courses after the first time*: all grades earned remain on the academic record and **are included in the GPA calculation.**

Freshman-level courses repeated for the first time at UTEP AUTOMATICALLY entail GPA recalculation if a grade of "A," "B," "C," "D," or "F" is earned when the course is repeated.

A course grade received as a result of disciplinary action is not eligible for grade replacement for GPA recalculation. The notation (D) after a grade indicates that the course is not eligible for grade replacement for GPA recalculation. Grade replacement of GPA calculation will not be made after graduation.

Note: UTEP students are cautioned that under no circumstances may a course taken at this institution and repeated at another college or university be eligible for GPA recalculation, even if the student is involved in first-time repetition of a freshman-level course. Courses transferred to UTEP are not calculated in a student's GPA.

Class Attendance

The student is expected to attend all classes and laboratory sessions. It is the responsibility of the student to inform each instructor of extended absences. When in the judgment of the instructor, a student has been absent to such a degree as to impair his or her status relative to credit for the course, the instructor may drop the student from the class with a grade of "W" before the course drop deadline and with a grade of "F" after the course drop deadline.

Excused Absences for University-Recognized Activities

Students who will be absent while representing the University in officially recognized University activities (sports, band, professional conferences, etc.) must notify the Dean of Students not less than ten days prior to the absence. The Dean of Students will provide the student with a letter of excuse for the professor. It is the student's responsibility to give the letter to the professor prior to the official recognized activity. Students following these procedures will be permitted to make up both assignments and examinations in consultation with instructors.

Absence for Religious Holy Days

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, *Tax Code*. Section 51.911 of the *Texas Education Code* related to absences by students for observance of religious holy days states that the institution shall excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is

excused within a reasonable time after the absence. The student must notify the instructor of each course that he/she will be absent for a religious holy day. The student's notification must be in writing and must be either (a) delivered by the student personally to the instructor of each class, with receipt of the notification acknowledged and dated by the instructor, or (b) by certified mail, return receipt requested, addressed to the instructor of each class. If a student and an instructor disagree about the nature of the absence being for the observance of a religious holy day as defined therein, or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the President of the University or his or her designee. The student and instructor shall abide by the decision of the President of the University or his/her designee.

Absence from Examinations

A student absent from a test during the semester is graded zero unless another policy is set by the instructor.

Dead Day

This specific day will be scheduled one day after the last day of classes only during the fall and spring semesters. The following policy will be observed:

1. No classes will be held on this day, except classes which meet once a week on that day;
2. Make-up exams should be left to the discretion of each individual instructor;
3. All student work (i.e., research papers, lab reports, term paper, etc.) should be due prior to this day;
4. If a comprehensive final is given, no new material, quizzes, or exams should be given two calendar days prior to Dead Day and attention should be given to reviewing of semester material. Implementation of this recommendation is to be left to the discretion of the individual instructor.

Final Examinations

Exemption from final examinations may not be given. Final examinations are scheduled to be two hours, forty-five minutes in length and take place during the final examination period. It is the policy of the University not to administer a second final examination in a course. It is also University policy that students shall not have more than two final examinations in a single day. In the unlikely event that the examination schedule results in a student having three final examinations on a single day, the faculty member upon the request of the student shall reschedule the second of that student's three examinations.

Scholastic Integrity

The University of Texas at El Paso prides itself on its standards of academic excellence. In all matters of intellectual pursuit, UTEP faculty and students must strive to achieve excellence based on the quality of work produced by the individual. In the classroom and in all other academic activities, students are expected to uphold the highest standards of academic integrity. Any form of academic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all

graduates of UTEP. It is imperative, therefore, that the members of this academic community understand the regulations pertaining to academic integrity and that all faculty insist on adherence to these standards.

Any student who commits an act of academic dishonesty is subject to discipline. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the *Handbook of Operating Procedures (HOP)*, and available in the Office of the Dean of Students and on the homepage of the Dean of Students at www.utep.edu.dos, may result in sanctions ranging from disciplinary probation, to a failing grade on the work in question, to a failing grade in the course, to suspension or dismissal, among others.

Reinstatement of Students After Extended Absence

At the time of reinstatement to the University after an absence of at least two academic years, a student has the option of:

1. Continuing with the academic record and GPA as they stand, and completing all remaining requirements for graduation; or
2. Beginning anew, with no courses attempted earlier at UTEP counted toward the degree, nor counted in the cumulative GPA calculations.This option may be elected only once.

If option (1) is chosen, the GPA will be computed according to rules in force at the time of re-entry. If option (2) is chosen, notation will be made in the student's record indicating that portion of the record which is to be involved in computing requirements for graduation. There is no assurance that courses attempted prior to this option will be accepted as transfer credit by another institution. In either case, all courses taken and grades earned will remain on the official academic record. Pursuit of the degree under either option does not exempt the student from the provisions of the "seven-year rule" (students should refer to the Catalog Requirements section).

If the student was not eligible to re-enroll at the end of the last period of enrollment at the University, negotiation of a Petition for Reinstatement with the academic dean of either the previous or intended major is required at the time of reinstatement. The petition will specify which of the two options has been chosen.

GRADES AND GRADE POINT AVERAGES

Grade	Meaning	Grade Points per Semester Hour
A	Excellent	4
B	Good	3
C	Average	2
D	Below Average but Passing	1
F	Failure	0

The above grades are included in the grade point average (GPA), which is calculated as follows: (1) multiply the semester hours of credit in each course by the number shown above for the grade received in that course; (2) divide the total grade points earned by the sum of the semester hours attempted in courses in which one of the above grades was earned.

The following grades are not included in grade point average calculations:

Grade	Meaning
I	Incomplete
S	Satisfactory, in a Pass/Fail course
U	Unsatisfactory, in a Pass/Fail course
P	In Progress
W	Withdrawal
CR	Transfer credit or credit by examination
A*	Satisfactory
B*	Satisfactory
C*	Satisfactory
D*	Satisfactory
F*	Unsatisfactory
S*	Satisfactory
U*	Unsatisfactory
N	A temporary administrative grading notation often meaning not reported by the faculty or some other administrative problem

Midterm Grades for Freshmen

At mid-semester, all freshmen will receive midterm grades. This midterm grade report is designed to give students an early indication on their progress during the freshman semesters. Midterm grades are not recorded on the student's academic record, nor computed in the cumulative grade point average and academic standing.

Incomplete or In-Progress Work

Assignment of the grade "I" is made only in exceptional circumstances and requires the instructor to file with the academic dean an outline of the work to be completed and the time span (not to exceed one calendar year) allowable for completion. In no case may repetition of the course be assigned as work to be completed. If the work has not been completed at the end of the specified time, the "I" will be changed to an "F." A student may not enroll in a course in which he/she has an unresolved grade of "I." The grade of "P" (in progress) is limited to specific courses in which re-enrollment is required. This includes all thesis courses (5398-5399, 6320-6321), graduate internships, and certain undergraduate courses.

Grade Changes

All student initiated grade reviews and grade appeals shall be made no later than one year after the official grade has been released to the student; for a student who has graduated**, the deadline is** three months following the semester in which the degree was awarded.

Any student may request the faculty member to review and re-evaluate a grade previously given. The student may then seek assistance from the department chair or the academic dean in obtaining a grade review.

After a grade review, a formal grade appeal process is available in cases where a student wishes to appeal a grade assigned by the instructor. The formal appeal shall be officially filed with the Student Welfare and Grievance

Committee no later than one year after the official grade has been released to the student; for a student who has graduated, **the filing deadline is** three months following the semester in which the degree was awarded. See Student Life Policies and Procedures section-Student Grievance Procedures in this Catalog for additional information.

College/Major Academic Standing

Selected colleges or majors may also require students to maintain a 2.0 GPA for courses taken within the college or within the major. A student whose college/major GPA falls below a 2.0 after completing a specified minimum number of hours of the designated course work in the college/major will be placed on probation within the college/major. This minimum shall be nine hours unless specified differently on the degree requirements for the college/major.

If the student's college/major GPA remains below a 2.0 after completing nine additional hours of course work in the college/major [or the designated college/major probationary period (students should refer to the individual degree requirements to determine the applicable probationary period)], the student will be placed on suspension from the college/major for a minimum of one semester. A student who is on suspension from a college/major may continue to enroll in the University if the student changes majors and meets the GPA requirements of the new college/major. A change to a new major in the same college will require permission from the dean. A student who wishes to re-enroll in the same major after a suspension must make a Petition for Reinstatement to the College/Major to the student's academic dean. If the petition is approved, the student will be permitted to re-enroll under academic probation, plus any special conditions which may be imposed by the academic dean. It is recommended that students who are suspended from the college/major receive career counseling through the University Counseling Center.

Students who have been suspended for a period of one semester and have been allowed to re-enroll in that college/major must attain a GPA of 2.0 in the college/major after the completion of nine additional hours of course work in the college/major [or the designated college/major probationary period (student should refer to the individual degree requirements to determine the applicable probationary period)]; failure to do so will result in suspension from the college/major for a minimum of one year. A student who is allowed to re-enroll after this suspension and does not achieve a 2.0 GPA in the college/major [or the designated college/major probationary period (student should refer to the individual degree requirements to determine the applicable probationary period)] will be dismissed from the college/major. A change of major will be required if the student wishes to continue to enroll in the University.

Any appeal from the regulations governing academic performance shall be directed to the dean of the college in which the student is a major, who is empowered to grant relief in unusual cases if the circumstances warrant such action. This policy is in addition to the policies concerning academic standing within the University. Any penalties concerning eligibility to re-enroll arising from the University's academic standing policy shall take precedence over any provisions within this policy.

Standards of Academic Performance

Undergraduate students are expected to maintain a cumulative grade point average (GPA) of at least 2.0, a "C" average for all work attempted at UTEP, and at least a GPA of 2.0 for all course work required in the major field

of study. These are University-wide minimum requirements for the conferral of any bachelor's degree, but higher minimum standards of performance are required in some programs.

When final grades of each term are posted to the student academic record, both term GPA (for the semester or session just ended) and cumulative GPA (for all work attempted at UTEP) are included. In addition, designations appropriate to the student's past academic performance and eligibility to re-enroll at the University are included. These designations are as follows:

Eligible to Re-enroll

A student whose cumulative GPA is 2.0 or higher is eligible to re-enroll.

Academic Probation

A student whose cumulative GPA falls below 2.0 will be placed on academic probation. A student on academic probation must have permission to re-enroll. Students in an entering student program should seek this permission from their entering student advisor. Other students should seek this permission from their academic dean. A student will remain on academic probation as long as the term GPA is at least 2.0 and the cumulative GPA is below 2.0.

Academic Suspension for One Semester

A student on academic probation whose term GPA is below 2.0 will be placed on academic suspension for one semester. A student thus suspended MAY NOT re-enroll at the University until one long semester or full summer session has elapsed, following which, if the student wishes to re-enroll, he/she must negotiate a Petition for Reinstatement with the academic dean. If the petition is approved, the student will be permitted to re-enroll under academic probation, plus any special conditions that may be imposed by the academic dean.

Academic Suspension for One Year

A student on academic probation who has already been placed on academic suspension for one semester, and whose term GPA is less than 2.0, will be placed on academic suspension for one year. A student thus suspended MAY NOT re-enroll at the University until one full calendar year has elapsed, following which, if the student wishes to re-enroll, he/she must negotiate a Petition for Reinstatement with the academic dean of the previous major or, if the student is selecting a new major, the dean of the intended new major. If reinstated, the student will be permitted to re-enroll under academic probation, plus any special conditions of the Petition for Reinstatement.

Academic Suspension For Two Years

A student who has been placed on academic suspension for one year and whose semester and cumulative GPA is below 2.0 will be placed on academic suspension for two years. A student thus suspended MAY NOT re-enroll at the University until two full calendar years have elapsed, following which, if the student wishes to re-enroll, he/she must negotiate a Petition for Reinstatement with the academic dean of the previous major or, if the student is selecting a new major, the dean of the intended new major. If reinstated, the student will be permitted to re-enroll under academic probation, plus any special conditions of the Petition for Reinstatement.

Any appeal from the regulations governing academic performance shall be directed to the dean of the college in which the student is a major, who is empowered to grant relief in unusual cases if the circumstances warrant such action. Any student who attempts to circumvent the academic performance regulations is subject to disciplinary action.

General Requirements for Undergraduate Degrees

General academic regulations may be changed at any time. All students, regardless of when originally enrolled, are required to abide by current academic regulations.

RESIDENCE

Work counting toward the degree must be completed in residence at the University as follows:

1. a total of at least 25% of the semester hours (a minimum of 30 semester hours)
2. twenty-four of the last 30 semester hours
3. twelve semester hours of advanced courses in the major subject must have been completed not more than three years previous to the date of graduation

CATALOG REQUIREMENTS

In order to be graduated, a student must fulfill the specific course and degree requirements of the catalog in effect at the time of his/her enrollment or of any subsequent catalog in effect during his/her enrollment, provided that the requisite courses outlined in the selected catalog are still being offered. No catalog more than seven years old may be used to determine the course requirements for a degree. The seven-year period begins with the year the catalog was issued, regardless of the student's first semester of enrollment. Students entering the University for the first time during the summer session will be subject to the requirements of the catalog for the next Fall term, or of a later catalog.

A student transferring from a Texas two-year institution may select a catalog that was in effect prior to the first semester of enrollment at UTEP, as long as the student was following UTEP's degree plan while enrolled at the community college.

DEGREE PLAN

Students are advised to obtain and follow the degree plan for their major upon their first enrollment at the University. The student is required to indicate a major and file a degree plan of the major with the academic dean upon completion of 60 semester hours.

CHANGE OF MAJOR

A student who wishes to change majors must obtain permission of the dean of the college of the new major.

CONCENTRATIONS AND MINORS

Students interested in pursuing a concentration or minor in an area of study should refer to the college curriculum in the catalog or consult with their major advisor for further details.

COMPLETION OF FRESHMAN-LEVEL COURSES

All freshman-level courses which are required by specific course number shall be completed before the student has completed 90 semester hours toward his/her degree. Otherwise, no credit will be granted toward fulfilling the minimum credit hour requirements for the degree even though the courses must be completed.

ONE-HOUR COURSES

No more than six one-hour courses may be counted toward completion of the minimum total hours required for a degree (unless degree requirements specify otherwise), except with specific approval of the academic dean.

MAJOR EXAMINATIONS

At the discretion of the department concerned, a comprehensive examination may be required in the major subject under the following conditions:

1. Four hours written, or three hours written and one hour oral.
2. The department fixes the time and place, and supervises the examination.
3. In case of failure, the student may take another examination on a date determined by the department.

GRADE POINT AVERAGE REQUIRED FOR GRADUATION

A minimum grade point average of 2.0 must be achieved in all course work at The University of Texas at El Paso and in all transfer work counted toward the degree. The UTEP cumulative grade point average consists of all grades earned at this institution regardless of their applicability toward a degree. Transfer credits may be counted toward meeting degree requirements, but transfer grades and grade points do not enter into UTEP grade point average calculations. A minimum grade point average of 2.0 is required in the major. This is intended as a University-wide *minimum* and does not prevent a college from requiring a higher GPA in specific majors or programs, provided appropriate approvals have been obtained.

GRADUATION

Degrees are conferred at the end of each long semester (December, May) and each summer session (August). Formal commencement ceremonies are held in May for all candidates who complete degree requirements during the Spring semester and in December for Fall candidates and graduates of the previous Summer. The student must apply for graduation and pay the appropriate fee in order to be considered a candidate. The application process begins with the academic dean and should be initiated during the next-to-last semester or session and completed no later than the published deadline in the *Class Schedule*. The paid graduation application form will be collected by the Student Business Service Office for processing by the Records Office.

SECOND BACHELOR'S DEGREE

A second baccalaureate degree will not be conferred until the candidate has completed at least 24 semester hours at The University of Texas at El Paso, in addition to those counted toward the baccalaureate degree requiring the higher number of semester hours of credit. These additional hours must include at least 6 advanced hours in the major subject of the second degree, and at least 6 hours must have been earned after completion of requirements for the first bachelor's degree. A student working toward a second bachelor's degree will register as an undergraduate student. Two bachelor's degrees may not be awarded to any candidate at the same commencement.

POSTHUMOUS DEGREE

A posthumous degree may be awarded only if the student was enrolled in courses that would have allowed the student to complete all work for the degree, and if the student had the appropriate grade point average in the required areas. For further information, individuals may contact the appropriate dean's office.

Academic Honors

UNIVERSITY HONORS PROGRAM

Honors House
(Behind the Academic Services Building)
Phone: (915) 747-5858
honors@utep.edu
http://www.utep.edu/honors

DIRECTOR: Gary Edens

University Honors Degree

Candidates will earn Honors in specified areas (listed below) and will complete either 6 hours of upper-division Honors credit or a 6-hour Honors Senior Project in their major. Recipients of the University Honors Degree must complete the following course requirements:

ENGL	1311-1312	At least 3 hours of English must be taken for Honors credit.Entering freshmen who place beyond ENGL 1312 will take an Honors sophomore or upper-division English course.
HIST	1301-1302	At least 3 hours of History must be taken for Honors credit.
POLS	2310-2311	At least 3 hours of Political Science must be taken for Honors credit.

Complete 8 hours of courses given by the departments of Biological Sciences, Chemistry, Geological Sciences, or Physics. At least 3 hours of science must be taken for Honors credit.

Complete 6 hours of upper-division work for Honors credit. Three of these hours may be satisfied through approved independent study.

OR

Complete a 6-hour Honors Senior Project (HON 4395-4396). In several departments, completion of the Honors Senior Project may also qualify the student for Departmental Honors recognition: Political Science, Psychology, History, Chemistry, Biological Sciences, Geological Sciences, and Physics.

Additional Honors credits as required to bring the total to 30 hours; the hours may be earned by enrolling in Honors sections or by contracting for Honors credit in non-Honors courses.

With approval of a student's departmental advisor and the University Honors Program Director, a maximum of 6 of these 30 hours may be taken on a Pass/Fail basis. Credits obtained on this basis may be used only for elective credit if approved by the student's academic department. Courses taken on a Pass/Fail basis are disregarded in determining the grade point average, thereby encouraging Honors students to enroll in a course for which they might otherwise feel inadequately prepared.

Completion of the above requirements with a cumulative GPA of 3.3 or higher at the time of graduation entitles the student to receive the University Honors Degree. The notation "University Honors Degree" will be added to the permanent academic record and the diploma, and all Honors courses completed will be designated with (H).

University Honors Certificate

Students who wish to pursue a less comprehensive Honors curriculum may elect to obtain the University Honors Certificate by completing 18 hours of Honors course work. At least 6 hours must be upper-division, and 3 of these may be by approved independent study. A maximum of 3 Honors hours may be taken on a Pass/Fail basis, with the same restrictions described for such courses in the University Honors Degree option. Upon graduation with a cumulative GPA of 3.3 or higher, the notation "University Honors Certificate" will appear on the permanent academic record and on the diploma, and all Honors courses completed will be designated with (H) on the transcript.

Honors Contract Credit

Honors Program members enrolled in a non-honors section of a course may arrange for special additional work under the supervision of the instructor. If the contract work is completed and evaluated as Honors quality by the instructor and a grade of "A" or "B" is earned for the course, Honors credit for the class will be awarded. Detailed guidelines and contracts are available at the Honors House.

Honors Transfer Credit

If an Honors course is completed elsewhere in an institution accredited by the Association for Colleges and Schools and transfers as the equivalent of a course offered at UTEP, the Honors course will be counted toward hours needed to earn the University Honors Degree or Certificate. If the Honors course completed elsewhere transferred to UTEP as enblock (ENB), then the course must be evaluated on an individual basis by the Honors Director in consultation with the Honors Advisory Committee and a decision made based on course content. A minimum of 50% of the credits required for the Honors Degree or Certificate must be completed at UTEP.

Honors Recognition at Commencement

The Degree candidate is recognized at commencement by the wearing of a gold stole. The Certificate candidate is recognized at commencement by the wearing of a lilac cord. Students completing a senior thesis/project are recognized at commencement by the wearing of a dark green cord.

Honors (HON)

3300 Honors Colloquium (3-0)
Examination of a special topic or interdisciplinary area. May be repeated once for undergraduate credit as subject varies. Course approved for undergraduate or graduate credit.

4395 Honors Senior Thesis (0-0-3)
4396 Honors Senior Thesis (0-0-3)
Students will conduct an Honors Senior Project under the direction of a faculty member in their major department and report the findings, usually in thesis form. During the first semester (HON 4395), a prospectus prepared by the student describing the proposed project will be filed with the Honors office. The completed project will be defended orally. *Prerequisite*: Department approval.

OTHER HONORS PROGRAMS

Departmental Honors Program

Students wishing to earn departmental Honors will complete a senior thesis, senior project, or other special requirement, depending on the department. A departmental faculty member will direct the project or thesis. The director, along with a departmental honors committee, will judge the student's work, and outside referees may be consulted if deemed appropriate. Students may include departmental honors credits with University honors credits, upon consultation with the University Honors Program Director, in order to earn Honors at both levels. The following offer Departmental Honors: Political Science, Psychology, History, Chemistry, Biological Sciences, Geological Sciences, and Physics. Completion of a senior thesis/project is recognized at commencement by the wearing of a dark green cord.

Dean's List

At the close of each fall and spring semester, the Registration and Records Office prepares a Dean's List for each undergraduate college of all full-time undergraduate students who have completed at least 12 collegiate hours and have earned a semester grade point average of 3.5. This honor will be noted on the student's academic record.

Academic Honors

The University of Texas at El Paso offers three opportunities for students to achieve special recognition for academic performance at graduation. Graduation with any of these honors adds a special distinction to academic records and diplomas and may enhance the prospects for graduating seniors to enter graduate and professional schools or the job market. To be eligible for the following recognitions and/or programs, candidates must be among

the most able and intellectually curious of students and must meet minimum GPA requirements. Each form of honors is described more fully below.

Academic Honors at Graduation

Honors will be awarded upon graduation in the following categories for each baccalaureate degree to students who have completed at least sixty (60) of the total required credit hours of their degree plans at The University of Texas at El Paso:

1. Summa Cum Laude (Highest Honors) will be awarded to students who attain a minimum UTEP grade point average of 3.90.
2. Magna Cum Laude (High Honors) will be awarded to students who attain a minimum UTEP grade point average of 3.80, but who do not qualify for Highest Honors.
3. Cum Laude (Honors) will be awarded to students who attain a minimum UTEP grade point average of 3.50, but who do not qualify for High or Highest Honors.

In computing the minimum grade point average for academic honors at graduation, only grades earned at UTEP applied to the degree will be included.

Requirements for honors for a second degree include the above requirements with the additional stipulation that the student completes thirty (30) hours beyond the original baccalaureate requirements.

Recognition at commencement will be by the wearing of an Honors cord: Highest Honors - gold, High Honors - white, and Honors - color of college.

STUDENT LIFE POLICIES AND PROCEDURES

What's Inside

General Regulations

- Student Conduct
- Prohibitive Conduct
- Illegal Substances Policy
- Disruptive Acts Policy
- Hazing Policy
- Solicitation
- Compulsory Inspection of Vehicle
- Immunization Requirement
- AIDS, HIV, and Hepatitis B Infection Policy
- Bacterial Meningitis
- Student Right-to-Know and Campus Security Act
- Student Grievance Procedures
- Discrimination Complaints

General Regulations

Detailed policies and procedures affecting student life are printed in the *Handbook of Operating Procedures (HOP)* student section and are available on the Internet at http://it.utep.edu/hoop/Student_Affairs_Index_Page_HOP.htm. The handbook supplements the rules and regulations of the Board of Regents and covers student conduct and discipline, use of University facilities, student organizations, educational records, and student publications. The *Rules and Regulations* of the Board of Regents of The University of Texas System are at http://www.utsystem.edu/bor/rules. The President has delegated responsibility for the administration of student discipline to the Dean of Students.

STUDENT CONDUCT

While enrolled at the University, a student neither loses the rights nor escapes the responsibilities of citizenship. Any student who engages in conduct that is prohibited by the Board of Regents' *Rules and Regulations* or University rules, or by federal, state, or local law is subject to discipline whether such conduct takes place on or off campus or whether civil or criminal penalties are also imposed for such conduct. All students are expected and required to obey the law, to show respect for properly constituted authority, and to observe correct standards of conduct.

The University of Texas at El Paso administers student discipline according to established procedures of due process. Procedures are defined and described in the *Rules and Regulations* of the Board of Regents, Part One, Chapter VI, Section 3, and in the *Handbook of Operating Procedures (HOP)*.

Students should check with appropriate departments whose policy or regulation is of concern. If necessary, students need to refer to the rules as contained in the Regents' Rules and the *Handbook of Operating Procedures (HOP)*. The Office of the Dean of Students can assist on this matter. This set of rules is available at http://it.utep.edu.hoop

OTHER PROHIBITED CONDUCT

Computer usage violations, use of alcoholic beverages, dishonesty, gambling, defacing of property, endangering the health or safety of others, use of obscene and threatening language, altering of records, possession or use of firearms, failure to respond promptly to official notices, etc. will subject the student to disciplinary action.

Penalties, which may be imposed in conjunction with the approved disciplinary procedures, include the following: admonition, disciplinary probation, withholding of grades, withholding of official transcript or degree, restitution, failing grade, denial of degree, suspension and expulsion, revocation of degree and withdrawal of diploma, or other penalty as deemed appropriate under the circumstances. In addition, certain privileges may be withdrawn consistent with the severity of the offense and the rehabilitation of the student. These penalties may be imposed singularly or in any combination upon individuals, groups, or organizations.

ILLEGAL SUBSTANCES POLICY

The use, possession, or sale of any illegal drugs or narcotics including any amount of marijuana on the campus of the University is a violation of Regents' *Rules and Regulations* and of University policies governing student conduct, as well as a violation of State Law. In addition to possible criminal prosecution, student offenders will be subject to disciplinary action by the University. The minimum disciplinary penalty that will be imposed is suspension from the University for a specified period of time and/or suspension of rights and privileges.

DISRUPTIVE ACTS POLICY

The obstruction or disruption of any teaching, research, administrative, disciplinary, public service, or other authorized activity on campus or under the authority of the University or on property owned or controlled by the University is prohibited and will subject the student or group of students to disciplinary action.

HAZING POLICY

Hazing in state educational institutions is prohibited by both state law (Sections 51.936 and 37.151 et seq., *Texas Education Code*) and by the Regents' *Rules and Regulations* (Part One, Chapter VI, Section 3.28). Individuals or organizations engaging in hazing could be subject to fines and charged with criminal offenses. Additionally, the law does not affect or in any way restrict the right of the University to enforce its own rules against hazing.

The law defines hazing as any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in any organization whose members are or include students at an educational institution. Hazing includes but is not limited to:

1. Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;
2. Any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics, or other activity that subjects the student to an unreasonable risk or harm or that adversely affects the mental or physical health or safety of the student;
3. Any activity involving consumption of food, liquid, alcoholic beverage, liquor, drug, or other substance which subjects the student to an unreasonable risk or harm or which adversely affects the mental or physical health of the student;
4. Any activity that intimidates or threatens the student with ostracism; that subjects the student to extreme mental stress, shame, or humiliation; or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution; or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in this subsection;
5. Any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code.

Activities which under certain conditions constitute acts that are dangerous, harmful, or degrading, in violation of Rules include but are not limited to:

- calisthenics, such as sit-ups, push-ups, or any other form of physical exercise;
- total or partial nudity at any time;
- the eating or ingesting of unwanted substance;
- the wearing or carrying of any obscene or physically burdensome article;
- paddle swats, including the trading of swats;
- pushing, shoving, tackling, or any other physical contact;
- throwing oil; syrup, flour, or any other individual interrogation;
- forced consumption of alcoholic beverages either by threats or peer pressure;
- lineups intended to demean or intimidate;
- transportation and abandonment (road trips, kidnaps, walks, rides, drops);
- confining individuals in an area that is uncomfortable or dangerous (hot box effect, high temperature, too small);
- any type of personal servitude that is demeaning or of personal benefit to the individual members;
- wearing of embarrassing or uncomfortable clothing;
- assigning pranks such as stealing, painting objects, harassing other organizations;
- intentionally messing up the house or room for clean up;
- demeaning names;
- yelling and screaming; and
- requiring boxing matches or fights for entertainment.

The University regards any form of hazing as a major violation, and any individual and/or registered student organization participating in such activities will be prosecuted. According to the law, a person can commit a hazing offense not only by engaging in a hazing activity, but also by soliciting, directing, encouraging, aiding, or attempting to aid another engaging in hazing; by intentionally, knowingly, or recklessly allowing hazing to occur; or by failing to report first-hand knowledge that a hazing incident is planned or has occurred in writing to the Dean of Students or other appropriate university officials. The fact that a person consented to or acquiesced in a hazing activity is *not* a defense to prosecution for hazing under this law.

An organization can commit a hazing offense if the organization condones or encourages hazing or if an officer or any combination of members, pledges, or alumni of the organization commits or assists in the commission of hazing.

In an effort to encourage reporting of hazing incidents, the law grants immunity from civil or criminal liability to any person who reports a specific hazing event in good faith and without malice to the Dean of Students or other appropriate university officials, and it immunizes a person from participation in any judicial proceeding resulting from that report.

SOLICITATION

In general, solicitation is prohibited in any building, structure, or facility of the UTEP campus. Certain university activities are permitted as defined in the Handbook of Operating Procedures. This handbook is available for review in the Office of the Dean of Students and on the homepage of the Dean of Students at www.utep.edu/dos.

STUDENT TRAVEL POLICY

Purpose

It is the policy of the University of Texas at El Paso (UTEP) to promote safe travel by students who participate in certain university organized and sponsored activities or events.

Policy and Procedure

1. This Policy is applicable to student travel undertaken by one or more currently enrolled students to reach an activity or event that meets **all** of the following criteria:
   a. **An activity or event organized and sponsored by the university**. An activity or event is considered to be organized and sponsored if it has been planned and funded by the university and approved in writing by the designated administrator. The types of activities and events covered by this policy include course related field trips, recreational sports club trips, departmental sponsored trips, the activities of sponsored student organizations, and meetings of academic organizations where a student is officially representing the university; **and**
   b. **The activity or event is located more than 25 miles from the university; and**
   c. (i) **Travel to the activity or event is funded and undertaken using a vehicle owned or leased by the university; or**
   (ii) **Attendance at the activity or event is required by a registered student organization and approved in accordance with this Policy.**
2. Registered student organizations that require their members to travel 25 miles or more from the university to attend an activity or event covered by this Policy must obtain prior written approval for the proposed travel by the designated administrator.
3. The following provisions will apply to all travel covered by this Policy.
   a. All Motor Vehicle Travel.

   Seat Belts:

   Occupants of motor vehicles shall use seat belts or other approved safety restraint devices required by law or regulation at all times when the vehicle is in operation.

   Alcohol and Illegal Substances Prohibited:

   Occupants of motor vehicles shall not consume, possess, or transport any alcoholoic beverages or illegal substances.

   Passenger Capacity:

   The total number of passengers in any vehicle at any time it is in operation shall not exceed the manufacturer's recommended capacity or the number specified in applicable federal or State law or regulations, whichever is lower. Where applicable, all travel participants are required to comply with The University of Texas System Business Procedure Memorandum 16-05-02, including, but not limited to, provisions concerning vehicle passenger capacity.

   License and Training:

   Each operator of a motor vehicle shall have a valid operator's license and be trained as required by law to drive the vehicle that will be used.

Proof of Insurance, Inspection, and Safety Devices:

Each motor vehicle must have a current proof of liability insurance card and State inspection certification, be equipped with all safety devices or equipment required by federal or State law or regulation, and comply with all other applicable requirements of federal or State law or regulations.

Legal Operation of Vehicle and Driving Schedule:

Operators of motor vehicles shall comply with all laws, regulations, and posted signs regarding speed and traffic control and shall not operate the vehicle for a continuous period that is longer than the maximum provided by federal or State law or regulations or guidelines promulgated by the university, whichever is lower, without scheduled rest stops or overnight stops.

b. Travel Using a Vehicle Owned or Leased by the University.

Service and Maintenance:

In addition to those provisions in Item 3.a., each vehicle owned or leased by the university must be subject to scheduled periodic service and maintenance by qualified persons and comply with all applicable requirements of The University of Texas System Business Procedure Memorandum 16-05-02.

Operators of Vehicles:

All operators of vehicles owned or leased by the University shall be employees of the university and shall have a valid operator's license for the operation of the particular vehicle. In addition, operators shall have a current Motor Vehicle Record on file with the designated office of the university.

c. Travel Using Rented Vehicles.

In addition to those provisions specified in Item 3.a., the rental, use, and operation of all rented vehicles shall comply, where applicable, with the State contracts for rental cars and all applicable requirements of The University of Texas System Business Procedure Memorandum 16-05-02.

d. Travel by Common Carrier.

When a common carrier (bus, airline, etc.) is used for student travel covered by this Policy, all reasonable steps will be taken to assure the travel is undertaken in conformance with this Policy and all applicable federal, State, local, and university regulations.

4. Students are responsible for abiding by the rules and regulations contained in the UTEP Student Code of Conduct while they are traveling. The sponsoring department may promulgate additional rules concerning expectations of students while on the trip.
5. As part of the approval process, all participants must sign an appropriate Release and Indemnification Agreement. All persons driving personal vehicles for travel covered by this policy must agree to comply with the requirements of 3.a. and produce some evidence of a valid operator's license for the vehicle to be used, current proof of liability insurance and Texas State inspection certificate.

COMPULSORY INSPECTION OF VEHICLE

It is mandatory for all students enrolled in public institutions of higher education in the State of Texas to be in compliance with Vehicle Emissions Testing Laws before privileges may be granted to park or drive a motor vehicle that is not registered in this state on institutional property.

For further details, please consult the Transportation Code, Chapter 548, Subchapter F: Motor Vehicle Emissions Inspection and Maintenance. A full copy of the legislation is available in the University's Parking Rules and Regulations.

IMMUNIZATION REQUIREMENT

The health and safety of students is paramount to the University. Although certain immunizations are required only of students enrolled in specific health-related courses and programs, all students are strongly encouraged to obtain them for their own protection. Students may obtain information regarding the consequences of outdated immunizations for certain diseases, the age groups most vulnerable to these vaccine preventable diseases, and local providers of immunization services from the Student Health Center located on campus. Immunizations are available at the Student Health Center by calling (915) 747-5624 to obtain information. Students are responsible for the full cost of any immunizations for which a fee is charged.

In accordance with State law, the following immunizations are required for all students enrolled in health-related courses which will involve direct patient contact in medical or dental care facilities or who come in contact with human biological fluids or tissue. Students enrolled at UTEP will assume the full cost of the HBV. All other immunizations listed below are available for a small service fee.

- **Measles**: proof of two doses of measles vaccine administered on or after the first birthday and at least 30 days apart or proof of immunity;
- **Mumps**: proof of one dose of mumps vaccine administered on or after the first birthday or proof of immunity;
- **Rubella**: proof of one dose administered on or after the first birthday or proof of immunity;
- **Tetanus/diphtheria**: proof of one "booster" dose of tetanus/diphtheria (within 10 years);
- **Hepatitis B virus (HBV)**: proof of serologic immunity to HBV or certification of immunization with a complete series of Hepatitis B vaccine. Students will be required to present a letter or other suitable written certification.

Note: Some colleges or academic departments may require additional immunizations. Certain exemptions are allowed from the immunization requirements. For further information, students should contact the Student Health Center or the academic department responsible for the courses or programs requiring immunizations.

A form on which the required immunizations can be documented is available from the Admissions Office or the Student Health Center. Since most secondary schools are required by law to maintain similar records, a copy of the high school immunization record may be submitted.

The Student Health Center is responsible for maintaining a record of those students who comply with these requirements and may recommend the placement of an administrative hold on records if they have not been met.

The Student Health Center provides the required immunizations with the exception of X-ray screening for Tuberculosis for which there is a modest charge. The HB vaccine is also available for a nominal charge for students enrolled in medical-related programs.

AIDS, HIV, AND HEPATITUS B INFECTION POLICY

The University of Texas at El Paso recognizes Acquired Immune Deficiency Syndrome (AIDS), Human Immunodeficiency Virus (HIV), and Hepatitis B Virus (HBV) as serious public health threats and is committed to encouraging an informed and educated response to issues and questions concerning AIDS, HIV, and HBV. To demonstrate its commitment, UTEP has adopted a policy and procedural steps to protect both the rights and well being of those students, employees, and patients who may be infected with HIV or HBV as well as to prevent the spread of infection. No individual with HIV or HBV infection will be discriminated against in employment, admission to academic programs, health benefits, or access to facilities. Students with HIV or HBV infection may attend all classes without restriction, as long as they are physically and mentally able to participate and perform assigned work and pose no health risks to others. All information regarding the medical status of UTEP, faculty, staff, and students is confidential.

A complete copy of the "AIDS, HIV and Hepatitis B Infection" policy can be found in the institutional *Handbook of Operating Procedures (HOP)* available in the Dean of Students Office, the Library, and the Student Health Center. This policy is applicable to all students of UTEP as they pursue their academic (and clinical) endeavors. An educational pamphlet on HIV infection developed by the U.S. Department of Health and Human Services and the Public Health Service will be made available to all students from the Student Health Center.

BACTERIAL MENINGITIS

This information is being provided to all new college students in the state of Texas. Bacterial Meningitis is a serious, potentially deadly disease that can progress extremely fast-so take utmost caution. It is an inflammation of the membranes that surround the brain and spinal cord. The bacteria that causes meningitis can also infect the blood. This disease strikes about 3,000 Americans each year, including 100-125 on college campuses, leading to 5-15 deaths among college students every year. There is a treatment, but those who survive may develop severe health problems or disabilities.

What are the symptoms?

- High fever
- Rash or purple patches on skin
- Light sensitivity
- Confusion and sleepiness
- Lethargy
- Severe headache
- Vomiting
- Stiff neck
- Nausea
- Seizures

There may be a rash of tiny, red-purple spots caused by bleeding under the skin. These can occur anywhere on the body.

The more symptoms, the higher the risk, so when these symptoms appear, seek immediate medical attention.

How is Bacterial Meningitis diagnosed?

- Diagnosis is made by a medical provider and is usually based on a combination of clinical symptoms and laboratory results from spinal fluid and blood tests.
- **Early diagnosis and treatment can greatly improve the likelihood of recovery.**

How is the disease transmitted?

- The disease is transmitted when people exchange saliva (such as by kissing, of by sharing drinking containers, utensils, cigarettes, toothbrushes, etc.) or come in contact with respiratory or throat secretions.

How do you increase your risk of getting Bacterial Meningitis?

- Exposure to saliva by sharing cigarettes, water bottles, eating utensils, food, kissing, etc.
- Living in close conditions (such as sharing a room/suite in a dorm or group home).

What are the possible consequences of the disease?

- Death (*in 8 to 24 hours from perfectly well to dead*)
- Permanent brain damage
- Kidney failure
- Learning Disability
- Hearing loss, blindness
- Limb damage (fingers, toes, arms, legs) that requires amputation
- Gangrene
- Coma
- Convulsions

Can the disease be treated?

- Antibiotic treatment, if received early, can save lives and chances of recovery are increased. However, permanent disability or death can still occur.
- Vaccinations are available and should be considered for:
  - Those living in close quarters
  - College students 25 years old or younger
- Vaccinations are effective against 4 of the 5 most common bacterial types that cause 70% of the disease in the U.S. (but does not protect against all types of meningitis).
- Vaccinations take 7-10 days to become effective, with protections lasting 3-5 years.
- The cost of the vaccine varies, so check with your health care provider.
- Vaccination is very safe-most common side effects are redness and minor pain at injection site for up to two days.
- Vaccination is available at UTEP Student Health Center, by appointment at 747-5624.
- The City County Health Department, Immunization Outreach at 591-2050
- Pro Action-Tillman Health Center at 533-3414

How can I find out more information?

- Contact your own health care provider.
- Contact your Student Health Center at 747-5624
- Contact your local or regional Texas Department of Health Office at 834-7853.
- Contact websites: http://www.dcd.gov/ncidod/dbmd/diseaseinfo; http://www.acha.org

Requirement to obtain information on Bacterial Meningitis

- All incoming undergraduate and graduate students are required to obtain information about Bacterial Meningitis and sign an acknowledgement form with the Records Office, located in the Academic Services Building.

STUDENT RIGHT-TO-KNOW AND CAMPUS SECURITY ACT

In compliance with the Jeanne Clery Disclosure of Campus Security Police and Campus Crime Statistics Act of 1998. The University of Texas at El Paso collects specified information on campus crime statistics, campus security policies, and institutional completion or graduation rates. Pursuant to the federal law, alleged victims of violent crime are entitled to know the results of campus student disciplinary proceedings concerning the alleged perpetrators.

UTEP makes timely reports to the campus community on crimes considered to be a threat to students and employees, and crimes are reported to campus police or local police agencies.

Every October, UTEP publishes and distributes an annual report of campus security policies and crime statistics to all current students and employees, provides copies of the report to applicants for enrollment or employment upon request, and submits a copy of the report to the Secretary of Education upon request. The annual campus crime statistics report references crimes which occur on the campus property owned or controlled by UTEP or within a contiguous geographic area of the institution. Statistics for off-campus buildings or property owned by student organizations that are registered by the institution when such statistics are available from local police departments.

In addition, UTEP publishes in the annual security report its policy regarding sex-related offenses, including sexual assault prevention programs, education programs to promote awareness of sex offenses, administrative disciplinary procedures and sanctions for offenders, and counseling and student services for victims.

UTEP annually calculates and discloses institutional completion or graduation rates for undergraduate students to all prospective and current students. (The federal requirement for calculation of a completion or graduation rate applies only to institutions of higher education that admit undergraduate students who are enrolling for the first time at an institution of higher education and have not enrolled previously at any other institution of higher education.) Prior to the offer of athletically-related student aid to a potential student athlete, UTEP provides certain information on graduation rates specified by the Act to the prospective student and to the student's parents, guidance counselor, and coach.

Further information concerning Student Right-To-Know and Campus Security can be found at the following web site: www.campussafety.org.

STUDENT GRIEVANCE PROCEDURES

Grade Appeals

A student may challenge his/her grade as determined by a member of the faculty of the University during or within one year after the end of any credit course, qualifying or comprehensive examination, for which the student has been enrolled or three months following the term the graduate degree was awarded. A challenge to a grade may be pursued only on the basis of malice, bias, arbitrary, or capricious grade determination, or impermissible discrimination. In no event shall a challenge be pursued on the basis of the standards employed in setting grades, so long as those standards are employed impartially.

The student should first attempt to resolve the question through consultation with the faculty member who assigned the grade. The student should then attempt to resolve the question through consultation with the administrator(s) to whom the faculty member reports. Having failed to resolve the matter after consultation with both the faculty member and her/his supervisors, the student may consult with and/or file a challenge with the Chairperson of the Student Welfare and Grievance Committee. Students should contact the Dean of Students for specific information or can obtain a copy of the grievance form and instructions on the Dean of Students web page at www.utep.edu/dos.

Non-Academic Grievances

Non-academic grievances of policies and procedures of University departments related to matters other than discrimination, such as the application or interpretation of student policies, must be initiated by making an effort to resolve the matter with the individual involved in the interpretation or decision. If the matter is not resolved, it must be submitted in writing to the appropriate director, chair, or department head within 10 working days of the questioned decision or interpretation. Grievances not satisfactorily resolved within 10 working days of that appeal may then be submitted to the appropriate Vice President. Disputes not satisfactorily resolved within 15 working days at this level may finally be appealed to the President.

DISCRIMINATION COMPLAINTS

Complaints regarding discrimination should be reported to the University's Equal Opportunity/Affirmative Action Office. The University has various policies prohibiting discrimination which can be found in the *Handbook of Operating Procedures (HOP).* Questions regarding applicable policies should be addressed to the University's Equal Opportunity/ Affirmative Action Office, Union Building, East, Room 306, or at (915) 747-5662.

FACILITIES AND STUDENT SERVICES

What's Inside

Academic and Research Facilities

Student Services

- Campus Life
- Personal Support
- Career and Professional Development
- Health and Fitness

Extracurricular Services

- Student Development Center
- Office of Special Events
- The University Ticket Center
- Student Government Association
- Student Publications
- Department of Intercollegiate Athletics

Cultural Services

- Campus Fine Arts
- El Paso Centennial Museum/Chihuahuan Desert Gardens
- KTEP Public Radio
- Texas Western Press

Academic and Research Facilities

The property, buildings, or facilities owned or controlled by The University of Texas at El Paso are not open to the general public for assembly, speech, or other activities, and such uses by students and employees are subject to reasonable regulation.

No person, organization, group, association, or corporation may use property, buildings, or facilities owned or controlled by The University of Texas at El Paso for any purpose other than in the course of the regular programs or activities related to the role and mission of the University, unless authorized by the *Rules and Regulations* of the Board of Regents of the University of Texas System. Any authorized use must be conducted in compliance with the provisions of the Regents' *Rules and Regulations*, the rules and regulations of The University of Texas at El Paso, and applicable federal, state, and local laws and regulations.

CENTER FOR EFFECTIVE TEACHING AND LEARNING (CETaL)

The Center for Effective Teaching and Learning (CETaL) is a resource for University faculty. CETaL provides faculty with workshops, the opportunity for faculty mentoring, and a library of teaching and learning materials. Through these services, faculty can then document their teaching effectiveness.

CETaL seeks to cultivate an environment where teaching is highly valued and where teachers strive continuously to improve their effectiveness. It is a scholarly center working to find, document, and report the best teaching practices at UTEP and elsewhere. In addition, CETaL aids faculty in doing scholarly research on teaching, curriculum, and other issues related to delivery of instruction.

CETaL is a resource for those who understand that teaching is a complex and interactive process among many parties in a variety of environments, and that it can be taught, improved, and evaluated.

CENTER FOR ENVIRONMENTAL RESOURCE MANAGEMENT (CERM)

The Center for Environmental Resource Management (CERM) coordinates faculty and student research addressing the environmental problems affecting the border region of the southwestern United States and northern Mexico, including water supply and water quality; air quality; detection, analysis and remediation of hazardous substances; and environmental health. Students receiving support through CERM get hands-on experience on research, policy and outreach projects addressing a variety of issues such as management of water resources, measurement and characterization of air pollution, methods of containment and remediation of soil-borne and water-borne contaminants, development of alternative energy technologies such as wind energy, and development of community-based training programs to help disadvantaged communities to restore and maintain environmental health. CERM also coordinates education, outreach and policy development programs, as well as UTEP's doctoral program in environmental science and engineering.

CENTER FOR INTER-AMERICAN AND BORDER STUDIES (CIBS)

A national leader in research and education focusing on the U.S.-Mexico border, the Center for Inter-American and Border Studies (CIBS) provides support for faculty and student research, sponsors seminars and publications addressing border issues, and works to forge linkages between UTEP and universities in Mexico and the rest of Latin America. CIBS also coordinates UTEP's undergraduate degree programs in Latin American and Border Studies.

CENTER FOR TRANSPORTATION INFRASTRUCTURE SYSTEMS (CTIS)

The Center for Transportation Infrastructure Systems (CTIS), formerly Center for Highway Materials Research, coordinates basic and applied research related to the nation's transportation infrastructure. CTIS is internationally known for its research excellence in nondestructive testing of transportation facilities. The center is also one of the few entities in the U.S. with advanced dynamic vehicular traffic modeling capabilities related to Intelligent Transportation Systems. The staff can perform the most advanced tests related to asphalt, concrete, aggregates and soils using the comprehensive laboratory facilities and modern testing equipment. The large-scale simulation and computational capabilities of CTIS have facilitated interdisciplinary research with several other universities. Other emerging research agenda of the Center include advanced design, management and risk assessment of critical transportation infrastructure, and intelligent vehicle communication and navigation systems. For more information visit our web site at http://ctis.utep.edu

DISTANCE LEARNING AT UTEP

The Digital Media Center (DMC) is committed to providing graduate and undergraduate students, who are unable to take advantage of a traditional class schedule, with appropriate opportunities to participate in the learning process through the use of alternative media and methods for the delivery of instruction in a distance learning environment. The DMC offers distance learning opportunities in hybrid and completely on-line formats for the UTEP campus. Through DMC the UTEP campus is also an active partner of the UT System TeleCampus (http://www.telecampus.utsystem.edu) offering university courses at a distance across the various University of Texas component campuses. Administrative offices for DMC are located in the Undergraduate Learning Center, Suite 308 and can be contacted by phone at (915) 747-6675.

INSTITUTE FOR MANUFACTURING AND MATERIALS MANAGEMENT (IM^3)

The Institute for Manufacturing and Materials Management (IM^3) focuses University resources to improve the competitiveness of industry. IM^3 provides technical assistance to industry and supports manufacturing related research and education. IM^3 serves as an access point for industry to the full range of UTEP's growing manufacturing related resources. IM^3 engineers and professional staff assist manufacturers in technology utilization, product development and commercialization, and process and facility modernization.

INSTITUTE FOR POLICY AND ECONOMIC DEVELOPMENT (IPED)

The Institute for Policy and Economic Development (IPED), located at The University of Texas at El Paso, is a key component in the university's commitment to deepen public understanding of the issues that face the culturally diverse community of tomorrow. The Institute's interdisciplinary approach to research design, data collection, and analysis provides the Institute's clientele with objective, timely information that forms the framework needed for public policy investigation.

The Institute includes the programs and activities that represent the primary funded research and outreach activities related to policy issues and economic development in West Texas, the Paso del Norte region, and the U.S. Mexican border.

The Institute activities are primarily broken down into the following activities: Economic Development; Technology and Business Development; Trade and Transportation; Regional Modeling; Survey Research; and, Policy Analysis.

MATERIALS RESEARCH AND TECHNOLOGY INSTITUTE (MRTI)

The Materials Research and Technology Institute (MRTI) houses several programs devoted to materials research and training of students on the US/Mexico border. These include: the Stanford/UTEP "Gateway Program" for advanced training in synchrotron techniques, the Materials Corridor Initiative (MCI), and the Southwestern Fuel Cell Alliance (SWFA). MRTI seeks to: make regional MAS&E students competitive world wide, to improve technology and technical skills in El Paso/Juárez area, and to develop local careers for our world-class students. This is accomplished through "cutting edge" basic and applied research, leading to commercial projects that will enhance both the environmental and economic conditions of the region. MRTI is also equipped with "state of the art" laboratory equipment and materials simulation computational capabilities.

OFFICE OF TECHNOLOGY PLANNING AND DISTANCE LEARNING (TPDL)

The Office of Technology Planning and Distance Learning (TPDL) serves as an academic resource and campus support unit for UTEP faculty, students, and staff engaged in asynchronous and distance delivered instruction. Founded in 1997 under the auspices of the Office of the Provost and Vice President for Academic Affairs, the mission of the TPDL is to provide graduate and undergraduate students, who are unable to take advantage of a traditional class schedule, with appropriate opportunities to participate in the learning process through the use of alternative media and methods for the delivery of instruction. The TPDL office works in cooperation with UTEP faculty across the six academic colleges in the design, delivery, course management, and evaluation of distance education and online instructional programs. It also promotes and implements campus policies and practices to appropriately guide the growth and development of all UTEP distance education programs. In carrying out its mission, the TPDL office collaborates with public and private institutions to meet the expanding needs for higher education and workforce retooling in the region. TPDL staff works with UTEP faculty to develop instructional programs that integrate a variety of technology-based and electronic digital media materials, face-to-face instruction, World Wide Web (WWW), Internet, interactive videoconferencing, CD ROM, and other telecommunications technologies for teaching and learning.

The TPDL office oversees the scheduling and technical coordination for using the videoconferencing facilities across campus, the network backbone and service areas, and at other designated learning sites. The services of the TPDL office are focused on technical production, instructional design and pedagogical guidance and training-development programs for faculty engaged in the design and adaptation of instructional materials for fully online and hybrid courses at a distance as well as classes and meetings convened through interactive video conferences. Through its new Faculty Instructional Technology (F.I.T.) Collaboratory Lab, the TPDL office provides UTEP faculty with state-of-the art professional development and training opportunities in the principles of good online teaching practices; assistance in the proper use of equipment in the distance learning classrooms; and staffing and related technical support to design instruction that cost-effectively uses the campus videoconference and multimedia facilities.

Located in UTEP's Undergraduate Learning Center (UGLC), the office of TPDL also enables UTEP to be an active partner with the new "virtual university" of Texas, the UT TeleCampus. Individual on-line courses and fully delivered on-line graduate degrees are offered by the TPDL office across various University of Texas component campuses using both digital, web-based media

and compression video technology-based delivery systems. In addition, many of the online courses listed in this catalog offered by UTEP are the result of a working partnership with the UT TeleCampus. The UT TeleCampus is the centralized support center for online education throughout The University of Texas System. At their website (www.telecampus.utsystem.edu) you will find: online study programs and courses, a digital library, free online student tutorial services, 24/7 technical support "helpdesk", links to various admissions and registrar offices throughout the UT System and full program descriptions for the available online courses and degrees the UT TeleCampus facilitates. To review the complete listing of courses and host universities in the UT System for UT TeleCampus programs of study, you may access the website at http://www.telecampus.edu. The designated UTEP campus contact for the TeleCampus is the TPDL Office located in Suite 316 of the UGLC (915/747-8901), or via email at: tpdl@utep.edu. The TPDL office staff is available to assist students seeking to take distance delivered instruction, as are the student services support staff of the UT TeleCampus. You can call the TeleCampus with your questions toll-free at 1-888-TEXAS-16 (1-888-839-2716) or email at: telecampus@utsystem.edu.

Three of the fully delivered on-line degrees offered by UTEP through the UT TeleCampus (UTTC) are the MBA-On-line, offered by UTEP's College of Business Administration and seven other University of Texas campuses; the M.Ed. in Technology (Educational Technology On-Line), which UTEP, UT Brownsville, UT Austin, and several other Texas universities are delivering via the Internet; a new Masters in Kinesiology, and a Health Care Educators certificate program involving the College of Health Sciences and the School of Nursing. Also by the Spring semester 2004, the UTEP distance learning program will include a new three course certificate program in DNA and Forensics Technology (Criminal Justice 4300; BIOL 3320, Genetics; and BIOL 4395, Toxicology), and a fully online Alternative Teacher Certification program for individuals seeking to complete required certification for elementary and secondary education levels.

Students interested in undertaking distance courses through UTEP and the UT TeleCampus must be fully admitted to UTEP or to one of the other UT System academic university campus components by completing the Inter-Institutional Distance Education Admission and Registration (IDEAR) form online at the UT TeleCampus website (www.telecampus.utsystem.edu). Once admitted to one of the 15 University of Texas campuses, students can select courses offered through the distance education delivery options of the UT TeleCampus. Students are required to abide by the host university policies, procedures, and requirements regarding the course selection process, and student qualifications. Students can visit the UT TeleCampus website and become familiar with this information at: www.telecampus.utsystem.edu. UTEP's fully delivered online courses that are part of a collaborative degree programs with other university of Texas campuses include: LING 3315, History of the Spanish Language; SPAN 3315, History of the Spanish Language; COMM 5350b, Working with Technology and a Changing Population Demography; COMM 5350a, Interactive Telecommunications, Networking and Distance Communication Technologies; KIN 5369, Early Childhood Development; KIN 5361, Biomechanical Basis of Sport; KIN 5357, Psychological Foundations of Sports; CIS 5394, Information Systems for Managers; MGMT 5335, Global Strategic Management; NURS 5345, Curriculum Development; NURS 5347, Effective Teaching Strategies; and NURS 5380, Evaluation of Learning. Additional new on-line courses and program degree study options are routinely being added at UTEP and as a result, interested students are encouraged to consult the TPDL website at UTEP for the most recent information: www.tpdl.utep.edu.

The TPDL staff on the UTEP campus can be contacted via e-mail at tpdl@utep.edu or by visiting their Internet website at http://www.tpdl.utep.edu. It contains a complete listing and description of all distance education courses and degree program offerings, as well as connecting links to the main UT TeleCampus website in Austin, Texas for selection of other online courses, programs of study and online registration.

PAN AMERICAN CENTER FOR EARTH AND ENVIRONMENTAL SCIENCE (PACES)

Established in 1995, the Pan American Center for Earth and Environmental Science (PACES) is an interdisciplinary research center whose primary research objective is to expand the scientific knowledge of the Earth system using the unique vantage point of space, with an emphasis on the Southwestern United States and Northern Mexico border region. Significant remote sensing, geophysical, geological, and environmental data generated by NASA, other agencies, and institutions have been assembled to support this objective. In addition, PACES investigators conduct studies aimed at adapting and developing intelligent software and support tools to support the storage, fusion, manipulation, and analysis of remotely sensed and other data. The Center seeks to provide expanded educational opportunities about NASA technology and the Earth system to a diverse population of students at all levels.

UNIVERSITY LIBRARY

The University Library, housed in an elegant six-story building with seating capacity for 1,343 users, is open on a daily basis, 94.5 hours a week. It houses over one million books and government publications, as well as close to two million microforms. In addition to the 9,000+ electronic journals, subscriptions are maintained to 2,833 periodicals and newspapers. Most materials are available for loan to University students, faculty, and staff.

Books, journals, and audio-visual materials are listed in the Library's computerized catalog. This catalog allows users to conduct searches by author, title, subject, and key word. It is accessible from computers located on all floors of the library as well as campus offices, and from home. In addition, the Library provides access to 12,517 CD ROM and remote databases in all major areas of study at the University. These databases provide bibliographic information as well as selected abstracts and full text research articles and reports. Internet access to the catalogs of other academic libraries is also available.

The professional staff of the Reference Department provides instruction and assistance in locating and using traditional hardcopy as well as the electronic resources of the Library. Librarians are available to provide assistance with the specialized collections in departments such as Government Documents, which receives over 60% of all materials published by the Federal Government; and Special Collections, which houses rare books as well as the following thematic collections: Art, Printing, Military History, Western Fiction, Chicano Studies, Border Studies, and Oral History. The Library's manuscript and archival materials are also located in the Special Collections Department.

The Access Services Department provides automated checkout services, makes reserve materials available, and provides inter-library loan/document delivery services. CPM (Current Periodicals and Microforms) houses journals and newspapers that have been published within the last two years, in addition to microforms. Support for students and faculty, who are involved in distance education, is also provided by the library. This support includes delivery of books and other materials by surface mail, subject consultation with librarians, and access to electronic resources via the Internet.

The Library Technology Center provides IBM and MacIntosh Desktops, Laptops, and PC's for student use. Standard word processing and other software packages are available. In addition, the Center has an extensive collection of educational non-print media for use in the Library.

Self-service photocopying equipment is available on all floors of the Library and a full-service Copy Center is located on the first floor. Study rooms and graduate study carrels are conveniently located throughout the library.

Student Services

The University of Texas at El Paso offers a wide array of services for students to ensure that student needs, concerns, and interests are addressed.

CAMPUS LIFE

Miner Village

UTEP offers apartment-style, residence halls in Miner Village, which opened in Fall 2001. Miner Village is definitely 'Campus Living at its Best', providing residents with efficiency, two-bedroom and four-bedroom units, all of which are furnished. Monthly payments include all utilities (refrigerated air), local telephone service, basic cable service, Internet connections, and a parking sticker for the Miner Village living area. Laundry facilities, a sand volleyball court, and barbeque pits are available to residents on site. The great location of Miner Village provides easy access to the Union, food services, meeting rooms, Bookstore, Memorial Gymnasium, and the Education Building, which are all minutes away. Mesa Street is just one block over offering a variety of eating establishments and businesses.

Applications for admission to The University of Texas at El Paso and application for Miner Village are separate transactions. All information regarding Miner Village, UTEP's New Era in Campus Living, may be obtained from:

Department of Residence Life
Miner Village, Summit Hall
2401 N. Oregon Street
El Paso, TX 79902
(915) 747-5352

Sodexho Services

A whole new dining experience is located throughout the University Campus. The Union Food Court is home of the original chicken sandwich: **Chick-Fil-A**, the **Firehouse Grill**, **El Cazo** (comida mexicana), **Pizza Hut Express**, **Tortugas** (tortas), and a campus **C-Store**. An upscale beverage and pastry shop located on the 1st floor of the Union building features world famous **Starbucks Coffee and Freshens** (fresh yogurt). **The El Paso Natural Gas Conference Center** features a new Food Court, home of a new sub shoppe **Quiznos, Starbucks #2** and **Delicious Burritos**. **UTEP Catering by Sodexho** offers a full range of services including banquets, receptions, meetings, conferences, and private functions. Kiosk refreshments are located throughout campus, **Cafe-A-La-Cart** (Education Building) and **Miner Stop** (Business Building). **Sodexho** also offers complete **Concession** services to all UTEP sporting and special events.

University Bookstore

The University Bookstore, located on the first floor Union East, is responsible for having required academic textbooks and supplies for students. The Bookstore also provides the University community a large variety of reference books, school and office supplies, computer software and accessories, calculators, UTEP apparel and gift items, commencement apparel and invitations, magazines, book buy backs, special book and software orders, specialty plaques, computer hardware orders, and check cashing. The Fall and Spring operating hours are Monday-Thursday 8:00 a.m.-7:00 p.m., Friday 8:00 a.m.-5:00 p.m. and Saturday 10:00 a.m.-2:00 p.m. The University Bookstore's telephone number is (915) 747-5594 and the web address is www.utepbookstore.com.

PERSONAL SUPPORT

Counseling Center

The University Counseling Center provides a variety of psychological services to the UTEP community. These services include both personal and career counseling for registered UTEP students. Personal counseling is available to help students find solutions to emotional and situational problems that are interfering with their ability to succeed at UTEP. Career counseling aims to assist students in choosing an academic major or occupation. The Center also offers free access to a computerized occupational and academic decision-making program and to *Alcohol 101*, an interactive, computer-based program about alcohol education. The University Counseling Center's Internet Home Page, accessible at www.utep.edu/counsel (or through the Student Services Branch of the UTEP Home Page), describes the Center's services in more detail and provides links to mental health resources worldwide. The University Counseling Center is located in Union West, Room 104. The telephone number is (915) 747-5302.

Women's Resource Center

The Women's Resource Center provides opportunity and location where women's concerns can be voiced, dealt with directly, and/or be referred to other resources within the University and local community.

The mission of the Women's Resource Center is to support the advancement of the educational purpose and institutional values of the University of Texas at El Paso. The Center serves to foster the personal growth and development of women as competent, independent, and confident individuals as well as to increase understanding of social, personal, and political issues that are of concern and interest to women and men.

The Center strives to ensure a campus community in which women and men can live and work together in a mutually respectful and supportive environment, fostering and encouraging a sense of equality, responsibility, and personal empowerment. Through an extensive amount of deduction, we work toward recognizing and affirming the abilities as well as accomplishments of UTEP women. The center is continuously committed to being a resource through which women of varying race, ethnicity, sexual orientation, age, and ability are encouraged to utilize our services and participate in our many programs and events.

The Women's Resource Center is located in 112 West Union and is open Monday through Friday from 8:00 a.m. to 5:00 p.m. For more information, students should call (915) 747-5291, fax (915) 747-5215, or e-mail wrc@utep.edu.

University Child Care Center

Child care is available for children of all students, staff, and faculty of the University. The University Child Care Center is located at 1825 Hawthorne and is managed and operated by Sara Care Child Care Center, Inc. Hours are Monday through Thursday, Fall and Spring semesters from 7:15 a.m. to 9:00 p.m., Fridays 7:15 a.m. to 6:00 p.m., Summer hours are 6:45 a.m. to 6:00 p.m., Break hours are 7:15 a.m. to 6:00 p.m. Children aged three months to 12 years are accepted, depending on space availability (hourly, daily, weekly care available; Summer Camp for school age children). Age appropriate early childhood developmental programs are offered in the curriculum. The University Child Care Center is licensed by the Texas Department of Protective and Regulatory Services. Financial assistance is available for qualifying parents through Child Care Services. The Center's phone number is (915) 747-5270.

Disabled Student Services Office (DSSO)

Disabled Student Services Office (DSSO) provides a program of support to students with physical, or mental impairments, as well as those who become temporarily disabled due to an injury or recent surgery, and to women with "at risk" pregnancies. The department provides the following services to eligible students registered with DSSO: note taking, sign language interpreter and reader and/or scribe services, priority registration, use of adaptive technology, diagnostic testing for learning disabilities, alternative test format and location, and advocacy. To register to receive services, students need to schedule an intake interview with the director of DSSO and provide medical and/or diagnostic documentation verifying a disability. The documentation must clearly state symptoms and limitations that adversely affect academic performance. **All information provided to DSSO is treated as highly confidential and is not disclosed without written consent or a compelling need to know.** If students have or suspect a hearing loss, and/or a learning disability that is adversely affecting academic performance in math and/or foreign language requirements for a degree, they should contact this office immediately to discuss available options. Students should be aware that faculty are not obligated to provide accommodations without proper notification from DSSO. Therefore, for needed accommodations, students should contact DSSO at (915) 747-5148 or e-mail dss@utep.edu. Students can also visit DSSO's website at www.utep.edu.dsso or office located in Room 106 East Union Building.

Office of International Programs

The Office of International Programs serves as the primary source of information and assistance for the international community at UTEP. Its services include advising and programming for international students and scholars, coordinating and promoting study abroad experiences for students, managing the PASE (Programa de Asistencia Estudiantil) programs, and supporting international and multicultural activities on campus. The Office provides international students with financial, immigration, cross-cultural, and personal assistance through one-on-one counseling and regularly scheduled social and cultural activities. International scholars visiting UTEP on short-term teaching or research assignments also participate in the programs of the Office and receive advising assistance.

Throughout the year, the Office of International Programs highlights the multicultural nature of El Paso and UTEP through cultural events focusing on the University's diverse nationalities. The Office of International Programs is located at 203 Union East. The Office can be contacted at (915) 747-5664 (fax: 915-747-5794) or at oip@utep.edu or at www.utep.edu/oip.

For U.S. and international students seeking to broaden their studies by spending a period abroad, the Office provides counseling and materials on international educational opportunities and offers financial support to UTEP students in the form of Study Abroad Scholarships. Such opportunities are described below.

Study Abroad and Exchange Programs

UTEP's study abroad and exchange programs enable students to gain global experience through a period of study at a partner university in another country. An international experience of this sort has many dimensions.

- It is enlightening, maturing and life changing. By living in different cultures, students are challenged to re-examine themselves, their attitudes, and their goals.
- It is academically challenging and rewarding. By studying at another university or in a different academic environment, students are able to view subjects from a fresh perspective, learn from new instructors with contrasting styles, and enroll in courses not offered on the UTEP campus.
- It is beneficial to a student's career plans. Increasingly, employers are looking for new employees with life experiences and unique skills. A study abroad program on a resume helps students stand out and makes them attractive to employers seeking people with good interpersonal skills and abilities to work with colleagues and clients on a global scale.
- It is a chance to see the world and meet new people. Though students may see it in books or on the Internet, there is nothing like experiencing the world's great art, architecture, music, and literature first hand in the places they were created. The best way to experience it is with local citizens who know the places and who can help maximize the experience.

Program Locations

UTEP offers semester or yearlong exchange opportunities in the following countries: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Czech Republic, Denmark, Estonia, Fiji, Finland, France, Germany, Ghana, Hungary, Iceland, Italy, Japan, Latvia, Mexico, Netherlands, New Zealand, Nicaragua, Republic of Korea, South Africa, Spain, Sweden, Switzerland, United Kingdom, Uruguay.

In addition, UTEP coordinates opportunities for summer study in the following countries: Chile, England, Finland, France, Germany, Italy, Malta, Mexico, Netherlands, Republic of Korea, Russia, Spain, Thailand.

Eligibility and Application

Eligibility requirements vary. Most programs are designed for undergraduate students, but some will accept graduate students. Many programs require that students have a minimum 2.5 GPA or higher. For programs whose courses are taught in a foreign language, students need to have either a minimum of three years of college-level study in that language, or the equivalent verbal and writing skills. Some programs in countries where English is not the native language do offer courses in English; if a student participates in one of these programs, the language requirement will be waived.

Applications for study abroad are accepted every fall and spring semesters for the following academic period. The deadlines are October 1 for spring or summer and February 15 for summer or fall. An application form is available from the Office of International Programs. The application packet includes a personal statement, two letters of recommendation, and copies of college or university transcripts.

Credit

Students participating in the programs listed above are able to receive UTEP credit for the courses taken at the partner university. Depending upon the courses chosen and departmental approval, the credit received while abroad may fulfill university core or major degree requirements. If not, the courses will be considered elective credit.

While abroad, students register for the appropriate hours of EXCH courses. Upon return, students receive the UTEP course equivalents for the classes taken abroad, which appear on the student's transcript. Prior approval for the courses taken abroad and their equivalents at UTEP is obtained from the student's major department, the Admissions Office, and the Office of International Programs.

Exchange Courses (EXCH)

2100 Student Exchange Program (1-0)
Approved undergraduate study at a foreign university for UTEP credit. Course subjects determined by program selected and course availability. This course may be repeated for credit. *Prerequisite*: Office of International Programs approval.

2200 Student Exchange Program (2-0)
Approved undergraduate study at a foreign university for UTEP credit. Course subjects determined by program selected and course availability. This course may be repeated for credit. *Prerequisite:* Office of International Programs approval.

2300 Student Exchange Program (3-0)
Approved undergraduate study at a foreign university for UTEP credit. Course subjects determined by program selected and course availability. This course may be repeated for credit. *Prerequisite:* Office of International Programs approval.

2400 Student Exchange Program (4-0)
Approved undergraduate study at a foreign university for UTEP credit. Course subjects determined by program selected and course availability. This course may be repeated for credit. *Prerequisite:* Office of International Programs approval.

Costs

Students participating in programs sponsored by UTEP pay the same or equivalent tuition they would if they were spending the same period on campus. In addition, students are responsible for room and board, personal expenses, books and supplies, travel to the program site, and any miscellaneous expenses. Generally, the costs range from $1,500 to $4,500 for a summer program, $6,000 to $10,000 for a semester, and $12,000 to $18,000 for a year, which includes all expenses and tuition. In comparison, the estimated cost for a student living independently in El Paso and studying full-time for a year at UTEP is approximately $14,000.

Financial Aid and Scholarships

Because there may be extra costs incurred during a study abroad program, financial aid is available to help make it a reality for all students. One dollar of every UTEP student's fees goes to support a scholarship specifically for UTEP students to study abroad. This Study Abroad Scholarship is available for any kind of academic program abroad including short-term summer programs, yearlong exchanges, and independent study or research. Both undergraduate and graduate students are eligible to apply.

Scholarship amounts depend upon the cost of the program and the student's financial resources, including aid through UTEP's Financial Aid Office. The awards are based on both merit and financial need. To be eligible for the scholarship, a student must meet the following requirements:

- Have an overall minimum GPA of 2.75
- Have completed at least 24 credit hours as an undergraduate or 16 as a graduate at UTEP prior to the Study Abroad Program

In addition to the Study Abroad Scholarship, financial assistance for international programs is also available through UTEP's Financial Aid Office. Students must apply for financial aid at the regular deadlines for on-campus aid (usually in January). The amount of aid received depends upon the student's financial situation. In some cases, the additional cost of studying abroad can qualify a student for additional aid. Most additional aid available for study abroad is in the form of loans. The Financial Aid Office can provide more information on these sources of aid.

Other International Programs

A Semester in Russia and the Ukraine

A semester in Russia and the Ukraine is an extension of UTEP's Russian Program. In both countries, language classes are conducted from 9:00 a.m. to 12:00 p.m. five days a week. Afternoon cultural studies are followed by excursions and field trips to major points of interest. Credit is awarded upon successful completion of the course and a post-course test. For additional information, students should contact Dr. Z.A. Kruszewski at (915) 747-7984.

CAREER AND PROFESSIONAL DEVELOPMENT SERVICES

Career Services

The Department of Career Services is committed to helping UTEP students explore and prepare for the best career opportunities during and after their college years. Students often find career decisions challenging or confusing. However, regardless of a student's classification, career goals, or employment-related needs, Careers Services can be of assistance.

Career Services offers a variety of programs to help meet students' diverse employment needs. We provide one-on-one assistance for students who seek guidance with their career paths, who are unsure of the opportunities in their field of study, who need help with their resume or who want to practice for an upcoming interview. Additionally, the department has a resource library: CIRCUS (Career Information Resource Center for UTEP Students) that holds information on employers visiting the UTEP campus, market trends, graduate schools, career opportunities, resume writing and interviewing resources guides. CIRCUS also has a career guidance software program that can help students narrow their career choices. The Department offers special workshops on a variety of career-related topics and hosts career fairs throughout the year.

Student Employment

Student Employment is available to help students locate part-time jobs in the El Paso area that do not require a degree. The only requirement to accessing the online system is UTEP enrollment. Students can create their Career Services online account by visiting our web site at www.utep.edu/careers.

Cooperative Education (Co-op) Program and Internships

Students can gain pre-professional work experience during college through the Co-op or Internship Program. Both programs are designed to give students an insight into their chosen area of study and to equip them with the knowledge and work experience needed upon graduation. The Co-op program exposes students to local and national employers and offers two work options: alternating and parallel. Students participating in the alternating work option are considered full-time UTEP students while at work; this includes local or out-of-town work assignments. The parallel work option requires that the student be enrolled at UTEP for additional course work.

Professional Placement

Every year, Career Services links countless local and national corporations, and government agencies with graduating UTEP students for employment purposes. Students are strongly encouraged to register with professional placement two semesters prior to their graduation.

At Career Services we understand that our students have diverse interests and career paths, and therefore we strive to provide programs and services that meet students' individual needs. For more information, visit our office at Room 103 West Union, or contact us at (915) 747-5640, careers@utep.edu or online at www.utep.edu/careers.

Professional and Continuing Education (PACE)

Professional and Continuing Education offer's a broad range of seminars, short courses, institutes, and programs for the general public, business and industry, professionals, and government agencies. The role of the PACE is to offer a variety of continuing education and professional development opportunities, along with credit course offerings that transfer to accredited degree programs at UTEP. Professional and Continuing Education consists of nine major program areas:

1. **Credit Courses** are designed to meet the needs of students at various stages of their careers and education attainment levels. Courses may be offered at convenient non-traditional times and at off-campus locations throughout the city. All credit courses are accredited and are transferable to degree programs at UTEP.
2. **Community Programs** offer short courses quarterly for personal and professional enrichment in areas such as language instruction, money management, arts, crafts, music, dance, writing, health, college preparation, youth programs, and summer camps. Skill enhancement and cultural and recreational activities promote individual success, provide creative outlet, and offer a vehicle for community involvement. These lifelong learning, non-traditional programs encourage active participation, exploration of new ideas, and a sharing of common interests.
3. **Career Development Programs** offer courses that provide individual professional growth. Career opportunities are enhanced through one-day seminars and short courses. Individuals learn skills that will enhance their ability to advance professionally in a variety of careers. Spanish language programs and others are available for on-site training.

4. **Business, Manufacturing, and Professional Programs** offer opportunities for individuals of varying levels of experience from both the public and private sectors to develop new skills, meet license or certification renewal requirements, and update knowledge. These include seminars, certificate programs, and short courses in the areas of accounting, communication, customer service, human resources, management, purchasing, inventory control, quality assurance, supervision, production operations, legal assistance, ISO/QS 9000, ISO 1400, and more. All can be customized for in-house/on-site delivery and many are available in Spanish.
5. **Technology Education Programs** provide critical training for a broad range of computer software and user levels to the general public and business community. UTEP is now a Microsoft Certified Solution Provider and a Microsoft Certified Technical Education Center. Specific program areas include Microsoft Office, operating systems, graphic design, multimedia applications, web design, programming, database administration, and much more. New computer certificate programs will become available throughout the year. Customized contract training is available for businesses and organizations with special training or software needs.
6. The **English Language Institute (ELI)** conducts intensive English training on a full-time basis. Students from all over the world attend UTEP's ELI to study for the TOEFL to enter UTEP or other higher education institutions within the USA. Many students are individuals who want to improve their English skills for business or personal reasons. The Institute also provides English language proficiency testing as well as intensive English classes on site for business and other organizations.
7. **Summer Camps/Athletic Programs** consist of a wide variety of youth outreach activities including, camps in cheerleading, soccer, women's and men's basketball, and women's volleyball. Other summer programs for youth include acting/drama, fencing, ballet, and a variety of other classes.
8. The **Advanced Placement Program (AP)** enables students to complete college-level studies while still in high school, and to obtain college placement or credit, or both, on the basis of their performance on rigorous AP Examinations. The Advanced Placement Summer Institute hosted by Professional and Continuing Education and co-sponsored by the College Board trains teachers and administrators to prepare students for the AP exam.
9. The **Center for Lifelong Learning (CLL)** is an educational program planned and operated by and for individuals fifty years of age or older. The CLL provides learning opportunities for those eager and willing to learn and take an active role in renewing or expanding their education and enriching their lives. Managed by an elected board and administered by volunteer members, its membership numbers 1000+. Employed staff provides administrative support, with assistance from Professional and Continuing Education staff. CLL's class catalog and registration are available in Miner's Hall, Suite 209, 500 W. University, El Paso, TX 79968-0602. The phone number is (915) 747-6280.

For more information contact PACE at (915) 747-5142 or visit the office at Miners Hall, Room 108.

HEALTH AND FITNESS

Student Health Center

The Student Health Center offers confidential health care services and activities to all University students presenting a validated UTEP ID. The staff includes one physician, two nurse practitioners, registered nurses, a pharmacist, a dietician and a physical therapist. The majority of services are provided at no cost, however, laboratory tests, and pharmacy services are provided at minimal fees. Referrals outside the Student Health Center, including x-ray referrals, are at the student's own expense. Student insurance is available and highly recommended for every student without coverage by some hospitalization policy. Information may be obtained by calling ECA Associates at (915) 533-9891.

Services of the Student Health Center include primary health care, health promotion with emphasis on physical fitness, and women's health issues. Confidential HIV/AIDS testing and counseling are available on the second and fourth Wednesday of each month from 11:00 a.m. to 1:00 p.m. Student identification is NOT required or requested for HIV/AIDS testing.

The Student Health Center facilitates compliance with the University's requirement that all students must submit proof of immunization, or be immunized, for Tetanus-Diphtheria, Measles, Mumps, and Rubella by providing the required immunizations. In addition, the Student Health Center offers Tuberculosis screening. A form on which the required immunizations can be documented is available from the Office of Admissions and Recruitment or the Student Health Center. Since most secondary schools are required by law to maintain similar records, a copy of the high school immunization record may be submitted. Students not in compliance with the immunization requirement may be denied registration.

All emergencies are referred to adjacent hospitals, and University police are available to administer first aid. Minor illness, injury, or health concerns are treated by the Student Health Center's professional staff.

The Student Health Center is located at 2001 Wiggins, directly across from the University Library. The Center is closed on Friday between noon and 1:00 p.m. For additional information, students should call the Center at (915) 747-5624 for information concerning walk-ins, appointments, and general hours of operations.

Recreational Sports Department

The Recreational Sports Department provides an opportunity for each member of the University community to voluntarily participate in a wide variety of sports and recreational activities. For further information, students should call (915) 747-5103.

The **Intramural Sports Program** includes approximately 40 activities for men and women. There are team sports such as flag football, volleyball, basketball, sand volleyball, 3 on 3 basketball, swim meet, 3-point basketball, badminton, bowling, and indoor soccer, as well as individual and dual sports such as tennis, racquetball, and wallyball. Many activities include "Co-rec" leagues for teams comprised of equal numbers of men and women participants. Activity schedules are printed each semester and are available at Memorial Gym Room 103; the department's website is http://www.utep.edu/rsd.

Open Recreation involves leisure time use of recreational facilities for basketball, volleyball, indoor racquetball, outdoor racquetball, tennis, and table tennis. Sports equipment is available for checkouts with a valid UTEP ID. Reservations for UTEP's playing fields must be made by registered student organizations at the Recreational Sports Department office. Racquetball

reservations must be made Monday through Friday between the hours of 8:00 a.m. and 3:00 p.m. with a one-hour reserve time between 3:00 p.m. and 10:00 p.m.; Saturdays 9:00 a.m. to 3:00 p.m. and Sundays 10:00 a.m. to 3:00 p.m., open on a first come first serve basis. A validated UTEP ID must be carried at all times.

Sport Clubs are open to all students. Many clubs compete against other schools, while others exist for instruction and recreation. Current clubs include fencing, men's soccer, water polo, and racquetball.

The **Outdoor Adventure Program** was established to provide the necessary resources to fully enjoy the great outdoors. The Program offers the equipment needed for camping, hiking, and water sports while also providing supervised ski, camping, and hiking trips at resorts located around the El Paso area. For information, students should call (915) 747-5103 or drop by Memorial Gym Room 103.

If individuals can't find the right motivational partner or are just having a hard time getting a workout started, the **Fitness Programs** may be a good choice. Individuals are encouraged to try any of the five Fitness Programs offered at convenient times throughout the day/week. Individuals may choose from Aqua-Aerobics, Step-Aerobics, Pilates, Kickboxing, Weightlifting, or T'ai Chi. UTEP students, faculty, or staff may participate at a very low cost of $35.00 per class. Each class is the duration of a semester with hours and days subject to change the following semester.

The **Swimming and Fitness Center** is where individuals can come enjoy a great cardio, weight, and/or aquatic workout. The facility offers individuals the opportunity to have a variety of mild to intense workouts. The Exercise Room has an assortment of cardio machines, free weights, and selectorized machines. The two swimming pools are temperature controlled and provide the opportunity for lap swimming. One pool has both 1-meter and 3-meter diving boards with depth at 13 feet. The second pool has a zero deck entry and also provides users the opportunity to enjoy water sports such as volleyball, basketball, and jungleball. The facility is open free of charge to current UTEP students who present their valid UTEP ID. Current students may purchase membership at a nominal fee for their spouse and children. Membership is also offered at nominal rates to UTEP faculty/staff, their spouse and children, members of the Alumni Association, their spouse and children age 17 and under. Children age 5 years and under are admitted at no charge with supervision of a parent or guardian member. The facility is equipped to service individuals with disabilities. Hours of operation are Monday through Friday 6:00 a.m.-1:45 p.m.; Monday through Thursday 3:00 p.m.-10:00 p.m.; Friday 3:00 p.m.- 8:00 p.m.; Saturday 9:00 a.m.- 5:00 p.m. and Sunday 12:00 p.m. - 5:00 p.m.

For further information, individuals can visit http://www.utep.edu/rsd or call Memorial Gym (915) 747-5103 or the Swimming and Fitness Center (915) 747-8100.

Extracurricular Services

STUDENT DEVELOPMENT CENTER - "Making it happen!"

The Student Development Center (SDC) is a one-stop clearinghouse of information and resources for UTEP students involved, or wanting to become involved, in Campus Life. The SDC provides students with opportunities to get involved in leadership activities, campus activities, health awareness programs, student organizations including fraternities, sororities, special-interest clubs, honor societies, and professional and service organizations.

SDC Vision Statement

The Student Development Center (SDC) seeks to promote individual student growth and personal achievement through a wide range of programs and services specifically designed to complement and enhance the educational experiences of all students enrolled at The University of Texas at El Paso. The SDC provides opportunities for student involvement, student development, and experiential learning which contribute to student success and satisfaction.

SDC Goals

- Support a University-wide effort to recruit and retain the best students from diverse backgrounds;
- Prepare students to become productive, capable citizens in a world of diverse cultures;
- Enhance the academic success of all UTEP students;
- Create multidimensional development opportunities through innovative programs and activities; and
- Develop modes of association outside the classroom through student organization involvement.

SDC Mission and Responsibility Statement

The Student Development Center (SDC) serves the broader academic mission of The University of Texas at El Paso through programs and services that enrich the learning environment outside the classroom. To that end, the SDC offers educational and entertaining opportunities through Leadership Development Programs, Greek Life Programs, Campus Activities Board, Health Awareness Programs, and Student Organizations. The Center promotes student growth and development and augments the overall educational process by:

- Fostering student development by providing and supporting programs which contribute to the education of students in various developmental areas, such as cognitive and aesthetic development, identity formation, physical self, moral reasoning, interpersonal relatedness, and social perspective;
- Assisting students with the transition into and out of the UTEP community;
- Helping remove personal obstacles, provide the information, and teach the competencies students need to benefit from the UTEP learning environment;
- Providing direct support and services to students to facilitate the attainment of an education; and
- Providing direct support for University, college, and department programs.

Campus Activities Board (CAB)

The Campus Activities Board (CAB) is responsible for programming a wide variety of social and educational activities. CAB's goal is to provide daily activities for the enjoyment of the UTEP community. Students can have an impact on what kind of activities are presented by either attending these events or participating in CAB. Events include Minerpalooza, Homecoming, Pep Rallies, Minerfest, Monday Melodies and Coffee House Programs.

Health Awareness Program

The Health Awareness Program focuses on alcohol and substance abuse prevention, sexual responsibility and HIV/AIDS awareness and education and coordinates programs and workshops designed to help students make healthy and educated lifestyle choices throughout their college career. Programs include the annual Health Fair, National Collegiate Alcohol Awareness Week, World AIDS Day Candle Light Vigil, and the Healthy Miner Program.

Greek Life

The Greek Life component of the Student Development Center works with fraternities and sororities to develop campus events and community service programs. Greek Week takes place in the Spring semester. Summer activities include information tables during orientation programs.

Leadership Development Program

With the assistance of student leaders, the Leadership Development Program coordinates the Women's Leadership Conference, the annual Leadership Retreat, and Leaders in Motion. A workshop available at the start of every fall and spring semester and is designed to update organization presidents and advisors about university policies and procedures.

Student Organizations

The Student Development Center works with over 180 student organizations on campus. These organizations can be categorized as follows: honorary, social, service, professional, spiritual, governing, recreational, international, and special interest organizations. SDC works with these organizations in different capacities, from advising them on any matters with which they might need assistance to creating training programs with them when deemed necessary.

Special Interest Organizations: This type of organization is formed by students sharing an extra-curricular interest. Special interest organizations participate in community service, recreational activities, and/or leadership activities.

Professional Organizations: Professional organizations and professional fraternities give students the opportunity to meet others with similar career goals. As with other types of organizations, there is room to learn and to develop leadership skills. Professional organizations are particularly important for networking, as students make contacts with people in their field of study in school and in the El Paso area.

Honor Societies: Honor societies are for those students who excel in their academic and extra-curricular involvement. In departmental honorary societies, students meet with the very best students of a particular major or field of study.

Service Organizations: Service organizations, as their name indicates, are dedicated to volunteerism and service within the El Paso and University community.

Religious Organizations: Religious organizations are formed by students of similar religious beliefs. However, organizations do not exclude students of other religions from membership. This type of organization usually sponsors different events such as religious retreats, Bible readings, and community service projects.

Coordinating/Governing Organizations: These organizations are formed as coordinating bodies for student organizations that have a common interest. They serve as a liaison between the organizations and the University administration.

The Student Development Center challenges all incoming and currently enrolled students to "redefine education" by joining or creating at least one organization and actively participating in University activities. Becoming actively involved in campus events and activities is one of the most important steps a student can take towards a rewarding college experience. **Current information about the services, programs, and activities offered through the Student Development Center can also be found on the Internet at http://www.utep.edu/stuact.**

OFFICE OF SPECIAL EVENTS

There is no business like show business! For over a decade, the office of Special Events has been dedicated to bringing quality entertainment to the UTEP and El Paso communities.

We operate as a full production house in the booking of the UTEP special events facilities: Sun Bowl Stadium, Don Haskins Center, and Magoffin Auditorium. We provide multiple productions and marketing solutions as well as auxiliary services to artists and promoters. Our goal is to ensure the success of all the events that we proudly present such as *Cher, Shakira, Rudy Giuliani, The Eagles, Ricky Martin, NSYNC, The Rolling Stones, HBO'S Oscar de la Hoya Fight*, and *WWE* among many, many others.

Our office is also responsible for the programming of the Wednesday Music Café Concert Series, the Union Exhibition Gallery and the Art and Foreign Film series, host of the Cinema Novo Film Society of El Paso, the only art film society in our city.

We are a young and vibrant department where students and staff come together to bring the stars to El Paso's sky. For more information, visit us on the web at http://www.utep.edu/events or call us at (915) 747-5481.

THE UNIVERSITY TICKET CENTER

We have got your ticket to all the excitement of athletic events, concerts, dinner theatre, music, theatre arts, and much more…

As a vital component of the University of Texas at El Paso, we serve the ticketing needs of the greater El Paso-Cuidad Juárez and southern New Mexico border-plex. Years of experience make us a leader in event ticketing and the number one source of event information in our area.

Our friendly staff is always ready to assist you. We open Monday through Friday from 10:00 a.m. to 6:00 p.m. and are located on the corner of Mesa and Baltimore right in front of the Don Haskins Center. Give us a call at (915) 747-5234. We'll be happy to serve!

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association (SGA) is the official voice of the student body in the University decision making process. SGA acts as the students' representative before the local, state, and national governments on issues that affect the student population. Since its inception, SGA has served to communicate student needs, desires, and demands to UTEP administrators, the Board of Regents, and the Texas Legislature. SGA also serves to maintain

a pleasant and exciting environment for student life. The range of activities of SGA, both on and off campus, is continually expanding as students increase their interest in the political process that affects their lives.

Each spring, all UTEP students are eligible to participate in the election of Student Government Association officers and the Student Senate. Student Government is modeled after the United States Federal Government with executive, legislative, and judicial branches. The President, Vice President of Internal Affairs, and Vice President of External Affairs compose the Executive Branch that is responsible for the daily operations of the organization. The Legislative Branch consists of one Senator for each 1000 students enrolled and is vested with all SA legislative powers; SGA senate meetings are open to all students. Both the Executive and Legislative Branches are assisted in their many projects by student volunteers known as Legislative Assistants. The Judicial Branch is composed of three parts: the Supreme Court, the Traffic Court, and the Student Advocates.

The University of Texas System Advisory Group is an addition to the Student Government Association. The three UTSSAG delegates work on legislation that affects the entire UT System and is an advisory to the Board of Regents on student issues.

STUDENT PUBLICATIONS

All UTEP students with a GPA of at least 2.0 may serve as reporters, editors, photographers, or advertising salespersons for the University's student publications program. Those publications include The Prospector, the campus newspaper, and a Spanish-language newspaper, El Minero. At The Prospector, students learn professional newspaper production techniques that eventually can be used to build up a resume or working portfolio for a journalism career. To insure freedom of expression, student publications are overseen by a duly elected committee composed of UTEP faculty, staff, and students. A professional publications staff, comprised of a director, advertising manager, an editorial adviser, an administrative clerk and an accounting clerk, directs the daily activities of the student editors, reporters, ad reps, and ad designers. The professional staff meets regularly with the publications committee to review business operations and to address editorial concerns. Student Publications exist to produce fine, professional journalists, photographers, and ad designers through quality training and a hands-on setting. Student Publications produces bilingual journalists (English/Spanish) who have the ability to work in Spanish-speaking countries or in other border cities as well.

DEPARTMENT OF INTERCOLLEGIATE ATHLETICS

UTEP is an NCAA Division I A school and is a member of the Western Athletic Conference. Sponsored sports are football, men's and women's basketball, men's and women's cross country, men's and women's golf, men's and women's indoor track and field, men's and women's outdoor track and field, women's tennis, women's rifle, women's soccer, women's softball, and women's volleyball.

Football is played in the 52,247-seat Sun Bowl Stadium, which is located on campus and nestled in the southern tip of the Rocky Mountains; men's and women's basketball plays in the 11,767-seat Don Haskins Center; and women's volleyball plays at Memorial Gymnasium, which seats 3,000 people. Soccer plays at the university Soccer Field with the Rocky Mountains as a backdrop. The track program runs at Kidd Field, which seats 15,000 people. Teams nationally ranked in recent years include men's basketball, men's golf, cross country, indoor and outdoor track and field, and women's rifle.

Mission

The UTEP Department of Intercollegiate Athletics is committed to providing a regionally and nationally competitive athletics program as an integral part of the educational mission of the University. Programs sponsored shall be in compliance with the University. Programs sponsored shall be in compliance with the highest recognized standards of the institution and its athletics governing bodies. Intercollegiate athletics operates in harmony with the University's stated mission and is committed to the intellectual, cultural, physical, and social development of student-athletes. In particular, the intercollegiate athletics program shall serve as an educational opportunity for student-athletes and as a focal point to bring the student body, faculty, and community together. Opportunities for participation are provided without discrimination.

Cultural Services

CAMPUS FINE ARTS

The Departments of Art, Music, Theatre Arts and Film along with the Student Union sponsor ballet and dance, music, music theatre, plays, and the visual arts. All are available to UTEP students as participants and audiences. Students may perform in, work behind the scenes for, or attend more than two hundred performances of ballet, musical concerts, Broadway musicals, opera, and plays each year. Many are free. In addition, campus art galleries provide thousands of hours of free admission to exhibitions by students, faculty, and guest artists.

The Fine Arts Center's facilities include more than a hundred studios and practice spaces for sculpture, painting, printmaking, ceramics, metalwork, graphic design, dance, instrumental and vocal music, acting, theatre design, and set-costume construction. There are also two art galleries, a music library, several student lounges, three theatres, and a recital hall.

Ballet, theatre, and music theatre productions are seen in the Wise Family Theatre, Magoffin Auditorium, and the Studio Theatre in the Fox Fine Arts Center as well as the University Dinner Theatre located in the Student Union. Music activities such as the University's Symphony, Opera, Wind, Percussion, Jazz Bands, Choirs, Jazz Singers, and chamber groups as well as Ballet-In-Focus and Zarzuela are held in the Fine Arts Center's Recital Hall or the adjacent, 1000-seat, Magoffin Theatre. Faculty and student art shows are presented in the Fine Arts Art Gallery and the Glass Gallery. The Student Union also sponsors a provocative film series and additional art exhibitions of students, faculty, and guest artists.

Yearly schedules of Chicano Studies, African-American Studies, the Department of English, Women Studies, Languages and Linguistics, and the Office of International Programs often include public cultural activities. Bilingual and multicultural events and presentations are a part of every season.

The El Paso Arts Resource Department, The El Paso Symphony, the El Paso Museum of Art, The El Paso Opera, and Ciudad Juárez provide the region with ample opportunities to see professional local, national and international artists.

EL PASO CENTENNIAL MUSEUM/CHIHUAHUAN DESERT GARDENS

The El Paso Centennial Museum was built in 1936 with funds allocated by the Commission for the Texas Centennial Celebration. As the University's museum, it serves students and the El Paso/Juárez communities. The mission of this natural and cultural history museum is to preserve, document, exhibit, and educate about the Southwest and Mexico. Noteworthy collections pertaining to Geology, Anthropology, Archaeology, Paleontology, Ornithology, and Mammalogy include rocks, crystals, minerals, pottery, stone tools, shell jewelry, and baskets. The Chihuahuan Desert Gardens, dedicated in 1999, are located on the west side of the museum. They contain plants of the region in settings that can be adapted for area businesses and homes. Basic museum and special project classes are offered to UTEP students. Temporary exhibits, lectures, gallery talks, youth classes, adult workshops, and volunteer activities are educational offerings. The Museum is free and open to the public Tuesdays through Saturdays, 10:00 a.m. to 4:30 p.m., except on National and University holidays.

KTEP PUBLIC RADIO

KTEP 88.5 FM broadcasts news, information, and cultural programming 24 hours per day for the University as well as El Paso, Southern New Mexico, and Juárez. KTEP is a member of National Public Radio and Public Radio International. The station trains UTEP students in broadcasting, and students can work at the station either as interns or volunteers. KTEP is equipped with the latest in digital broadcast technology. KTEP began broadcasting in 1950 and was the first FM station in El Paso and one of the first in the Southwest. A quarterly program guide is available by calling (915) 747-5152.

TEXAS WESTERN PRESS

Texas Western Press is the 50-year-old book publishing entity of The University of Texas at El Paso founded by internationally known typesetter and book designer Carl Hertzog. Specializing in nonfiction books on the history and cultures of the Southwest, the press also publishes 2 series: Southwestern Studies, monographs on personalities and events of the American Southwest, and The Border/La Frontera, a series based on current research on the U.S.-Mexico borderlands. The Press's award-winning books are sold nationally and internationally through chain bookstores, independent booksellers, and Texas Western Press. Texas Western Press is located in the Hertzog Building, on the corner of Rim and Wiggins Road.

COLLEGES AND DEGREE PROGRAMS

What's Inside

- Core Curriculum
- University Studies
- College of Business Administration
- College of Education
- College of Engineering
- College of Health Sciences
- College of Liberal Arts
- College of Science

Core Curriculum

All undergraduates of The University of Texas at El Paso are required to complete a 42-semester credit hour core curriculum before receiving a baccalaureate degree. For degree plans that terminate with a post-baccalaureate degree, without completing the baccalaureate degree, undergraduates are required to complete the core curriculum before enrolling in graduate-level courses.

COMPONENTS AND COURSES

The core curriculum consists of nine components (blocks). Each component has a required minimum number of semester credit hours. The minimum number is also the maximum number that may be applied toward the core curriculum requirement. Any additional credits may apply toward degree requirements. The courses that may be used to satisfy the component requirements are listed with their Texas Common Course Number (TCCN) in brackets. The core curriculum requirement does not preclude the counting of core curriculum courses toward other degree requirements. Students are advised to consult particular degree requirements for their major before selecting courses to meet core curriculum requirements.

I. **Communication** (nine credits) The objective of the communication component is to enable the student to communicate effectively in clear and correct prose or orally in a style appropriate to the subject, occasion, and audience.
   A. English Composition (six credits):
      1. For students whose secondary education was in English:
         ENGL 1311[1] Expository English Composition [ENGL 1301]
         and
         ENGL 1312[2] Research and Critical Writing [ENGL 1302]
      2. For students whose secondary education was not in English:
         ESOL 1311 Expository English Composition for Speakers of ESL [ENGL 1306] ***and***
         ESOL 1312 Research and Critical Writing for Speakers of ESL [ENGL 1307]
   B. Speech (three credits):
      COMM 1301[1] Public Speaking [SPCH 1315] ***or***
      COMM 1302 Business and Professional Communication [SPCH 1321]

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[1] COMM/ENGL 1611 may be used to satisfy both the ENGL 1311 and COMM 1301 requirements.

[2] ENGL 1313 may be substituted for ENGL 1312.

II. **Mathematics** (three credits) The objective of the mathematics component is to develop a quantitatively literate college graduate. Every college graduate should be able to apply basic mathematical tools in the solution of real-world problems.

Select one course from the following (only three credits apply toward the required 42):
MATH 1320 Mathematics for the Social Sciences I [MATH 1324] ***or***
MATH 1508[1] Precalculus [MATH 2412[2]]

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[1] A higher level course in the calculus sequence may be substituted.
[2] TCCN MATH 1314 will also satisfy this requirement.

III. **Natural Sciences** (six credits), a minimum of two semesters of lecture and one semester of laboratory) The objective of the study of the natural sciences is to enable the student to understand, construct, and evaluate relationships in the natural sciences, and to enable the student to understand the bases for building and testing theories. The courses listed are for non-majors; the major courses in the discipline may be substituted for the non-major sequence.

Select one sequence from the following (only six credits apply toward the required 42):

1. **ASTR 1307** Elementary Astronomy of the Solar System [PHYS 1311] ***and***
   ASTR 1308 Elementary Astronomy of Stars and Galaxies [PHYS 1312] ***and***
   ASTR 1107 Astronomy Laboratory I [PHYS 1111] ***or***
   ASTR 1108 Astronomy Laboratory II [PHYS 1112]
2. **BIOL 1303** Introductory Biology [BIOL 1308] ***and***
   BIOL 1304 Human Biology ***and***
   BIOL 1103 Introductory Biology Laboratory [BIOL 1108] ***or***
   BIOL 1104 Human Biology Laboratory (nonmajor-track) [1]
3. **CHEM 1407** Introductory Chemistry [CHEM 1406] ***and***
   CHEM 1408 Introductory Chemistry [CHEM 1408] (nonmajor-track) [2]
4. **ESCI 1301** Introduction to Environmental Science [ENVR 1301] ***and***
   ESCI 1101 Environmental Science Laboratory [ENVR 1101] ***and***
   BIOL 1306 Organismal Biology [BIOL 1307] ***and***
   BIOL 1108 Organismal Biology Laboratory [BIOL 1107] ***or***
   GEOL 1301 Introduction to Physical Geology [GEOL 1303] ***and***
   GEOL 1101 Laboratory for GEOL 1301[5] [GEOL 1103]
5. **GEOL 1303** Principles of Earth Sciences [GEOL 1301] ***and***
   GEOL 1304 Principles of Earth Sciences [GEOL 1302][3]
6. **PHYS 1403** General Physics I [PHYS 1401] ***and***
   PHYS 1404 General Physics II [PHYS 1402][4]
7. **SCI 1401** Explanatory Power of Science [TCCN applied for] ***and***
   SCI 1402 Science in the Modern World [TCCN applied for]

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[1] **BIOL 1305 & 1107 & 1306 & 1108** [BIOL 1306, 1106, 1307, 1107] may be substituted for this sequence.
[2] **CHEM 1305 & 1105 & 1306 & 1106** [CHEM 1311, 1111, 1312, 1112] may be substituted for this sequence.
[3] **GEOL 1301 & 1101 & 1302 & 1102** [GEOL 1303, 1103, 1304, 1104] may be substituted for this sequence.
[4] **PHYS 2420 & 2421** [PHYS 2425, 2426] may be substituted for this sequence.
[5] **BIOL 1303 or GEOL 1303** [BIOL1308 or GEOL 1301] may be substituted for this sequence.

IV. **Humanities** (three credits) The objective of the humanities component is to expand students' knowledge of the human condition and human cultures, especially in relation to behaviors, ideas, and values expressed in works of human imagination and thought. Through study in disciplines such as literature and philosophy, students will engage in critical analysis and develop an appreciation of the humanities as fundamental to the health and survival of any society. Select one course from the following:
1. **ENGL 2311** English Literature [ENGL 2322]
2. **ENGL 2312** English Literature [ENGL 2323]
3. **ENGL 2313** Introduction to American Fiction [ENGL 2342]
4. **ENGL 2314** Introduction to American Drama [ENGL 2343]
5. **ENGL 2318** Introduction to American Poetry [TCCN applied for]
6. **HIST 2301** World History to 1500 [HIST 2321]
7. **HIST 2302** World History since 1500 [HIST 2322]
8. **PHIL 1301** Introduction to Philosophy [PHIL 1301]
9. **PHIL 2306** Ethics: Philosophical Perspective on Human Conduct and Values [PHIL 2306]

V. **Visual and Performing Arts** (three credits) The objective of the visual and performing arts component is to expand students' knowledge of the human condition and human cultures, especially in relation to behaviors, ideas, and values expressed in works of human imagination. Through study in disciplines of the visual and performing arts, students will form aesthetic judgments and develop an appreciation of the arts as fundamental to the health and survival of any society. Select one of the following:
1. **ART 1300** Art Appreciation [ARTS 1301]
2. **ARTH 1305** Art History of the Western World I [ARTS 1303]
3. **ARTH 1306** Art History of the Western World II [ARTS 1304]
4. **MUSL 1221** Introduction to Music Literature I ***and*** **MUSL 1222** Introduction to Music Literature II
5. **MUSL 1324** Music in Western Societies [MUSI 1306]
6. **MUSL 1327** Jazz to Rock [MUSI 1310]
7. **THEA 1313** Introduction to Theatre [DRAM 1310]
8. **THEA 1390** Introduction to the Art of the Motion Picture [DRAM 2366]

VI. **United States History** (six credits) The objectives of the history component are to expand students' knowledge of the origin and history of the U.S., their comprehension of the past and current role of the U.S. in the world, and their ability to critically evaluate and analyze historical evidence. U.S. history courses (three credits must be Texas history):
1. **HIST 1301** History of the U.S. to 1865 [HIST 1301] ***and***
2. **HIST 1302** History of the U.S. since 1865 [HIST 1302]

VII. **Political Science** (six credits) The objectives of the political science component are to expand students' knowledge of the origin and evolution of the U.S. and Texas political systems, focusing on the growth of political institutions, and on the constitutions of Texas and the United States; and to enhance their understanding of federalism, states rights, and individual civil liberties, rights, and responsibilities.
1. **POLS 2310** Introduction to Politics [GOVT 2305] ***and***
2. **POLS 2311** American Government and Politics [GOVT 2306]

VIII. **Social and Behavioral Sciences** (three credits) The objective of the social and behavioral science component is to increase students' knowledge of how social and behavioral scientists discover, describe, and explain the behaviors and interactions among individuals, groups, institutions, events, and ideas. Such knowledge will better equip students to understand themselves and the roles they play in addressing the issues facing humanity.
Select one course from the following:
1. **ANTH 1301** Introduction to Physical Anthropology and Archeology [ANTH 2346]
2. **ANTH 1302** Introduction to Cultural Anthropology [ANTH 2351]
3. **ECON 1301**[1] Basic Issues in Economics [ECON 1301]
4. **GEOG 1310** Cultural Geography [GEOG 1302]
5. **LING/ANTH/ENGL 2320** Introduction to Linguistics [TCCN applied for]
6. **PSYC 1301** Introduction to Psychology [PSYC 2301]
7. **SOCI 1301** Introduction to Sociology [SOCI 1301]

[1] **ECON 2303** or **2304 [**ECON 2301 or 2302] may be substituted for this course.

IX. **Institutionally Designated Option** (three credits) The objective of the institutionally designated option component is to develop the critical thinking skills and academic tools required to be an effective learner. Special emphasis is placed on the use of technology in problem solving, communications, and knowledge acquisition.
UNIV 1301 Seminar in Critical Inquiry[1] [EDUC 1300]

[1] **UNIV 2350** Interdisciplinary Technology and Society [TCCN applied for] may be substituted for this course.

"C" RULE

All courses used to satisfy the core curriculum must be completed with a grade of "C" or better. This also applies to courses transferred from another institution.

TRANSFER STUDENTS

Students who transfer without completing the core curriculum at another Texas institution of higher education shall receive academic credit in UTEP's core curriculum for each of the courses that the student has successfully ("C" or better) completed in the core curriculum of the sending institution. If a student has successfully ("C" or better) completed the 42-hour core at another Texas institution of higher education, that block of courses shall be substituted for The University of Texas at El Paso's core curriculum. Such a student shall receive academic credit for each of the sending institution's core curriculum courses transferred and may not be required to take additional courses to satisfy UTEP's core curriculum. However, courses listed in UTEP's core curriculum may be required by the degree plan or as a prerequisite to a course.

University Studies

344 Undergraduate Learning Center
Phone: (915) 747-7618
Fax: (915) 747-6496

DIRECTOR: Dorothy Ward

University Studies is an academic unit in University College. Created to help increase students' opportunities for success, University Studies offers two Core Curriculum courses—University 1301 and University 2350. To provide additional support for entering students, University Studies also coordinates learning communities.

UNIVERSITY COURSES

University 1301 and University 2350 are courses taught by faculty and staff from various departments across campus. University 1301: Seminar in Critical Inquiry is a discipline-based, theme-driven course designed to engage students in the University community. Enrollment in University 1301 is restricted to students with fewer than thirty hours of earned credit the semester in which they are taking the course. University 2350: Interdisciplinary Technology and Society is designed to engage students in a critical examination of technology and its effects. Entering students must take either University 1301 or University 2350 to satisfy Block IX of the Core Curriculum. By successfully completing either of these courses, students gain credit toward graduation. The course descriptions identify the innovative nature of the two courses.

University Courses (UNIV)

1301 Seminar in Critical Inquiry
(↔ EDUC 1300)
This course will engage entering students in critical inquiry concerning one or more related academic topics. The seminar will increase students' knowledge of the role of technology in the academic community. Information acquisition, critical thinking, and communication will be integrated in an active learning environment. Students will conduct library and electronic research to support one or more academic projects. Specific topics may vary with instructor.

2350 Interdisciplinary Technology and Society
Students in this course will be introduced to approaches to technology assessment and will examine social, cultural, and environmental consequences of technology. The course will include problem solving in small groups assigned to research, analyze, discuss, and arrive at possible solutions for a broad range of topics related to technology and society. Specific topics may vary with instructor. Strategies for effective uses of electronic technology in support of research are emphasized. Prerequisite: ENGL 1312 or ENGL 1313 or ESOL 1312.

UNIVERSITY LEARNING COMMUNITIES

University Studies also coordinates learning communities for entering students. Learning communities connect students through linked courses. Students enrolled in learning communities attend two, three, or more courses together; for example, a “community” of students might be enrolled together in an English and a history class. Sharing courses in this way increases students’ opportunities to make friends, form study groups, work closely with faculty, and connect ideas across courses. Look in the class schedule for a list of learning communities offered each semester.

COLLEGE OF BUSINESS ADMINISTRATION

Accounting
Economics and Finance
Information and Decision Sciences
Marketing and Management

Dr. Gary J. Mann, Interim Dean
Dr. Robert D. Tollen, Associate Dean
Mr. Jackie Eason, Assistant Dean

Business Administration Building, Room 101
(915) 747-5241 (ph)
(915) 747-5147 (fax)
coba@utep.edu

College of Business Administration

The College of Business Administration at The University of Texas at El Paso shares with the University its fundamental mission to provide quality higher education to the citizens of El Paso and the West Texas region, to prepare them to function effectively in society, and to contribute to the quality of life in this community and region. The border location of the University and College provides an environment that affords opportunities for students to become knowledgeable in Inter-American economic, business, and cultural matters within the context of a business school education comparable to that provided by other accredited institutions.

The College is committed to providing the widest possible access to quality higher education to allow our students to become competitive on a local, regional, national, and international level. Therefore, the goal of the College is to provide:

- Broad-based programs which give students the background for entry into, and advancement in, professional and managerial positions, and for life-long career success.
- Intellectual contributions that improve application of existing knowledge in regional businesses and industries and the border economy, as well as nationally and worldwide; enhance the delivery of instruction to students; and extend the boundaries of knowledge.
- Service which contributes to meeting the personal and professional needs of our students, the University, alumni, community, and academia.

Our quality is reflected in the success of our students, alumni, and faculty and in the enhancement of the personal and professional lives of community residents.

The College also meets an important secondary responsibility as a partner in the U.S.-Mexico business community of the region. Many individuals engaged in business enroll in selected courses in order to gain specific skills or to broaden their knowledge. In addition, the faculty of the College of Business Administration participates in the Division of Professional and Continuing Education, which offers a wide variety of non-credit programs including programs for the business practitioner. CEDARS (Centers for Entrepreneurial Development Advancement, Research and Support), through the activities of The Family and Closely-Held Business Forum and The Franchise Center, nurtures an environment to develop, advance, support, and transfer proven strategies and techniques in business principles and practices that will provide for effective and efficient entrepreneurial ventures and support in both local and international markets.

At the heart of all these programs is a distinguished faculty committed to teaching, research, and community services. Their work, as well as that of their students, is supported by the superb facilities of the College of Business Administration. The College of Business provides a Computer Application Learning Center (CALC) laboratory that is the focal point of computer, audiovisual, and multimedia-based learning, including three microcomputer laboratories.

The undergraduate program in the College leads to the Bachelor of Business Administration (BBA) degree. Graduate programs lead to the Master of Business Administration (MBA), the Master of Accountancy (MAcc), and other degree programs. The BBA, the MBA, and the MAcc are accredited by AACSB International, the Association to Advance Collegiate Schools of Business.

Information on graduate programs may be obtained from the *Graduate Catalog*. In addition, a Bachelor of Arts in Economics is offered through the College of Liberal Arts. Business minors, including general business, accounting, economics, management, marketing, and computer information systems, are also available to students in the College of Liberal Arts.

Bachelor of Business Administration

The College of Business Administration, with departments of Accounting, Economics and Finance, Information and Decision Sciences, and Marketing and Management, offers a BBA degree with the following majors: Accounting; Computer Information Systems; Economics; Finance with concentrations available in General Finance and Commercial Banking; General Business with concentrations in International Business and Secondary Education; Management with concentrations available in General Management and Human Resource Management; Marketing; and Production/Operations Management.

Policies Concerning Admission to and Completion of BBA Degree Programs

1. Students entering the College of Business Administration will be designated as Pre-Business majors until they have completed the requirements for admission to a major option program offered by the College. In order to declare as a Pre-Business major, the student **must** file a degree plan in the Office of the Dean.
2. Admission to a major option program is limited to those students who meet the following requirements:
   a. Completion of the Non-Business Foundation Requirements and the Business Foundation Requirements as described in the "Undergraduate Course of Study" for the Bachelor of Business Administration.
   b. Completion of the following courses (or their equivalent) with a minimum grade of "C": ACCT 2301 and ACCT 2302; ECON 2303 and ECON 2304; ENGL 1311, 1312 and ENGL 3355; MATH 1320 and MATH 2301; QMB 2301.
   c. An overall GPA of 2.0 or greater in all hours attempted.
3. Upon completion of requirements in item 2, the student will be admitted to one of the major option programs offered by the College of Business Administration. Upon admission, the major code will be changed from Pre-Business to the major option code for the program.
4. Enrollment in the upper-division level courses offered by the College of Business Administration is restricted to those students who have been admitted to one of the BBA major option programs. Permission for concurrent enrollment in lower-division courses in item 2-a and upper-division business courses is granted only once and written permission by the Undergraduate Advisor is required. Upper-division business courses taken by a Pre-Business major without written permission of the Undergraduate Advisor will be counted as business electives only, and other approved upper-level business courses will be designated to complete the degree requirements.
5. A freshman-level course may be repeated once and the latter grade substituted for a previous grade in the student's grade point average (GPA) calculation. Grades and attempted hours for other repeated courses will be used in computing the GPA.

6. Only those transfer credits with a grade of "C" or better will be accepted for credit toward the BBA degree. Courses taken at two-year institutions or as a requirement for a two-year degree are accepted by the College of Business Administration as transfer credits for lower-division courses only. Courses taken at four-year accredited institutions and designated as lower-division courses may be accepted as upper-division credits if the course is taught at the upper-division level at UTEP and has received additional validation from the Office of the Dean. Transfer credit for upper-division business administration courses is restricted to AACSB accredited curricula. Transfer credit for courses from institutions outside the United States will be evaluated independently. The applicability of transfer credits to the degree plan is determined by the Office of the Dean.
7. To complete the degree, a student must comply with the following:
   - Complete the required course of study as outlined below.
   - Follow University academic regulations as stated elsewhere in this catalog.
   - Earn a 2.0 GPA in all courses attempted within the College of Business Administration.

     Note: Accounting majors must also earn a 2.0 or better GPA average in ACCT 3321 and accounting courses listed in the Accounting Option Requirement.
8. A graduating senior must file an application for the degree with the Office of the Dean before the semester of graduation. Students are responsible for setting an appointment to clear for graduation during announced times.
9. Students working toward the BBA degree may not enroll on a pass/fail basis in any course taught in the College of Business Administration.
10. Six of the last 30 hours needed to complete the BBA degree may be taken at another university; however, the student must receive written approval from the Office of the Dean before enrolling at the other institution.
11. MGMT 4300, Strategic Management, may be taken only during the semester or summer term in which the degree is to be conferred. Approval of the Undergraduate Advisor is required for enrollment in this course.
12. Non-BBA students wishing to take upper-division business courses must be advised in the College of Business Administration, Room 102. Students wishing to take upper-division courses must have junior standing (60 credit hours) and a 2.0 cumulative GPA and must have completed the stated prerequisites for the course.
13. Students must complete 50 percent or more of their College of Business Administration credit hours at UTEP.
14. Students may pursue more than one major option by completing all requirements, including Major Option Requirements, for all major options selected.

Undergraduate Course of Study

The course of study for the Bachelor of Business Administration degree includes four sets of academic requirements.

Non-Business Foundation Requirements	48	semester hours
Business Foundation Requirements	15	semester hours
Business Core Requirements	33	semester hours
Major Requirements	24	semester hours
Total	120	semester hours

Non-Business Foundation Requirements (48 semester hours)

All of these courses must be completed with a grade of "C" or better.

- 6 - ENGL 1311* and 1312 (or ESOL 1311, 1210, and 1312)
- 3 - ENGL 3355
- 3 - COMM 1301* or 1302
- 6 - MATH 1320 and 2301
- 6 - POLS 2310 and 2311
- 6 - HIST 1301 and 1302
- 3 - Humanities
  See University Core Curriculum/Humanities menu for approved courses.
- 6 - Natural Sciences; lab required
  See University Core Curriculum/Natural Science menu for approved courses.
- 3 - Visual and Performing Arts
  See University Core Curriculum/Visual and Performing Arts menu for approved courses.
- 3 - PSYC 1301 or SOCI 1301
- 3 - UNIV 1301 or UNIV 2350

* English 1611 may be counted for ENGL 1311 and COMM 1301.

Business Foundation Requirements (15 semester hours)

All of these courses must be completed with a grade of "C" or better.

- 6 - ACCT 2301 and 2302
- 6 - ECON 2303 and 2304
- 3 - QMB 2301

The UTEP Core Curriculum is included in the Non-Business Foundation requirements. Students should make core curriculum course choices carefully based on these requirements in order to complete their degrees with the minimum number of courses.

Business Core Requirements (33 semester hours)

- 3 - ACCT 3314 or 3321 or 3323 (Accounting option requires 3321)*
- 3 - BLAW 3301
- 3 - ECON 3302, 3303, or 3320 (Accounting, Economics, and Finance options require 3320)
- 3 - FIN 3310
- 3 - CIS 3345
- 3 - POM 3321
- 3 - QMB 3301
- 3 - BUSN 3304
- 3 - MGMT 3303
- 3 - MKT 3300
- 3 - MGMT 4300 (Taken in last semester)

*ACCT 3314 and ACCT 3323 cannot both be taken for credit in any option.

ACCT 3314 cannot be counted by accounting majors toward fulfillment of any part of the accounting option degree requirements.

Major Requirements (24 semester hours)

Accounting

15 - ACCT 3320, 3322, 3323, 3327, and 4304
3 - Elective from ACCT 4301, 4305, 4321, 4325, 4328 or 4399
3 - Elective from CIS 3350, 4330, 4365, 4370, or 4398
3 - Elective from ACCT 43XX, BLAW 4325, BLAW 4391, FIN 4318, MGMT 3311, or an additional elective from the CIS menu above (CIS 3350, 4330, 4365, 4370, or 4398)

Computer Information Systems

12 - CIS 3350, 3355, 4365, and 4370
9 - Electives from CIS 3385, 4305, 4320, 4330, 4399, or POM 3335
3 - Upper-division business elective

Economics

6 - ECON 3302 and ECON 3303
12 - Electives from upper-division ECON courses
6 - Upper-division electives

Finance

General Finance Concentration

6 - FIN 3315 and FIN 4310
9 - Electives from upper-division FIN courses except FIN 3350
3 - Elective from upper-division ACCT courses
6 - Upper-division electives

Commercial Banking Concentration

9 - FIN 4311, 4312, and 4318
3 - Elective from FIN 3315, 3325, 4310, or 4325
6 - Electives from upper-division ACCT courses
6 - Upper-division electives

General Business

International Business Concentration

6 - Sophomore language (e.g., SPAN 2301 and 2302 or SPAN 2303 and 2304)
12 - Electives from ACCT 4325, BLAW 4325, ECON 3366, ECON 3367, ECON 4325, ECON 4368, FIN 4325, MGMT 4325, or MKT 4325
3 - Upper-division non-business elective
3 - Upper-division business elective

Secondary Education Concentration[1]

3 - RED 3342
3 - EDPC 3300
15 - SCED 3311, 3317, 4370, and 4691
3 - Upper-division business electives
1 - TED 2101

[1]Students in this option are required to check with the College of Education about entry into the Teacher Education Program. Students in this option must select an English literature course as the humanities choice in the non-business foundation. The inclusion of TED 2101 requires an adjustment of concentration requirements to 25 semester hours.

General Business Concentration

18 - Upper-division business electives (no more than 6 hours in any one functional area)
6 - Upper-division non-business electives

Management

General Management Concentration

12 - MGMT 3304, 3311, 3315, and 4325
3 - Elective from upper-division MGMT courses
3 - Upper-division non-business elective
6 - Upper-division business electives

Human Resource Management Concentration

18 - MGMT 3311, 3315, 4304, 4310, 4315, and 4337
3 - Upper-division non-business elective
3 - Upper-division business elective

Marketing

9 - MKT 3302, 4301, and 4395
3 - Elective from MKT 3305 or 4325
6 - Electives from upper-division MKT courses
3 - Upper-division non-business elective
3 - Upper-division business elective

Production/Operations Management

6 - POM 3322, 3333
15 - Electives from upper division POM courses or MKT 4356
3 - Upper-division business elective

Combined Plans

The Department of Accounting and the College of Business Administration offer two combined plans: the concurrent award of the BBA in Accounting and the Master of Accountancy (BBA/MAcc) and the concurrent award of the BBA in Accounting and the Master of Business Administration with a concentration in accounting (BBA/MBA). Both plans require a 150-hour course of study. The BBA/MAcc requires 120 semester hours of undergraduate study, and 30 semester hours of graduate study. The BBA/MBA requires 117 semester hours of undergraduate study and 33 semester hours of graduate study.

Requirements for Admission to Either Combined Plan

Students are admitted to the College of Business Administration and to the accounting major based on requirements listed in the Undergraduate Catalog. Students must be admitted to the Graduate School and the Master of Accountancy program or the Master of Business Administration program based on requirements listed in the Graduate Catalog except that the completion of a Baccalaureate degree is not required. There is no conditional admission to Graduate School under either combined plan.

1. Requirements related to undergraduate course work:
   a. Completion of the Non-Business Foundation and Business Foundation Requirements with an average of 3.0 or better in ENGL 1312, MATH 1320, MATH 2301, ACCT 2301, ACCT 2302, ECON 2303, ECON 2304, and QMB 2301.

b. Completion of nine hours of non-accounting Business Core Courses.

c. Completion of twelve hours of accounting courses including ACCT 3321, ACCT 3322, and two of the following: ACCT 3320, ACCT 3323, or ACCT 3327.

d. Achievement of a minimum GPA of 2.7 in all junior and senior-level accounting courses taken prior to admission. These accounting courses are restricted to the ones listed in the Major Option Requirements for the BBA degree in Accounting.

2. Requirements for unconditional admission to the graduate program:

a. Official scores on the Graduate Management Admissions Test (GMAT) or the Graduate Record Exam (GRE) GMAT preferred

b. A GPA of at least 2.7 on all undergraduate and graduate level work already completed.

c. A statement, not to exceed one page, describing the applicant's socio-economic and educational background, professional experience, and education and career goals.

d. International students must achieve a minimum TOEFL score of 250/600.

STUDENTS MUST BE ADMITTED TO THE GRADUATE SCHOOL BEFORE TAKING ANY COURSES FOR GRADUATE CREDIT.

STUDENTS SHOULD PLAN TO APPLY FOR ADMISSION TO THE GRADUATE SCHOOL DURING THEIR JUNIOR YEAR.

A GPA OF 3.0 ON ALL WORK TAKEN BEYOND THE 90TH SEMESTER HOUR OF CREDIT IS REQUIRED TO REMAIN IN THE GRADUATE PROGRAM.

Course of Study for the Combined Plans

The course of study for the combined BBA/MAcc plan and the combined BBA/MBA plan includes academic requirements both at the undergraduate and graduate level. The requirements are summarized below:

Undergraduate – BBA/MACC plan (120 semester hours)

Non-Business Foundation Requirements	51 semester hours
Business Foundation Requirements	15 semester hours
Business Core Requirements	30 semester hours
Accounting Major Requirements	21 semester hours
Electives	3 semester hours

Undergraduate – BBA/MBA Plan (117 semester hours)

Non-Business Foundation Requirements	48 semester hours
Business Foundation Requirements	15 semester hours
Business Core Requirements	30 semester hours
Accounting Major Requirements	21 semester hours
Electives	3 semester hours

Graduate – BBA/MAcc Plan (30 semester hours)

Business Core Requirements	3 semester hours
Accounting Major Requirements	18 semester hours
Electives	9 semester hours

Graduate-BBA/MBA Plan (33 semester hours)

MBA Core Requirements	21 semester hours
Accounting Concentration Requirements	12 semester hours
Combined Program Total	150 semester hours

Undergraduate Course of Study for the Combined Plans

Non-Business Foundation Requirements (48 - 51 semester hours)

All of these courses must be completed with a grade of "C" or better.

6 - ENGL 1311 and 1312
3 - COMM 1301 or 1302
6 - MATH 1320 and 2301
6 - POLS 2310 and 2311
6 - HIST 1301 and 1302
6 - Natural Science (See University Core Curriculum menu)
3 - PSYC 1301 or SOCI 1301
3 - Humanities (See University Core Curriculum menu)
3 - Visual and Performing Arts (See University Core Curriculum menu)
3 - ENGL 3355
3 - ENGL 3359 (Required for BBA/MAcc ONLY
3 - UNIV 1301 or UNIV 2350

Business Foundation Requirements (15 semester hours)

All of these courses must be completed with a grade of "C" or better.

6 - ACCT 2301 and 2302
6 - ECON 2303 and 2304
3 - QMB 2301

Business Core Requirements (30 semester hours)

3 - ACCT 3321
3 - BLAW 3301
3 - QMB 3301
3 - CIS 3345
3 - MKT 3300
3 - FIN 3310
3 - ECON 3320
3 - MGMT 3303
3 - POM 3321
3 - BUSN 3304

Accounting Major Requirements (21 semester hours)

15 - ACCT 3320, 3322, 3323, 3327, and 4304
3 - Approved accounting elective
3 - Business Computer Application Elective: Choose one from CIS 3350, 4330, 4365, 4370, or 4398

Electives (3 semester hours)

3 - Upper-division free elective (BBA/MBA MUST choose non-accounting elective)

Graduate Course of Study for the Combined BBA/MAcc Plan
(30 semester hours)

Business Core Requirements (3 semester hours)

3 - MGMT 5325 or MGMT 5335 (Taken last semester)

Accounting Major Requirements (18 semester hours)

Financial Accounting/Auditing Concentration

9 - Choose three from ACCT 4301*, 5310, 5323, and 5324
9 - Choose three approved graduate accounting electives

Tax Concentration

6 - ACCT 4328* and 5322
9 - Choose three from ACCT 5320, 5321, 5325, or 5326
3 - Choose one approved nontax graduate accounting elective

*Should be taken after being admitted to Graduate School. If already taken prior to admittance to Graduate School, three hours of a graduate accounting elective must be taken to fulfill this requirement.

Electives (9 semester hours)

9 - Choose three approved graduate business electives.

A minimum of 12 of the 18 hours in this concentration must be 5300-level accounting courses.

ACCT 5397 (Professional Report in Accounting), if selected, must be written in the area of concentration of the option chosen.

Up to nine hours of specified undergraduate courses allowed for graduate credit may substitute for graduate hours in the graduate portion of the combined program. Those undergraduate accounting courses required as part of the Graduate Accounting Major Requirements are counted in these limitations.

Graduate Course of Study for the Combined BBA/MBA Plan
(33 semester hours)

MBA Core Requirements (21 semester hours)

3 - CIS 5313
3 - ECON 5311
3 - ECON 5360
3 - FIN 5311
3 - MGMT 5336
3 - MKT 5311
3 - MGMT 5325 or MGMT 5335 (taken during the last semester)

Accounting Concentration (12 semester hours)

12 - Choose four from the following: ACCT 4301, ACCT 4305, ACCT 4321, ACCT 4325, ACCT 4328, ACCT 5310, ACCT 5312, ACCT 5322, ACCT 5323, ACCT 5324, ACCT 5326, ACCT 5391

A minimum of 9 of the 12 hours in this concentration must be 5300-level accounting courses.

No more than 12 semester hours of tax courses may be counted in the degree plan.

Minors in Business and Economics

Students who are not majoring in Business may obtain minors in Business and Economics in four areas: General Business, Accounting, Economics, and Management. Students should check with their major advisors for further details.

General Business Minor - CIS 2320 and 15 hours from BLAW 3301, ACCT 3309 or 2301, MKT 3300, MGMT 3303, FIN 3310, and ECON 3320 or CIS 3345. Students electing this minor field must complete ECON 2304 (fulfills Social Studies requirement) and MATH 1320, 2301, or STAT 2380 (fulfills Mathematics/Statistics requirement).

Accounting Minor - ACCT 2301 and 2302, CIS 2320, and nine hours from ACCT 3321, 3322, 3323, 3327, 4301, 4305, or 4328. Students electing this minor field must complete ECON 2304 (fulfills Social Studies requirement) and MATH 1320, MATH 2301, or STAT 2380 (fulfills Mathematics/Statistics requirement).

Economics Minor - ECON 2303 and 2304, ECON 3302 or 3303, and nine hours from ECON 3300 or 4300 level courses. Students electing this minor field must complete MATH 1320, MATH 2301, or STAT 2380 (fulfills Mathematics/Statistics requirement).

Management Minor - CIS 2320, ACCT 2301, and 12 hours from BLAW 3301, MGMT 3303, MGMT 3311, MGMT 3320, MGMT 4325, and POM 3321. Students electing this minor field must complete ECON 2304 and MATH 1320, MATH 2301, or STAT 2380 (fulfills Mathematics/Statistics requirement).

Major in Economics in Liberal Arts

Students may obtain a BA degree with a major in Economics from the College of Liberal Arts. Students should refer to the Department of Economics for details. Students pursuing the BA in Economics may not minor in Business.

Accounting

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ASSOCIATE PROFESSORS EMERITUS: Walter G. Austin, Jr., Janet S. Omundson
PROFESSOR: Mann
ASSOCIATE PROFESSORS: Braun, Eason, Haynes, Putnam, Zimmermann
ASSISTANT PROFESSORS: S. Glandon, T. Glandon, Leahey, Mayne
LECTURERS: Otero, Stevens

The mission of the Department of Accounting is to provide quality higher education to the citizens of El Paso and the surrounding region, prepare them to function effectively in society, and contribute to the quality of life in this community and region. The Department's goal is to provide a Bachelor of Business Administration degree which prepares graduates for entry into professional and managerial positions as accountants in public, private, and governmental and other not-for-profit organizations; lifelong learning; and success. The BBA-Accounting option and the Master of Accountancy degrees are accredited by AACSB International-the Association to Advance Collegiate Schools of Business.

Accounting (ACCT) courses and Business Law (BLAW) courses are included under the Accounting section.

Accounting (ACCT)

2301 Principles of Accounting I (3-0)
(🐎 ACCT 2301)
A study of financial accounting concepts and procedures from the initial recording of an economic transaction to the preparation of financial statements for an entity. *Prerequisite*: MATH 1409, MATH 1410, MATH 1508, or MATH 1320 with a grade of "C" or better.

2302 Principles of Accounting II (3-0)
(🐎 ACCT 2302)
A continuation of Principles of Accounting I and study of cost accounting and managerial uses of accounting information. *Prerequisites*: ACCT 2301 with a grade of "C" or better and MATH 1409, 1410, 1508, or 1320 with a grade of "C" or better.

3314 Management Accounting (3-0)
A study of product costing systems, planning and control systems, and the use of accounting data in management decision making. May not be counted toward BBA in Accounting degree requirements. ACCT 3314 and ACCT 3323 may not both be counted toward any degree requirements. *Prerequisite*: ACCT 2302 with a grade of "C" or better.

3320 Accounting Systems (3-0)
Analysis of fundamental accounting systems. Emphasis on internal control and accounting transaction cycles, relationship of system and organization objectives, policies, procedures, and plans. *Prerequisite*: ACCT 3321.

3321 Intermediate Accounting I (3-0)
A study of financial accounting principles, concepts, and objectives. An in-depth examination of elements of financial statements. Preparation of financial reports in accordance with generally accepted accounting principles. *Prerequisites*: ACCT 2302 and CIS 2320, each with a grade of "C" or better.

3322 Intermediate Accounting II (3-0)
A continuation of Intermediate Accounting I. An in-depth study of financial accounting concepts, elements of financial statements, and preparation of financial reports. *Prerequisite*: ACCT 3321 with a grade of "C" or better.

3323 Cost Accounting (3-0)
A study of theory and procedures of product costing in job order and process cost systems, overhead allocation issues, and determination of standard costs, budgetary controls, variance analysis, and cost-volume-profit analysis for management decision making. Application of the managerial accounting framework to service organizations. *Prerequisites*: ACCT 2302 and CIS 2320, each with a grade of "C" or better.

3327 Federal Income Tax - Individuals (3-0)
A comprehensive explanation of the Internal Revenue Code and Regulations pertaining to individuals and the preparation of individual tax returns. *Prerequisites*: ACCT 2302 and CIS 2320, each with a grade of "C" or better, or department approval.

4199 Current Concepts in Accounting (1-0)
4399 Current Concepts in Accounting (3-0)
Topics to be announced. The course may be repeated for credit when the topic varies. *Prerequisites*: Senior standing, a College of Business GPA of 2.5 or better, completion of a minimum of 9 hours of accounting, and department approval.

4301 Advanced Accounting I (3-0)
A study of special problems of partnership accounting, business combinations, consolidated financial statements, accounting for foreign operations, and other timely topics as appropriate. *Prerequisite*: ACCT 3322.

4304 Auditing Principles and Procedures (3-0)
A study of the professional auditor's opinion formulation process, professional standards and ethics, audit procedures, and other engagements requiring reports by CPA's. *Prerequisites*: ACCT 3320 and ACCT 3322.

4305 Not-for-Profit Accounting (3-0)
An examination of the accounting and reporting procedures of governmental and other not-for-profit organizations, including state and local governments, universities, hospitals, and others. *Prerequisite*: ACCT 3322.

4321 Advanced Cost Accounting (3-0)
Advanced studies in cost management systems, capacity utilization, performance measurement, capital budgeting, transfer pricing, quantitative techniques, and other selected topics as appropriate. *Prerequisite*: ACCT 3323 with a grade of "C" or better, or ACCT 3314 with a grade of "B" or better, or ACCT 5311.

4325 International Accounting (3-0)
A study of comparative international accounting systems, accounting practices, and problems of multi-national enterprises, and the institutions and environments that affect them. *Prerequisite*: ACCT 3314 with a grade of "B" or better, or ACCT 3321 with a grade of "C" or better.

4328 Federal Income Tax - Partnerships and Corporations (3-0)
A study of the Internal Revenue Code and Regulations pertaining to partnerships and corporations, federal taxation of international-related transactions, gift and estate taxes, and federal income taxation of fiduciaries; including preparation of related tax returns. *Prerequisite*: ACCT 3327.

4396 Internship (0-0-3)
A practicum in accounting under the supervision of accounting practitioners. This course may count as a business elective or a free elective but not as an accounting elective in the accounting degree. The course grade counts towards the business GPA, but not the Accounting GPA. The internship must be completed prior to the last full semester of accounting coursework. *Prerequisites*: Completion of 6 hours of upper-division business courses and 6 hours of upper-division accounting courses, which must include ACCT 3321; a minimum upper-division business GPA of 3.0, a minimum upper-division accounting GPA of 3.0, and department approval.

4398 Independent Study in Accounting (0-0-3)
Prerequisites: ACCT 3322 and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Business Law (BLAW)

3301 Legal Environment of Business (3-0)
A study of the legal and ethical environment of business to provide a legal foundation for careers in business or government. BLAW 3301 or BLAW 5306, but not both, may be counted toward degrees awarded in the College of Business Administration.

4325 International Business Law (3-0)
Legal environments in which international business operates; litigation and arbitration of international disputes; transfer of capital and technology regulations; impact of antitrust and taxation laws on international business transactions; legal structure and powers of overseas business organizations; patent, trademarks, and copyright aspects of international business transactions. *Prerequisites*: BLAW 3301 or instructor approval and department approval.

4391 Business Law (3-0)
A study of the Uniform Commercial Code and the study of legal principles of agency, partnerships, and corporations, including security regulations. *Prerequisite*: BLAW 3301 or BLAW 5306.

See the *Graduate Catalog* for graduate programs and courses.

Economics and Finance

236 Business Administration
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CHAIRPERSON: Timothy P. Roth
PROFESSORS: Herbst, James, Roth, Sprinkle
ASSOCIATE PROFESSORS: Fullerton, Holcomb, Johnson, Schauer, Smith, Tollen
ASSISTANT PROFESSOR: Ford, Gonzalez, Wei
LECTURERS: Hammett, Higgins

Economics

BA Degree

Specific requirements for the economics major are ECON 2303, 2304, 3302, 3303, 3320, and twelve additional hours of economics; MATH 2301; and a statistics course offered by either the College of Business Administration or the Department of Mathematical Sciences. Students majoring in Economics and minoring in Business may not take free electives in the College of Business Administration.

General Prerequisite: A 2.0 cumulative GPA and Junior standing for all 3300 or 4300-level courses.

Economics (ECON)

1301 Basic Issues in Economics (3-0)
(♦ ECON 1301)
The course is designed to expose non-business majors to a broad range of economic issues and policies. The course will emphasize current trends in economic thought and selected topics of current interest. May not be taken for credit toward any degree plan in the College of Business Administration.

2303 Principles of Economics (3-0)
(♦ ECON 2301)
A survey of the basic principles of economics designed to give a broad understanding of the economy; primary attention is given to aggregate problems and issues considered of particular importance to the nation. *Prerequisite*: MATH 1320, MATH 1409, or MATH 1508 with a grade of "C" or better.

2304 Principles of Economics (3-0)
(♦ ECON 2302)
A survey of basic principles of economics designed to provide an analytical understanding of markets, prices, and production. *Prerequisite*: MATH 1320, MATH 1409, or MATH 1508 with a grade of "C" or better.

3302 Intermediate Macroeconomic Theory (3-0)
A study of national income accounting and theory; emphasis is placed on the classification and analysis of conventional spending

sectors and their effect on income and employment; a critical survey of policy applications that affect the level of income and employment. *Prerequisites*: ECON 2303 and (1) MATH 1320, (2) MATH 1409, (3) MATH 1410, or (4) MATH 1508.

3303 Intermediate Microeconomic Theory (3-0)
A study of cost, demand, and price theory; the concepts, assumptions, and policy implications of aspects of particular equilibrium and general equilibrium theory; a critical survey of various concepts of the scope, methods, and approaches to economics. *Prerequisite*: ECON 2304.

3320 Money and Banking (3-0)
A description of the history and present characteristics of the money and banking structure of the United States. Special emphasis is placed on monetary policy as it affects the level of economic activity. *Prerequisite*: ECON 2303.

3334 Regional Economics (3-0)
Location theory, factors influencing regional growth and techniques of analysis. Description of economic regions and analysis of interaction among economic regions. *Prerequisites*: ECON 2303 and ECON 2304.

3335 Urban Economics (3-0)
Investigation of economic forces in metropolitan areas. Topics covered include urban growth patterns, metropolitan economic performance, real estate markets, local public finance, and location theory.

3351 Industrial Organization and Government Policy (3-0)
A study of the impact of government policy on the economy, emphasizing effects of governmental regulation on manufacturing and service industries, public utilities, and other segments of the economy. *Prerequisite*: ECON 2304.

3366 Economics of Latin America (3-0)
Considers economic theory and current problems of monetary and fiscal policy, regional economic integration, land reform, export patterns, and industrialization. The emphasis is institutional rather than analytical.

3367 Economic Development (3-0)
A course concerned with problems of economic growth in the less developed countries. Consideration is given to patterns and problems of human and material resource utilization, capital formation, investment criteria, inflation and the development of innovative techniques. Emphasis is placed on the application of analytical concepts to the problems of economic development.

3372 Mathematical Economics (3-0)
Basic concepts and operations of mathematical logic and their application to economic analysis. *Prerequisites*: ECON 2303 and ECON 2304.

3373 Introduction to Econometrics (3-0)
An introductory course designed to acquaint the student with the basic concepts employed in model building, different types of economic models, problems and techniques of quantifying models, and the use of such models for public and business policy. *Prerequisites*: ECON 2303 and ECON 2304.

3380 History of Economic Thought (3-0)
A study of the development of principal economic doctrines and schools of economic thought. Prerequisites: ECON 2303 and ECON 2304.

4312 Current Issues In Banking (3-0)
An analysis of current problems in commercial banking from the points of view of the banks, their regulators, and the public. *Prerequisite*: FIN 4311 or department approval.

4325 International Economics (3-0)
Principal theories of international trade: foreign exchange markets, international capital flows, barriers to trade, international economic institutions, and the economics of regional trade integration. *Prerequisites*: ECON 2303 and ECON 2304.

4330 Public Sector Economics (3-0)
Financial administration by agencies of local, state, and federal government; principles of taxation; sales, property, income, and inheritance taxes; analysis of government expenditures and the public credit. *Prerequisites*: ECON 2303 and ECON 2304.

4340 Economics of Labor (3-0)
A study of the basic principles, historical background, and characteristics of labor markets; theories of wages, wage structures, collective bargaining, and the role of government in labor problems. *Prerequisite*: ECON 2304.

4368 Economy of Mexico (3-0)
A survey of the growth and change of the Mexican economy. Emphasis is placed on the description and analysis of recent and current economic policy.

4398 Independent Study in Economics (0-0-3)
Prerequisite: Department approval.

See the *Graduate Catalog* for graduate programs and courses.

Finance (FIN)

3310 Business Finance (3-0)
An introduction to the concepts of finance as applied in a business environment. Topics typically covered include financial environment, time value of money, valuation, capital budgeting, capital structure, and working capital management. *Prerequisites*: ACCT 2301 and MATH 1320 or MATH 1409 or MATH 1410 or MATH 1508, each with a grade of "C" or better.

3315 Investments (3-0)
Introduction to the analysis of investment media, means of purchasing and selling securities, and personal investment decision-making. Emphasis is given to determinants of growth, safety, and income and to problems involved in achieving objectives. *Prerequisite*: FIN 3310.

3325 Money and Capital Markets (3-0)
Analysis of the instruments and institutions of the money and capital markets and emphasis on the roles of these markets in the economy. *Prerequisite*: ECON 3320.

3350 Personal Financial Planning (3-0)
A study of modern financial management from the personal point of view. Budgeting, uses of savings, consumer credit, forms of insurance, and estate planning are among the topics discussed. Counts as a free elective for BBA degree.

4310 Managerial Finance (3-0)
The development and utilization of financial plans, policies, and practices in business enterprises. Particular emphasis is given to illustrative problems and cases. *Prerequisite*: FIN 3310.

4311 Commercial Bank Management (3-0)
The theory and practice of bank asset and liability management in the context of a liquidity-profitability conflict. *Prerequisites*: ECON 3320 and FIN 3310.

4312 Current Issues in Banking (3-0)
An analysis of current problems in commercial banking from the points of view of the banks, their regulators, and the public. *Prerequisite*: FIN 4311 or department approval.

4315 Investment Management and Security Markets (3-0)
A study of investment management policies for individuals and institutions and the operation of organized security exchanges and the over-the-counter market. *Prerequisite*: FIN 3315.

4316 Speculative Markets (3-0)
A study of the nature, functions, and applications of the various futures and options markets and contracts. Basis, long and short term hedging, spreading, and normal and inverted markets are examined, along with theoretical considerations. *Prerequisite*: FIN 3310.

4318 Financial Statement Analysis (3-0)
An inquiry into the techniques of analysis of financial statements as an aid to extraction and evaluation of information for interpretation and decision-making by lenders, investors, and others. *Prerequisite*: FIN 3310.

4325 International Finance (3-0)
A study of international monetary problems, financing of the flow of goods and services among nations, and balance of payments considerations. *Prerequisite*: ECON 3320.

4328 Central Banking (3-0)
A study of the history, economic functions, operating techniques, and policies of central banks. Emphasis is given to concurrent problems of monetary policy and control. *Prerequisite*: ECON 3320.

4396 Internship in Finance (0-0-3)
Exposure to the application of financial management and/or investment topics in a business environment. *Prerequisites*: FIN 3310, three additional hours of Finance, department approval, and a 3.0 cumulative GPA.

4398 Independent Study in Finance (0-0-3)
Prerequisite: Department approval.

See the *Graduate Catalog* for graduate programs and courses.

Information and Decision Sciences

205 Business Administration
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PROFESSORS: Mahmood, Udo
ASSOCIATE PROFESSORS: Gemoets, Hall, Kirs
ASSISTANT PROFESSORS: Bagchi, Joseph, Lopez, Mukhopadhyay, Solis
LECTURERS: Ghosh, Kesh, McCrae,Tahiliani, Vaughn, Woo

Computer Information Systems (CIS)

2320 Introduction to Computers and Computer Application Software (3-0) (♞ BCIS 1305)
This literacy course introduces the student to the essentials of computer hardware and software. The personal computer operating system and applications such as spreadsheet, database, Internet browsers, and e-mail are discussed. Emphasis will be placed on spreadsheet and database to solve typical business problems. The student will learn data sharing between applications.

2335 Introduction to Business Applications Programming (3-0)
This course introduces the student to programming in the most widely used computer language, COBOL. Emphasis will be on good programming practice, following top-down, modular, structured program design, development, testing, implementation, and documentation of business problems. *Prerequisite*: CIS 2320.

3340 Organizational Impact of Information Technology (3-0)
This course integrates both computer concepts and information systems concepts, and provides a strong managerial emphasis. Impact of information technology as well as organizational, global, strategic, and end-user computing issues will be covered. *Prerequisite*: Upper-division standing.

3345 Management Information Systems (3-0)
This course integrates both computer concepts and information systems concepts, and provides a strong managerial emphasis focusing on the impact of technologies in different environments. The course provides the fundamentals of management of information systems including organizational, global and strategic issues. *Prerequisite*: CIS 2320 or department placement exam.

3350 Business System Analysis and Design (3-0)
A study of the systems analyst in a business environment. Coverage of the tools, techniques, and procedures used to conduct an analysis of the business system including prototyping, CASE, and 4GL. This course will emphasize the design phase of systems analysis projects. *Prerequisites*: (1) CIS 2335 or (2) CIS 3345, and ACCT 3320.

3355 Business Data Structures and Business Programming (3-0)
Logical programming concepts such as data types, loops, functions, arrays, and pointers are examined. Physical data structures such as linked lists, queues, stacks, and trees are investigated. Management of files on secondary storage devices is studied. *Prerequisite*: CIS 2335.

3380 Programming with Visual Basic (3-0)
This introductory course in the Visual Basic programming language and environment provides an understanding of fundamental programming concepts required to develop end-user business applications in object-oriented, event driven environments. Integration and interaction of Visual Basic with other application tools will be explored. *Prerequisite*: CIS 3355.

3385 Advanced Business Application Programming (3-0)
All advanced features of COBOL programming language are examined including analysis of sequential, indexed, relative, and direct access file processing systems. Also covered are sort and merge techniques, table processing, and utilities. Emphasis is placed on writing modular programs using available routines or structures which can be included in a program using CALL and COPY. *Prerequisite*: CIS 2335 or equivalent.

4305 Advanced Business Systems Development (3-0)
The application of concepts acquired in systems analysis and design. Students will analyze the needs of an organization and design an information system for that organization. Particular emphasis will be placed on the need for auditing and control of that system. Coverage will include dealing with problems of installation and security. *Prerequisite*: CIS 3350.

4320 Object Oriented Programming Environment (3-0)
Object-oriented concepts will be used to solve real world business problems. Strong emphasis will be placed on hands-on structured programming. Concepts such as pointers, strings, files, and structures will be briefly reviewed. The course will focus on the concept of classes, function and operator overloading, inheritance, and virtual functions. Data structures will be discussed. *Prerequisite*: CIS 3335.

4330 Expert Systems and Decision Support Systems (3-0)
A study of artificial intelligence, expert systems, and decision support systems concepts and technologies applied to cover development, implementation, and management of expert systems and decision support systems for business organizations. Tools such as languages, shells, and hardware for utilizing artificial intelligence in designing expert systems and decision support systems are covered. *Prerequisites*: (1) CIS 2335, or (2) CIS 3345, and ACCT 3320.

4365 Database Management (3-0)
The course introduces students to issues related to database and database management systems (DBMS). Students gain technical backgrounds in planning, analysis, logical design, physical design, implementation, and maintenance of a database. Students are provided hands-on training in database design, development, and implementation using a relational DBMS software. Emphasis is placed on the problems and issues of managing in a database environment. *Prerequisites*: (1) CIS 3355 or (2) CIS 3345, and ACCT 3320. CIS 3355 may be taken concurrently with CIS 4365.

4368 Advanced Database Management (3-0)
This course is an extension of the first Database Management course with a focus on development of advanced, multi-user and distributed database applications using Report Builder or another SQL front-end package. The course emphasizes hands-on project work. Students will learn PL/SQL triggers and procedure builders, how to develop integrated database applications, and how to create Web applications. *Prerequisites*: CIS 3355 and CIS 4365.

4370 Business Data Communications (3-0)
An introduction to network components, transmissions links, link control, protocols, network typologies, error detection and correction methods, network management and security, local area networks, electronic commerce, virtual private networks, and use of the Internet in business. *Prerequisite*: CIS 2320 and CIS 3355.

4375 Introduction to Electronic Commerce (3-0)
The course will combine Electronic Commerce (e-commerce) business and technical state-of-the art topics and introduce students to these issues in order to facilitate their participation and involvement in the e-commerce area. The course will cover, among others, Web-based tools for e-commerce, e-commerce software, and infrastructure. Students will gain hands-on experience in designing e-commerce Web sites using appropriated software. *Prerequisite*: CIS 4365 with a grade of "C" or better, or department approval.

4396 Internship in Computer Information Systems (0-0-3)
To be arranged with the prior approval of the instructor and the department chairperson.

4398 Independent Study in Computer Information Systems (0-0-3)
The student studies a topic as a semester-long project. The project may be independent library research or a work-related task. The student must have the topic approved by the department chair and have a schedule to report progress with the instructor before work commences. *Prerequisite*: Department approval.

4399 Current Topics in Computer Information Systems (3-0)
The topics to be announced. This course may be repeated for credit as topics are changed. *Prerequisite*: CIS 2335.

See the *Graduate Catalog* for graduate programs and courses.

Production/Operations Management (POM)

3321 Production/Operations Management (3-0)
Production management and its relationship to marketing, finance, and accounting functions are described. Forecasting demand, aggregate planning, inventory planning and control, and scheduling provide the basis for linking strategic plans to the production plan. Other topics discussed include: quality control, product and process design, facility location and layout, productivity improvement, and project management. *Prerequisite*: QMB 2301.

3322 Advanced Production/Operations Management (3-0)
Discusses the design and implementation of Advanced Manufacturing Technologies (AMT). This includes Just-in-Time (JIT)

systems, cellular and Flexible Manufacturing Systems (FMS), and Computer Integrated Manufacturing (CIM). It also explores the key role that manufacturing plays in product development efforts and cross-functional teams. Other topics such as manufacturing strategy, maintenance, and the design of work systems are presented as well. Case studies and group projects/presentations are used for instructional purposes. *Prerequisite:* POM 3321.

3331 Service Operations Management (3-0)
Methods of process analysis in service organizations, methods improvement procedures, and work measurement techniques are developed to provide the basis for analyses of processes, layouts, and job design in an organization. *Prerequisite*: POM 3321.

3333 Production Planning and Control (3-0)
Material planning and control systems utilizing material requirements planning (MRP) techniques. Production planning, master production scheduling, MRP, capacity requirements planning and shop for control techniques are examined from both conceptual and practical standpoint. *Prerequisites*: POM 3322 and QMB 3301. POM 3322 may be taken concurrently with POM 3333.

3335 Project Management (3-0)
Various aspects of project management from conception and planning to project control and termination are discussed. Topics include: Project scheduling, precedence diagramming, PERT, CPM, budgeting, and project management information systems. Organizational and conceptual issues such as project team development and management structure will be addressed. *Prerequisites*: POM 3321 and QMB 3301.

3336 Inventory Management (3-0)
A study of the concepts, principles, problems, and procedures involved in managing inventories of raw materials, work-in-process, finished goods, and supplies. Some emphasis will be placed on the formulation and application of models for the analysis and replenishment of inventories. Implications for inventory management of material requirements planning and just in time systems will also be discussed. *Prerequisite*: POM 3322. POM 3322 may be taken concurrently with POM 3336.

3337 Business Logistics (3-0)
Analysis of logistics concepts, activities, and decisions necessary to plan, implement, and control the private and public physical distribution of goods and services. The focus and emphasis of the course is on physical, human, informational, global, and organizational system components. The course includes such logistics topics as inventory, facility location, warehousing, traffic and transportation, materials handling, packaging, order processing, customer service, and global logistics. *Prerequisite*: POM 3321.

3339 Quality Planning and Control (3-0)
A study of the most effective methods for improving product and process quality in manufacturing and service operations. The course covers the following topics: statistical control charts, quality auditing, Japanese QC tools, process capability, loss functions, statistical tolerances, and experimental design. Statistical computer software will be used. *Prerequisite*: POM 3321.

3390 Internship in Production/Operations Management (0-0-3)
A practical and on-site experience is an essential aspect of the learning process for POM students. A practical experience in a service operations/manufacturing enterprise will be emphasized. The student will be required to write a paper in a relevant topic agreed upon with the supervising faculty. *Prerequisites*: POM 3321, an advanced elective course in POM, and department approval.

4371 Transportation and Warehousing Systems (3-0)
Role of transportation systems in economic activity; emphasis on modes of transportation analysis and planning, and the management of transportation systems in supply chains. Administration of warehouse and terminal functions in logistics systems, with analysis of customer service, forecasting, investment, design, and operation activities. *Prerequisite*: POM 3321.

4375 Operational Models for Supply Chain Management (3-0)
An examination of some of the major operational concepts and issues relating to the flow of materials, goods, services, and information through a company's supply chain—the network of organizations that supply and transform materials and distribute final products to customers. The course seeks to provide an understanding of the importance of individual components (suppliers, manufacturers, distributors, and customers) in the operation of the supply chain. It will emphasize inventory-service level tradeoffs, risk pooling, and other operational concerns. Some of the more recent approaches designed for the effective and efficient operation of the supply chain will be discussed. *Prerequisites*: POM 3321, QMB 3301 and CIS 3345.

4398 Independent Study in Production/Operations Management (0-0-3)
The student studies a topic as a semester-long project. *Prerequisites*: POM 3321 and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Quantitative Methods in Business (QMB)

2301 Fundamentals of Business Statistics (3-0)
Introduction to statistical techniques as applied to business data. Included are descriptive statistics, measures of central tendency and variation, probability distributions, sampling theory, hypothesis testing, and regression and correlation analysis. A major effort is devoted to computerized solution techniques to provide managerial information. *Prerequisite*: MATH 1320 or MATH 1409 or MATH 1410 or MATH 1508.

3301 Quantitative Methods in Business (3-0)
Introduction to quantitative methods applied to business decision making. These methods include linear, integer, and goal programming, network analysis, and transportation linear programming. A major effort is devoted to computerized solution techniques to provide managerial information. *Prerequisite*: QMB 2301.

See the *Graduate Catalog* for graduate programs and courses.

Marketing and Management

230 Business Administration
(915) 747-5185
mandm@utep.edu

CHAIRPERSON: Janice R.W. Joplin
PROFESSOR EMERITA: Lola B. Dawkins
PROFESSORS: Brouthers, Foster, Hoy, Ibarreche, Michie, Sullivan
ADJUNCT PROFESSOR: Haines
ASSOCIATE PROFESSOR EMERITUS: Glenn Palmore
ASSOCIATE PROFESSORS: Hadjimarcou, Joplin
ASSISTANT PROFESSORS: Baca, Khorram, Posthuma, Stratemeyer
LECTURERS: Bruna, Eason, Grambling

Business (BUSN)

3304 Global Business Environment (3-0)
An examination of the issues confronting business enterprises in the global economy. Topics will include understanding cultural and ethical issues; the influence of social, political, and economic systems; and the impact of environmental and technological issues in the perspective of a global business environment. *Prerequisite*: COMM 1301 or COMM 1302 each with a grade of "C" or better and MKT 3300.

Management (MGMT)

3303 Introduction to Management and Organizational Behavior (3-0)
An introduction to the management functions of planning, organizing, leading, and controlling. Emphasis will be given to organizational behavior concepts, international business, ethical issues, and quality management perspectives. *Prerequisite:* PSYC 1301 or SOCI 1301.

3304 Advanced Organizational Development (3-0)
The concepts, values, underlying assumptions, and intervention techniques that are common in the practice of organizational development and change are presented. *Prerequisite*: MGMT 3303.

3306 Entrepreneurship (3-0)
Entrepreneurship is designed to provide an understanding of the entrepreneur and the entrepreneurial process. Emphasis is on new venture planning and establishment of new firms as opposed to dealing with problems of an established business. The distinctive focus is enterprise creation. *Prerequisites*: MGMT 3303 and FIN 3310.

3311 Introduction to Human Resource Management (3-0)
This course emphasizes how to effectively utilize and manage human resources in a rapidly changing environment. Emphasis is on such topics as strategic human resource planning, staffing, performance appraisal, and compensation. Emphasis will also be placed on understanding the legal ramifications of human resource management decisions. *Prerequisite*: MGMT 3303.

3315 Employee and Labor Relations (3-0)
Study of labor law, trends in the labor movement, union structure, organizing, and collective bargaining processes. Preparation for and handling of negotiations. Grievance and discipline handling in both union and non-union organizations. Arbitration, decertification, and managing in a non-union environment. *Prerequisite*: MGMT 3311.

3320 Small Business Management (3-0)
Focuses on the analysis, operation, and management of small business. Provides practical experience working with small business and entrepreneurial opportunities in the community. Investigates marketing production and administrative functions to develop over-all managerial awareness and analytical skills in small business problem solving. *Prerequisites*: ENGL 3355, MGMT 3303, and ACCT 2301.

4300 Strategic Management (3-0)
Integration of accounting, business law, finance, human resources, production management, and marketing to solve management problems. *Prerequisites*: Graduating Seniors only, overall GPA of 2.0 or better, business GPA of 2.0 or better, FIN 3310, MGMT 3303, MKT 3300, POM 3321, and for Accounting majors, a 2.0 or better GPA in all hours attempted in the following courses: ACCT 3321 and accounting courses listed in the Accounting Option Requirement.

4304 Human Resource Training and Development (3-0)
The course is an intensive study of the procedures utilized by organizations to facilitate the learning process to assure that these efforts result in the achievement of organizational goals and objectives. Emphasis is given to such topics as learning theory, training and development methods, evaluation, and administration. Experiential exercises are utilized to facilitate the application of theory to organizational practices. *Prerequisite*: MGMT 3311 or MGMT 3315.

4306 Franchising (3-0)
Franchising investigates the advantages and potential risks that must be considered before making an investment in a franchise business. There is particular emphasis on the discovery and evaluation of the franchiser and the feasibility of entrepreneurs converting an existing business into a franchise chain or creating and selling new business concepts. *Prerequisites*: MGMT 3303 and FIN 3310.

4310 Employment Law and Dispute Resolution (3-0)
Consideration of the full impact of federal and state employment and labor laws on employer-employee relations. Specific subject matter includes job discrimination, minimum wage and overtime, lawful terminations, job safety and health regulations, employment of aliens, workmen's compensation, and substance abuse in the work place. Recognition and management of problem situations will be covered. *Prerequisite*: MGMT 3311 or MGMT 3315.

4315 Human Resource Staffing and Planning (3-0)
A study of the staffing process in organizations. Primary emphasis on job analysis and the use of human resource information systems in the planning, recruitment, selection, and appraisal activities. *Prerequisite:* MGMT 3311 or MGMT 3315.

4325 International Management (3-0)
A study of the differences in managerial processes in organizations having international operations with an emphasis on traditional managerial activities. It is a cross-cultural approach to the study of management using the United States as a point of reference. *Prerequisite*: MGMT 3303.

4337 Compensation and Employee Benefits (3-0)
This course examines the goals of the organization in the employment of human resources and its use of reward systems in the motivation of goal-oriented behavior. Topics included are job evaluation systems, merit pay, and employee benefits. Legal aspects of pay administration such as wage and hour laws and ERISA will be covered. *Prerequisites*: MGMT 3311 or MGMT 3315 and department approval.

4396 Internship in Management (0-0-3)
A course designed to give a business major practical work experience. *Prerequisites*: MGMT 3303, three hours of MGMT courses beyond 3303, and department approval.

4398 Independent Study in Management (0-0-3)
Individualized instruction in a particular issue in management. The nature and scope of the study is arranged with a faculty member. *Prerequisites*: MGMT 3303 and department approval.

4399 Current Topics in Management (3-0)
Topics to be announced. This course may be repeated for credit as topics are changed. *Prerequisites:* MGMT 3303 and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Marketing (MKT)

3300 Principles of Marketing (3-0)
A description and analysis of the ways in which goods move to points of consumption. Topics studied include functions, institutions, the marketing environment, markets, and government regulation. *Prerequisites*: ACCT 2301 and junior standing.

3302 Buyer Behavior (3-0)
This course emphasizes the psychological and sociological aspects of both industrial and consumer buyer behavior. Topics range from basic motivation and learning theory to group dynamics with applications to the formulation of marketing strategy. *Prerequisite*: MKT 3300.

3305 Selling and Sales Management (3-0)
Presents the techniques of effective personal selling; the function and duties of the sales representative; and the task of sales management in staffing, training, and motivating the sales force. *Prerequisites*: MKT 3300 and (1) MKT 3302 or (2) MGMT 3303.

3310 Principles of Retailing (3-0)
Analysis of retail store management including personnel requirements and career opportunities with emphasis on modern methods in

buying, receiving, pricing, merchandise and financial control, sales promotion, and customer service. *Prerequisites*: MKT 3300 and FIN 3310 and (1) MKT 3302 or (2) MGMT 3303.

3320 Advertising and Sales Promotion (3-0)
The planning, execution, and evaluation of advertising and sales promotion activities to stimulate customer demand. *Prerequisites*: MKT 3300 and (1) MKT 3302 or (2) MGMT 3303.

4301 Marketing Research (3-0)
Scientific methods of analysis and statistical techniques are employed in solving marketing problems. Emphasis on collection of information from internal and external sources; analysis, interpretation, and presentation of research findings. *Prerequisites*: MKT 3300, MKT 3302, and QMB 3301.

4325 International Marketing (3-0)
Emphasis is placed upon the recognition, analysis, and consideration of different market conditions across countries as well as the use of standardized marketing strategies. Areas of investigation include planning and organizing for international operations, marketing mix strategies, interrelationships with other functional areas and the political, cultural, ethical and economic aspects of marketing products and services worldwide. Prerequisites: (1) MKT 3300 and FIN 3310 and (a) MKT 3302 or (b) MGMT 3303 or (2) graduate standing.

4356 Logistics and Supply Chain Management (3-0)
An introductory review and discussion of business activities that center on the movement and storage of inventories and the dynamic forces affecting logistics decisions. This course critically evaluates the physical and information flows that occur within the logistics and supply chain system. It is intended to provide an understanding of how business decisions influence logistical flow and the ways in which choices made by logistics managers affect overall corporate performance by reducing total cost and improving customer satisfaction levels. *Prerequisite*: POM 3321.

4390 Industrial Marketing (3-0)
This course distinguishes organizational markets from consumer markets. Emphasis is placed upon the characteristic features of industrial and institutional demands that set the environment within which the industrial marketer must cope. *Prerequisites*: (1) MKT 3300 and (a) MKT 3302 or (b) MGMT 3303 or (2) graduate standing.

4391 Service Marketing (3-0)
This course integrates concepts from other marketing courses to adapt them to services marketing. The focus is on the unique properties of services. A distinctive approach to services marketing strategy development and execution is examined. *Prerequisite*: MKT 3300 or graduate standing.

4395 Strategic Marketing Management (3-0)
An integrating course in marketing, systematically oriented with emphasis on the marketing mix, and special attention to market analysis, marketing information, and sales forecasting. *Prerequisites*: MKT 4301 and FIN 3310.

4396 Marketing Internship (0-0-3)
Designed to provide practical work experience in marketing. To be taken during the senior year with permission of the internship advisor and the department chairperson. *Prerequisites*: MKT 3300, MKT 3302, and department approval.

4398 Independent Study in Marketing (0-0-3)
Individualized instruction in a particular issue in marketing. The nature and scope of the study is arranged with a faculty person. *Prerequisites*: MKT 3300 and department approval.

4399 Current Topics in Marketing (3-0)
Topics to be announced. This course may be repeated for credit as topics are changed. *Prerequisites*: MKT 3300 and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Real Estate (REST)

3300 Real Estate Principles (3-0)
A survey course, designed to introduce the basic concepts of real estate law, appraisal, finance, investment, and brokerage.

COLLEGE OF EDUCATION

Educational Leadership and Foundations
Educational Psychology and Special Services
Teacher Education

Dr. Josefina Tinajero, Dean
Dr. Judith Munter, Associate Dean

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College of Education

The mission of the College of Education is to prepare effective teachers, counselors, diagnosticians, and school administrators, who successfully address the needs of schools and other youth serving agencies, especially those in multicultural communities. In order to support this mission, the faculty of the College strives to demonstrate by example the quality of teaching expected of its graduates, engages in research and scholarly activities, and provides educational services to the schools and community.

At the undergraduate level, the College offers programs aimed at providing qualified students an opportunity to attain the knowledge, values, and skills needed to enter the teaching profession and to receive an initial Texas teaching certificate. At the graduate level, the College offers Master's degrees in the areas of reading education, instructional specialist, (i.e., Bilingual education; elementary education; secondary education; early childhood education; education; math education; science education; health and physical education), educational administration, school counseling, community counseling, educational diagnostics, and special education. In addition to these graduate degree programs, the College offers graduate level courses leading to advanced Texas licensing in administration, supervision, counseling, and various teaching specialties. A Doctor of Education (Ed.D.) degree is offered in Educational Leadership. (For information about graduate programs in Education, students should refer to the University's *Graduate Catalog*.)

COE website:	http://education.utep.edu
TED Graduate website:	http://teachered.education.utep.edu/tedgrad.htm
EDPC Graduate website:	http://edpsychology.education.utep.edu
EDLD website:	http://edleadership.education.utep.edu

The College maintains close ties with the practicing teaching profession through Field-based Teacher Preparation Programs. The educator preparation programs are approved by the Texas Higher Education Coordinating Board and by the Texas State Board for Educator Certification (SBEC). Candidates who successfully complete a certification program are recommended to receive teacher certification in the State of Texas.

Professional certification programs in the College of Education are offered in early childhood education; bilingual education; reading education; primary, middle, secondary, and all-levels education; counseling; special education; educational diagnostics; and educational administration.

Students wishing to explore teaching as a career option enroll in UNIV 1301. In this course, information concerning the teaching profession is presented, and students have an opportunity to discuss career issues with Education faculty and public school practitioners.

The Education Student Services Office is located in Education 412. Staffed with faculty advisors, this office provides information about undergraduate degrees, certification, and transfer work. The College administrative offices are located on the fourth floor of the Education Building. Program and faculty offices are located on the third through eighth floors.

Undergraduate Degree and Teaching Licenses

Primary and Middle Grades Education or Special Education EC-12

The College offers a Bachelor of Interdisciplinary Studies (BIS) degree, which may be taken by students who wish to teach at the primary or middle grades level and who may wish to qualify for a Texas teacher certificate at

those levels, or for students teaching special education at any level. Students working on the Bachelor of Interdisciplinary Studies degree must have their degree plan filed in the College of Education. These students are advised by College of Education faculty and request degree and certification course substitutions through that faculty.

Secondary Education and All-Levels Education

Students interested in becoming secondary teachers or all-levels Art, Music, and Physical Education teachers complete a Bachelor of Arts, a Bachelor of Business Administration, a Bachelor of Music, a Bachelor of Science, or a Bachelor of Science in Kinesiology and Sports Studies with a minor in secondary or all-levels teaching, depending on the teaching area of their interest. Program of studies information appears in the appropriate section of this Catalog under the Colleges of Business Administration, Liberal Arts, Health Sciences, and Science. Information on the secondary or all-levels teaching minors is available in the Education Student Services Office, Education 412.

Students working on a degree outside the College of Education and wishing to become certified in Texas as secondary or all-levels teachers have their degree and copy of their current certification plan filed under the appropriate college in which they are pursuing their major. These students also must have a copy of their degree plan and a certification plan filed in the College of Education Student Services Office, Education 412. They are advised by the faculty of the college of their major and request course substitutions through the office of their college dean. Substitutions pertinent to the secondary or all-levels teaching certificate minor are under the purview of the Dean of Education.

Transfer Students Seeking Degrees in Education

Undergraduate transfer students seeking a Bachelor's degree in Interdisciplinary Studies must submit original copies of their transcripts to the Admissions Office (Academic Services Building) for evaluation, as well as an application for admission, prior to consulting with an advisor in the College of Education. No official academic advising is done for transfer students until a written evaluation of previous academic work is prepared by the Admissions Office.

Certification for Candidates Who Have Completed a Bachelor's Degree

Alternative Teacher Certification Program (ATCP)

An Alternative Certification Program conducted in partnership with local public school districts and private schools, is available to a candidates who have completed a bachelor's degree with a 2.5 overall grade point average (GPA). Candidates are required to have passed all three portions of the THEA, or have appropriate GRE scores within the last three years. Candidates are encouraged to apply for the following teaching fields: Elementary Education, Bilingual Education, Middle School Generalist, Middle Grades Language Arts-Social Studies and Middle Grades Math-Science, Special Education, or Secondary Education with specialization in Basic Business, Biology, Chemistry, Art, Dance, Earth Science, English/ESL, English/Reading, French, German, Government, Health, History, Journalism, Life/Earth Sciences, Mathematics, Music, Physics/Physical Science, Sciences Composite, Social Studies Composites, Spanish, Speech, and Theatre Arts. In this program, candidates teach full-time in an elementary, middle, or secondary school, while employed by a public school district, or private school, and complete a one-year internship.

Eighteen to thirty-two graduate credit hours are required to meet certification while completing a one-year internship. Although the University is approved to offer alternative teacher certifications in the areas listed, the availability of positions for these fields depends on the staffing needs of the local public and private schools. For more information contact the Alternative Teacher Certification Office, 747-7605.

Career and Technology Education (CATE)

The career and technology teacher certification program provides qualified applicants with the knowledge and skills for becoming a certified teacher in one of the following areas: Business Education, Marketing Education, Health Science Technology Education, Career Investigations, and Trades and Industrial Education. Career and technology education is a vast enterprise in the United States with virtually every high school student taking courses in one or more career and technology areas. With national and state school reform efforts focused on academic achievement, and with the fastest-growing occupations now requiring post high school preparation, career and technology programs are seeking qualified individuals to contribute to these goals. For more information, contact the CATE Program at 747-7639.

Field-Based Teacher Certification

The College of Education offers a field-based teacher certification program for candidates who have already completed a bachelor's degree and wish to become primary, middle, secondary, or all-levels teachers. The program requires fieldwork in partner schools. This is a non-degree plan administered by the Student Services Office in cooperation with the department in which the candidate's teaching specialty resides. Unlike Alternative Certification, this program does not provide concurrent employment in a public school.

In order to be admitted to the program, candidates must have:

1. A bachelor's degree with a 2.50 GPA in the final 60 hours.
2. Submitted an application for admission to post-baccalaureate course work at the Graduate School.
3. Submitted required scores on all portions of the TASP.
4. Submitted biographical information and three letters of professional recommendation.

In order to finish the program and to be recommended for certification, candidates must complete the course of studies and field-based blocks specified in the certification plan and pass the appropriate State certification tests (TExES), and any other requirements established.

Additional Certification Levels, and Fields, and Endorsements

Texas-certified teachers who wish to add another level of certification and/or a new field of specialization or endorsement must submit a copy of their State certificate(s) and have a new plan prepared at the Student Services Office, Education 412. Teachers already certified may add any level of certification or field of specialization available to primary, middle, secondary grades, and all-levels UTEP students. There are also supplementary certificates offered in Bilingual Education and English as a Second Language (ESOL). The State provides certified teachers with an opportunity to add new certification levels and specialization fields by challenging the TExES tests in those areas (H.B. 2185)

Out-of-State Teachers

Teachers with valid out-of-state teaching credentials who are seeking a Texas certificate must contact the Texas State Board for Educator Certification (SBEC) directly in order to have their credentials evaluated. Teachers with expired out-of-state teaching certificates must either contact the state in which they were certified in order to upgrade their certificate before contacting SBEC, or follow the procedure established for candidates who have a bachelor's degree and desire an initial Texas certification.

Admission to Teacher Education

Undergraduate students who wish to become primary, middle, secondary grades, or all-levels teachers in Texas should have an unofficial degree and certification plan prepared as soon as possible. This plan will become official once the student has fulfilled all the requirements for admission to teacher education. A copy of the plan must be filed in the Student Services Office of the College of Education, Education 412. To be admitted to teacher education, students must fulfill the following criteria:

1. Complete ENGL 1311 and 1312 and COMM 1301 with a grade of "C" or better in each course.
2. Complete MATH 1320 or a higher level math with a grade of "C" or better.
3. Provide required passing scores on the Texas Academic Skills Program (TASP): 220 in Writing, 230 in Math and 250 in Reading. To register, contact the Student Assessment and Testing Office, Education 210.
4. Complete 60 semester hours of college work with a cumulative GPA of 2.50 or better.
5. Provide an unofficial degree and/or certification plan filed with the Certification Office.
6. Provide biographical information and three letters of recommendation, at least one of which will be a professional reference from an educator, filed in the Student Services Office.

Note: To receive initial Texas teacher certification, students must be free of felony convictions.

Until admitted to teacher education, students indicating intent to become teachers will be classified as Pre-education students. Pre-education students are not permitted to enroll in upper division education courses.

According to University policy, students must remain in good standing to progress toward the completion of a degree program (see the appropriate catalog section under Academic Standards). In addition, irrespective of other factors, students may be prohibited from enrolling in Professional Education courses if, once due process has been provided, their suitability for the teaching profession is found to be unacceptable.

Field-Based Teacher Preparation

Teacher preparation students are expected to spend a significant amount of time in specially selected schools (partner schools) while they take their professional development courses. Admission to teacher education and admission to the campus Base Block, Block 1 and Block 2 is required to participate in the field-based teacher preparation program.

Description of the Primary and Middle Grades and Special Education Field-Based Program

The primary and middle grades and special education field-based program consists of one campus-based block and two field-based blocks. The field-based blocks are offered in fall and spring semesters only. Students must take these blocks sequentially. They may not enroll concurrently in blocks. Interns spend approximately 540 clock hours in the schools. A description of these blocks follows.

In the **primary and middle grades and special education campus-based block**, the teacher education student begins to develop an understanding of the knowledge, values, and experiential bases underlying the competencies necessary to become an effective teacher.

In the **primary and middle grades and special education field-based block 1**, teacher education interns participate in the field-based program. At this time, interns begin to organize their professional belief system. The semester has an emphasis on role induction. Students are grouped in cohorts and a faculty mentor is assigned to each cohort. Groups of approximately 15 interns are assigned to each elementary or middle school. Mentors follow their interns into the field assignments. During block 1 interns are scheduled 3 half days in the schools throughout the semester. They spend approximately 180 clock hours in the schools. In addition to classroom teaching duties, interns are enrolled in classes that help them apply their theoretical understandings to actual practice in schools. Faculty teach their courses in the partnership schools and provide opportunities for their interns to implement activities in real classroom settings in the school. During the first semester, the major concepts and skills required in the block are introduced and interns become familiar with the students, the teams of teachers, and the community of the partner schools to which they are assigned. Interns also begin to spend time with a team of classroom teachers at a partnership school while maintaining contact with University faculty. Interns are dedicated to reflecting on the work done throughout the semester.

In **primary and middle grades and special education field-based block 2**, interns solve problems mainly through small group work and begin to take responsibility for whole class instruction. The emphasis on role induction continues and interns work with children and educators at a partnership school (usually the same school at which they were assigned during block 1). Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Proficiency in all program competencies is assessed during this time. In addition to classroom teaching duties, interns are enrolled in classes that help them apply their theoretical understandings to actual practice in schools. Interns are scheduled in block 2 from 8:00 a.m. to 3:30 p.m. 3 times a week throughout the 15-week semester. They spend approximately 360 clock hours in the schools.

Description of the Secondary Field-Based Program

The overall goal of the secondary teacher preparation program is to assist preservice secondary teachers in acquiring the essential competencies required to assume the role of practitioners. The secondary program follows the same field-based model used for elementary, but has two blocks that are offered in the fall and spring semesters only. Interns spend approximately 540 clock hours in the schools. Faculty from the College of Liberal Arts, College of Science, College of Business Administration, and College of Health Sciences participate actively with Education faculty in the preparation of secondary teachers, by teaching some of the methods courses in their respective disciplines. A description of these blocks follows.

In **secondary field-based block 1**, interns begin to organize their professional belief system. The semester has an emphasis on role induction. Students are grouped in cohorts and a mentor is assigned to each cohort. Groups of approximately 15 interns are assigned to each secondary partnership school. Interns are scheduled mornings or afternoons 3 times a week for half days throughout the semester and spend part of this time taking University courses in the partnership schools. They spend approximately 180 clock hours in the schools. During the first weeks of the semester, the major concepts and skills required in the block are introduced and the interns become familiar with the pupils, the teams of teachers, and the community of the partner schools to which they are assigned. In the following weeks, interns begin to spend time with a team of classroom teachers at a partnership school while maintaining frequent contact with University faculty. Interns reflect on the work done throughout the semester.

In **secondary field-based block 2**, the interns solve learning problems mainly through small group work and take responsibility for whole class instruction. The emphasis on role induction continues and interns work on teaching their field of specialization at a professional development school (usually the same school in which they were assigned during block 1). Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Proficiency in all program competencies is assessed. In addition to classroom teaching duties, interns help school and University faculty to introduce the new block 1 interns to the field-based program. Interns are scheduled in block 2 from 8:00 a.m. to 3:30 p.m. 3 days a week throughout the 15-week semester. They spend approximately 380 hours in the schools.

Description of the All-Levels Field-Based Program

All-levels Art, Music, and Physical Education students participate in the same blocks as secondary students. These blocks are offered in the fall and spring semesters only.

In **all-levels field based block 1**, interns begin to organize their professional belief system. Interns are scheduled mornings or afternoons 3 half days throughout the semester. They spend approximately 180 clock hours in the schools.

During block 1, all-levels interns enroll in:

EDPC	3300	Developmental Variations
SCED	3311	Curriculum Planning in the Secondary School

In **all-levels field-based block 2,** the emphasis on role induction continues and interns work on teaching their field of specialization at a partnership school. Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Proficiency in all program competencies is assessed. Interns are scheduled in block 2 from 8:00 a.m. to 3:30 p.m. 3 times a week throughout the 15-week semester. They spend approximately 360 clock hours in the schools.

Secondary interns register for the following courses in block 2:

SCED	3317	Multicultural Education
RED	3342	Reading in the Content Areas

Students can enroll in other courses during their blocks and internship; however, the maximum University course load while enrolled in the field-based blocks is 15 semester hours.

Application for Graduation and/or Certification

Students must apply for graduation during the first month of the semester in which they intend to complete all degree requirements. A graduation fee is required.

Students who are seeking certification must register for and pass the appropriate State certification examinations (TExES). Students apply for certification once they complete all the requirements, including the appropriate TExES tests. A fee is required for the Texas Certificate.

In order to be recommended for degree and/or certification, a student must:

- Complete the courses listed in the degree and/or certification plan with an overall GPA of at least 2.0.
- Have a 2.5 GPA or better in the teaching field specialization and in Professional Education courses.

Note: To receive an initial Texas teacher certification, individuals must be free of felony convictions.

Primary Grades Education (EC-4) and Middle Grades Education (4-8) Programs

Students who wish to become primary and middles grades teachers and receive an initial Texas teacher certificate complete the Bachelor of Interdisciplinary Studies (BIS) offered in the College of Education.

Bachelor of Interdisciplinary Studies (BIS)

The BIS degree requires of all students a general education core, an interdisciplinary studies component, and a professional education component. Students enrolled in the BIS will choose from three certification levels: Primary Grades Education (EC-4), Middle Grades Education (4-8), or Special Education EC-12.

There are two specializations within the Primary Grades Education program: the Primary Grades (EC-4) Education Generalist, and the Primary Grades Education (EC-4) Bilingual Education Generalist.

There are seven specializations within the Middle Grades Education program.

Middle Grades Education (4-8):
Generalist
Bilingual Generalist
English Language Arts Reading and Social Studies Composite
Mathematics and Science Composite
English Language Arts, and Reading Composite
Social Studies Composite
Mathematics Composite

All students enrolled in the Bachelor of Interdisciplinary Studies program, regardless of their specialization choice, are required to complete the General Education Core:

General Education Core (42 semester hours)

9 Communications
ENGL 1311, ENGL 1312, COMM 1301

6 U.S. History
HIST 1301, HIST 1302

6 Political Science
POLS 2310, POLS 2311
3 Mathematics
MATH 1320
3 Humanities
HIST 2301, HIST 2302, PHIL 1301, PHIL 2306, ENGL 2311, ENGL 2312, ENGL 2313, ENGL 2314, or ENGL 2318
3 Social/Behavioral Sciences
ANTH 1301, LING/ANTH/ENGL 2330, or SOCI 1301
6 Natural Sciences
GEOL 1303, GEOL 1304
3 Visual and Performing Arts
ART 1300, MUSL 1324, MUSL 1327, MUSL 1221/1222, THEA 1390, or THEA 2390
3 Institutionally Designated Option
UNIV 1301 or UNIV 2350

In the following section, the two Primary Grades Education specializations and seven Middle Grades Education specializations, and the Special Education specialization are briefly described. For more information please consult the College of Education Student Services Office, 412 Education Building, (915) 747-5571, for a degree/certification plan that is in compliance with the State Board of Educator Certification 2002 Standards and Certification framework.

Primary Grades Education (EC-4): Generalist

The BIS with Primary Grades Education Generalist teaching specialization requires the I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302; ENGL 3305*, 4354*; STAT 1380; MATH 2303, 3305*; BIOL 1303, 1103; PSCI 2303, 3304*; GEOL 1303, 1304; HSCI 2303*, 4201*; ANTH 1302; EDT 3371; CHIC 3339*; ARTS 3320*; KIN 4201 *; EDPC 2300; ECED 2330, 3335, 4353, 4359, 4393, 4394, and RED 4341* (*denotes upper-division classes)
III. Professional Education Studies: SPED 3310; and ECED 4309, 4310, 4311; BED 4340, 4343 and TED 3330

Primary Grades Education (EC-4): Bilingual Education Generalist

The BIS with Primary Grades Bilingual Education Generalist teaching specialization requires the I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: STAT 1380; MATH 2303, 3305*; BIOL 1303, 1103; PSCI 2303, 3304*; GEOL 1303, 1304; ENGL 3305*, 4354*; CHIC 3339*; HSCI 2303*, 4201*; ANTH 1302; EDT 3371; ECED 2330; EDPC 2300; RED 4341*; BED 3345, 4340*, 4343*, 4344*, 4393* and 4394*; SPAN 3309*; ARTS 3320*; KIN 4201* (*denotes upper-division classes)
III. Professional Education Studies: ECED 2330, 4353, 4359 and RED 4341; EDPC 2300, SPED 3310, 4309, 4310, 4311, and TED 3330

Middle Grades Education (4-8): Generalist

The BIS with Middle Grades Education Generalist teaching specialization requires the I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302; EDT 3371; EDPC 2300; SPED 3310, and
Reading/Language Arts: ENGL 3306*, 4354*; RED 3340*, 4341*;
Social Studies: HIST 3317*; POLS 4313; GEOG 1310; CHIC 3339*, and ANTH 1302
Mathematics: STAT 1380; MATH 2303, 3308*, 3309*
Science: ESCI 1301; ASTR 1307; BIOL 1304, 1104; PSCI 2303, 3304*
(*denotes upper-division classes)
III. Professional Education Studies: BED 4340*, 4343*; EDPC 2300; SPED 3310*; MSED 4309, 4310, 4311, 4393, 4394 and TED 3330

Middle Grades Education (4-8): Bilingual Education Generalist

The BIS with Middle Grades Education Generalist teaching specialization requires the I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 3309; EDT 3371; BED 4340, 4341, 4342 4343, 4344, 4394; EDPC 2300, and
English Language Arts and Reading: ENGL 3306*, 4354*; RED 3340*, 4341*
Social Studies: HIST 3317*, POLS 4313*, CHIC 3339*, and ANTH 1302
Mathematics: STAT 1380, MATH 2303, MATH 3308*, 3309*
Science: ESCI 1301; BIOL 1304, 1104; PSCI 2303, 3304 (*denotes upper-division classes)
III. Professional Education Studies: BED 4393, EDPC 2300, SPED 3310, MSED 4309, 4310, 4311 and TED 3330

Middle Grades Education (4-8): English Language Arts, Reading and Social Studies Composite

The BIS with Middle Grades Education Reading/Language Arts and Social Studies Composite teaching specialization requires: I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core: HIST 2301 under Humanities
II. Interdisciplinary Major: SPAN 1302; STAT 1380; MATH 2303; PSCI 2303, 3304*; EDPC 2300, and
English Language Arts and Reading: RED 3340*, 4341*, 4342*, 4343*, 4344*, 4346*; ENGL 3306*, 3351*, 3352*, 3353*, 4354*
Social Studies: HIST 2302, 3317*, and 3 hours HIST* from Fields II, III, IV; POLS 4313; GEOG 1310; CHIC 3339; and ANTH 1302 (*denotes upper-division classes)
III. Professional Education Studies: EDPC 2300; SPED 3310; BED 4340, 4343; MSED 4309, 4393, 4394, and TED 3330

Middle Grades Education (4-8): Mathematics and Science Composite

The BIS with Middle Grades Education Mathematics and Science Composite teaching specialization requires: I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core: MATH 1508 under Mathematics
II. Interdisciplinary Major: SPAN 1302; RED 3340, 4341; ANTH 1302; EDPC 2300
Mathematics: STAT 1380; MATH 2303, 1411, 3308*, 3309*; 6 hours from MATH, 3300, 3303, 3304; and MTED 3330
Science: CHEM 1305, 1306; ESCI 1301; ASTR 1307; BIOL 1303, 1103, 1304, 1104; PSCI 2303, 3304*; SIED 3330 (*denotes upper-division classes)
III. Professional Education Studies: BED 4340, 4343; SPED 3310, MSED 4310, 4311, 4393, 4394 and TED 3330

Middle Grades Education (4-8): English Language Arts, and Reading Composite

The BIS with Middle Grades Education Reading/Language Arts Composite teaching specialization requires: I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302; EDT 3371; EDPC 2300; STAT 1380; MATH 2303; PSCI 2303, 3304; ANTH 1302, and
English Language Arts and Reading: RED 3340, 3342, 4341, 4343, 4346, 4347; ENGL 3300*, 3303*, 3305*, 3306*, 3351*, 3352*, 3353*, 3365*, 4354*, 4357* (*denotes upper-division classes)
III. Professional Education Studies: BED 4340, 4343; SPED 3310; MSED 4309, 4393, 4394, and TED 3330

Middle Grades Education (4-8): Social Studies Composite

The BIS with Middle Grades Education Social Studies Composite teaching specialization requires: I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302, STAT 1380, MATH 2303, PSCI 2303, 3304, RED 3340, 4341; EDPC 2300, and
Social Studies Composite: HIST 2301, 2302, 3309, 3317, 3325, and 6 hours from Fields II, III, IV; POLS 3312*, 3320*, 3335*, 4310*, 4313*, and a combination of 12 hours from ANTH 1302; CHIC 3339*; GEOG 1310, and ECON 1301
III. Professional Education Studies: SPED 3310; BED 4340, 4343; MSED 4309, 4393, 4394, and TED 3330

Middle Grades Education (4-8): Mathematics Composite

The BIS with Middle Grades Education Mathematics Composite teaching specialization requires: I. General Education Core, II. Interdisciplinary Major courses, and III. Professional Education Studies courses.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302; PSCI 2303, 3304; EDPC 2300; RED 3340, 4341; ANTH 1302, and
Mathematics Composite: MATH 1508, 1411, 2300, 2303, 2325, 3300*, 3303*, 3304*, 3308*, 3309*, 3323*, 4370* (twice); STAT 1380, and MTED 3330 (*denotes upper-division classes)
III. Professional Education Studies: SPED 3310; BED 4340, 4343; MSED 4310, 4393, 4394, and TED 3330

Special Education (EC-12)

The BIS with Special Education specialization requires: I. General Education Core; II. Interdisciplinary Major: and III. Professional Education Studies: 3 hours of EDPC, and 24 hours of special education.

I. General Education Core
II. Interdisciplinary Major: SPAN 1302; ARTS 3320; ANTH 1302; CHIC 3339*; ENGL 3305* or 3306*, 4354*; MATH 2303, 3305* or 3308*; STAT 1380; BIOL 1304, 1104; PSCI 2303; HSCI 4201*; RED 3335* or 3342*, 4343*; KIN 4201; EDT 3371; EDPC 2300, and
Special Education: SPED 3325*, 3330*, 3340*, 3345*, 4330*, 4340*, 4365*, 4370* (*denotes upper-division classes)
III. Professional Education Studies: SPED 3310, 4365; ECED 4309 or MSED 4309; ECED 4310 or MSED 4310; ECED 4311 or MSED 4311; TED 3330; SPED 4393; SPED 4394

Secondary School Teacher Preparation Programs

Students who wish to become secondary school teachers and receive an initial Texas teacher certificate complete a bachelor's degree outside the College of Education. These students major in the subject area they desire to teach and complete a minor in secondary education. For example, a student who wishes to teach English would seek a Bachelor of Arts degree in the College of Liberal Arts with a major in English and American Literature and a minor in secondary teaching or a student who wishes to teach Health completes a Bachelor of Science in Health Sciences with a minor in secondary teaching.

Secondary school teaching certificates in Texas allow students to teach their discipline in grades 8-12. Presently, all Texas secondary certificates attainable through UTEP programs require a minimum of 12 semester hours in a second area or support field. Therefore, all students seeking a secondary teacher certificate will have to accumulate 12 semester hours in a second area of specialization that is taught in the public schools. This may be done by counting some courses from the general requirements area and carefully arranging the selection of electives, or by taking additional courses beyond the minimum requirements of the degree. This certificate requirement is to be met by all secondary candidates regardless of their degree or major.

Students desiring to become secondary school teachers must have a degree and copy of their certificate plan filed in their appropriate college, and a copy of the degree and certification plan filed in the Student Services Office of the College of Education, Education 412. The plan identifies the courses required in the teaching minor and any additional subject courses required for certificate that may not be required for a non-teaching degree. The Student

Services Office verifies that students have the required scores in the State-mandated test of basic skills (TASP) and have completed all the requirements to be admitted to teacher education. Students will not be allowed to enroll in Reading or Professional Education courses until they have been admitted to teacher education.

The application process for admission to teacher education may be initiated as soon as the student completes 60 hours and a copy of the student's degree and certification plan is submitted to the Student Services Office, Education 412. (Students should refer to the Admission to Teacher Education section above.)

List of Approved Secondary Specialization Fields

The University is approved by the Texas State Board for Educator Certification to offer the following fields for secondary certification (students should consult an advisor in their area of specialty for the selection of fields and scheduling of courses):

Basic Business
Communication
English
English-Language Arts
Theatre Arts
French
German
Spanish

History
Political Science
Psychology
Social Studies Composite
Sociology

Mathematics
Biology
Chemistry
Earth Science
Life/Earth Science
Physical Sciences
Physics
Natural Sciences (science composite)

Health

All-Levels Teacher Preparation Programs

Students who wish to be certified in Texas to teach all-levels (grades 1-12) Art or Music complete a bachelor's degree in the College of Liberal Arts and a minor in education. Students who wish to become all-levels Physical Education teachers complete a bachelor's degree in the College of Health Sciences and minor in education.

Candidates for all-levels teacher certification must have a degree plan and copy of their certification plan filed in their college, and a copy of the degree plan filed in the Student Services Office in the College of Education. For more detailed information, students should see the advisors designated to prepare all-levels degree plans in the departments of Art, Music, and Kinesiology.

Methods Courses for the Secondary and All-Levels Education Minor

The following methods courses are part of the secondary and all-levels education minor and appear listed under the academic departments in which the students major:

ARTE	4347	Methods of Teaching Art
ENGL	4355	Teaching Composition and Literature in Secondary Schools
FREN	4301	Methods of Foreign Language Instruction
GERM	4301	Methods of Foreign Language Instruction
HSCI	4301	Teaching Health in Secondary School
KIN	4319	Methods and Materials in Elementary Schools
KIN	4321	Methods and Materials in Secondary Schools
LING	4301	Methods of Foreign Language Instruction
MUSE	3336	Teaching of Music in Elementary Schools
MUSE	4333	Teaching of Music in Junior and Senior High Schools
SCED	4367	Teaching Mathematics in Secondary Schools
SCED	4368	Teaching Science in Secondary School
SPAN	4301	Methods of Foreign Language Instruction

Educational Leadership and Foundations

501 Education Building
(915) 747-5300
edlshpfd@utep.edu

CHAIR: William Johnston
PROFESSORS EMERITI: Herbert K. Heger, John B. Peper
PROFESSORS: Daresh, Pacheco, Slate
ASSOCIATE PROFESSORS: Brooks, Rincones, Rippberger
ASSISTANT PROFESSOR: Kramer, Satterfield, Sorenson

Students should consult the *Graduate Catalog* for information on degrees and programs in Educational Leadership and Foundations.

Educational Psychology and Special Services

701 Education Building
(915) 747-5221
edpsych@utep.edu

CHAIRPERSON: Sandra R. Lloyd
ASSOCIATE PROFESSORS: Brehm, Combs, Cortez-Gonzalez, Hammond, Ingalls, Johnson, Lloyd
ASSISTANT PROFESSORS: Argus-Calvo, Barbee, Garcia-Tafoya

Educational Psychology and Counseling (EDPC)

2300 Development in Young Children and Youth (3-1) (TECA 1354)
This course covers typical development (cognitive-language, physical-motor, and social-personality) from birth through adulthood. Field Experience required. Prerequisites: Admission to Teacher Education and department approval.

3300 Developmental Variations (3-0-2)
This course covers typical development (cognitive-language, physical-motor, and social-personality) from birth through young adulthood as well as variations of typical development and accommodations made within the education system to include federal, state, local, and school-based decisions in instruction, curriculum, and law. Field Experience required. *Prerequisites*: Admission to Teacher Education and department approval.

3346 Developmental Variations and Learning Differences (3-2)
Survey of human growth and development of adolescents and young adults as well as variations of typical development and accommodations made within the education system. Survey of various exceptionalities and laws pertaining to the disabled. *Prerequisites*: Admission to Teacher Education and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Special Education (SPED)

3310 Special Education Services for Students in General and Special Education Settings (3-0)
This course covers the definitions and characteristics of the various exceptionalities as well as the accommodations made for students within the general education setting. Federal mandates regarding services, instruction, curriculum, and inclusion within the least restrictive environment will be emphasized. *Prerequisite*: Admission to Teacher Education.

3325 Students with Learning Disabilities (3-0)
This course is designed to acquaint students with cognitive and social-emotional characteristics common to students with learning disabilities, and to explore factors that influence the performance of these students in various settings. Includes definitions, characteristics, interventions, and causes for learning disabilities. *Prerequisites*: SPED 3310 and admission to Teacher Education. SPED 3310 may be taken concurrently with SPED 3325.

3330 Students with Behavior Disorders and/or Emotional Disturbance (3-0)
Overview of contemporary theories, legal issues, and approaches to educating students with behavior disorders or emotional disturbance. Emphasis will also cover interventions and strategies for educating students with autism. *Prerequisites*: SPED 3310 and admission to Teacher Education. SPED 3310 may be taken concurrently with SPED 3330.

3340 Students with Severe and Profound Disabilities (3-0)
Focuses on characteristics, history, and educational implications for students with severe or profound disabilities. Includes various models of integration, transition, and community based instruction. Specific field experience is required. *Prerequisites*: SPED 3310 and admission to Teacher Education. SPED 3310 may be taken concurrently with SPED 3340.

3345 Language and Reading for Special Learners (3-0)
Designed to provide special education teachers with an understanding of concepts and procedures for encouraging language development, and for teaching reading and other major content areas to students with disabilities. Specific field experience is required. *Prerequisites*: SPED 3310 and admission to Teacher Education.

4330 Diagnosis and Placement (3-0)
Referral, assessment, placement, and program processes for persons with exceptionalities, including both formal and informal techniques, and implications for the use of this assessment information. *Prerequisites*: SPED 3310 and admission to Teacher Education. Course Fee required.

4340 Transitional Education for Learners with Special Needs (3-0)
This course focuses on terms and concepts of transition educational programs for individuals with disabilities. Will emphasize training for inclusion in communities including vocational, domestic/self-care, and leisure/recreational skills. *Prerequisites*: SPED 3310 and admission to Teacher Education.

4350 Workshop in Special Education (3-0)
Area of study will be designated. May be repeated for credit when topic varies. *Prerequisites*: Department approval and admission to Teacher Education.

4365 Organization and Management in Special Education (3-0)
Includes general principles in the organization of all types and levels of special education and inclusive classrooms as well as theories regarding the behavioral and social needs of students in those classrooms. Specific field experience is required. Senior standing suggested. *Prerequisites*: SPED 3310, department approval, and admission to Teacher Education.

4370 Assistive Technology for Special Populations (3-0)
Course will focus on the legal requirements for assistive technology; the assistive technology available for individuals with special needs; and the classroom use of this technology. *Prerequisite*: Department approval.

4393 Internship in Special Education I (3-0-30)
As part of the internship, students enroll in Block I of the field-based program. They are assigned to either an elementary (EC-4), middle school (4-8) or high school program for students with disabilities and scheduled all morning or all afternoon throughout the semester. Interns divide their time between fieldwork and university classes. *Prerequisites*: Admission to Teacher Education and department approval.

4394 Internship in Special Education II (3-0-30)
Students enroll in Block II of the field-based program and participate as members of the instructional team. This internship will be with a different age group and type of disability from the first internship. In addition to classroom teaching duties, interns are enrolled in university classes that help them apply their theoretical understandings to actual

practice. Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Interns are scheduled all day throughout the semester. *Prerequisites*: SPED 4393 with a grade of "C" or better, admission to Teacher Education, and department approval.

4691 Student Teaching in Special Education/Elementary (1-0-30)
Minimum of fifteen weeks all-day student teaching in special education and elementary classroom plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses, RED 3340, and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

Teacher Education

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CHAIRPERSON: Elena Izquierdo
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PROFESSORS: Ainsa, Bixler-Márquez, Descamps, Huerta-Macias, Tinajero
ASSOCIATE PROFESSORS: Blake, Edwards, González, Hurley, Izquierdo, May, Seda, Tchoshanov
ASSISTANT PROFESSORS: Awalt, Casas, Cashman, Chapman, Giza, Gunter, Hampton, Kosheleva, Licona, Munter, R. Rodriguez, Rossatto, Treadway
LECTURER: Armendariz, Liguori

Bilingual Education (BED)

3345 Biliteracy Development (3-1)
Develops an understanding of first and second language acquisition, its stages, and conventions. Integrates this knowledge base and applications in the interrelated components of reading and writing across all developmental stages. In addition, develops a knowledge base of the principles, components and stages of reading development for children who develop literacy in two languages. Integrates strategies to build on the linguistic knowledge that children bring in their first language in order to teach them a concept not yet developed. Taught in Spanish. *Prerequisites*: Admission to Teacher Education and department approval.

4309 Bilingual-Social Studies Education in Primary Grades (3-3)
Approaches to teaching social studies in early childhood education and primary grades to culturally and linguistically diverse populations. Includes setting goals for instruction and content, teaching techniques and methods of evaluation. Theory and practice are integrated through field-based experiences in local schools. Emphasis on individual differences, application of learning theories, curriculum development and understanding of state and national standards for social studies. *Prerequisites*: Admission to Teacher Education and department approval.

4310 Teaching Math in Dual Language Classrooms (3-3)
Methods for teaching mathematics in (EC-4) dual language classrooms. Emphasis on dual language learners, the equity principle (mathematics for all) and development of conceptual understanding on topics such as number sense, patterns and basic algebra, geometry and measurement, data analysis and probability. *Prerequisites*: Admission to Teacher Education and department approval.

4311 Teaching Science in Dual Language Classrooms (3-3)
Methods and materials for teaching science in pre-kindergarten through fourth grade. Emphasis on dual language, inquiry-based and standards-based teaching and learning. Includes computer applications and field experiences. *Prerequisites*: Admission to Teacher Education and department approval.

4327 Literacy Acquisition in English as a Second Language (3-0)
Principles of learning and teaching English as a Second Language in K-16 contexts. Emphasis is on an additive approach to ESL literacy acquisition. *Prerequisites*: BED 4340 with a grade of "B" or better and Admission to Teacher Education.

4340 Principles of Bilingual/ESL Education (3-0)
Emphasis is on the theory and practice of Bilingual Education and English as a Second Language. Focus on identification of program models in Bilingual/ESL education, including their historical, legislative, and philosophical foundations, as well as instructional frameworks for various programs. An additional focus is on the implementation of bilingual instruction with U.S.-Mexico border populations. *Prerequisite*: Admission to Teacher Education.

4341 Critical Perspectives in Spanish/English Literacy in Bilingual Education (3-0)
Critical perspectives on the development of Spanish/English literacy as relevant to bilingual education. Emphasizes the theoretical and practical conceptualization of both composition and reading theory. Includes a history of Spanish reading/writing methodology and the integration of bilingual multicultural literature. *Prerequisite*: BED 4340 with a grade of "B" or better and Admission to Teacher Education.

4342 Mathematics, Social Studies, and Science Development in Spanish (3-0)
Survey of conceptual representations of science, math, and social studies appropriate for Spanish speakers. Acquisition of specialized

vocabulary in Spanish. Exploration of available conceptual structure implied by first-language development in Spanish. *Prerequisite*: Admission to Teacher Education.

4343 Sheltered ESL Instruction (2-1)
Explores English language development and academic language socialization with ESL/Bilingual students through the teaching of subject matter via a second language. Focus is twofold: (1) English as a Second Language development and methodology; and (2) Academic and cognitive development through sheltered instruction in content areas. *Prerequisite*: BED 4340 with a grade of "B" or better, Admission to Teacher Education, and department approval.

4344 Involving Parents in the Educational Process (3-0)
The development of advocacy within families and community as a means of participation in the educational process of their children with particular emphasis on parents of children in Bilingual/ESL education programs. Emphasis on appreciation of cultural diversity and alternative ways of knowing among family and community. *Prerequisites*: BED 4340 with a grade of "B" or better and Admission to Teacher Education.

4393 Internship in Dual Language Education I (3-0-10)
As part of the internship, students enroll in Block I of the field-based program. They are grouped in cohorts, assigned to dual language programs and scheduled all morning or all afternoon throughout the semester. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. The fieldwork consists of assisting in student-centered classroom instruction. *Prerequisites*: Admission to Teacher Education and department approval.

4394 Internship in Dual Language Education II (3-0-20)
A continuation of BED 4393. Students enroll in Block II of the field-based program and participate in student-centered classroom instruction as members of the instructional team. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Interns are scheduled 3 times a week throughout the semester. *Prerequisites*: BED 4393 with a grade of "C" or better, and department approval.

4691 Student Teaching in Bilingual Education in the Elementary School (1-0-30)
Minimum of fifteen weeks of all-day student teaching in a bilingual education classroom, plus fifteen hours of seminars. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses, RED 3340, and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

Early Childhood Education (ECED)

2330 Introduction to Early Childhood Education (3-1)
(TECA 1311)
Introduction to the field of Early Childhood Education focusing on historical perspectives, current issues, types of curricula, and developmental practices. *Prerequisites*: Admission to Teacher Education and department approval.

3335 Language and Literacy in the Early Years (3-1)
Integration of literacy and language in early childhood education with emphasis in developmental reading and literacy for second language learners. Approaches to literacy development, developmental reading, and literacy acquisition for second language learners are addressed. A working knowledge of the transitional approach in literacy development from the child's first language to English is provided. Developmentally appropriate practices are integrated throughout the course. *Prerequisites*: Admission to Teacher Education and department approval. (May be taken as RED 3335)

4309 Social Studies Education in Primary Grades (3-3)
Approaches to teaching social studies in early childhood education and primary grades. Includes setting goals for instruction and content, teaching techniques and methods of evaluation. Theory and practice are integrated through field-based experiences in local schools. Emphasis on individual differences, application of learning theories, curriculum development and understanding of state and national standards for social studies. *Prerequisites*: Admission to Teacher Education and department approval.

4310 Teaching Mathematics in Primary Grades (3-3)
Methods for teaching mathematics in the primary grades. Emphasis on the equity principle (mathematics for all) and development of conceptual understanding on topics such as number sense, patterns and basic algebra, geometry and measurement, data analysis and probability. *Prerequisites*: Admission to Teacher Education and department approval.

4311 Teaching Science in Primary Grades (EC-4) (3-3)
Methods and materials for teaching science in pre-kindergarten through fourth grade. Emphasis on inquiry and standards-based teaching and learning. Includes computer applications and field experiences. *Prerequisites*: Admission to Teacher Education and department approval.

4353 Play Development in Early Childhood (3-0)
Explores how play interacts with emotional and intellectual development of the young child. Includes presentation of theories and research on play and their implementation in early childhood settings. *Prerequisite*: Admission to Teacher Education.

4356 Language Development for Young Children (3-0)
Oral and non-verbal communication, with particular attention to children in the Southwest. Theories of language development and research on the acquisition of communication skills. *Prerequisite*: Admission to Teacher Education.

4359 Children's Thinking in the Early Years (3-0)
The cognitive, social, and emotional development of children during the period of early childhood, the relationship of each of these types of developments to school settings, and appropriate and inappropriate objectives for children at particular stages of development in early childhood. *Prerequisite*: Admission to Teacher Education.

4393 Internship in Early and Primary Grades I (3-0-10)
As part of the internship, students enroll in Block I of the field-based program. They are grouped in cohorts, assigned to early or primary grades (EC-4) and scheduled all morning or all afternoon throughout the semester. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. The fieldwork consists of assisting in student-centered classroom instruction mostly through tutorial duties and small group work. *Prerequisites*: Admission to Teacher Education and department approval.

4394 Internship in Early and Primary Grades II (3-0-20)
A continuation of ECED 4393. Students enroll in Block II of the field-based program and participate in student-centered classroom instruction as members of the instructional team. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semesters in developing an effective professional style. Interns are scheduled 3 times a week throughout the semester. *Prerequisites*: ECED 4393 and department approval.

4691 Student Teaching in the Early Grades (1-0-30)
Minimum of fifteen weeks of all-day student teaching in an early childhood classroom plus fifteen hours of seminars. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses, RED 3340, and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

Educational and Career Technology (EDCT)

4300 Instructional Design, Delivery, and Assessment (3-2)
Basic principles of curriculum planning, instruction, and assessment in career and technical education settings, including methods of instruction for English language learners. *Prerequisite*: Department approval.

4301 Instructional Management, Safety and Relationships (3-2)
Management, safety, relationships, professional responsibilities and professional development for the career and technical educator. *Prerequisite*: Department approval.

4302 Educational Technology for Career and Technology Education Teachers (3-2)
Basic principles for creating a constructive, active, and generative learning environment. Technology integration and evaluation in the school classroom required. *Prerequisite*: Department approval.

4303 Internship I in Career and Technology (3-0-30)
First of two semesters of teaching in the classroom. Observation by the university instructor of the candidate's classroom teaching and seminars designed to relate the classroom instructional situation to corresponding educational theory. *Prerequisites*: Admission to the Teacher Education Program and department approval.

4304 Internship II in Career and Technology (3-0-30)
Second semester of teaching in the classroom. Observation by the university instructor of the candidate's classroom teaching and seminars designed to relate the classroom instructional situation to corresponding educational theory. *Prerequisites*: Admission to the Teacher Education Program and department approval.

4305 Teaching and Learning for Health Science TechnologyTeachers (3-2)
Methods and materials for teaching and learning the concepts of wellness, fundamentals of disease control, safety, roles of health care workers, technology, and the function of diagnostic, informational, and environmental systems of health care. *Prerequisite*: Admission to the Teacher Education Program and department approval.

Educational Technology (EDT)

3371 Educational Technology I (3-0)
Basic principles of educational technology for prospective teachers including terminology, historical development, social and ethical implications, proficiency in the application of technology tools, and integration of technology in school curricula. *Prerequisite*: Department approval.

See the *Graduate Catalog* for graduate programs and courses.

Elementary Education (ELED)

4691 Student Teaching in Elementary School (1-0-30)
Minimum of fifteen weeks all-day student teaching in the elementary school plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses, RED 3340, and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

Middle School Education (MSED)

4309 Social Studies Education in Intermediate/Middle Grades (3-3)
Approaches to teaching social studies in intermediate and middle grades. Includes setting goals for instruction and content, teaching techniques and methods of evaluation. Theory and practice are

integrated through field-based experiences in local schools. Emphasis on individual differences, application of learning theories, curriculum development and understanding of state and national standards for social studies. *Prerequisites*: Admission to Teacher Education and department approval.

4310 Teaching Math in Intermediate and Middle Grades (3-3)
Methods of teaching mathematics in intermediate and middle grades. Emphasis on the equity principle (mathematics for all) and development of conceptual understanding on topics such as real numbers and operation, geometry, algebra and functions, statistics and probability. *Prerequisites*: Admission to Teacher Education and department approval.

4311 Teaching Science in Intermediate and Middle Grades (3-3)
Methods and materials for teaching science in fourth through eighth grade. Emphasis on inquiry and standards-based teaching and learning. Includes computer applications and field experiences. *Prerequisites*: Admission to Teacher Education and department approval.

4393 Internship in Intermediate and Middle Grades I (3-10)
As part of the internship, students enroll in Block I of the field-based program. They are grouped in cohorts, assigned to intermediate or middle grades (4-8) and scheduled all morning or all afternoon throughout the semester. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. The fieldwork consists of assisting in student-centered classroom instruction mostly through tutorial duties and small group work. *Prerequisites*: Admission to Teacher Education and department approval.

4394 Internship in Intermediate and Middle Grades II (3-20)
Students enroll in Block II of the field-based program and participate in student-centered classroom instruction as members of the instructional team. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. Interns demonstrate that they can synthesize the knowledge, values, and experience of earlier semesters in developing an effective professional style. Interns are scheduled all day throughout the semester. *Prerequisites*: MSED 4393 with a grade of "C" or better and department approval.

Mathematics Education (MTED)

3330 Integration and Alternative Representation of Basic Mathematical Principles (3-0)
A course which integrates basic principles from various mathematical domains. Course will emphasize interrelationships among those principles and alternate conceptual representations of them. The representations will be analyzed to determine the mathematical skills and conceptual levels necessary to understand them. *Prerequisites*: Department approval and admission to Teacher Education.

Reading Education (RED)

2300 Literacy and Critical Thinking for the Preprofessional (3-2)
Strategic literacy, test-taking, and analytic thinking for pre-education students who do not meet requirements for admission to teacher education. Includes strategies to support preprofessionals whose second language is English. May be repeated.

3335 Language and Literacy in the Early Years (3-3)
Integration of literacy and language with emphasis in early literacy, developmental reading and writing, and English literacy for second language learners in early childhood through 4th grade. Includes child development, approaches to literacy development, and literacy acquisition for second language learners. Developmentally appropriate practices in relationship to literacy are discussed. A working knowledge of the transitional relationship in literacy development from first language to English and its importance for sound teaching practices will be developed. *Prerequisites*: Admission to Teacher Education and department approval. (May be taken as ECED 3335)

3340 Developmental Reading in the Elementary and Middle Grades (3-0-2)
Developmental reading, emphasizing curriculum and materials for teaching reading in the elementary and middle grades, including methods of instruction for second language students. *Prerequisite*: Admission to Teacher Education.

3342 Reading and Study in the Content Areas (3-0-2)
Methods and materials for developing maturity in reading and study skills, especially in the content areas from K-12. Special emphasis is given to the development of interest, the matching of students to proper materials, and instructional techniques for integrating the teaching of skills with the teaching of content. *Prerequisite*: Admission to Teacher Education.

3343 Literacy in Technical Content Area (3-2)
Methods and material for developing maturity in the language arts especially in technical content areas from grade 8-12, including methods of instruction for English language learners. Special emphasis is given to the development of interest, the matching of students to proper materials, and instructional techniques for integrating the teaching of literacy skills with content.

4341 The Diagnostic Teaching of Reading (3-0-2)
Standardized and informal materials and techniques for diagnosing strengths and weaknesses of individuals and groups, techniques and materials for building specific reading abilities, and methods of individualizing instruction and grouping. Identification and teaching strategies for dealing with dyslexia and other reading disorders. *Prerequisites*: RED 3340 and admission to Teacher Education.

4343 Teaching Critical Reading (3-0)
Methods and materials for developing higher level cognitive and affective reading behaviors among students from K-12. Teaching strategies which provide for the development of critical-creative readers

in both reading and content area subjects. *Prerequisites*: RED 3340 and admission to Teacher Education.

4344 Seminar in Reading (3-0)
Theories, materials, and research on topics including teaching reading through children's literature. *Prerequisites*: RED 3340 and admission to Teacher Education.

4345 Analysis, Evaluations and Development of Reading Materials (3-0)
Classroom language arts materials representative of various facets and philosophies in the teaching of reading/writing with major emphasis focused upon the development of criteria for the selection of materials appropriate for specific individuals and groups of children. *Prerequisites*: RED 3340 or RED 3342 and admission to Teacher Education.

4346 Literacy Practicum I (2-1)
Linguistic, cultural, sociological, and psychological foundations of the literacy processes; special emphasis on developing integrated reading-writing programs to meet the needs of diverse learners. *Prerequisites*: RED 3340 and RED 4341 each with a grade of "C" or better and admission to Teacher Education.

4347 Literacy Practicum II (2-1)
Advanced study of linguistic, cultural, sociological, and psychological factors in literacy processes; special emphasis on developing and implementing integrated reading-writing programs to meet the needs of diverse learners. *Prerequisites*: RED 3340, RED 4341 and RED 4346 each with a grade of "C" or better and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

Secondary Education (SCED)

3311 Curriculum Planning in the Secondary School (3-0-2)
Basic principles of curriculum planning in the secondary school. *Prerequisite*: Admission to Teacher Education.

3312 General Methods in the Secondary School (3-0-2)
Selection and usage of instructional methods in the secondary school. *Prerequisite*: Admission to Teacher Education.

3317 Multicultural Education in the Secondary School (3-0-2)
A survey of cultural education models, instructional methods, and classroom interaction processes in secondary schools that reflect the cultural composition of the United States. For secondary and all-levels majors. *Prerequisite*: Admission to Teacher Education.

4367 Teaching Math in Secondary School (3-0-2)
Materials and methods used in teaching mathematics in the secondary school. Skills in analysis and discovery, inquiry, and deductive teaching will be emphasized. *Prerequisite*: Admission to Teacher Education.

4368 Teaching Science in Secondary School (3-0-2)
Materials and methods used in teaching natural and physical science in the secondary school. Emphasis will be placed on developing skills in the use of inquiry, process approach, and discovery in teaching science. *Prerequisite*: Admission to Teacher Education.

4370 Teaching Business in the Secondary School (3-1)
Methods and materials used in teaching business subjects; the place of business in general education. Field experience required. *Prerequisite:* Admission to Teacher Education.

4691 Student Teaching in the Secondary School (1-0-30)
Minimum of fifteen weeks all-day of student teaching in the secondary school plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses and admission to Teacher Education.

4393 Internship in Secondary Education I (3-0-20)
As part of the internship, students enroll in Block I in the field-based program. Interns are grouped in cohorts, assigned to secondary (9-12) schools and scheduled three half days of internship per week throughout the semester. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. The fieldwork consists of assisting in student-centered classroom instruction mostly through tutorial duties and small group work. *Prerequisites*: Admission to Teacher Education and department approval.

4394 Internship in Secondary Education II (3-0-20)
Continuation of SCED 4393. Students enroll in Block II of the field-based program and participate in student-centered classroom instruction as members of the instructional team. In addition to classroom teaching duties, interns are enrolled in university classes and Internship Seminars that help them apply their theoretical understandings to actual practice. Interns demonstrate that they can synthesize the knowledge, values, and experiences of earlier semester in developing an effective professional style. Interns are scheduled all day throughout the semester. *Prerequisites*: SCED 4393 with a grade of "C" or better and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Science Education (SIED)

3330 Integration and Alternative Representations of Basic Science Principles (3-0)
A cross-disciplinary course which integrates basic science principles. Topics will be selected from the various sciences. Course will emphasize interrelationships among the various sciences and alternate conceptual representations of identified basic science principles. *Prerequisites*: Admission to Teacher Education and department approval.

Teacher Education (TED)

2101 Orientation to Education (1-0)
Designed to orient the prospective teacher education student to the profession of teaching. Taken on a pass/fail basis.

3330 Education and Communities: Applied Critical Pedagogy (3-3)
An examination of applied critical pedagogy and the multiple roles of teachers in the 21st century. Includes a field-based application of the socio-cultural foundations of education within the context of local schools and communities. Emphasizes the cultural, structural and institutional dynamics of schooling in multicultural and multilingual communities. *Prerequisites*: Admission to Teacher Education and department approval.

4350 Educational Workshop (3-0)
Studies in designated area. May be repeated for credit when topic varies.

4696 Student Teaching in All-Levels Art (1-0-30)
Minimum of fifteen weeks all-day of student teaching (eight weeks in an elementary school; seven weeks in a secondary school) plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses and admission to Teacher Education.

4697 Student Teaching in All-Levels Music (1-0-30)
Minimum of fifteen weeks all-day of student teaching (eight weeks in an elementary school; seven weeks in a secondary school) plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses and admission to Teacher Education.

4698 Student Teaching in All-Levels Physical Education (1-0-30)
Minimum of fifteen weeks all-day of student teaching (eight weeks in an elementary school; seven weeks in a secondary school) plus fifteen hours of seminar. Special admission requirements for student teaching. *Prerequisites*: All other professional studies courses and admission to Teacher Education.

See the *Graduate Catalog* for graduate programs and courses.

COLLEGE OF ENGINEERING

Civil Engineering
Computer Science
Electrical and Computer Engineering
Mechanical and Industrial Engineering
Metallurgical and Materials Engineering

Dr. Barry A. Benedict, Dean
Dr. Roberto Osegueda, Associate Dean

Engineering/Science Complex
Engineering Building, Room E 230
(915) 747-5460 (ph)
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College of Engineering

Engineers enjoy one satisfaction that not everyone can claim—they can point to tangible evidence of their efforts. Every modern structure, computer, jet aircraft, power-generating plant, or new automobile design is a lasting testimonial to the engineers responsible for it. Thus, to a great extent, our current standard of living and high level of technology are due to the diligent and innovative efforts of engineers. Future accomplishments could help increase energy and food supplies, develop more contamination-free power plants, aid in medical science's fight against disease, and expand our computational and design skills beyond imagination. A notable researcher once capsuled the engineer's career satisfaction in pointing out that while scientists "explore what is," engineers "create what never has been."

The future for engineering graduates remains very bright. Our rapid pace of technological and industrial developments has established an ever-increasing need for highly talented and qualified professional engineers. In addition, the increasing demand for goods and services has imposed new challenges to present and future engineers. To provide these things and, at the same time, conserve resources and minimize environmental impact, engineers must recognize that solutions to long-standing societal problems are only found by thorough planning and study. With a capacity for problem solving, engineers may be the best-qualified persons to address society's problems.

The complexities of today's economy and environment are such that all resources must be used in an optimal manner. Thus, the College of Engineering, through its curricula, strives to educate and train engineers who have the desire to learn and the breadth of vision to formulate and solve the problems of today and tomorrow. It is expected that a student who applies himself or herself and successfully completes one of the engineering or computer science programs will not only be technically prepared but also broadly educated, and thus ready to make a significant contribution.

The College offers many programs of study that should be selected on the basis of personal ambitions, interests, and abilities. The student may choose the traditional BS degree and also consider advanced research-oriented graduate programs leading to the MS and PhD degrees. Within the College, the undergraduate programs in civil, electrical, industrial, mechanical, and metallurgical engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, Maryland 21202-4012; telephone: (410) 347-7700. The breadth of modern computer technology is covered by BS and MS degrees in Computer Science and a computer engineering concentration in Electrical and Computer Engineering. The program leading to the BS in Computer Science is accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, Maryland 21202-4012; telephone: (410) 347-7700.

To recognize outstanding achievement and encourage professional activities, each program has one or more active student sections of the appropriate professional and honor societies. Additionally, there are campus chapters of professional societies that cover all fields of engineering. Participation in these groups provides a valuable educational and professional experience and students are encouraged to participate to the extent of their eligibility.

College Vision Statement

The University of Texas at El Paso, College of Engineering will provide Engineering and Computer Science programs of the highest quality.

College Mission Statement

The College of Engineering dedicates itself to provide UTEP Engineering and Computer Science students with a set of skills, knowledge, and attitudes that will permit all of its graduates to succeed and thrive in their professional careers and in society.

The college strives to maintain a vital state of the art research enterprise that provides students and faculty with opportunities to create, interpret, apply and disseminate knowledge.

The college strives to produce graduates who are prepared to meet all intellectual, ethical, and career challenges.

The college responds to its unique geo-political location on the U.S.-Mexico border by providing access to high quality engineering and computer science programs that support sustainable development in the region.

Mathematics Preparation

In addition to the usual preparatory work, applicants to the College of Engineering are expected to have at least two years of algebra, one year of geometry, and one semester of trigonometry or Pre-Calculus in preparation for their freshman year.

Transfer Course Work

A student may transfer a maximum of 66 semester hours, limited to lower-division courses, from two-year junior or community colleges. A maximum of 100 semester hours of courses is transferable from accredited U.S. colleges and universities. Transfer credit for engineering courses is restricted to ABET-accredited curricula or is awarded on the basis of departmental recommendation. Transfer students may be required to take competency exams and/or take specified courses that the department feels they must have in order to establish the quality of their degree. Credit for upper division engineering courses will be given only on the basis of departmental recommendation.

The academic records of all transfer students are reviewed by the College of Engineering to determine eligibility for admission into an engineering program. International students must meet the additional requirement of an overall minimum GPA of 3.0 in mathematics, chemistry, physics, and engineering for all institutions attended.

All transfer credit that is to be applied toward undergraduate engineering degree requirements must be approved by the Dean of Engineering. Transfer credit evaluation should be completed when the student transfers to the College or before completion of the lower-division requirements.

Change of Major

1. All petitions for change of major to or within the College of Engineering are subject to the approval of the chairperson of the department gaining the student.

2. Any student enrolled in a non-engineering program at the University may change his or her major to a department in the College of Engineering if he or she has demonstrated an aptitude for the engineering profession and is qualified to enroll for MATH 1411 in his or her first semester of engineering.
3. Any student enrolled in an engineering program at the University may change his or her major to another department in the College of Engineering if he or she has a minimum overall GPA of 2.0 and earned a minimum GPA of 2.0 in the semester previous to applying for the change of major.
4. All students entering the College of Engineering must follow the catalog (or a later catalog) that is in effect at the time of their transfer.

Lower-Division Program

1. A student entering the College of Engineering must complete the designated lower-division course block prior to enrolling in the upper-division engineering sequence or any junior/senior classes. The lower-division course block is comprised of English, science, engineering, and mathematics courses listed in the freshman and sophomore years.
   a. Enrollment in the upper-division courses prior to completion of the lower-division requires permission of the student's department chairperson.
   b. Substitutions for the lower-division course requirements require the permission of the student's department chairperson.
2. Completion of the lower-division block also requires a minimum 2.0 GPA for the lower-division courses designated by the department and a "C" or better in certain specified courses.
3. Any student who does not satisfy the "C" minimum rule in the appropriately designated courses must repeat those courses.
4. Any student who has not met the requirements for satisfactory completion of the lower-division block as stated above or who fails to make satisfactory progress toward a degree will be denied subsequent enrollment in the College of Engineering.

Pre-Engineering Program

The Entering Students Program for Engineering and Science

Circles of Learning for Entering Students (CircLES)

Program Description

Circles of Learning for Entering Students (CircLES) is a comprehensive retention program targeting first-time freshman and first-time transfer students in the sciences, engineering and mathematics (SEM). The goals of CircLES are to increase retention, improve academic performance, and add value to a student's education through the creation of an environment where students make connections with the university, the colleges, faculty, upper-division students, and their peers. A learning environment is emphasized in the first year where entering students can be successful and begin to develop lifelong learning habits. There are four major foci within the CircLES Program, all coordinated by the Director of the Entering Student Program. Areas of focus include: 1) a mandatory college-specific orientation program in the summer prior to matriculation; 2) mandatory placement in learning communities (clusters) in the first year; 3) strong developmental advising and early intervention;

4) leadership development. Since its inception, the CircLES program has become recognized as a model on campus and elsewhere for creating a strong foundation for entering students to springboard them toward a successful college and (eventually) professional career.

Vision

The CircLES Program wants to be a recognized model for creating a strong Foundation for entering students to springboard them toward a successful college and professional career.

Mission Statement

The CircLES Program is dedicated to: 1) providing pre-engineering and pre-science students with the skills and knowledge to become successful college students; 2) developing leadership skills and self-awareness in entering and other students to foster their success; and 3) connecting entering students to the university, the Colleges of Engineering and Science faculty, and each other.

Educational Objectives for the CircLES Program

1. To provide pre-engineering and pre-science students with the motivation, skills and knowledge to become successful college students and to become successful engineering and science students.
2. To introduce pre-engineering and pre-science students to team building and group dynamic skills.
3. To begin developing leadership skills in pre-engineering and pre-science students.
4. To increase the awareness of pre-engineering and pre-science students of the opportunities available to engineering and science graduates.

Students wishing to major in engineering or computer science will be classified as pre-engineering students for not less than one semester after admission to the University. Students must fulfill all Pre-Engineering requirements and must:

1. Complete the specified orientation program.
2. Meet with a pre-engineering advisor each semester.
3. Complete an approved program of study that may include one or more of the following courses: UNIV 1301; ENGR 1100, 1300, 1400, 1401, 1402; MATH 0310, 0311, 1411, 1508; ENGL 0310, 1311, 1312. Although required for the Pre-Engineering Program, a number of these courses do not meet departmental degree requirements. Check with your CircLES advisor.
4. Maintain a minimum overall GPA of 2.0 in all designated courses.
5. Complete certain specified courses with a “C” or better.
6. Make satisfactory progress toward completion of the Pre-Engineering Program.

Upon completion of the Pre-Engineering Program, students will petition for a change of major into a selected department.

Limit on Engineering Course Enrollments

The maximum number of times an engineering course can be taken is three. All enrollments in a course that result in a grade of “A,” “B,” “C,” “D,” “F,” or “W” will be counted. Once a student has reached the maximum of three

enrollments, he or she will not be allowed to enroll in the course a fourth time. If the course is required in the student's degree plan, the student will not be able to complete the requirements for that degree. Once a student has obtained a "C" or better in an engineering course, that course may not be repeated for credit.

Enrollment in Engineering/Computer Science Courses by Non-Majors

Enrollment in nearly all engineering and computer science courses is restricted to students with the appropriate majors. Students from outside the engineering college wishing to take engineering/computer science courses should request permission from the chairperson of the department offering the course.

Double Majors

Students in the College of Engineering may pursue more than one undergraduate degree. However, all requirements for each degree must be completed before the degree can be awarded.

Cooperative Education

Cooperative education is a program which integrates a student's formal academic study with special periods of practical work experience in business, industry, government, professional, or service organizations. These work experiences are an integral part of the student's education, supplementing academic knowledge and promoting and encouraging personal development and professional preparation. The academic value of work completed under the cooperative education program is recognized by allowing credit to be earned for completion of three work periods and submission of required reports. Contact the Dean of Engineering for information on the availability of co-op work assignments.

Five-Year Bachelor/Master of Science Program

The College of Engineering provides an opportunity for qualified students to participate in a five-year bachelor/master of science degree program. The program is structured to allow qualified engineering students to enter a graduate research or design program during the senior year of the bachelor's degree. During this fourth year, the student may reserve certain courses for graduate credit, work actively on a research project for nine months, and may be considered for employment as a teaching or research assistant at the appropriate salary. Both the bachelor's and master's degrees can be completed in five academic years.

Graduate Study

The traditional Master of Science (MS) degree is available in civil engineering, computer engineering, computer science, electrical engineering, industrial engineering, manufacturing engineering, mechanical engineering, and metallurgical engineering. This degree is research-oriented, normally requiring a thesis and up to 27 hours of graduate course work. The Master of Science in Environmental Engineering (MSEnE) and the Master of Engineering in Environmental Engineering (MEEnE) are also offered. Ph.D. degrees are offered in computer engineering, materials science and engineering, and environmental science and engineering.

Students who rank high in their undergraduate class should give serious consideration to developing their full intellectual potential in engineering by continuing with advanced studies at the graduate level. For those students interested in the practice of professional engineering, the Master of Science

in Engineering (MSE) degree should be given serious consideration. The program involves 33 hours of coursework without a thesis. Possible areas of specialization include business management, operations research, computer science, and others. Graduate programs are more fully discussed in the Graduate Catalog.

Bachelor of Science in Civil Engineering

The Civil Engineering Program at the undergraduate level is broadly based and provides courses in the major divisions of Civil Engineering.

Vision

The Department of Civil Engineering strives to graduate highly qualified engineers, maintain nationally recognized research and provide quality professional and community service to the region and the world.

Mission

The Department of Civil Engineering of The University of Texas at El Paso through its faculty, staff, students, and constituents works together to acquire, generate, share, and use knowledge in the different fields of Civil Engineering to make the El Paso/Ciudad Juárez region and the world a better place to live.

The Department accomplishes its mission through both undergraduate and graduate programs. The Department contributes to the quality of these programs by generating research opportunities that create synergy among faculty, students, and practicing professionals. We contribute to the quality of life of society through innovation in the generation, sharing, and use of knowledge. We will continue to be leaders in procuring external funding for research and teaching. Faculty work together within the department, and other departments in the University, to provide multidisciplinary opportunities for both students and faculty.

The Civil Engineering Department recruits, retains and graduates individuals with high professional and ethical standards to work in government and private organizations. The faculty is committed to increasing and improving the quality of our graduates. The result of our work is reflected in the continuing improvement of the quality of life in El Paso and the surrounding regions through the impact that our graduates have on these communities.

Educational Objectives:

1. Graduates will be educated in the fundamental concepts of engineering and science to create intellectual curiosity in order to provide for a successful career and life-long learning.
2. Graduates will be able to design effective civil engineering systems.
3. Graduates will have the ability to function on multidisciplinary teams.
4. Graduates will serve as productive members of society and the profession by recognizing the social, ethical, environmental and political implications of engineering decisions.
5. Graduates will be able to communicate effectively to technical and non-technical audiences.
6. Graduates will have exposure to real-life problems including hands-on experience.

Freshman Year

1st Semester			Hours
ENGR	1401+	Introduction to Engineering and Design	4
ENGL	1311+	Expository English Composition	3
MATH	1411+	Calculus I	4
		Science Elective[1+]	4
UNIV	1301 or 2350[2+]		3
			18
2nd Semester			
BE	1205+	Graphic Fundamentals in Engineering Design	2
HIST	1301+	History of U. S. to 1865	3
ENGL	1312+	Research and Critical Writing	3
MATH	1312+	Calculus II	3
		Science Elective[1+]	4
			15

Sophomore Year

1st Semester			
BE	2434+	Mechanics I	4
MATH	2313+	Calculus III	3
BE	2326+	Engineering Economy	3
POLS	2310+	Introduction to Politics	3
		Science Elective [1+]	4
			17
2nd Semester			
BE	2338+	Mechanics II	3
BE	2375+	Introduction to Thermal-Fluid Science	3
MATH	2326+	Differential Equations	3
HIST	1302+	History of the U.S. since 1865	3
BE	2303+	Introduction to Materials and Science Engineering	3
BE	2377+	Electrical Circuits and Motors	3
			18

Junior Year

1st Semester			
BE	3341	Engineering Analysis	3
BE	3373	Engineering Probability and Statistical Models	3
CE	3343	Structural Analysis I	3
GEOL	3321	Geology for Engineers	3
CE	3325	Environmental Engineering Fundamentals	3
			15
2nd Semester			
CE	3336	Civil Engineering Materials	3
CE	3313	Engineering Measurements	3
CE	4335	Structural Design I	3
CE	4456	Hydraulic Engineering	4
		Humanities Elective [3+]	3
			16

Senior Year

1st Semester

CE	4340	Transportation Engineering	3
CE	4348	Geotechnical Engineering	3
CE	4195	Senior Professional Orientation	1
CE	4361	Structural Design II	3
POLS	2311	American Government and Politics	3
		Communications Elective[4+]	3
			16

2nd Semester

CE	4342	Water and Waste Water Engineering	3
CE	4153	Water and Waste Laboratory	1
CE	4388	Senior Design	3
CE	4375	Advanced Topics in Civil Engineering	3
		Visual and Performing Arts Elective [5+]	3
			13

Total Semester Credit Hours 128

[+] A grade of "C" or better is required in these courses.
[1] Science Elective: Each student must take PHYS 2421, and two of the three choices below:
PHYS 2420
CHEM 1305 and CHEM 1105
CHEM 1306 and CHEM 1106
[2] UNIV 1301 or UNIV 2350
[3] Humanities Menu
[4] COMM 1301 or COMM 1302
[5] Visual and Performing Arts Menu

Bachelor of Science in Computer Science

The Computer Science Program at the undergraduate level is designed to provide a strong base in programming and problem solving skills, a theoretical understanding of computer science, and practical experience in applying the computer to the solution of problems. Specialization is provided through numerous upper-division electives.

Vision

The vision of the Department of Computer Science is to provide computer science programs of the highest quality through a participatory approach to education, research, and service to the community.

Mission

The department will provide its students with:

- a strong foundation for study and practice
- advanced knowledge of techniques, methodologies and tools
- personal skills and professional attitudes
- a culture that actively involves them inside and outside the classroom and that will enable them to succeed and thrive as computer scientists and in society

The department will advance the field of computer science by supporting its faculty and students with a culture that:

- encourages exemplary, internationally recognized research
- involves graduate and undergraduate students
- fosters internal and external collaboration
- attracts external funding

The department will serve the local, national and international communities by developing, refining, applying, and transferring approaches to education that encourage students to pursue their education to their full potential. The department will serve as a leading model of education in this process.

Educational Objectives

UTEP CS graduates will:

1. be able to apply techniques, methodologies, tools and skills to build high-quality computing systems that function effectively and reliably in the emerging information infrastructure
2. be able to work in teams, to apply theoretical methods, to apply principles of software engineering, and to model real-world processes and objects
3. be able to serve as productive and ethical members of society and the profession
4. have the motivation and the ability to adapt to evolving methodologies of computing
5. understand graduate study as a professional path

Freshman Year

1st Semester			Hours
CS	1401+	Introduction to Computer Science	4
ENGL	1311+	Expository English Composition	3
HIST	1301+	History of U.S. to 1865	3
MATH	1411+	Calculus I	4
	+	Core Curriculum Requirement	3
			17
2nd Semester			
CS	2401+	Elementary Data Structures and Algorithms	4
ENGL	1312+	Research and Critical Writing	3
HIST	1302+	History of U. S. since 1865	3
MATH	1312+	Calculus II	3
MATH	2300+	Discrete Mathematics	3
			16

Sophomore Year

1st Semester			
CS	2402+	Data Structures	4
MATH	2313+	Calculus III	3
PHYS	2420+	Introductory Mechanics	4
POLS	2310+	Introduction to Politics	3
	+	Core Curriculum Requirement	3
			17

2nd Semester

CS	3331+	Advanced Object Oriented Programming	3
EE	2369+	Digital Systems Design I	3
POLS	2311+	American Government and Politics	3
PHYS	2421+	Fields and Waves	4
	+	Core Curriculum Requirement	3
			16

Junior Year

1st Semester

CS	3432+	Computer Architecture I: Basic Computer Organization and Design	4
CS	3360	Design and Implementation of Programming Languages	3
EE	3384	Probabilistic Methods in Engineering & Science	3
		Technical Elective	3
	+	Core Curriculum Requirement	3
			16

2nd Semester

CS	3195	Junior Professional Orientation	1
CS	3320+	Computer Architecture II: Advanced Computer Design	3
CS	3350	Automata, Computability and Formal Languages	3
MATH	3323+	Matrix Algebra	3
		Technical Elective	3
	+	Core Curriculum Requirement	3
			16

Senior Year

1st Semester

CS	4310+	Software Engineering: Requirements Engineering	3
CS	4375	Theory of Operating Systems	3
MATH	4329	Numerical Analysis	3
		Technical Elective	3
		Free Elective	3
			15

2nd Semester

CS	4311	Software Engineering: Design and Implementation	3
		Quantitative Science Elective	3
		Quantitative Science Elective Lab	1
		Technical Elective	3
		Technical Elective	3
		Free Elective	3
			16

Total semester credit hours 129

+ A grade of "C" or better is required in these courses.
Technical Electives must be from a list approved by the Computer Science department. This list includes junior and senior level computer science classes. Several special topics classes – CS 4390, CS 4371 and CS 4181 – can be repeated for credit; however, no more than a total of six hours of CS 4390, CS 4371 and CS 4181 in any combination can be counted toward the degree.

Students must complete fifteen semester hours of University Core Curriculum Requirements, from the following menus:

Visual and Performing Arts menu	3 semester hours
Humanities menu	3 semester hours
Social and Behavioral Sciences menu	3 semester hours
Communications Submenu B (Speech)	3 semester hours
Institutionally Designated Option	3 semester hours

All University Core Curriculum Requirements must be completed with a grade of "C" or better.

Bachelor of Science in Electrical Engineering

The Electrical Engineering program consists of 128 semester credit hours divided into a lower division, providing diverse courses over a broad base of technical subjects, and an upper division providing more specialized courses.

Vision

The Department of Electrical and Computer Engineering will provide programs of the highest quality to produce world class engineers who can address the challenges of the new millennium.

Mission

The Department of Electrical Engineering will:

- Dedicate itself to providing its students with the skills, knowledge and attitudes that will allow its graduates to succeed as engineers and leaders.
- Maintain a vital, state-of-the art research enterprise, which provides its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
- Prepare its graduates for life-long learning to meet intellectual, ethical and career challenges.
- Recognize and act upon the special mandate to make high quality engineering education available to the residents of El Paso and the surrounding binational metroplex.

Educational Objectives

As individuals and as members of teams, our graduates will be able to:

- Demonstrate the ability to formulate, analyze, and solve electrical and computer engineering problems.
- Demonstrate the ability to apply the design process to engineering problems.
- Communicate effectively with those inside and outside of electrical and computer engineering.
- Exhibit social and professional responsibility in a global context.

Freshman Year

1st Semester			Hours
EE	1305+	Introduction to Electrical Engineering	3
ENGL	1311+	Expository English Composition	3
CHEM	1305+	General Chemistry	3

MATH	1411+	Calculus I	4
UNIV	1301+	Seminar in Critical Inquiry	3
	or		
UNIV	2350+	Interdisciplinary Technology and Society	3
			16

2nd Semester

ENGL	1312+	Research and Critical Writing	3
CHEM	1306+	General Chemistry	3
	or		
BIOL	1305+	General Biology	3
MATH	1312+	Calculus II	3
PHYS	2420+	Introductory Mechanics	4
COMM	1302+	Business and Professional Communications	3
EE	1110+	Measurements Laboratory	1
			17

Sophomore Year

1st Semester

MATH	2313+	Calculus III	3
HIST	1301+	History of U. S. to 1865	3
EE	2372+	Software Design I	3
EE	2369+	Digital Systems Design I	3
PHYS	2421+	Fields and Waves	4
			16

2nd Semester

EE	2351+	Networks	3
EE	2110+	Basic EE Lab	1
MATH	2326+	Differential Equations	3
MATH	3323+	Matrix Algebra	3
HIST	1302+	History of U. S. Since 1865	3
POLS	2310+	Introduction to Politics	3
			16

Junior Year

1st Semester

EE	3109+	Computation Lab	1
EE	3438+	Electronic Networks	4
EE	3321+	Electromagnetic Field Theory	3
EE	3376+	Microprocessor Instrumentation	3
EE	3176	Microprocessor Instrumentation Lab	1
PHYS	3325+	Survey of Modern Physics	3
			15

2nd Semester

EE	3210	Electrical Engineering Lab I	2
EE	3340	Linear Integrated Circuits	3
EE	3329	Electronic Devices	3
EE	3353	Signals and Systems	3
EE	3384	Probabilistic Methods	3
ECON	1301+	Basic Issues in Economics	3
			17

Senior Year

Two Semesters

EE	4195	Senior Professional Orientation	1
EE	4220	Senior Project Laboratory	2
EE	4210	Electrical Engineering Lab II	2
	or		
EE	4142	Digital Lab II	
	and		
EE	4178	Microprocessor and Interfacing Lab	2
EE	4230	Senior Project Lab II	2
POLS	2311+	American Government and Politics	3
		Core Curriculum Requirement*	6
		Specialization Courses*	12
		Approved Technical Electives	3
			31

Total Semester Credit Hours 128

+ A grade of "C" or better is required in these courses.

* Six hours of electives must be selected from University Core Curriculum courses. Three of these hours must be in visual and performing arts, three hours must be in humanities. At least 12 hours must be selected from the three lists of concentration courses as described. A student who selects 9 hours from a single list will be considered as having a concentration, and the area of concentration will be printed on his/her academic transcript next to the granted degree. Students who choose not to have a concentration must take at least three hours from each list. The approved technical elective must be selected from upper level courses in Engineering or Computer Science or the Biological or Physical Sciences.

Concentrations

Each list of courses permits the student to develop a concentration or pursue a particular career objective. In following a particular list, students will complete an in depth program of current interest to Electrical Engineering. Interested students should select a concentration prior to completion of the junior year, and plan their course of study in order to satisfy any prerequisites for courses within their chosen concentration. Most concentration courses are offered only once each academic year.

Computer Engineering

The computer engineering concentration is concerned with the organization, design, and use of digital hardware. Students who satisfy the requirements of this concentration have the opportunity to be prepared to work in both the design and application of modern computing systems. To fulfill the requirements of this concentration, a student must take the first two and any other two from the eight groupings of courses and laboratories listed below.

EE	3372	Software Design II
EE	4374	Operating System Design
EE	4342/	
	4142	Digital Systems Design II
EE	4372	Microcontroller Applications
EE	4375	VLSI Design I

EE	4378/ 4178	Microprocessor Systems II
EE	4379	Computer Architecture
EE	4365	Topics in Soft Computing

Fields and Devices Engineering

This concentration prepares the student in: a) the generation, transmission, and reception of signals in the electromagnetic spectrum, b) the analysis, design, and testing of modern electronic circuits. For this concentration students must complete at least three of the courses listed below, and one from either one of the other lists of concentration courses.

EE	3385	Energy Conversion
EE	4347	Electromagnetic Energy Transmission and Radiation
EE	4350	Integrated Circuits and Semiconductor Devices
EE	4352	Power Electronics
EE	4361	Fiber Optic Communications
EE	4375	VLSI Design I
EE	4380	Microwave Communications
EE	4381	Electro-Optical Engineering
EE	4382	Antenna Engineering
EE	4385	Biomedical Instrumentation
EE	4386	Computational Methods in Electrical Engineering
EE	4389	High Resolution Radar

Systems and Communications Engineering

This concentration stresses analytical design of systems for information transmission, control, and signal processing. For this concentration students must complete at least three of the courses listed below, and one from either one of the other lists of concentration courses.

EE	4341	Communication Systems
EE	4361	Fiber Optic Communication
EE	4364	Systems and Control
EE	4383	Digital Signal Processing
EE	4388	Digital Communications
EE	4365	Topics in Soft Computing
EE	4356	Real-Time Signal Processing and Communication
EE	4389	High-Resolutions Radar

Bachelor of Science in Industrial Engineering

The Industrial Engineering Curriculum is designed for students who desire to enter industry or pursue advanced studies. The curriculum provides a broad range of courses in the areas of human interface design and management, plant design, operations research, production and inventory control and quality control.

Vision

The industrial Engineering Program strives to graduate industrial engineers of the highest quality and to conduct state of the art research.

Mission

The Industrial Engineering Program makes available a high quality, relevant engineering education available to all residents of the El Paso bi-national region. The department dedicates itself to providing students with a set of skills, knowledge and attitudes that will permit its graduates to succeed and thrive as engineers and leaders.

Educational Objectives

1. Prepare all students for jobs in the marketplace and success in the bi-national setting.
2. Prepare all students to pass the Fundamentals of Engineering (FE) Examination.
3. Prepare and motivate students to engage in graduate level studies.

Freshman Year

1st Semester			Hours
ENGR	1401+	Introduction to Engineering	4
ENGL	1311+	Expository English Composition	3
MATH	1411+	Calculus I	4
		Science Course[1+]	4
UNIV	1301+ or 2350+		3
			18
2nd Semester			
BE	1205+	Graphics Fundamentals in Engineering Design	2
HIST	1301+	History of U. S. to 1865	3
ENGL	1312+	Research and Critical Writing	3
MATH	1312+	Calculus II	3
		ScienceCourse[1+]	4
			15

Sophomore Year

1st Semester			
BE	2434+	Mechanics I	4
MATH	2313+	Calculus III	3
BE	2326+	Engineering Economy	3
POLS	2310+	Introduction to Politics	3
		Science Course[1+]	4
			17
2nd Semester			
	+	Social Science Core	3
BE	2338+	Mechanics II	3
BE	2375+	Introduction to Thermal-Fluid Science	3
MATH	2326+	Differential Equations	3
BE	2303+	Introduction to Materials Science and Engineering	3
BE	2377+	Electrical Circuits and Motors	3
			18

Junior Year

1st Semester			
BE	3341+	Engineering Analysis	3
BE	3373+	Engineering Probability and Statistical Models	3
HIST	1302+	History of U.S. since 1865	3
IE	3126	Industrial Engineering Laboratory	1
COMM	1302+	Business and Professional Communication	3
			13

2nd Semester

IE	3477	Methods and Industrial Ergonomics	4
IE	4492	Operations Research	4
IE	3331	Systems Engineering	3
IE	3332	Safety Engineering	3
		Visual and Performing Arts Elective+	3
			17

Senior Year

1st Semester

IE	4353	Industrial System Simulation	3
IE	4391	Production and Inventory Control	3
IE	4384	Industrial Layout	3
IMS	4360	International Manufacturing Management	3
IE	4195	Senior Professional Orientation	1
		Technical Elective[2]	3
			16

2nd Semester

IE	4385	Statistical Quality Control and Reliability	3
IE	4466	Senior Design	4
		Technical Elective[2]	3
		Humanities Elective+	3
POLS	2311+	American Government and Politics	3
			16

Total Semester Credit Hours 130

+ A grade of "C" or better is required.

[1] Science Courses: Each student must take PHYS 2421, and two of the three choices below:
PHYS 2420,
CHEM 1305 and CHEM 1105,
CHEM 1306 and CHEM 1106.

[2] Select a 2-course block from MECH 3365, MECH 4311, MECH 3305, MECH 4364, MECH 3363, IMS 4361, IE 4395. The 6 hours of technical elective must be taken as one of the designated 2-course blocks.

[3] Select from ENGL 2311, ENGL 2312, ENGL 2313, ENGL 2314 or ENGL 2318.

International Manufacturing Certificate

This program is an applied internship in a local manufacturing plant where the student applies the international manufacturing management and engineering fundamentals from IMS 4360 and 4361. The student will intern in a manufacturing facility and work on problems ranging from testing and inspection, design, quality, production and inventory control, maintenance, purchasing, planning and scheduling, safety and ergonomics, tooling, to accounting, etc. Students will have an industry mentor, a faculty mentor, and a field engineer helping with problems. The mid-term and final examinations will consist of a written report and presentation based on the research/design/analysis performed in a department to the faculty mentor and industrial partner.

Bachelor of Science in Mechanical Engineering

The Mechanical Engineering curriculum is designed for students who desire to enter industry or pursue advanced studies. The curriculum provides a broad range of courses in the areas of thermal sciences, fluid mechanics, mechanical design and manufacturing.

Vision

The Mechanical Engineering Program strives to graduate mechanical engineers of the highest quality and to conduct state of the art research.

Mission

The Mechanical Engineering Program makes available a high quality, relevant engineering education available to all residents of the El Paso bi-national region. The department dedicates itself to providing students with a set of skills, knowledge and attitudes that will permit its graduates to succeed and thrive as engineers and leaders.

Educational Objectives:

1. Prepare all students for jobs in the marketplace and success in the bi-national setting.
2. Prepare all students to pass the Fundamentals of Engineering (FE) Examination.
3. Prepare and motivate students to engage in graduate level studies.

Freshman Year

1st Semester			Hours
ENGR	1401+	Introduction to Engineering	4
ENGL	1311+	Expository English Composition	3
MATH	1411+	Calculus I	4
		Science Course[1+]	4
UNIV		1301+ or 2350+	3
			18
2nd Semester			
BE	1205+	Graphic Fundamentals in Engineering Design	2
HIST	1301+	History of U. S. to 1865	3
ENGL	1312+	Research and Critical Writing	3
MATH	1312+	Calculus II	3
		Science Course[1+]	4
			15

Sophomore Year

1st Semester			
BE	2434+	Mechanics I	4
MATH	2313+	Calculus III	3
BE	2326+	Engineering Economy	3
POLS	2310+	Introduction to Politics	3
		Science Course[1+]	4
			17

2nd Semester

		Social Science Core+	3
BE	2338+	Mechanics II	3
BE	2375+	Introduction to Thermal-Fluid Science	3
MATH	2326+	Differential Equations	3
BE	2303+	Introduction to Materials Science and Engineering	3
BE	2377+	Electrical Circuits and Motors	3
			18

Junior Year

1st Semester

MECH	3305	Mechanical Engineering Laboratory I	3
BE	3341+	Engineering Analysis	3
BE	3373+	Engineering Probability and Statistical Models	3
HIST	1302+	History of U.S. since 1865	3
MECH	3354	Fluid Mechanics	3
			15

2nd Semester

MECH	4106	Mechanical Engineering Lab II	1
COMM	1302+	Business and Professional Communication	3
IE	3126	Industrial Engineering Laboratory	1
MECH	3365	Dynamic Response	3
MECH	4364	Mechanical Design	3
MECH	3376	Thermodynamics II	3
		Humanities Elective+	3
			17

Senior Year

1st Semester

MECH	4107	Mechanical Engineering Lab III	1
MECH	4311	Automatic Controls	3
MECH	4111	Controls Laboratory	1
		Technical Elective[2] MECH or IE course from list below	3
MECH	4351	Heat Transfer	3
		Technical Elective[2] MECH or IE course from list below	3
			14

2nd Semester

MECH	4466	Senior Design	4
MECH	4195	Senior Professional Orientation	1
		Technical Elective[2] MECH or IE course from list below	3
POLS	2311+	American Government and Politics	3
		Visual and Performing Arts Elective+	3
			14

Total Semester Credit Hours 128

+ A grade of "C" or better is required.
1 Science Courses: Each student must take PHYS 2421, and two of the three choices below:
PHYS 2420,
CHEM 1305 and CHEM 1105,
CHEM 1306 and CHEM 1106.
2 Approved technical electives are MECH 4355, MECH 4356, MECH 4368, MECH 4371, MECH 4395; MECH 3363; IE 3477, IE 3332, IE 4353, IE 4384, IE 4385, IE 4391, IE 4392.

Bachelor of Science in Metallurgical and Materials Engineering

The Metallurgical and Materials Engineering curriculum is a broad-based program designed to provide a basic education in metallurgical and materials engineering. The student can specialize in one or more areas in the junior and senior year by taking appropriate elective courses. The program is well suited for a career in industry or as a basis for graduate study. Courses related to advanced materials topics are also available.

Vision

Our vision is to provide a modern Metallurgical and Materials Engineering Program of the highest quality**.**

Mission

We will emphasize learning and applying metallurgical and materials engineering fundamentals, spanning all major classes of materials. We will offer students opportunities to explore the whole gamut of applications, from advanced microelectronic technology to the basic infrastructure on which we all depend. The B.S. degree program in Metallurgical and Materials Engineering will serve two broad purposes: 1) to provide sufficient grounding for a graduate to perform effectively, over time, in industry or other employment; and 2) to provide opportunity for all types of students, while maintaining a high level of excellence in all graduates. It will sharpen communication skills, both oral and written. It will also provide basic engineering skills for problem-solving and lifelong learning. We will maintain a balance between the applied and theoretical aspects, and will strive to provide pre-professional employment (either research experiences or internships).

Educational Objectives:

(The following objectives are ranked in order of decreasing importance. 1= most important)

1. Students completing the B.S. program in Metallurgical and Materials Engineering will be competitive professionally and academically with other students completing a similar, ABET-accredited program nationally.
2. Graduates will have demonstrated their ability to assimilate Metallurgical and Materials Engineering fundamentals into the design process.
3. Our Department will provide materials and process fundamentals for other academic disciplines to show the value-added of multidisciplinary efforts such as: electronic materials, structural integrity assessment of materials, quality assurance, biomaterials, materials simulation and modeling, environmental sensitive issues, etc.
4. Graduates will either find a job or secure admission to a graduate program. The Department will take a pro-active stance in helping its students.

5. The Department will take the lead in the development and innovations of entering students programs with emphasis on engineering design issues, student team development, and engineering multidisciplinarity.
6. The B.S. program in Metallurgical and Materials Engineering at UTEP will continue to make significant regional and national contributions to the minority B.S. degree pool in the field of Metallurgical and Materials Engineering or related fields.

Freshman Year

1st Semester			Hours
ENGR	1401+	Introduction to Engineering and Design	4
ENGL	1311+	Expository English Composition	3
MATH	1411+	Calculus I	4
		Science Course[1+]	4
UNIV	1301 or 2350[2+]		3
			18
2nd Semester			
BE	1205+	Graphics in Engineering Design	2
HIST	1301+	History of U.S. to 1865	3
ENGL	1312+	Research and Critical Writing	3
MATH	1312+	Calculus II	3
		Science Elective[1+]	4
			15

Sophomore Year

1st Semester			
BE	2434+	Mechanics I	4
MATH	2313+	Calculus III	3
BE	2326+	Engineering Economy	3
POLS	2310+	Introduction to Politics	3
		Science Elective[1+]	4
			17
2nd Semester			
BE	2338+	Mechanics II	3
BE	2375+	Introduction to Thermo-Fluid Science	3
MATH	2326+	Differential Equations	3
BE	2303+	Introduction to Material Science and Engr.	3
BE	2377+	Electrical Circuits and Motors	3
			15

Junior Year

1st Semester			
		Social and Behavioral Science Elective[3+]	3
		Communication Elective[4+]	3
HIST	1302+	History of U.S. Since 1865	3
MME	3306+	Rate Processes in Materials Systems	3
	or		
BE	3373[9+]	Engineering Probability and Statistics	3
MME	3406+	Physical Metallurgy	4
			16

2nd Semester

POLS	2311+	American Government and Politics	3
		Visual and Performing Arts Elective[5] +	3
MME	3407+	Mechanical Behavior of Materials	4
MME	3308+	Applied Chemical Thermodynamics	3
	or		
IE	3332[9]	Safety Engineering	3
MME	3309	Introduction to Electronic Materials	3
	or		
MME	3321[9]	Engineering Alloys	3
			16

Senior Year

1st Semester

		Humanity Elective[6+]	3
MME	4303	Metals Processing	3
	or		
IE	4391[9]	Production and Inventory Control	3
MME	4413	Structural Characterization	4
		MME Elective[7, 8+]	3
	or		
MME	4330[9]	Solidification Processes	3
MME	4195	Senior Professional Orientation	1
			14

2nd Semester

MME	4404	Materials Processing	4
or			
MME	4405[9]	Material Fabrication	4
MME	4419	Metallurgical and Materials Engineering Design	4
		MME Elective[7+]	3
		MME Elective [7+]	3
IE	4385[9]	Statistical Quality Control and Reliability	3
			14 or 17

Total Semester Credit Hours ..... 125 or 128

+ A grade of "C" or better is required. A "C" or better is required in MME courses through the junior level.
1 Science Elective: CHEM 1305 and 1105, CHEM 1306 and 1106, and PHYS 2421.
2 University Elective: UNIV 1301 or UNIV 2350.
3 Social and Behavioral Science Menu.
4 Communication Elective: COMM 1301 or COMM 1302.
5 Visual and Performing Arts Menu.
6 Humanities Menu.
7 Electives offered are Advanced Electronic Materials Science (3310), Composite Materials (3314), Engineering Alloys (3321), Corrosion (4309), Polymer Engineering (4310), Materials Fabrication (4405), Failure Analysis (4316), and Solidification Processes (4330)
8 All courses designated such are required for concentration 1.
9 All courses designated such are required for concentration 2.

Concentrations

Each list of courses permits the student to develop a focus or pursue a particular career objective. In following a particular list, students will complete an in-depth program of current interest in Metallurgical and Materials Engineering. Most concentration courses are offered only once each academic year. The student must complete all the requirements for concentration 1 or all the requirements for concentration 2.

Concentration 1: General Metallurgical and Materials Engineering

This concentration provides students with a program of study that emphasizes the major areas of metallurgical and materials engineering. This concentration is intended for students with a broad interest in metallurgical and materials engineering. Students choosing this concentration follow the curriculum outlined above.

Concentration 2: Manufacturing

This concentration utilizes electives in the traditional metallurgical and materials engineering program along with other appropriate program modifications to allow a graduate to perform a variety of professional duties in manufacturing arenas especially involved with materials selection and design, materials processing, environmental concerns, production failures and materials degradation, and a range of materials and processes quality control. This concentration prepares a student for advanced study in manufacturing engineering, materials science and engineering, or other related engineering areas. In addition to the requirements shown in the degree plan, the student must work on a manufacturing related project during Senior Design (MME 4419).

Basic Engineering (BE)

1205 Graphic Fundamentals in Engineering Design (1-3)
(♦ ENGR 1204)
Fundamentals of multiview projections, auxiliaries, sections, pictorial drawings, dimensioning; introduction to CAD, decision process, and geographical information systems.

2303 Introduction to Materials Science and Engineering (3-0)
Introduction to properties of engineering materials and relationships to their structure, behavior, and processing; materials testing and measurement of properties. Selection of materials for engineering applications considering interrelationships between structure, properties, processing, and performance. *Prerequisite*: CHEM 1305 with a grade of "C" or better.

2326 Engineering Economy (2-3)
Application of economics to engineering and industrial problems which require a knowledge of engineering for their solution. *Prerequisite*: MATH 1411 with a grade of "C" or better.

2338 Mechanics II (2-3)
(♦ ENGR 2302)
A second course in Newtonian mechanics; dynamics (kinematics and kinetics) of particles and rigid bodies; work and energy; impulse and momentum. *Prerequisites*: MATH 1312 and BE 2434, each with a grade of "C" or better.

2375 Introduction to Thermal-Fluid Science (2-3)
An introduction to the basic concepts of thermodynamics and fluid mechanics to include properties, property relationships, states and fields. Presentation of the basic equations of thermal-fluid science, continuity, first and second laws of thermodynamics and momentum. *Prerequisite*: BE 2338. BE 2338 may be taken concurrently with BE 2375.

2377 Electrical Circuits and Motors (2-3)
(🐏 ENGR 2305)
Principles of electrical circuits, generator, and motors. Introduction to electronics and introduction to microprocessors for data acquisition. *Prerequisite*: PHYS 2421 with a grade of "C" or better.

2434 Mechanics I (3-3)
(🐏 ENGR 2301)
A first course in Newtonian mechanics using vectors. Equilibrium of particles and rigid bodies, forces in space, centroids, moments of inertia, study of stress and strain; use of stress-load equations to determine the state of stress in specific structural elements; study of combined stresses. *Prerequisite*: MATH 1411 with a grade of "C" or better.

3341 Engineering Analysis (3-0)
Applications of mathematical principles to the analysis of engineering problems: derivation and solution of mathematical models of physical systems, closed-form solutions, computer solutions by programming in a higher language and by using mathematical computer packages. *Prerequisites*: MATH 2313 and MATH 2326, each with a grade of "C" or better.

3373 Engineering Probability and Statistical Models (2-3)
Fundamental concepts of discrete and continuous random variables, distribution functions, moments, moment generating functions, statistical dependence, stochastic modeling and random events, graphical and numerical methods, descriptive and inferential statistics, point and interval estimation, hypothesis testing and regression analysis. The creation and proper utilization of statistical decision models for engineering analysis and design are stressed. Emphasis is on measurement, formulation analysis and design of physical problems. *Prerequisite*: MATH 2313 with a grade of "C" or better.

Engineering (ENGR)

1100 Engineering Seminar (1-0)
This course will prepare entering students to succeed in the college and introduce students to careers in engineering and science. The course cannot be counted toward a degree in an Engineering discipline. *Prerequisite*: Department approval.

1300 Introduction to Science and Engineering (3-0)
This course will help the student develop learning, study, and group skills, improve math application skills, and develop critical thinking and basic computer skills and problem solving skills. Basic concepts in engineering and science will be introduced. *Prerequisite*: MATH 0310. MATH 0310 may be taken concurrently with ENGR 1300.

1400 Introduction to Engineering and Physical Sciences (3-3)
This course will help the student develop critical thinking skills, improve problem solving skills, increase learning, study, and group skills, develop basic computer skills, and improve math application skills. Basic concepts in science and engineering will be introduced and explored through projects. The course is designed for pre-science and pre-engineering students who are not yet enrolled in MATH 1508. *Prerequisite*: MATH 0311. MATH 0311 may be taken concurrently with ENGR 1400.

1401 Introduction to Engineering and Design (3-3)
This course will introduce the student to effective procedures for solving engineering and design problems using mathematics, computers, basic measuring systems and devices, computational tools, and statistical concepts. The course will also introduce the student to the engineering profession, including the role and responsibilities of the engineer in todays' society. *Prerequisites*: MATH 1411 and ENGL 1311, each with a grade of "C" or better, and department approval. MATH 1411 and ENGL 1311 may be taken concurrently with ENGR 1401.

Civil Engineering

201B Engineering Science Complex
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civilengineering@utep.edu

CHAIRPERSON: Carlos M. Ferregut
PROFESSORS EMERITI: Howard G. Applegate, Herbert H. Bartell, David Rozendal
PROFESSORS: Ferregut, Nazarian, Oey, Osegueda, Tarquin, Turner, Walton
ASSOCIATE PROFESSOR: Li
ASSISTANT PROFESSORS: Carrasco, Chiu, Gurian, Tandon

Civil Engineering (CE)

General Prerequisite: Junior standing in Civil Engineering or written permission of the instructor for all 3000-4000-level courses.

3313 Engineering Measurements (2-3)
Theory and practice of surveying measurements with emphasis on precision, errors, and significant figures, the use of the level, transit, and engineer's tape. *Prerequisites*: BE 1205 with a grade of "C" or better and junior standing in Civil Engineering or department approval.

3325 Environmental Engineering Fundamentals (3-0)
Introduction to the engineering aspects of environmental systems to include such topics as mass and energy balances, sustainable systems, water pollution, air pollution and control, solid and hazardous waste management, and governmental regulation. *Prerequisite*: Junior standing in engineering or science.

3336 Civil Engineering Materials (2-3)
Properties of civil engineering materials, measurements and test methods, relationship of properties to performance; their structure and behavior: relationship between structure and behavior. *Prerequisite*: BE 2434 with a grade of "C" or better.

3343 Structural Analysis (2-3)
A study of framed structures, trusses, girders, and beams including applications of static and moving loads on bridges. *Prerequisites*: BE 2434 with a grade of "C" or better and junior standing in Civil Engineering or department approval.

4153 Water and Waste Laboratory (0-3)
Laboratory analysis of water and wastes. *Prerequisites*: CE 4342 and junior standing in Civil Engineering or department approval. CE 4342 may be taken concurrently with CE 4153.

4171 Engineering Problems (0-0-1)
4271 Engineering Problems (0-0-2)
4371 Engineering Problems (0-0-3)
Original investigation of special problems in the student's field, the problem to be selected by the student with the approval of the head of the department. May be repeated for credit. *Prerequisites*: Senior standing and department approval.

4181 Co-op Work Experiences (0-0-1)
4182 Co-op Work Experiences (0-0-1)
4183 Co-op Work Experiences (0-0-1)
Work experience in business, industrial, governmental, professional, service, or other organizations to provide on-the-job training and professional preparation in the student's area of interest. A report covering the work experience must be submitted by the student to the departmental Co-op coordinator at the end of each work period. Upon completion of his or her third work period and submission of a report summarizing the total work experience, a student can use three hours of Co-op Work Experience in his or her degree plan in place of a technical elective or elective in the major. *Prerequisites*: Selection by the Co-op Coordinator, department chairperson, and employer and junior standing in Civil Engineering.

4195 Senior Professional Orientation (1-0)
Introduction to the Engineering profession with emphasis on job placement, professional ethics, and an engineering field examination. Required of all students prior to graduation.

4335 Structural Design I (3-0)
Reinforced concrete theory; design of beams, columns, slabs, footings, and retaining walls using current design specifications. *Prerequisites*: CE 3343, CE 3336, and junior standing in Civil Engineering or department approval.

4340 Transportation Engineering (3-0)
Study of planning, economics, finance, location, design, and administration of transportation systems. *Prerequisite*: CE 3313. CE 3313 may be taken concurrently with CE 4340.

4342 Water and Wastewater Engineering (3-0)
Study of basic processes involved in conventional water and wastewater treatment plants. Coverage includes theory and preliminary design considerations. *Prerequisites*: BE 2375 and junior standing in Civil Engineering or department approval.

4348 Geotechnical Engineering (2-3)
Physical and mechanical properties of soils, plasticity, shrinkage, permeability seepage, consolidation, shear strength, Rankine and Coulomb earth pressure and braced cuts. *Prerequisites*: BE 2434, BE 2375, each with a grade of "C" or better, and GEOL 3321.

4361 Structural Design II (3-0)
Design of steel structures including the application of plastic design methods using current design specifications. *Prerequisites*: CE 3343 and department approval.

4375 Advanced Topics in Civil Engineering (3-0)
Presentation of contemporary issues and advanced topics in all areas of Civil Engineering. *Prerequisite*: Department approval.

4388 Senior Design (1-6)
Conceptual, preliminary, and final design projects. *Prerequisites*: Department approval and minimum of 115 hours of Civil Engineering Curriculum completed.

4456 Hydraulic Engineering (3-3)
Essential principles of hydraulics and hydrology demonstrated in the laboratory and applied to the design of hydraulic structures. *Prerequisites*: BE 2375 and Junior standing.

See the *Graduate Catalog* for graduate programs and courses.

Computer Science

234 Computer Science Building
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http://www.cs.utep.edu

CHAIRPERSON: David Novick
PROFESSORS: Kreinovich, Novick
ASSOCIATE PROFESSORS: Gates, Longpré, Teller, N. Ward
ASSISTANT PROFESSORS: d'Auriol, Cheon, Modave, Roach, K.Ward
LECTURERS: Bell, Fernandez, Sassenfeld

Computer Science (CS)

1310 Introduction to Computer Programming (3-0)
(♦ COSC 1301)
Fundamentals of computers, including software, hardware, impact on society, and beginning programming in a high-level language, such as FORTRAN, BASIC, LOGO. Designed for students not engaged in mathematically oriented studies.

1401 Introduction to Computer Science (3-3)
(♦ COSC 1430)
First course for students majoring in Computer Science. Introduction to problem solving with computers, including representation, control

structures, and software development methods; closed laboratory and programming assignments in a high-level language; programming environments; social and ethical aspects of computing. *Prerequisite*: MATH 1508 with a grade of "C" or better.

1420 Computer Programming for Scientists and Engineers (3-3)
Introduction to computers and problem solving with digital computers. A procedural programming language will be utilized to solve scientific and engineering oriented problems. Visualization methods will also be used to provide an experimental approach to problem solving. *Prerequisite*: MATH 1508 with a grade of "C" or better.

2401 Elementary Data Structures and Algorithms (3-3) (COSC 1418)
Second course for students majoring in Computer Science. Fundamental computing algorithms, including searching and sorting; elementary abstract data types including linked lists, stacks, queues and trees; introduction to algorithm analysis. *Prerequisite*: CS 1401 with a grade of "C" or better.

2402 Data Structures (3-3) (COSC 2318)
The definition and implementation of abstract data types; representation of data using sets, lists, trees, and graphs; the design and implementation of traversal, search, and sort algorithms; and the space and time analysis of algorithms. *Prerequisites*: CS 2401 and MATH 2300 each with a grade of "C" or better.

3190 Special Topics in Programming (1-0)
Essential constructs and usage of either a programming language (e.g., C, PROLOG, Haskell, C++, Perl), an operating system (e.g., Unix), or advanced topics within a particular language or OS (e.g., CGI programming, Java GUI programming, Windows GUI programming, Motif). Intended to allow advanced students to acquire working proficiency quickly. The language/OS will vary. May not be counted toward the major in Computer Science. May be repeated for credit when the topic differs. *Prerequisite*: CS 3360 with a grade of "C" or better.

3195 Junior Professional Orientation (1-0)
Introduction to the Computer Science profession with a special emphasis on professional ethics. Required of all students prior to graduation.

3320 Computer Architecture II: Advanced Computer Design and Implementation (3-0)
The organization and structure and the major hardware components of computers; the mechanics of information transfer and control within digital computer systems. *Prerequisite*: CS 3432 and EE 2369 each with a grade of "C" or better.

3331 Advanced Object-Oriented Programming (3-0)
An in-depth exposure to the object-oriented programming paradigm, which builds upon programming experience gained in lower-level computer science classes. Emphasis on programming in an object-oriented language with which students are already familiar, and on requirements, testing, code reading, and comprehension. *Prerequisite*: CS 2402 with a grade of "C" or better.

3335 Systems Programming (3-0)
The design and implementation of the programming environment including editors, compilers, loaders and linkers, debuggers and operating systems. *Prerequisite*: CS 2402 with a grade of "C" or better.

3350 Automata, Computability, and Formal Languages (3-0)
Theoretical computing models and the formal languages they characterize: finite state machines, regular expressions, pushdown automata, context-free grammars, Turing machines and computability. Capabilities and limitations of each model, and applications including lexical analysis and parsing. *Prerequisite*: CS 2402 with a grade of "C" or better.

3360 Design and Implementation of Programming Languages (3-0)
Design features of modern programming languages including flow control mechanism and data structures; techniques for implementation of these features. *Prerequisite*: CS 3331 with a grade of "C" or better.

3370 Computer Graphics (3-0)
An introduction to representation and display of graphical information including line, character, and curve generation. Emphasis on two-dimensional techniques. *Prerequisites*: CS 2402 and MATH 3323 each with a grade of "C" or better.

3432 Computer Architecture I: Basic Computer Organization and Design (3-3)
Compile and assembly processes; machine organization; fetch/decode/execute process; symbolic coding of instructions and data, including instruction types, formats, and addressing modes; implementation of data and control structures, subroutines, and linkage; and input/output handling at the assembly level, including memory-mapped I/O and interrupt and exception handling. *Prerequisites*: CS 2402 and EE 2369 each with a grade of "C" or better.

4181 Undergraduate Seminar (1-0)
Advanced topics in computer science. Presentation and discussion of various topics in computer science by faculty, students, speakers from other institutions and from industry.

4191 Introduction to Computer Science Research (0-0-1)
Introduction to the basic skills needed for research, including oral presentation skills, report writing skills, comprehension, critiquing and feedback skills, teamwork skills, and research skills such as formulating a problem, planning research efforts, and managing time. These skills are taught in a group environment as part of a research project. Participation requires departmental approval and permission of the faculty member(s) supervising the student's research. *Prerequisite*: Department approval.

4195 Senior Professional Orientation (1-0)
Continuation of CS 3195. Further introduction into the Computer Science profession with emphasis on job placement. Senior standing required. May not be counted toward the major in Computer Science.

4310 Software Engineering: Requirements Engineering (3-0)
Methodologies, approaches, and techniques associated with software requirements analysis and definition; process for defining requirements of a system including feasibility study, requirements elicitation, formal specification, modeling, validation, verification, and documentation; other topics include cooperative teamwork and project management; first semester of a two-semester capstone project in which students work with a customer to capture and specify requirements for a real-world application.*Prerequisite*: Department approval.

4311 Software Engineering: Design and Implementation (3-0)
Methodologies, approaches, and techniques associated with software design, implementation, and testing of a software system; other topics include cooperative teamwork, project management, and documentation; second semester of a two-semester capstone project in which students design and implement a real-world application specified in CS 4310. *Prerequisite*: CS 4310 with a grade of "C" or better.

4316 Computer Networks (3-0)
Introduction to data communications. Covered topics include: data transmission, link control, encoding, multiplexing, switching, network topologies, address resolution, protocol layering, routing methods, data security, and distributed systems. *Prerequisites*: CS 2402 and EE 3384 each with a grade of "C" or better.

4320 Artificial Intelligence (3-0)
Introduction to basic concepts and techniques of artificial intelligence including knowledge representation, search strategies, symbolic logic, expert systems, and applications. *Prerequisite*: CS 2402 with a grade of "C" or better.

4342 Database Management (3-0)
Introduction to data base concepts, hierarchical, network and relational data models, data description and query languages, file and index organization, and file security and integrity. *Prerequisite*: CS 2402 with a grade of "C" or better.

4352 Compilers and Interpreters (3-0)
The structure of compilers and interpreters: lexical syntax and semantic analysis, formal description of programming languages, parsing techniques, intermediate languages, optimization and code generation. *Prerequisite*: CS 3350 with a grade of "C" or better.

4365 Topics in Soft Computing (3-0)
Introduction to basic concepts and techniques of soft computing, including neural, fuzzy, evolutionary, and interval computations, and their applications. This course may be repeated for credit when topic varies. *Prerequisites:* EE 3384 or STAT 3330, and MATH 4329.

4371 Computer Science Problems (0-0-3)
Original investigation of special problems selected by the student in consultation with the instructor and with the permission of the Chairperson of the Computer Science Department. May be repeated for credit. *Prerequisites*: Senior standing in Computer Science and department approval.

4375 Theory of Operating Systems (3-0)
Process and thread management, concurrency, memory management, processor scheduling, I/O management and disk scheduling, and file management. *Prerequisite*: CS 3320 with a grade of "C" or better.

4390 Special Topics in Computer Science (3-0)
Selected topics of current interest in Computer Science. May be repeated for credit when topic varies. *Prerequisites*: Senior standing in Computer Science and department approval.

4392 Research Methods in Computer Science (3-0)
An advanced course in the skills needed for research in Computer Science, including a survey of the various research paradigms and experimental protocols used across the field. Within a particular research area of the student's choice, a student will learn to: judge whether a question is a research question; design an appropriate experiment to answer a research question; interpret the results of an experiment, including selection and application of appropriate statistical tests; present and defend their research orally and in writing.

4393 Senior Project (0-0-3)
Research and analysis leading to a new publishable theoretical result or a new useful sophisticated piece of software. Includes formal project proposal, generation of a well-documented report, and a presentation of the results to faculty and students. Intended to allow advanced undergraduate students to actively and productively participate in research. A research topic must be selected by the student in consultation with the instructor and with the permission of the Chairperson of the Computer Science Department. *Prerequisite*; Department approval.

See the *Graduate Catalog* for graduate programs and courses.

Electrical and Computer Engineering

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CHAIRPERSON: Benjamin C. Flores
PROFESSORS EMERITI: Michael Austin, Glenn A. Gibson, Jack Smith
ASSOCIATE PROFESSOR EMERITUS: Samir Manoli
PROFESSORS: Flores, Liu, Nazeran, Pierluissi, Riter, Schroder, Starks, Williams
ASSOCIATE PROFESSORS: Cabrera, Lush, Nava, Usevitch
ASSISTANT PROFESSORS: Diong, Gonzalez, MacDonald, Moya, Quinones, Yao, Zubia
LECTURER: Myers, Rodriguez, Rubio, Woo

Electrical and Computer Engineering (EE)

General Prerequisite: Junior standing for all 3000 or 4000-level courses.

1110 Measurements Laboratory (1-2)
Introduction to Electrical Engineering laboratory procedures, causes, and correction of errors in measurements, theory of operation and usage of basic Electrical Engineering test instruments, and report writing. *Prerequisite*: EE 1305 with a grade of "C" or better.

1305 Introduction to Electrical Engineering (3-0)
An introduction to mathematical and systems concepts that form the basis for signal processing. Includes the theory of digital signals and discrete-time systems. Also included are digital filters and an exposure to elementary frequency analysis. EE 1305 must be taken prior to registration for EE 2351. *Prerequisite*: MATH 1508 with a grade of "C" or better.

2110 Basic Electrical Engineering Laboratory (1-2)
Use of oscilloscopes, function generators, and power supplies. Introduction to diode rectifiers, RC filters, and zener regulators. Design of dc power supplies. Technical writing and computer aided design. *Corequisite*: EE 2351. *Prerequisite*: EE 1110 with a grade of "C" or better.

2351 Networks (3-0)
Theory of electrical circuits including Kirchhoff's laws, mesh and nodal analysis. Transient analysis of RC, RL, and RLC circuits. Laplace Transform, transfer function and convolution concepts. *Corequisite:* EE 2110. *Prerequisites*: MATH 2313, MATH 2326, and PHYS 2421, each with a grade of "C" or better. MATH 2313 and MATH 2326 may be taken concurrently with EE 2351.

2369 Digital Systems Design I (3-0)
(COSC 1309)
Design and synthesis of digital systems using both combinational and sequential circuits. Includes laboratory projects implemented with standard ICs. *Prerequisite*: EE 1305 with a grade of "C" or better.

2372 Software Design I (3-0)
An introduction to software design with a structured computer language that focuses on the construction of programs consisting of multiple functions residing in multiple files. Covers program creation and top-down-design, basic elements and operations, modular program construction, and the use of programming tools such as makefiles. Introduces object oriented programming techniques. *Prerequisite*: EE 1305 with a grade of "C" or better.

3109 Computer-aided Digital Design (1-2)
Design of digital circuits using CAD tools. Includes schematic capture, simulation, and hardware description language. *Prerequisites*: EE 2351 and EE 2369, each with a grade of "C" or better.

3176 Laboratory for Electrical Engineering 3376 (0-3)
Assembly language programming of microcomputer systems. *Corequisite*: EE 3376.

3210 Electrical Engineering Laboratory I (1-4)
Introduction to experimental analysis of bipolar junction transistors, junction field effect transistors, switching power supplies, amplifiers, and oscillators. Includes digital circuits and introduction to transducers. *Prerequisite*: EE 3438 with a grade of "C" or better.

3321 Electromagnetic Field Theory (3-0)
Fundamental laws and concepts of electrostatics and magnetostatics, and their physical characteristics in dielectric and conductive media. Applications are made to the determination of resistance, capacitance and inductance of solid structures, as well as to transmission lines. *Prerequisite*: EE 2351 with a grade of "C" or better.

3329 Electronic Devices (3-0)
Energy band models, electron and hole concentrations and transport, p-n junction, bipolar junction transistors, and field effect devices. *Prerequisites*: PHYS 3325 and EE 3321, each with a grade of "C" or better.

3340 Linear Integrated Circuits (3-0)
Analysis and design of linear integrated circuits stressing impedance levels, gains, and frequency responses. Complex plane concepts. Active filter and oscillator design. Pulse response and stability analysis. *Prerequisites*: EE 3438 with a grade of "C" or better.

3353 Signals and Systems (3-0)
Representation and analysis of continuous and discrete time signals; time and frequency analysis of linear time-invariant systems; convolution, differential and difference equations. Fourier Series and Transform. Z-transform. *Prerequisite*: EE 3438 with a grade of "C" or better.

3372 Software Design II (3-0)
An introduction to object-oriented software design. Covers basic language elements, operations, and design concepts; emphasizes program design and construction using extensible, reusable modules. *Prerequisites*: EE 2372, EE 3176, and EE 3376, each with a grade of "C" or better.

3376 Microprocessor Systems I (3-0)
Study of microprocessor programming models, assembly language, macro assemblers, and an introduction to system integration and interfacing. *Corequisite:* EE 3176. *Prerequisites*: EE 2372, EE 2369, and EE 2351, each with a grade of "C" or better. EE 3176 must be taken concurrently with EE 3376.

3384 Probabilistic Methods in Engineering and Science (3-0)
Problems involving discrete and continuous random variables, distribution functions, moments, statistical dependence, and an introduction to statistical methods. Emphasis to be on formulation of physical problems. *Prerequisite:* Junior standing or upper-divisional Computer Science or Electrical Computer Engineering course is required.

3385 Energy Conversion (3-0)
Theory and performance characteristics of electro-mechanical energy conversion equipment to include transformers and both d-c and a-c generators and motors and the control devices employed therewith. *Prerequisite*: EE 3353 with a grade of "C" or better.

3438 Electronic Networks (4-0)
Continuation of networks and introduction to electronic devices: Power computations in sinusoidal steady state. Filters, resonance, transfer functions, and two-port concepts. Diodes, bipolar junction and field effect transistor amplifiers. *Prerequisite*: EE 2351 with a grade of "C" or better.

4142 Laboratory for Electrical Engineering 4342 (0-3)
Design and verification of digital systems using simulation. Laboratory implementation using standard, integrated circuits and programmable logic devices. *Corequisite*: EE 4342.

4171 Engineering Problems (0-0-1)
4371 Engineering Problems (0-0-3)
Original investigation of special problems in the student's field, the problem to be selected by the student with the approval of the head of the department. A maximum of three credit hours of engineering problems may be applied toward the BS degree. *Prerequisites*: Senior standing and department approval.

4178 Laboratory for Electrical Engineering 4378 (0-3)
Use of development tools in the design and implementation of microprocessor-based systems. *Corequisite*: EE 4378.

4181 Co-op Work Experiences (0-0-1)
4182 Co-op Work Experiences (0-0-1)
4183 Co-op Work Experiences (0-0-1)
Work experience in business, industrial, governmental, professional, service, or other organizations to provide on-the-job training and professional preparation in the student's area of interest. A report covering the work experience must be submitted by the student to the departmental Co-op coordinator at the end of each work period. Upon completion of his or her third work period and submission of a report summarizing the total work experience, a student can use three hours of Co-op Work Experience in his or her degree plan in place of a technical elective or elective in the major. *Prerequisite*: Selection by the Co-op Coordinator, department chairperson, and employer.

4195 Senior Professional Orientation (1-0)
Introduction to the engineering profession with emphasis on job placement and ethical conduct in the engineering workplace. Required of all students prior to graduation.

4210 Electrical Engineering Laboratory II (1-4)
Experimental introduction to modulation, communication and IF transformers, transmission lines, wave guides, and antenna measurements. Emphasis on laboratory investigation using specialized instrumentation. *Prerequisites*: EE 3210, EE 3321and EE 3340, each with a grade of "C" or better. EE 3210 and EE 3340 may be taken concurrently with EE 4210.

4220 Senior Project Laboratory I (2-4)
Research and analysis leading to a preliminary design for an approved engineering project. Includes formal project proposal and work plan; specification of functional, performance and cost goals; generation of computer-aided design documents and simulation or modeling results.

Design process is concluded in EE 4230 through prototyping, testing, and revisions. *Prerequisites*: EE 3384 and EE 3109 each with a grade of "C" or better; for all options except Computer Engineering: EE 4210. EE 4210 may be taken concurrently with EE 4220. For Computer Engineering option: EE 4142 or EE 4178. EE 4142 or EE 4178 may be taken concurrently with EE 4220. Laboratory fee required.

4230 Senior Project Laboratory II (1-4)
Laboratory development of special projects concerned with various electrical systems. Small group or individual semester projects are stressed. *Prerequisites*: For general engineering option: EE 4220 and EE 4210. For computer engineering option: EE 4220 and EE 4142, or EE 4178, each with a grade of "C" or better.

4341 Communication Systems (3-0)
Spectral density and correlation; sampling theory; linear, angle, and pulse modulation; random signals and noise; effects of noise in modulation systems. *Prerequisites*: EE 3353 and EE 3384, each with a grade of "C" or better.

4342 Digital Systems Design II (3-0)
Design techniques for complex digital systems, with emphasis on computer hardware design and computer-aided techniques, including hardware description languages and hardware simulation packages. Algorithmic State Machine design is stressed for small systems. Emphasis on problem definition, design, and verification. *Corequisite:* EE 4142. *Prerequisite*: EE 3376 with grade of "C" or better.

4347 Electromagnetic Energy Transmission and Radiation (3-0)
Study of time-harmonic electric and magnetic fields with emphasis on wave propagation in free space and along guiding conductors. Characteristics of radiating structures such as wire antennas and apertures. *Prerequisite*: EE 3321 with a grade of "C" or better.

4350 Integrated Circuits and Semiconductor Devices (3-0)
Bipolar and MOS integrated circuits, microelectronic processing technology, microwave devices, photonic devices, and power semiconductor devices. *Prerequisite*: EE 3329 with a grade of "C" or better.

4352 Power Electronics (3-0)
An introduction to power electronic devices (diodes, thyristors, MOSFET's, IGBT's, power electronic circuits (rectifiers, DC converters, inverters) and their applications (power supplies, DC and AC motor drives. *Prerequisite*: EE 3438 with a grade of "C" or better.

4356 Real Time Signal Processing and Communications (3-0)
A project based course where filtering, spectral analysis, and modulation algorithms are implemented on modern signal processing circuits. This class is programming intensive, emphasizing the practical aspects of design over theory. *Prerequisites*: EE 3353 and EE 3376, each with a grade of "C" or better.

4361 Fiber Optic Communications (3-0)
Light propagation using ray and electromagnetic mode theories, dielectric slab waveguides, optical fibers, attenuation and dispersion in optical fibers, optical fiber transmitters and receivers, electro-optical devices, and optical fiber measurement techniques. *Prerequisites*: EE 3438 and EE 3321, each with a grade of "C" or better.

4364 Systems and Controls (3-0)
Analysis and design of discrete and continuous time linear systems. Relationships between frequency and time domain design. Analysis of system stability and performance using root locus, lead lag compensation, and other techniques. Applications to electro-mechanical systems. *Prerequisite*: EE 3353 with a grade of "C" or better.

4365 Topics in Soft Computing (3-0)
Basic concepts and techniques of soft computing, including neural, fuzzy evolutionary, and interval computations, and their applications. *Prerequisites*: EE 3353 and EE 3384, each with a grade of "C" or better.

4372 Microcontroller Applications (2-3)
Use and application of single chip microcontrollers in the design of instrumentation and control systems. *Prerequisites*: EE 3376 and EE 3340, each with a grade of "C" or better.

4374 Operating Systems Design (3-0)
Design and implementation of single and multiuser operating systems. Topics include OS structure, process management, interprocess communication within and between CPUs, memory management, file systems, and I/O. Contemporary operating systems provide design examples. *Prerequisite*: EE 3372 with a grade of "C" or better.

4375 VLSI Design I (3-0)
Introduction to CMOS VLSI design and computer-aided VLSI design tools. A term project is required that involves high-level design approaches, layout editing, simulation, logic verification, timing analysis, and testing. *Prerequisite*: EE 3329 and EE 3109 each with a grade of "C" or better.

4378 Microprocessor Systems II (3-0)
A study of a 16/32 bit microprocessor family and companion devices, and various design aspects of microprocessor systems. *Corequisite:* EE 4178. *Prerequisite*: EE 3376 with a grade of "C" or better.

4379 Computer Architecture (3-0)
Organization of CPUs; memory hierarchies, including cache and virtual memories; parallel processing, including pipelining and multiprocessing. *Prerequisite*: EE 3376 with a grade of "C" or better.

4380 Microwave Communications (3-0)
Primarily a terminal undergraduate course concerning high frequency energy generation and transmission. Topics include waveguides, microwave oscillators, principles of solid-state microwave devices, and propagation of radio waves in the atmosphere. *Prerequisite*: EE 3321 with a grade of "C" or better.

4381 Electro-Optical Engineering (3-0)
Introduction to photonics, ray optics versus wave optics, lens theory, polarization of light, electro-optical devices, lasers, semiconductor photon sources and detectors, and introduction to nonlinear optics. *Prerequisite*: EE 3321 with a grade of "C" or better.

4382 Antenna Engineering (3-0)
Introductory antenna theory and design. Fundamentals and definitions, simple radiating systems, arrays, line sources, wire antennas, broadband antennas, and antenna measurements. *Prerequisite*: EE 3321 with a grade of "C" or better.

4383 Digital Signal Processing (3-0)
An introduction to basic one-dimensional processing methods including: sampling and quantization; discrete-time Fourier and z-domain LTI systems analysis, theory of operation and computational aspects of FIR and IIR digital filters; principles of filter design; the discrete Fourier transform and its application to spectral analysis. *Prerequisite*: EE 3353 with a grade of "C" or better.

4385 Biomedical Instrumentation (3-0)
An introduction to basic concepts in biomedical instrumentation, blood flow measurements, biopotential amplifiers, and electrodes as well as electrical safety of medical equipment. *Prerequisite*: EE 3340 with a grade of "C" or better.

4386 Computational Methods in Electrical Engineering (3-0)
Computer solution of integro-differential equations associated with typical engineering problems from areas such as microwaves, antennas, solid-state devices, and machine design. Techniques discussed include finite-differences, method of moments, boundary elements, and finite elements, with an emphasis on the latter. Fundamental knowledge of a high level language such as FORTRAN, BASIC, or C and a software tool such as MATHCAD or MATLAB are necessary. *Prerequisite*: EE 3321 with a grade of "C" or better.

4388 Digital Communications (3-0)
Techniques of sampling; digital baseband transmission; digital modulation schemes; introduction to coding and fundamental limits on system performance. *Prerequisites*: EE 3353 and EE 3384, each with a grade of "C" or better.

4389 High Resolution Radar (3-0)
Basic theory for design and analysis of radar systems that perform target and surface imaging. Concepts and definitions, the radar range equation, modern radar design, wideband waveforms, and signal processing, synthetic high resolution radar, synthetic aperture concepts. *Prerequisites*: EE 3321 and EE 3353, each with a grade of "C" or better.

4395 Special Topics in Electrical Engineering (3-0)
Selected topics of current interest in Electrical Engineering. May be repeated once for credit when topic varies. *Prerequisites*: Senior standing in engineering and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Mechanical and Industrial Engineering

101 Engineering Science Complex
(915) 747-5450
meandie@utep.edu

CHAIRPERSON: Louis Everett
PROFESSORS EMERITI: John M. Levosky, John A. Whitacre, Jr.
PROFESSORS: Bronson, Craver, Dowdy, Everett, McLean, Swift
ASSOCIATE PROFESSORS: Huerta, Wicker
ASSISTANT PROFESSORS: Choudhuri, Chessa, Contreras, Gutierrez, Hawkins, Pan, Pennathur

Industrial Engineering (IE)

3126 Industrial Engineering Laboratory (0-3)
Introduction to basic machining and automated manufacturing concepts such as CNC and robotics. Shop demonstrations and visits to area factories. *Prerequisites*: BE 2303 and BE 3373, each with a grade of "C" or better.

3331 Systems Engineering (2-3)
Basics of operations research models, including linear programming models, simplex method, sensitivity analysis, transportation models, assignment models, network flow models, and decision analysis and games. Statistical inferential techniques in IE applications including ANOVA, randomized block designs, factorial designs, linear regression, and response surface methods for process optimization are also included. *Prerequisite*: BE 3373 each with a grade of "C" or better.

3332 Safety Engineering (2-3)
A study of man-machine environment and the accident cause-effect relationship. Provides an analytic structure through which safety decision-making can be performed in light of changes in the legal, management, and technical aspects of industrial safety. *Prerequisite*: BE 3373 with a grade of "C" or better.

3477 Methods and Industrial Ergonomics (3-3)
Introduction to the design and analysis of human-machine systems and interfaces. Application of biomechanics, anthropometry, and work physiology to the design of work. Study of operations and process analysis, methods analysis, and work design techniques used in manufacturing and service industries. Macro and micro motion analyses, work measurement, and the relation to line balancing, machine loading, scheduling and sequencing, management control. *Prerequisites*: BE 1205 and BE 3373, each with a grade of "C" or better.

4195 Senior Professional Orientation (1-0)
Introduction to the Engineering profession with emphasis on job placement, professional ethics, and an engineering field examination.

4353 Industrial Systems Simulation (2-3)
Introduction to systems simulation with special emphasis on: logic and methodologies of discrete event simulation, generation of random numbers and random deviates, survey of simulation languages. At the end of the course the student should be able to develop simulation models of industrial systems and to understand the issues involved in simulation studies. *Prerequisite*: BE 3373 with a grade of "C" or better.

4371 Engineering Problems (0-0-3)
Original investigation of special problems in the student's field; the problem to be selected by the student with approval of the head of the department. May be repeated for credit. *Prerequisite*: Senior standing and department approval.

4384 Industrial Layout (2-3)
The design, selection, and layout of buildings and equipment for proper utilization in manufacturing. *Prerequisites*: IE 3477 and IE 4492.

4385 Statistical Quality Control and Reliability (2-3)
The statistical design of systems for prescribed quality levels and prevention of defects. *Prerequisite*: BE 3373 with a grade of "C" or better.

4391 Production and Inventory Control (2-3)
A study of the principles and theory used in the design and maintenance of production operations and inventory systems. These include forecasting techniques, inventory models, production control models, and assembly line balancing. *Prerequisites*: BE 3373 with a grade of "C" or better and IE 4492.

4395 Special Topics in Industrial Engineering (3-0)
Selected topics of current interest in Industrial Engineering. May be repeated once for credit when topic varies. *Prerequisite*: Senior standing in engineering.

4466 Senior Design (2-6)
Conceptual, preliminary, and final design solutions to engineering problems by students in teams. *Prerequisites*: Students must be in their last full semester (semester of graduation) and must have a 2.0 GPA or better overall and in their major.

4492 Operations Research (3-3)
An introduction to deterministic optimization models. These include the concepts of operations research modeling, classical optimization, linear and dynamic programming, and network analysis. An introduction to probabilistic optimization including queuing theory, Monte Carlo techniques of simulation, project scheduling, and basic Markov processes. Current topics in deterministic and probabilistic modeling are included. A project is an integral part of the course. *Prerequisites*: BE 3341, BE 3373 and IE 3331, each with a grade of "C" or better.

See the *Graduate Catalog* for graduate programs and courses.

International Manufacturing Systems (IMS)

4360 International Manufacturing Management (2-3)
A comprehensive study of border manufacturing business issues. Includes analyses of the impact of culture on employee recruitment and selection, motivation, attitudes, training, and general labor relations and laws. Technology transfer, international accounting systems, the economics of foreign exchange, international capital budgeting, and the legal environments affecting offshore/border manufacturing are examined. Managerial control functions, materials management/logistics, location analysis, and information flow between manufacturing problems and group projects/presentations are utilized. *Prerequisite*: Department approval. Laboratory fee required.

4361 International Manufacturing Engineering (2-3)
Practical issues of design, analysis and integration of international manufacturing engineering components are covered. Emphasis is placed on dynamics of material flow, international planning hierarchies, fundamentals of enterprise resource planning, and the effects of automation on scheduling strategies and materials flow in a labor-intensive environment. Concurrent engineering, function deployment, group technology, process planning, and assembly line design focused on border operations are stressed. A focus on discrete production, with control systems such as MRP, Kanban, JIT, OPT, and synchronous manufacturing are covered. A team project and presentation is required. *Prerequisite*: Department approval. Laboratory fee required.

4396 International Manufacturing Internship (0-0-3)
An applied internship in a local manufacturing plant where the student applies the international manufacturing management and engineering fundamentals from IMS 4360 and IMS 4361. The student intern will rotate between two departments in a U.S. offshore manufacturing facility from testing and inspection, design, quality, production and inventory control, maintenance, purchasing, planning and scheduling, safety and ergonomics tooling, accounting, etc. The mid-term and final examinations will consist of a written report and presentation based on the research/design/analysis performed in a department to the faculty mentor and industrial partner. Must be admitted to the International Manufacturing Certificate Internship Program. Prerequisites: IMS 4360 and IMS 4361 with a grade of "B" or better, and department approval. Laboratory fee required.

4397 International Manufacturing Internship (0-0-3)
An applied internship in a local manufacturing plant where the student applies the international manufacturing management and engineering fundamentals from IMS 4360 and IMS 4361. The student intern will rotate between two departments in a U.S. offshore manufacturing facility from testing and inspection, design, quality, production and inventory control, maintenance, purchasing, planning and scheduling, safety and ergonomics, tooling, accounting, etc. The mid-term and final examinations will consist of a written report and presentation based on the research/design/analysis performed in a department to the faculty mentor and industrial partner. Must be admitted to the International Manufacturing Certificate Internship Program. *Prerequisites*: IMS 4396 and department approval.

Mechanical Engineering (MECH)

General Prerequisite: Junior standing for all 3000 or 4000-level courses.

3305 Mechanical Engineering Laboratory I (2-3)
Theory and fundamentals of the measurement of mechanical and thermal properties and the application of these measurements to processes. This includes the study of various types of measurement devices from traditional gages to modern computer-based data acquisition systems. The applications of these measurement techniques are practiced through various laboratory problems. *Prerequisites*: MATH 2326 or MATH 3326, BE 2377, and BE 3373, each with a grade of "C" or better.

3354 Fluid Mechanics (3-0)
Fluid properties, fluid statics, fluid flow concepts and basic equations, dimensional analysis and dynamics similitude, viscous effects, fluid resistance, laminar and turbulent boundary layers, flow through pipes. *Prerequisites*: BE 2375, and MATH 2326 or MATH 3326, each with a grade of "C" or better.

3363 Introduction to Computer Aided Manufacturing (2-3)
Geometric modeling theory for computer aided drafting and manufacturing, parametric representation of analytical and synthetic curves and surfaces, fundamentals of modeling solids, cutting tool fundamentals, practice using commercial computer aided modeling software, class project requiring students to design a mechanical component and create the necessary code for input to a numerically controlled machine tool used in its manufacture. *Prerequisites*: BE 2338 and IE 3126 each with a grade of "C" or better.

3365 Dynamic Response (3-0)
Fundamentals of vibration theory and system response. Single and multiple degrees of freedom, damping, and isolation. *Prerequisites*: BE 2338, and MATH 2326 or MATH 3326, each with a grade of "C" or better.

3376 Thermodynamics II (3-0)
Continuation of BE 2375. Application of principles of cycles and reactive systems; energy relationships and equilibrium requirements. *Prerequisites*: Junior standing and BE 2375 with a grade of "C" or better.

4106 Mechanical Engineering Lab II (0-3)
A continuation of the Mechanical Engineering Lab series, with practical measurement problems in mechanical engineering. *Prerequisite*: MECH 3305.

4107 Mechanical Engineering Lab III (0-3)
A continuation of the Mechanical Engineering Lab series, with practical measurement problems in mechanical engineering. *Prerequisite*: MECH 4106.

4111 Controls Laboratory (0-3)
Experiments including spring-mass-damped systems, internal structural damping, forced vibrations, open and closed loop pneumatic systems, servomotor control, steppter motor control and control simulator. *Prerequisite*: MECH 4311. MECH 4311 may be taken concurrently with MECH 4111.

4195 Senior Professional Orientation (1-0)
Introduction to the Engineering profession with emphasis on job placement, professional ethics, and an engineering field examination.

4311 Automatic Controls (3-0)
A study of classical control theory including transfer functions, stability and time response, error analysis and sensitivity functions, root locus, Nyquist diagrams, and Bode Plots; the analog computer as a simulation tool particularly as pertains to non-linear control systems. Also, an introduction to modern control theory is presented. *Prerequisite*: MECH 3365.

4351 Heat Transfer (3-0)
Introduction to heat transfer by conduction, convection, and radiation; steady and transient states; steady periodic states; heat transfer in engineering apparatus. *Prerequisites*: BE 3341 with a grade of "C" or better and MECH 3354.

4355 Gas Dynamics (3-0)
A study of the flow of compressible fluids. One-dimensional steady flow, supersonic flow, normal and oblique shock, flow with heating and cooling, measurement of fluid properties and flow parameters. *Prerequisites*: BE 3375 and MECH 3454, each with a grade of "C" or better.

4364 Mechanical Design I (2-3)
Stress analysis; deflection analysis; strength of mechanical elements; design of screws, fasteners, and joints, clutches, brakes, and couplings, shafting. *Prerequisite*: CE 2334 or BE 2434 with a grade of "C" or better.

4368 Environmental Control Engineering (3-0)
A study of theory and practice leading to the design of heating and air conditioning systems to control building environment for human comfort

4371 Engineering Problems (0-0-3)
Original investigation of special problems in the student's field; the problems to be selected by the student with approval of the department chairperson. May be repeated for credit. *Prerequisite*: Senior standing and department approval.

4395 Special Topics in Mechanical Engineering (3-0)
Selected topics of current interest in Mechanical Engineering. May be repeated once for credit when topic varies. *Prerequisite*: Senior standing in engineering.

4466 Senior Design (2-6)
Conceptual, preliminary and final design solutions to engineering problems by students in teams. *Prerequisites*: Students must be in their last full semester (semester of graduation) and must have a 2.0 GPA or better overall and in their major.

See the *Graduate Catalog* for graduate programs and courses.

Metallurgical and Materials Engineering

M201 Engineering Science Complex
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metal@utep.edu

CHAIRPERSON: Lawrence E. Murr
PROFESSOR EMERITUS: Lonnie L. Abernethy, Juan M. Herrera
PROFESSORS: Fisher, McClure, Murr, Stafford, Varma
ASSOCIATE PROFESSORS: Arrowood, Golding

Metallurgical and Materials Engineering (MME)

General Prerequisite: Junior standing for all 3000 or 4000-level courses.

3306 Rate Processes in Materials Systems (3-0)
Introduction to reaction kinetics, fluid flow, and heat transfer applied to materials systems. *Prerequisites*: ENGR 1401, CHEM 1306, and MATH 2326 or MATH 3326, each with a grade of "C" or better, and Junior standing.

3308 Applied Chemical Thermodynamics (3-0)
First, second, and third law of thermodynamics applied to materials systems. Topics include thermochemistry, chemical equilibria, phase equilibria, solutions, activity, and electrochemical potential. *Prerequisites*: BE 2375 with a grade of "C" or better and Junior standing.

3309 Introduction to Electronic Materials Science (3-0)
Basic theory of the electrical, semiconductor, magnetic, optical, and superconductor properties of materials. Application and fabrication of selected materials. *Prerequisite*: PHYS 2421 with a grade of "C" or better.

3314 Composite Materials (3-0)
Introduction to fiber-reinforced materials. Manufacturing technology for strong fibers and whiskers. Mechanical performance, design, and manufacturing of composite products. Adhesion, interfacial shear, and critical fiber length. Anisotropic plane-stress elasticity; multiaxial strength of anisotropic materials. Classical theory of laminates. Delamination and other performance problems. *Prerequisites*: BE 2434 and BE 2303, each with a grade of "C" or better, and Junior standing.

3321 Engineering Alloys (3-0)
The study of the selection and specification of engineering alloys for the use in industrial applications. Topics related to ferrous and non-ferrous metals in the cast, wrought, powder, and particle state will be covered. *Prerequisite*: MME 3407 with a grade of "C" or better or department approval.

3406 Physical Metallurgy (4-0)
The underlying principles of physical metallurgy dealing with the structure-property relationships will be covered. Topics will include crystal structures and defects, solid solutions, deformation and annealing, diffusion, phase equilibria, nucleation and growth, phase diagrams, solidification, and phase analysis. *Prerequisites*: BE 2303 with a grade of "C" or better and junior standing.

3407 Mechanical Behavior of Materials (3-3)
The microstructure-property relationships will be emphasized in this course. The deformation processes for metals, ceramics, polymers, and composite materials will be analyzed in terms of current theories and models. The topics include twinning, martensite, fracture, dislocation theory, plastic deformation, creep, fatigue, strengthening mechanisms, and mechanical testing. *Prerequisite*: BE 2303 with a grade of "C" or better.

4171 Engineering Problems (0-0-1)
4271 Engineering Problems (0-0-2)
4371 Engineering Problems (0-0-3)
Original investigation of special problems in the student's field, the problem to be selected by the student with the approval of the head of the department. May be repeated for credit. *Prerequisite*: Senior standing.

4175 Undergraduate Research in Metallurgy (0-0-1)
Supervised individual research. May be repeated for credit as topic varies. Can only be substituted for metallurgy electives or technical electives. *Prerequisites*: Senior standing and a 3.0 grade point average.

4181 Co-op Work Experiences (0-0-1)
4182 Co-op Work Experiences (0-0-1)
4183 Co-op Work Experiences (0-0-1)
Work experience in business, industrial, governmental, professional, service, or other organizations to provide on-the-job training and professional preparation in the student's area of interest. A report covering the work experience must be submitted by the student to the departmental Co-op coordinator or department chair at the end of each work period. Upon completion of his or her third work period and submission of a report summarizing the total work experience, a student can use three hours of Co-op Work Experience in his or her degree plan in place of a technical elective or elective in the major. *Prerequisite*: Selection by the Co-op Coordinator, department chairperson, and employer.

4195 Senior Professional Orientation (1-0)
Introduction to the engineering profession with emphasis on job placement, professional ethics, and an engineering field examination. Required of all students prior to graduation. *Prerequisite*: Senior standing.

4275 Undergraduate Research in Metallurgy (0-0-2)
Supervised individual research. May be repeated for credit as topic varies. Can only be substituted for metallurgy electives or technical electives. *Prerequisites*: Senior standing and a 3.0 grade point average.

4303 Metals Processing (3-0)
Analysis of the unit operations involved in metal and mineral production using the principles of material and energy balance, fluid flow, heat transfer, reaction kinetics, and thermodynamics. Survey of processing operations for specific metals such as copper, iron, aluminum, magnesium, titanium, and uranium. *Prerequisites*: BE 2375, MME 3306, and MME 3308, each with grade of "C" or better.

4309 Corrosion (3-0)
Application of electrochemistry and engineering principles to the corrosion, passivity, and protection of metals and alloys. *Prerequisite*: BE 2303 with a grade of "C" or better or department approval.

4316 Failure Analysis (3-0)
The mechanisms of materials failure, failure analysis techniques, and non-destructive testing methods are discussed with emphasis on analysis and interpretation of case studies. *Prerequisites*: BE 2303 and BE 2434, each with a grade of "C" or better, and junior standing.

4330 Solidification Processes (3-0)
Fundamentals of solidification in processes commonly found in manufacturing. The course will cover the principles involved in metal casting, welding, brazing, soldering and plastic injection molding. *Prerequisite*: BE 2303 with a grade of "C" or better.

4375 Undergraduate Research in Metallurgy (0-0-3)
Supervised individual research. May be repeated for credit as topic varies. Can only be substituted for metallurgy electives or technical electives. *Prerequisites*: Senior standing and a 3.0 grade point average.

4404 Materials Processing (3-3)
Analysis of the unit processes involved in ceramic production and specialized processes such as zone refining, chemical vapor deposition, plasma spraying, and surface modification using the principles of material and energy balance, fluid flow, heat transfer, reaction kinetics and the thermodynamics. Survey of specific processing techniques for materials such as silicon, glass, ceramic magnets, silicon carbide, silicon nitride, and ceramic superconductors. *Prerequisite*: MME 4303 with a grade of "C" or better.

4405 Materials Fabrication (3-3)
Fundamentals of metalworking, forging, rolling, extrusion and drawing; sheet metal forming, welding, joining and casting. *Prerequisites*: Upper division standing and BE 2303 with a grade of "C" or better. Laboratory fee required.

4413 Structural Characterization (3-3)
The application of modern instrumentation and techniques to structural characterization problems. Both theory and operation will be stressed. X-Ray analysis, electron microscopy (TEM-SEM), and electron probe analysis will be included. *Prerequisite*: MME 3407 with a grade of "C" or better or department approval.

4419 Metallurgical and Materials Engineering Design (3-3)
Introduction to creative industrial problem-solving and the design process in materials engineering. Topics include material and process selection, project planning and resource management, economic decision making in terms of cost evaluation and profitability, and optimization methods. Weekly discussions explore issues of professionalism including engineering ethics, public safety and environmental concerns in design, codes, and standards, etc. Student design teams define and investigate problems in metallurgical processing, materials selection and evaluation, quality control, etc. Design project teams make written and oral progress reports, as well as a final written report and presentation. Laboratory time is devoted to design projects. *Prerequisites*: MME 3407, with a grade of "C" or better, MME 4303, and BE 2326.

See the *Graduate Catalog* for graduate programs and courses.

COLLEGE OF HEALTH SCIENCES

School of Nursing

School of Allied Health

- **Clinical Laboratory Science**
- **Health Sciences**
- **Kinesiology**
- **Occupational Therapy**
- **Physical Therapy**
- **Speech-Language Pathology**

Dr. Leslie O. Schulz, Dean
Dr. Robert L. Anders, Associate Dean and Director of the School of Nursing
Connie Gamboa, Assistant Dean for Student Affairs

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College of Health Sciences

A baccalaureate nursing program was established at El Paso in 1970 under the administration of The University of Texas System School of Nursing. In 1976, the School of Nursing became an integral part of The University of Texas at El Paso and was organized as a College of Nursing. The Health Science and Medical Technology Programs were transferred to the College in 1979, and shortly thereafter, the name was changed to the College of Nursing and Health Sciences. As a result of the continuing growth of the College adding numerous health professional programs, the latest change was in February 1999 with the renaming of the College to the College of Health Sciences.

The College offers an undergraduate nursing program leading to the Bachelor of Science in Nursing degree as well as the graduate program culminating in the Master of Science in Nursing degree. A Doctorate in Nursing Science is available through a cooperative agreement with the University of Texas-Houston Health Science Center School of Nursing. Allied Health programs are offered which lead to the Bachelor of Science in Clinical Laboratory Science (Medical Technology), the Bachelor of Science in Health Science, the Bachelor of Science in Kinesiology, the Bachelor of Science in Occupational Therapy, the Master of Science in Health and Physical Education, the Master of Science in Kinesiology, the Master of Science in Speech-Language Pathology, and the Masters in Physical Therapy.

The nursing programs are fully accredited and are approved by the Texas State Board of Nurse Examiners. The Bachelor of Science in Clinical Laboratory Science is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education. The Physical Therapy Program is accredited by the Commission of Accreditation for Physical Therapy Education. The master's degree in Speech-Language Pathology is accredited by the Council on Academic Accreditation of the American Speech, Language, and Hearing Association and is required in order to qualify for national certification by the American Speech, Language, and Hearing Association and for Texas licensure to practice as a speech-language pathologist.

The College is located approximately one mile from the main UTEP campus, at 1101 North Campbell Street, and is housed in a large, modern building which includes classrooms, laboratories, faculty offices, and lounges for both students and faculty. The Independent Learning Center facilitates independent learning by students through the use of audio-visual programs, programmed units, and laboratory computers. Training and support on instructional software development are available to all interested students and faculty. Equipment reservation and checkout are also available to students and faculty from the College of Health Sciences. The Simulation Laboratory provides an opportunity for students to practice skills before direct contact with patients or clients in clinical settings. The Speech, Hearing, and Language Clinic provides a community service as well as the first clinical practicum experience for Speech-Language Pathology students. The Clinical Laboratory Science program has four new laboratories: microbiology, hematology/immunohematology, chemistry, and research. The Occupational Therapy labs provide students with the opportunity to develop

skills in therapeutic media, evaluations, and treatment procedures. In addition, the OT Program has an ADL lab where students are able to practice adapting cooking and activity of daily living techniques for persons with a variety of disabilities. Anatomy laboratory space is shared with the Physical Therapy Program. The Physical Therapy labs provide students with opportunities to develop skills in the evaluation of patient problems and the application of treatment modalities. The program has a separate lab for analyzing a person's gait.

The El Paso/Las Cruces/Ciudad Juárez international border community, with a population of more than one and a half million, provides a wide variety of clinical experiences for both students and faculty of the College. Hospitals and other health care agencies throughout the area are utilized for student and faculty clinical practice. In addition, the El Paso City-County Health Department and a number of voluntary agencies provide patient care opportunities for learning. Agencies such as the Pan American Health Organization, the U.S. Immigration and Naturalization Service, and customs and consular offices on both sides of the border provide the student with unique learning experiences in the control and prevention of disease.

SCHOOL OF NURSING

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INTERIM DIRECTOR OF GRADUATE NURSING PROGRAM: Audree Reynolds
INTERIM DIRECTOR OF UNDERGRADUATE NURSING PROGRAM: Leticia Lantican
PROFESSOR EMERITA: Patricia Castiglia
PROFESSORS: Adams, Amaya, Anders, Poss, Reynolds
ASSOCIATE PROFESSORS EMERITI: Dorothy Corona, Betty J. Kinsinger, Leticia Lantican, Jesusa Lara
ASSISTANT PROFESSORS: Edmonds, Nelson
CLINICAL ASSISTANT PROFESSORS: Bass, Cummins, Farnsworth
INSTRUCTORS: Beeman, Benson, Blanco, Castañeda, Culton, Farrington, Flahive, Fowler, Hamlin, Herbias, Lujan, McKee, Monsivais, Pope, Smith, Stevens, Valladolid, Whitaker
LECTURERS: Barker, Wood

Philosophy

The philosophy of the nursing program of The University of Texas at El Paso College of Health Sciences is derived from the mission of the University. The mission of the nursing program is to prepare professional practitioners of nursing to care for the health needs of individuals, families, groups, and communities in society. Nursing has a major role in assuring that changing health needs of men and women are met.

Objectives of the Undergraduate Nursing Program

1. Provide professional nursing care to individuals, families, groups, and communities in various developmental states and from different sociocultural backgrounds.
2. Use critical thinking and apply theories, principles, and concepts in making clinical judgments about the health care needs of individuals, families, and communities.
3. Intervene to minimize or alleviate stressors: to reinforce positive adaptive behavior; to promote, maintain, and restore health; and to care for the ill, disabled, and terminally ill.
4. Collaborate with other professionals, agency personnel, and consumers in planning, implementation, and evaluation of health care.
5. Practice nursing within the framework of legal, ethical, moral, and professional standards.
6. Use research findings in the care of clients/patients.
7. Provide leadership within the nursing profession and in health affairs.
8. Develop a lifetime commitment to intellectual inquiry, self-directed learning, and professional growth.
9. Use undergraduate education as a basis for graduate study.

General Information for Nursing Students

Student Affairs

It is the responsibility of the student:

1. To become familiar with and comply with regulations of the College of Health Sciences;
2. To keep the Student Records Office and the Admissions Office informed of his or her current (1) local address, (2) telephone number, or where he or she may be reached, and (3) permanent address and phone number;
3. To be informed of general and special notices including examination schedules posted on the official bulletin board in the College;
4. To be flexible in personal scheduling to accommodate course didactic and clinical assignment changes from published days and times;
5. To make arrangements for completion of all work and to meet the requirements for removal of incomplete grades; and
6. To assure that official communications, including requests for release of information to other institutions, be submitted in writing.

Special Expenses

Uniforms, lab coat, name pin, and identification patch are required dress for clinical practicum. Another expense is ongoing assessment and testing in preparation for registered nurse licensure examination.

Background checks may be required at the student's expense to proceed into the Nursing major or to continue in the major once admitted. The School of Nursing (SON) requirements at the time of application and during participation in the major apply.

Professional Liability Insurance

All students enrolling in clinical nursing courses will be required to show evidence of current professional liability insurance coverage of at least a $1,000,000 limit each claim and $3,000,000 limit in the aggregate per year. This insurance can be purchased at registration.

Student Employment

The School of Nursing assumes no responsibility for students employed in a health care agency. A student is personally responsible and liable for any activities conducted while employed. Professional liability insurance purchased by a student is valid in the student role, but not in the employment role (check individual policy). An individual who practices nursing illegally may jeopardize his/her future as a licensed professional. A student employed in an agency has the responsibility, personally and professionally, to engage in only those activities which fall within the job description for non-professional workers and has a responsibility to refuse to participate in activities which he or she has not been legally licensed to perform.

Nursing Student Organization

All nursing students are eligible for membership in the Nursing Student Organization, which is a chapter of the Texas Nursing Students' Association and the National Student Nurses Association. The Nursing Student Organization has goals consistent with those of the National Student Nurses' Association. Its purpose is to aid in the development of the individual student as a future health professional. Nursing students are represented on campus committees and in campus activities involving the entire UTEP student body.

Sigma Theta Tau

Delta Kappa Chapter of Sigma Theta Tau was chartered at The University of Texas at El Paso in 1980. The purposes of Sigma Theta Tau are to recognize the achievement of scholarship of superior quality, to recognize the development of leadership qualities, to foster high professional standards, to encourage creative work, and to strengthen commitment on the part of individuals to the ideals and purposes of the profession of nursing. Each year, invitations to membership are extended to selected students in either the undergraduate or graduate program who are within the upper one-third of their graduating class and who have a minimum 3.00 GPA.

Financial Aid

Students enrolled in the College of Health Sciences are eligible to apply for all forms of financial assistance available to other majors. Specific information can be obtained from the Financial Aid Office.

Armed Services

The United States Armed Services view the Reserve Officers Training Corps (ROTC) as an exceptionally valuable source for officers who have an appreciation of nursing's contribution to the defense of the nation. ROTC offers programs whereby nursing students may earn a commission while they complete their nursing curriculum. Scholarships that provide for tuition, books, and supplies are available. Monthly stipends are offered to advanced students. In addition to financial assistance, ROTC offers leadership/management

courses which are valuable assets in a nursing career. A six-week summer training program provides valuable experience for students in health care facilities between the academic years. Interested students should contact the Department of Military Science or the Department of Aerospace Studies on campus.

Admission and Advising

Students seeking admission to the University as freshmen or transfers should consult the section titled Undergraduate Admission in this Catalog. Students transferring from other nursing programs must submit to the School of Nursing Director a statement from the dean or department chair of the previous program stating that the student is eligible to return to that program. Students are classified as pre-nursing majors until they are admitted into the nursing program.

Students who wish to identify as a pre-nursing major are to obtain advising from the Academic Advising Center located in the Academic Services Building. Specific advisors are available to counsel and advise students regarding the nursing program requirements. These advisors will initiate a degree plan for each student. The degree plan guides the student seeking admission to the Nursing major. The pre-nursing majors are urged to work closely with the advisors at the Academic Advising Center. The Academic Advising Center personnel prepare and forward to the School of Nursing the roster of candidates to be considered for admission to the Nursing major. The students selected for admission to the Nursing Program will subsequently be advised by the School of Nursing Academic Advisor.

Nursing Program Admission

Students interested in the Bachelor of Science in Nursing degree must have a degree plan prepared by the Academic Advising Center after completion of 30 hours of required courses. Students are considered for admission into the upper-division nursing major if they have completed 51 hours of lower-division prerequisite courses with an overall grade point average (GPA) of 2.5 or higher; a minimum GPA of 2.5 in Natural, Physical, and Behavioral Science prerequisites; and an overall University grade point average of 2.0 or higher must also be maintained. Selection into the upper-division nursing program is based upon the number of applicants, space availability, and academic performance. A “C” or better is required in the following prerequisites: English; Math; and Natural, Physical, and Behavioral Sciences. Any student who does not satisfy the “C” minimum in the appropriately designated courses will not be considered for admission to upper-division course work until this requirement is met.

All prerequisite Natural, Physical, and Behavioral Science courses must be current and completed within four (4) years prior to eligibility to apply for the Nursing Program.

Requirements for Enrollment in Clinical Nursing Courses

Certification in cardiopulmonary resuscitation (CPR) must be presented in order to enroll in each upper-division clinical nursing course. The CPR certification must be valid for the entire semester and must be at Level “C” according to the American Heart Association standards.

Evidence of current immunization and other clinical clearance requirements must be submitted to the UTEP Student Health Center for verification and processing. Students may initiate the health clearance process at the Student Health Center. It is advised that students selected for the Nursing

Program immediately contact the Student Health Center upon notification of selection. All current required clearances must be met to proceed in a clinical course. Students registered for clinical courses who do not meet the clinical requirements will be disenrolled from the course. This includes at a minimum annual PPD, City Wide Orientation, Liability Insurance, and CPR.

Academic Standards

Academic Progress

A grade of "C" or higher must be earned for each nursing course. A grade of "D" or "F" in either the theory or practicum parts of a course constitutes a grade of "D" or "F" for the course, resulting in failure of the course. If a student earns a "D" or "F" in a required upper-division nursing course, the concurrent or next higher course may not be taken until the prerequisite course is repeated and passed with a "C" or higher.

Courses with the NURS prefix may be repeated only once based on faculty recommendation and space availability. A student may repeat only two NURS prefix courses and continue in the Nursing Program. A student may withdraw only once from a maximum of two NURS courses. Faculty recommendation to NOT repeat a course or more than two NURS course failures results in the student's removal from the nursing program.

All nursing students must perform within limits of safe practice. A faculty member may drop a student from a course with an "F" if the student's nursing practice is deemed to be unsafe as defined in the Safe Practice Policy of the College. A copy of this policy is posted on the Official Bulletin Board in the College.

Rigorous study is required to succeed in the Nursing Program. Multiple hours of preparation are required beyond the classroom periods and clinical experiences. Students must be willing to accept this as a condition of succeeding in the program.

Conferences/Retention

Retention in the major is taken seriously. A retention action plan is in place in the SON. Faculty and/or students may initiate the process. A retention action plan will help determine areas of difficulty and recommendations for the student to apply to improve potential success.

Students are advised to discuss academic progress and/ or situations first with the immediate faculty member, then with the faculty member with overall responsibility for the specific course (the course manager).

Faculty are available to confer with students outside of class according to posted office hours. The Director of the School of Nursing and the Undergraduate Program Director are prepared to confer with students as needed.

Graduation Requirements

1. To be eligible for graduation, a student must have attained a minimum 2.0 GPA in both the lower-division and the upper-division course work in the baccalaureate degree plan.
2. A candidate must successfully complete the prescribed curriculum and must meet all other requirements of the University, College, and School.

Testing Program

In order to assist faculty with academic advisement of students, as well as providing a means of ongoing evaluation of the School of Nursing curriculum, nursing students are required to participate in a testing and evaluation program in addition to course examinations.

Licensure as a Professional Nurse

Graduates seeking licensure must successfully complete the State Registered Nurse Licensure Examination which is administered by the Board of Nurse Examiners for the State of Texas. The Board issues an **Authorization to Test (ATT)** letter that serves as a temporary permit to practice professional nursing as a graduate nurse (GN) under the direct supervision of a Registered Professional Nurse. The permit is valid for the 90-day time period indicated on the ATT letter or until the new graduate receives results from the first NCLEX-RN®, **whichever date is earlier**. New graduates **may not** continue to practice as GNs after failing the NCLEX-RN®, even if the date of the ATT letter validity has not expired.

All students must be aware of the Declaratory Order Petition. If the student needs to file a Declatory Order Petition based on the Board of Nurse Examiners guidelines to be licensed, this should be done very early or even prior to applying for the major. The web site to review current rules and regulations is www.bne.state.tx.us.

Bachelor of Science in Nursing

This program consists of approximately two years of lower-division courses taken at a regionally accredited college or university. NURS 2401 is offered only at UTEP and is a prerequisite for application to the nursing major. Two or more years of upper-division nursing courses taken at the School of Nursing are required. The entire program is possible to complete in eight full term semesters. Upon successful completion of the program, students are awarded the degree and are eligible to take the State Board Examination for registered nurse licensure.

Degree Requirements

Lower-Division Nursing Requirements (66 semester hours)

University Core

*	ENGL	1311	Expository English Composition
	or		
	ENGL/COMM	1611	Written and Oral Communication
	or		
	ESOL	1311	Expository English Composition for Speakers of ESL

*	ENGL	1312	Research and Critical Writing
	or		
	ENGL	1313	Writing About Literature
	or		
	ESOL	1312	Research and Critical Writing for Speakers of ESL

*	COMM	1301	Public Speaking
	or		
	COMM	1302	Business and Professional Communication

*	MATH	1320	Mathematics for Social Sciences
	or		
	Higher level Math		

*	CHEM	1407	Introductory Chemistry
	and		
	CHEM	1408	Introductory Chemistry
	or		
	CHEM	1305/1105	General Chemistry/Laboratory for Chemistry 1305
	and		
	CHEM	1306/1106	General Chemistry/Laboratory for Chemistry 1306

Humanities (select one 3 hour course)	
ENGL	2311, 2312, 2314, 2318
HIST	2301, 2302
PHIL	1301, 2306

Visual and Performing Arts (select one 3-4 hour course)	
ART	1300
ARTH	1305
ART	1306
MUSL	1221 and MUSL 1222
MUSL	1324
MUSL	1327
THEA	1313, 1390

*HIST	1301	US History to 1865
HIST	1302	US History since 1865

*POLS	2310	Introduction to Politics
POLS	2311	American Government and Politics-must include Texas Government

* PSYC	1301	Introductory Psychology

*	UNIV	1301	Seminar/Critical Inquiry
	or		
	UNIV	2350	Interdisciplinary Technology and Society

Pre-Professional Courses

*BIOL	1305, 1107	General Biology with Topics in the Study of Life lab
*BIOL	2311, 2111	Human Anatomy and Physiology I with Human Anatomy and Physiology Lab I
*BIOL	2313, 2113	Human Anatomy and Physiology II with Human Anatomy and Physiology Lab II
*MICR	2330	Microorganisms and Disease
HSCI	2302	Nutrition Education
*NURS	2401	Wellness Perspectives

***Nursing prerequisites** (51 semester hours)

Pre-nursing students are eligible to apply to the nursing major after completing 51 hours of the lower-division prerequisites with a minimum 2.5 cumulative GPA. Also, a minimum cumulative GPA of 2.5 is required in the BIOL, CHEM, MICR and MATH prerequisites. Grades of “A”, “B” or “C” must be earned in all prerequisite courses, and a minimum overall 2.0 GPA must also be maintained.

Summer enrollment is encouraged to ease course load during long semesters.

Upper-Division Nursing Major Requirements (62 semester hours)

Professional Courses

4th Semester		
NURS	3307	Pharmacodynamics and Nursing Implications
NURS	3402	Human Pathophysiology
NURS	3502	Health Assessment

5th Semester		
NURS	3303	Foundations of Nursing Practice
NURS	3314	Nursing Research and Statistics
NURS	3604	Nursing Care of the Individual

6th Semester		
NURS	3608	Family Developmental Stressors
NURS	3609	Family Situational Stressors

7th Semester		
NURS	4307	Nurse as Coordinator of Care
NURS	4308	Principles and Practices of Public Health
NURS	4810	Nurse Provider of Care in Crisis

8th Semester		
NURS	4611	Promoting Health Along the Border
NURS	4612	Senior Practicum

Total: 62 semester hours

Required Electives (6 semester hours)

NURS	3310	Nursing Care of Ill Children
NURS	3315	Independent Study
NURS	3318	Nursing Care of the Aging Client
NURS	3319	Cultural Perspectives on Health Care
NURS	3330	Contemporary Perspectives on Death and Dying
NURS	3380	Selected Topics in Nursing (Topics vary)
NURS	3605	Nursing Care of Clients Adapting to Perioperative Stressors

and

a 3 hour upper-division elective

Courses with the NURS prefix may be repeated only once based on faculty recommendation and space availability. A student may repeat only two NURS prefix courses and continue in the Nursing Program. A student may withdraw only once from a maximum of two NURS courses. Faculty recommendation to NOT repeat a course or more than two NURS course failures results in the student's removal from the nursing program.

The total semester hours required for the BSN degree: 134

Bachelor Science in Nursing for Registered Nurses (RN/ BSN Option)

The University offers degree options for registered nurses that allow completion of the Bachelor of Science and the Master of Science in Nursing degree in accelerated programs.

All Registered Nurses must submit their applications for undergraduate admission, official college transcripts, to the Admissions Office in the Academic Services Building. After the admission process has been completed, credits earned through transfer will be applied toward the requirements for the Bachelor of Science in Nursing degree. Students who are licensed registered nurses and who have acquired the body of knowledge and developed the competencies represented by certain professionally oriented courses on the degree plan receive advanced standing credit for selected nursing courses. Courses for which credit has not been allowed through one of the methods mentioned above must then be taken to earn the degree.

Information on the lower-division and upper-division courses needed to complete the Bachelor of Science in Nursing degree can be obtained from the School of Nursing . Information on the RN to Master of Science in Nursing degree can be obtained from the office of the Graduate Nursing Program Coordinator at the College of Health Sciences. Students are encouraged to earn credit by examination in those lower-division courses for which they have adequate academic preparation.

Degree Requirements (123 semester hours)

University Core

ENGL	1311	Expository English Composition
or		
ENGL/COMM	1611	Written and Oral Communication
or		
ESOL	1311	Expository English Composition for Speakers of ESL

ENGL	1312	Research and Critical Writing
or		
ENGL	1313	Writing About Literature
or		
ESOL	1312	Research and Critical Writing for Speakers of ESL

COMM	1301	Public Speaking
or		
COMM	1302	Business and Professional Communication

MATH	1320	Mathematics for Social Sciences
or		
Higher level Math		

CHEM	1407	Introductory Chemistry
and		
CHEM	1408	Introductory Chemistry
or		
CHEM	1305/1105	General Chemistry/Laboratory for Chemistry 1305
and		
CHEM	1306/1106	General Chemistry/Laboratory for Chemistry 1306

Humanities (select one 3 hour course)	
ENGL	2311, 2312, 2314, 2318
HIST	2301, 2302
PHIL	1301, 2306

Visual and Performing Arts (select one 3-4 hour course)	
ART	1300
ARTH	1305
ART	1306
MUSL	1221 and MUSL 1222
MUSL	1324
MUSL	1327
THEA	1313, 1390

HIST	1301	US History to 1865
HIST	1302	US History since 1865

POLS	2310	Introduction to Politics
POLS	2311	American Government and Politics- must include Texas Government

PSYC	1301	Introductory Psychology

UNIV	1301	Seminar/Critical Inquiry
or		
UNIV	2350	Interdisciplinary Technology and Society

Pre-Professional Courses

* BIOL	2311, 2111	Human Anatomy and Physiology I with Human Anatomy and Physiology Lab I
* BIOL	2313, 2113	Human Anatomy and Physiology II with Human Anatomy and Physiology Lab II
* MICR	2330	Microorganisms and Disease
* HSCI	2302	Nutrition Education

* NURS	3303	Foundations of Nursing Practice
* NURS	3307	Pharmacodynamics and Nursing Implications
NURS	3314	Nursing Research and Statistics
* NURS	3402	Human Adaptation to Pathophysiology
* NURS	3502	Health Assessment
* NURS	3604	Nursing Care of the Individual
* NURS	3608	Family Development Stressors
* NURS	3609	Family Situational Stressor
NURS	4300	Contemporary Professional Nursing
NURS	4401	Issues and Problems in Leadership
and		Management
NURS	4500	Community Health Nursing
NURS	4501	Multidisciplinary Health Care

Electives (12 semester hours)

The total semester hours required for the BSN degree: 123

* Advanced standing credit is awarded based upon graduation from a nationally accredited nursing program and current (active) licensure to practice as a Registered Nurse in Texas or eligibility for licensure in Texas.

Nursing (NURS)

Note: The number in parentheses following the course title indicates the average number of contact hours per week. The first digit refers to the number of hours in a didactic/class setting, the second digit refers to the number of hours in an on-campus or off campus laboratory setting, and the third digit refers to the number of hours in an off-campus clinical practicum experience. Personal travel arrangements are required to participate in clinical and laboratory experiences. These experiences are at a variety of locations in the El Paso region. When used, "SON" refers to the School of Nursing.

2401 Wellness Perspectives (3-3-0)
Focus on promoting health across the life span and on screening activities designed to identify the risk of illness and/or injury. *Prerequisites*: CHEM 1407, CHEM 1408, or CHEM 1305 and CHEM 1306, MICR 2330, ENGL 1312, BIOL 1305, BIOL 1107, BIOL 2111, BIOL 2311, BIOL 2113, BIOL 2313, and PSYC 1301, each with a grade of "C" or better. BIOL 2113 and BIOL 2313 may be taken concurrently with NURS 2401. Laboratory fee required.

3180 Selected Topics in Nursing (1-0-0)
3380 Selected Topics in Nursing (3-0-0)
Selected topics of current interest. May be repeated when topic varies. *Prerequisite*: Department approval.

3303 Foundations of Nursing Practice (2-3-0)
Focus on principles, theories, historical background, current trends and concepts related to nursing practice with special emphasis on nursing skills required in caring for clients experiencing non life-threatening medical and/or surgical conditions. *Prerequisites*: NURS 3307, NURS 3313, and NURS 3502, each with a grade of "C" or better. Laboratory and Nursing major fee required.

3307 Pharmacodynamics and Nursing Implications (3-0-0)
This course emphasizes knowledge of pharmacology that includes the pharmaceutical phase, pharmacokinetics, and pharmacodynamics. Implications for nursing related to the administration of medications is incorporated. *Prerequisite*: Department approval. NURS 3502 and NURS 3313 may be taken concurrently with NURS 3307. Nursing major fee required.

3310 Nursing Care of Ill Children (3-0-0)
This course offers further knowledge of growth and development, family theory, pathophysiology and skills used in caring for the ill child and his family. *Prerequisite*: Department approval.

3314 Nursing Research and Statistics (3-0-0)
Focus on basic concepts and process of research and statistics. *Prerequisite*: NURS 2401with a grade of "C" or better. Nursing major fee required.

3315 Independent Study (0-0-3)
Variable credit hour(s) of independent study. *Prerequisite*: Department approval.

3318 Nursing and the Aging Client (3-0-0)
This course provides an opportunity to gain increased knowledge and skill in the management of the health and nursing care of the elderly. The focus is on a holistic approach to aging processes as a basis for nursing practice. *Prerequisite*: Junior standing or department approval.

3319 Cultural Perspectives on Health Care (3-0-0)
This course builds upon concepts and issues related to culture and health. Major focus is on values and attitudes about caring, health, illness, and treatment as related to diverse cultural groups. *Prerequisite*: Junior standing.

3330 Contemporary Perspectives on Death and Dying (3-0-0)
The design of this course is to focus on personal feelings about one's own death and the death of others. The reactions and responses of dying, death, and bereavement across the age continuum in various cultures are explored. Alternative concepts of care and an interdisciplinary approach are utilized.

3402 Human Adaptation to Pathophysiology (4-0-0)
Major emphasis of this course is on the study of pathophysiological processes and their impact on the body systems, with special attention to disease or trauma-induced alteration of regulatory mechanisms within the human organism. *Prerequisites*: NURS 2401, BIOL 2113, and BIOL 2313 each with a grade of "C" or better, and department approval. Nursing major fee required.

3502 Health Assessment (3-6-0)
Focus on evaluation of the health status of individuals across the life span, including obtaining a health history and performing a physical-psycho-social assessment. *Prerequisites*: NURS 2401 with a grade of "C" or better and department approval. Nursing Major fee required.

3604 Nursing Care of the Individual (3-9-0)
Focus on the clinical application of assessment skills, pathophysiology, pharmacology, therapeutic communication, teaching/learning and clinical foundation skills associated with caring for individuals experiencing non life-threatening illness or injury. *Prerequisites*: NURS 3303, NURS 3307, NURS 3313, and NURS 3502, each with a grade of "C" or better. NURS 3303 is recommended to be taken concurrently with NURS 3604. Nursing major fee required.

3605 Nursing Care of Clients Adapting to Perioperative Stressors (3-6-0)
This course provides an opportunity to gain further knowledge and skill in the nursing care of clients who require surgical intervention. Focus is on the complete perioperative cycle of care. Clinical practicum is provided in pre-operative care and health teaching, participant/observer during the intraoperative phase, and post-operative care. *Prerequisite*: Department approval. Laboratory and Nursing major fee required.

3606 Health Promotion in Rural Environments (3-6-0)
This course explores health care problems of individuals, families, groups, and communities. Clinical practicum focuses on methods for promotion, protection, maintenance, and restoration of health in rural

settings. *Prerequisite*: Department approval. Laboratory fee required and Nursing major fee required

3608 Family Development Stressors (3-9-0)
Focus on normal stressors and commonly experienced illness, injury or mental health alterations throughout the family life cycle. *Prerequisites*: NURS 3303, and NURS 3604 each with a grade of "C" or better. NURS 3609 may be taken concurrently with NURS 3608. Nursing major fee required.

3609 Family Situational Stressors (3-9-0)
Focus on nursing care of clients experiencing situational and long-term stressors. Content will address biological, physiological and psychosocial elements. *Prerequisites*: NURS 3303, and NURS 3604, each with a grade of "C" or better. NURS 3608 may be taken concurrently with NURS 3609. Nursing major fee required.

4300 Contemporary Professional Nursing (3-0)
The focus of this course is the study of professional nursing with emphasis on the changing role of the nurse in a contemporary society and in health care delivery. The impact of health legislation, accountability, ethical decision-making, and the use of research process are studied. RN's in the RN-BSN or RN-MSN programs only. *Prerequisite*: Department approval.

4307 Nurse as a Coordinator of Care (3-0-0)
Focus on the professional nurse(s) role as coordinator of care in a complex health care environment. *Prerequisites*: NURS 3608 and NURS 3609, each with a grade of "C" or better. Nursing major fee required.

4308 Principles and Practices of Public Health (3-0-0)
Introduction to basic public health principles and practices applied to community health settings. *Prerequisites*: NURS 3608 and NURS 3609, each with a grade of "C" or better. Nursing major fee required.

4401 Issues and Problems in Leadership and Management (4-0-0)
The course focuses on analysis of health care costs, budgeting problems, quality assurance, and comprehensive nursing/health care. RN's in the RN-BSN or RN-MSN programs only. *Prerequisite*: NURS 3302.

4500 Community Health Nursing (4-1)
Focus on application of the nursing process to promote wellness and manage occurrence of health care needs of individual families and community. Includes practicum. RN's in the RN-BSN or RN-MSN programs only. *Prerequisite*: Department approval.

4501 Multidisciplinary Health Care (4-1)
Focus on primary health care with emphasis on multidisciplinary approach to individuals, families, and community problems. Planning for management of varied health problems within the community is emphasized. RN's in the RN-BSN or RN-MSN program only. Includes practicum. *Prerequisite*: Department approval.

4611 Promoting Health Along the Border (1-15-0)
Focus on community health issues along the US/Mexico border with emphasis on multidisciplinary teamwork. *Prerequisites*: NURS 4307, NURS 4308, NURS 4309, and NURS 4810, each with a grade of "C" or better. Nursing major fee required.

4612 Senior Practicum (1-15-0)
This is a culminating experience in the last semester of the B.S.N. program which provides students opportunities to apply nursing theory, knowledge and skills into practice. *Prerequisites*: NURS 4307, NURS 4308, NURS 4309, and NURS 4810, each with a grade of "C" or better. Nursing major fee required.

4810 Provider of Care in Crisis Events (4-12-0)
Focus on nursing care of individuals/families experiencing multiple system health crises. *Prerequisites*: NURS 3608 and 3609, each with a grade of "C" or better. Nursing major fee required.

See the *Undergraduate Nursing Student Handbook* for other requirements.

See the *Graduate Catalog* for graduate programs and courses.

SCHOOL OF ALLIED HEALTH

1101 N. Campbell

PROFESSORS EMERITI: John Conway, Donald Hardin, William H. Harris, James G. Mason, Grace Middleton, Joseph A. Perozzi, Gretchen Schmalz
PROFESSORS: Meeuwsen, Salvatore
CLINICAL ADJUNCT PROFESSOR: Vargas
ASSOCIATE PROFESSOR EMERITI: Gail Ackall, Ben W. Collins, Julie A. Patten
ASSOCIATE PROFESSORS: Crabtree, Dominguez, Duarte-Gardea, O'Quinn, Reynolds, B. Smith, D. Smith, Stanley, Tomaka, Weigel
ASSISTANT PROFESSORS: Ahmad, Brooks, Bybee, Carlson, Dionne, Funk, Haltiwanger, Jenkins, King, Nelson, Pederson, Protsman, Thompson
CLINICAL ASSISTANT PROFESSORS: Dillon
LECTURERS: Biswas, Gamboa, Torres
CLINICAL INSTRUCTOR: Bakarich

Clinical Laboratory Science Program

1101 N. Campbell Street, Room 717
(915) 747-8214
clsc@utep.edu

PROGRAM COORDINATOR: Delfina Dominguez
PROFESSOR EMERITA: Gail W. Ackall
ASSOCIATE PROFESSOR: Dominguez
INSTRUCTOR: Torres

Bachelor of Science in Clinical Laboratory Science

The Clinical Laboratory Science Program (CLS), formerly Medical Technology, is designed to prepare graduates to function as professional members of the health care team. Their services are utilized in hospitals, clinics, and private laboratories, as well as in business and industry. Clinical Laboratory Scientists perform a variety of immunological, biochemical, molecular, and microbiological procedures that aid in the diagnosis, treatment, and prevention of disease. Computerized databases, electronic charting, and sophisticated laboratory techniques such as DNA, PCR, and isoelectric focusing help insure the accuracy and precision of their work. The University of Texas at El Paso's Clinical Laboratory Science Program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (8410 West Bryn Mawr, Suite 670, Chicago, IL, 60631).

Students completing approximately 60 semester hours of prerequisite courses must apply for the professional phase of the program in the spring semester. Applicants must have a minimum overall GPA of 2.0 and a 2.5 GPA in math and sciences. University and clinical faculty will interview all applicants. A limited number of clinical sites are available; therefore, students will be selected to enter the professional phase of the program. Students begin the professional phase once a year in the summer session.

All lower-division course work must be completed prior to enrolling in the professional Clinical Laboratory Science courses. All students beginning the professional courses will be required prior to the clinical practicum to show evidence of professional liability insurance, current CPR certification, a recent physical examination, and current immunizations, including Hepatitis vaccinations. A grade of "C" or higher must be earned in each CLS class. If a student earns less than a "C," the student must withdraw from the program and reapply the following year.

All students must perform within limits of safe practice. Students who are deemed unsafe by faculty will be dropped and will receive an "F" in the clinical course. The Safe Practice and Procedure Policy for students is posted on the Official Bulletin Board in the College and in the Clinical Laboratory Science Program Office. All work performed by students during the clinical practicum is under the direct supervision of clinical faculty and countersigned by them.

As a professional, the student must exhibit a commitment to the welfare of patients. The faculty in the program reserve the right to refuse the opportunity of a student to perform tests or procedures on patients if the student gives evidence of unsafe and/or ineffective laboratory techniques.

Students graduating from The University of Texas at El Paso are eligible for two national certification examinations. One examination is administered by the American Society of Clinical Pathologists from Chicago, IL, and successful candidates may use the initials MT (ASCP) after their name. A second examination for which students are eligible is administered by the National Certification Agency from Washington, DC, and if passed, graduates may use CLS (Clinical Laboratory Scientist) after their name.

Degree Requirements (140 semester hours)

	Hours
Preprofessional Courses (64 hours)	
ENGL 1311 and ENGL 1312	6
COMM 1301 or COMM 1302	3
HIST 1301 and HIST 1302	6
POLS 2310 and POLS 2311	6
Visual and Performing Arts	3
Humanities	3
Social and Behavioral Science	3
Institutionally Designated Option	3
BIOL 2313 and BIOL 3320	6
CHEM 1305, CHEM 1105, CHEM 1306 CHEM 1106, CHEM 3324	11
MATH 1508	5
MICR 2440	4
CLSC 2210	2
PSYC 1303	3

Upper-Division Professional Courses (69 hours)

CLSC 3150, CLSC 3351, CLSC 3352, CLSC 3153, CLSC 3454, CLSC 3255, CLSC 3356, CLSC 3257, CLSC 3358, CLSC 3159, CLSC 3260, CLSC 3161, CLSC 3362, CLSC 3163, CLSC 3264, CLSC 3165, CLSC 3466, CLSC 3267, CLSC 3368, CLSC 3269, CLSC 4471, CLSC 4872, CLSC 4373, CLSC 4274, and CLSC 4175, CLSC 4876, CLCS 4377, CLSC 4278, CLSC 4179

Bachelor of Science in Clinical Laboratory Science Degree Plan

Preprofessional Courses

Freshman I - Fall Semester			**Hours**
CHEM	1305	General Chemistry[1]	3
CHEM	1105	Laboratory for CHEM 1305[1]	1
ENGL	1311	Expository English Composition[1, 2]	3
UNIV	1301 or 2350	Institutional Designated Option [1]	3
HIST	1301	History of US to 1865[1]	3
MATH	1508	Precalculus[1]	5
			18

Freshman II - Spring Semester			
CHEM	1306	General Chemistry II [1]	3
CHEM	1106	Laboratory for CHEM 1306[1]	1
ENGL	1312	Research and Critical Writing[1]	3
		Core – 3 hours from Social/Behavioral Science[1]	3

COMM	1301	Public Speaking[1, 2] or	
COMM	1302	Business and Professional Communication[1]	3
HIST	1302	History of US since 1865[1]	3
			16

Freshman III - Summer Semester

BIOL	2313	Human Anatomy and Physiology II [3]	3
		Core - 3 hours from Humanities[1]	3
			6

Sophomore I - Fall Semester

CHEM	3324[3]	Organic Chemistry I	3
MICR	2440	General Microbiology[3] (with lab)	4
POLS	2310	Introduction to Politics[1]	3
		Core- 3 hours Visual and Performing Arts [1]	3
			13

Sophomore II - Spring Semester

PSYC	1303	Statistical Methods[1]	3
POLS	2311	American Government and Politics[1]	3
BIOL	3320	Genetics[3]	3
CLSC	2210	Introduction to the Clinical Laboratory	2
			11

[1] A grade of "C" or better is required for these courses.
[2] COMM/ENGL 1611 may be used to satisfy both the ENGL 1311 and COMM 1301 requirements.
[3] Prerequisites are required for these courses.
Required Prerequisites: BIOL 1305, BIOL 1107, BIOL 1306, BIOL 1108, BIOL 2113, CHEM 3124.

Core for Visual and Performing Arts (select 3 semester hours)

ART	1300
ARTH	1305, 1306
MUSL	1221, 1222, 1324, 1327
THEA	1313, 2390

Core for Social and Behavioral Science (select 3 semester hours)

ANTH	1301, 1302
ECON	1301
GEOG/ANTH	1310
PSYC	1301
SOCI	1301
LING/MATH/ENGL	2320

Core for Humanities (select 3 semester hours)

ENGL	2311, 2312, 2313, 2314, 2318
HIST	2301, 2302
PHIL	1301, 2306

Total Preprofessional Courses : 74 semester hours

Professional Courses

Upper Division – First Year

Summer Semester			**Hours**
CLSC	3150	Medical Terminology	1
CLSC	3351	Clinical Immunology	3
CLSC	3352	Body Fluid	3
CLSC	3153	Body Fluids Lab	1
			8

Junior I – Fall Semester			
CLSC	3454	Clinical Chemistry I	4
CLSC	3255	Clinical Chemistry I Lab	2
CLSC	3356	Hematology I.	3
CLSC	3257	Hematology I Lab	2
CLSC	3358	Clinical Microbiology I	3
CLSC	3159	Clinical Microbiology I Lab	1
CLSC	3260	Serology	2
CLSC	3161	Serology Lab	1
			18

Junior II – Spring Semester			
CLSC	3362	Clinical Chemistry II	3
CLSC	3163	Clinical Chemistry II Lab	1
CLSC	3264	Hematology II	2
CLSC	3165	Hematology II Lab	1
CLSC	3466	Clinical Microbiology II	4
CLSC	3267	Clinical Microbiology II Lab	2
CLSC	3368	Immunohematology	3
CLSC	3269	Immunohematology Lab	2
			18

Upper Division – Second Year

Summer Semester			
CLSC	4471	Preceptorship I	4
			4

Senior I - Fall Semester			
CLSC	4872	Preceptorship II	8
CLSC	4373	Clinical Lab Management and Supervision	3
CLSC	4274	Clinical Investigation	2
CLSC	4175	Clinical Laboratory Science Seminar	1
			14

Senior II - Spring Semester			
CLSC	4876	Preceptorship III	8
CLSC	4377	Clinical Education and Research	3
CLSC	4278	Professional Development	2
CLSC	4179	Clinical Laboratory Science Seminar II	1
			14

Preprofessional hours: 74 semester hours

Professional hours: 76 semester hours

Total Hours for CLS degree: 150 semester hours

Includes preprofessional and professional course work; ENGL 1310, and MATH 0311 or MATH 1409 are not counted toward degree requirements.

Clinical Laboratory Science (CLSC)

General Prerequisite: Admission to the upper-division.

2210 Introduction to the Clinical Laboratory (2-0)
Information on the careers available in the clinical laboratory will be presented and tours of hospital, reference, and specialized clinical laboratories will be arranged.

3150 Medical Terminology (1-0)
This course is designed for students to gain a working knowledge of medical terminology, symbols, abbreviations, roots prefixes and suffixes. This course may be taken by any interested students in associated majors or programs or health related fields.

3153 Body Fluids Lab (0-2)
This laboratory provides the basic laboratory skills necessary for performing body fluids analyses. Several fundamental laboratory methods are performed by the students using common body fluids principles. These laboratory assays provide the basis for most body fluids assays which will be demonstrated in the clinical hospital laboratory rotations. *Corequisite*: CLSC 3352.

3159 Clinical Microbiology I Lab (0-2)
This laboratory is designed to introduce the fundamental concepts and vocabulary of diagnostic mycology/parasitology. Laboratory exercises will be performed to learn basic methodology in the isolation and identification of fungi and most common parasites found in clinical specimens. *Corequisite*: CLSC 3358. *Prerequisite*: MICR 2440 with a grade of "C" or better.

3161 Serology Lab ((0-2)
Serological techniques commonly used in the clinical laboratory will be encompassed with emphasis on direct application to the clinical laboratory. Serological testing and interpretation for disease such as syphilis, mononucleosis, streptococcal infections and others. *Corequisite*: CLSC 3260. *Prerequisite*: CLSC 3351 with a grade of "C" or better.

3163 Clinical Chemistry II Lab (0-2)
This laboratory provides the basic skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry analyses which will be demonstrated in the clinical hospital laboratory rotations. *Corequisite*: CLSC 3362. *Prerequisites*: CHEM 1305-1105, CHEM 1306-1106, CHEM 3324, and CLSC 3454-3255 each with a grade of "C" or better.

3165 Hematology II Lab (0-2)
A continuation of CLSC 3257 (Hematology I Lab) with emphasis on peripheral blood and bone marrow differentiation. Microscopic identification of white blood cell disorders including acute and chronic leukemias. Special hematology stains, hemoglobin electrophoresis and molecular diagnostics. *Corequisite*: CLSC 3264. *Prerequisites*: CLSC 3356 and CLSC 3257 each with a grade of "C" or better.

3255 Clinical Chemistry I Lab (0-4)
This laboratory provides the basic laboratory skills necessary for performing clinical chemistry laboratory analyses. Several fundamental laboratory methods are performed by the students using common clinical chemistry principles. These laboratory assays provide the basis for most clinical chemistry assays which will be demonstrated in the clinical hospital laboratory rotations. *Corequisite*: CLSC 3454. *Prerequisites*: CHEM 1305-1105, CHEM 1306-1106 and CHEM 3324 each with a grade of "C" or better.

3257 Hematology I Lab (0-4)
This course is designed to develop the skills and techniques necessary to recognize and identify normal and abnormal components of the hematopoietic system. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3356.

3260 Serology (2-0)
This course emphasizes the detection of disease by the use of serological techniques. Restricted to Clinical Laboratory Science majors.

3264 Hematology II (2-0)
This course emphasizes white cell formation and function. The etiology and treatment of white blood cell disorders is discussed. This course will also encompass hemostasis and laboratory determination of hemostatic disorders. Restricted to Clinical Laboratory Science majors. *Prerequisites:* CLSC 3356, CLSC 3257.

3267 Clinical Microbiology II Lab (0-2)
This laboratory course develops the basic skills and techniques necessary in the identification of a variety of human pathogens found in the clinical laboratory. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3466.

3269 Immunohematology Lab (0-2)
This laboratory course is designed to develop and refine skills in performing antigen and antibody identification techniques, compatibility testing, and blood component preparation. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3368.

3351 Clinical Immunology (3-0)
This course covers basic immunology and its clinical applications. Interactions between various lymphoid cells and their secretions are examined. The role of the immune system in tumor growth, transplantation and rejection, and autoimmune diseases is examined. Various test methods and procedures used in the clinical lab are demonstrated and discussed. Restricted to Clinical Laboratory Science majors. *Prerequisite*: MICR 2440.

3352 Body Fluids (3-0)
This course will cover the chemical, serological, and coagulation procedures performed on body fluids. Restricted to Clinical Laboratory Science majors.

3356 Hematology I (3-0)
This course is designed to provide a basic understanding of the fundamental mechanisms involved in blood cell formation and

function and the etiology and treatment of blood disorders. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3211. *Prerequisite*: BIOL 2313.

3358 Clinical Microbiology I (2-2)
This course will cover the concentration, isolation, and identification of infectious mycological and parasitological specimens. Restricted to Clinical Laboratory Science majors. *Prerequisite*: MICR 2440.

3362 Clinical Chemistry II (4-0)
A continuation of CLSC 3413 with an emphasis on therapeutic and abused drug monitoring, pharmacokinetics, toxicology, hormones, and methods. Restricted to Clinical Laboratory Science majors. *Prerequisites*: CLSC 3454.

3368 Immunohematology (3-0)
The immuno-chemical reactivity of blood antigens and antibodies, blood grouping, compatibility testing, and hemolytic disease of the newborn are presented. HLA testing and component therapy are explored. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3269. *Prerequisites*: CLSC 3351 and CLSC 3260.

3454 Clinical Chemistry (4-0)
Basic concepts of quality control, laboratory mathematics, colorimetry and spectrophotometry, fluorometry and radioimmunoassay are discussed. Chemical laboratory fundamentals and procedures are presented and related to normal and abnormal human physiology and biochemistry. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 3255. *Prerequisites*: CHEM 3324.

3466 Clinical Microbiology II (4-0)
This course covers the pathogenesis and epidemiology of pathogenic organisms found in the hospital laboratory: bacteria and viruses. The diagnosis of infectious diseases by various cultivation isolation and identification techniques is discussed. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 4106. *Prerequisites*: CLSC 3358 and department approval.

4175 Clinical Laboratory Science Seminar I (1-0)
Focuses on pathological findings and the role of the clinical laboratory in disease prevention, detection, and treatment. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 4872.

4179 Clinical Laboratory Science Seminar II (1-0)
Focuses in the role of the clinical laboratory in disease prevention, detection and treatment, as well as other areas related to laboratory medicine.

4190 Special Problems (0-0-1)
4290 Special Problems (0-0-2)
4390 Special Problems (0-0-3)
Independent study in clinical laboratory research. Limit six credits. *Prerequisites*: Admission to the Clinical Laboratory Science program and instructor approval.

4274 Clinical Investigation (2-0)
Correlation of disease states and changes in laboratory values—a case study approach. Restricted to Clinical Laboratory Science majors. *Prerequisite*: Department approval.

4278 Professional Development (2-0)
Students will present current case studies and develop a research proposal. Restricted to Clinical Laboratory Science majors. *Prerequisite*: Department approval.

4343 Clinical Laboratory Management and Supervision (3-0)
This course will cover scheduling, workload recording, cost accounting, and instrument and method evaluation. Restricted to Clinical Laboratory Science majors.

4373 Clinical Laboratory Management and Supervision (3-0)
This course will cover scheduling, workload recording, cost accounting, and instrument and method evaluation. Restricted to Clinical Laboratory Science majors.

4377 Clinical Education and Research (3-0)
Course will cover basic teaching techniques, development of continuing education programs, and proposal writing. Restricted to Clinical Laboratory Science majors. *Prerequisite*: Department approval.

4471 Preceptorship I (0-0-21)
Techniques and their applications in routine analysis, clinical microbiology, hematology, and coagulation in the clinical laboratory setting. Restricted to Clinical Laboratory Science majors. *Corequisite*: CLSC 4145. *Prerequisite*: CLSC 3368 with a grade of "C" or better.

4872 Preceptorship II (0-0-21)
Procedures in clinical chemistry, immunohematology, and serological applications in the clinical laboratory. Includes practicum. Restricted to Clinical Laboratory Science majors. *Prerequisites*: CLSC 4471 and department approval.

4876 Preceptorship III (0-0-32)
The preceptorship courses (I, II, and III) are designed to encompass rotations in seven different clinical sites. Procedures in clinical chemistry, immunohematology, microbiology, serology, coagulation and hematology. Includes practicum. Restricted to Clinical Laboratory Science majors. The (0-0-32) represent the contact hours per week. Prerequisites: CLSC 4471 and CLSC 4872 each with a grade of "C" or better.

Health Sciences

1101 N. Campbell, Room 717
(915) 747-8214
hsci@utep.edu

PROGRAM COORDINATOR: Joe Tomaka
PROFESSOR EMERITUS: John Conway
ASSOCIATE PROFESSORS: Duarte-Gardea, Smith, Tomaka, Weigel
ASSISTANT PROFESSOR: Thompson

Bachelor of Science in Health Science

The Health Science Degree prepares graduates to function as health professionals in health education and health promotion settings such as community health agencies, public health agencies, private business, and public schools. Students complete a common core of courses in Health Science and then select a minor in Community Health, Education, or other approved areas. The curriculum is designed to provide a broad general educational base as well as the basic skills, experiences, and professional competencies specific to the practice of health education/health promotion. Other professional responsibilities include acting as a resource person in health education and communicating the health and health education needs, concerns, and resources of a community. Graduates of this 131-semester hour program function in planning, implementing, evaluating, and coordinating health education programs and activities in a variety of settings. The curriculum prepares graduates to successfully complete the National Exam for the Certified Health Education Specialist (CHES) credential. The Health Science Program received national approval by SABPAC.

Certified Allied Health professionals see the Health Science Program Coordinator for a degree plan. These students may receive transfer credit for up to 62 semester hours earned in the student's associate degree program toward this degree. Professional foundation courses may account for up to 24 semester hours of this total transfer.

B.S. in Health Science Degree Plan (131 semester hours)

General Foundations (62 semester hours)

ENGL	1311 or ESOL 1311, ENGL 1312 or ESOL 1312, and ENGL 3359
HIST	1301 and HIST 1302
POLS	2310 and POLS 2311
MATH	1320 or higher
PSYC	1303
BIOL	1305, BIOL 1107, BIOL 2311, BIOL 2111, BIOL 2313, BIOL 2113
CHEM	1407 and CHEM 1408 or CHEM 1305/CHEM 1105, and
CHEM	1306/CHEM 1106
COMM	1301 or COMM 1302

Humanities (3 credit hours selected from Core Curriculum Menu)
Visual and Performing Arts (3 credit hours selected from Menu)
Social/Behavioral Sciences (3 credit hours selected from Menu)
Institutionally Designated Option (3 credit hours selected from Menu)

Electives (15 semester hours)

12 hours must be upper division.

Health Science Core (36 semester hours)

Required HSCI courses: (24 semester hours)
1301, 2302, 3301, 3303, (3304 or 3307), 3305, 4303, 4306

Designated Electives: (12 semester hours)

Students completing a Community Health minor must select HSCI 3302, 3311, and courses not designated for this minor.

HSCI 2303, 2309, 3302, 3306, 3307, 3308, 3309, 3310, 3311, 3315, 3320, 4304, 4307, 4308, 4311.

Minor Field (18 semester hours, nine of which must be upper division)

Approved minor fields: Any university minor with approval by the Health ScienceProgram Coordinator.

Suggested minors include:

Community Health Minor
HSCI 3315, 4304, 4307, 4311, 4600

Education Minor
Students selecting health education for secondary school teaching must confirm general education and professional education requirements with the Coordinator of the Health Science Program and the Certification Office in the College of Education. Students completing an Education minor must select HSCI 4301.

* Certified Allied Health professionals see the Health Science Program Coordinator for a degree plan. These students may receive transfer credit for up to 62 semester hours earned in the student's associate degree program toward this degree. Professional foundation courses may account for up to 24 semester hours of this total transfer credit.

Health Science Minor (not available to students majoring in Health Sciences): 18 hours. HSCI 1301, HSCI 2302, HSCI 3301, plus 9 additional HSCI semester hours (6 must be upper division).

Health Sciences (HSCI)

1301 Foundations of Health Science and Health Promotion (3-0) (PHED 1304)
Provides information essential to understanding factors that affect human health: health determinants, health indices, health behavior change theories, ethical issues and societal trends. Investigates professional practice settings, health professions, roles and functions of health professionals and professional health organizations. Visits to community health work sites may be required.

2302 Fundamentals of Nutrition (3-0) (BIOL 1322)
Includes a study of the nutrients and their sources, their metabolic functions and effects on well-being and health problems; also the components of adequate diets and local, national, and world nutritional problems. *Prerequisite*: BIOL 1305.

2303 Wellness Dynamics (3-0)
(♦ PHED 1305; TECA 1318)
Study of the concept of wellness and its components; self-assessment of current health status and application of scientific health and fitness principles for the improvement and maintenance of health throughout the life span. Includes exposure to a variety of lifetime physical activities. Course fee required.

2309 First Aid and Safety Practices (3-0)
(♦ PHED 1306)
Current practices in first aid, reaction to life threatening situations, treatment of typical minor injuries in recreational activities, safety practices, and risk management to reduce accidents. Equipment Maintenance fee required.

3120 Selected Topics in Health Science (1-0)
3220 Selected Topics in Health Science (2-0)
3320 Selected Topics in Health Science (3-0)
Topics not included in or going beyond the regular offerings. *Prerequisite*: Department approval.

3301 Community Health (3-0)
Study of international, national, state, and local health problems and the governmental and voluntary health agencies which deal with these problems. Incidence and prevalence of specific community health problems and diseases; solutions suggested through coordinated efforts of school, health, and welfare organizations. *Prerequisite*: HSCI 1301.

3302 Computerized Systems for Health Professionals (2-2)
Focuses upon skills and knowledge required of a professional in health sciences. Application of computers to gather, organize, and distribute health resources; apply computer assisted communication techniques and computer applications in data collection, analysis, and reporting in the health sciences.

3303 Current Health Issues and Problems (3-0)
Current scientific findings regarding contemporary health problems and current trends associated with the promotion of health. May include the study of factors related to mental-emotional health; stress; stress management; suicide; development of self-esteem; consumer health and health services; and international health and border health concerns. *Prerequisite*: HSCI 1301.

3304 Health Perspectives in Aging (3-0)
Examination of the lifelong aging process (physical and emotional) and health factors affecting the elderly. Course content includes theories of aging, health maintenance, and alternatives to institutionalization.

3305 Substance Abuse (3-0)
Pharmacological, psychological, and sociological effects of drug abuse on the individual and society. Emphasizes individuals' responsibility in regard to peer pressure, self-esteem, decision-making, and communication. Field trips may be required.

3306 Environmental Health (3-0)
Examination of the environment and its relationships to disease causation. Discussions on the physical, chemical, biological, and behavioral-sociological factors of man's environment. Emphasizes the principles and concepts of environmental health and environmental health hazards. Field trips may be required.

3307 Death, Dying, and Bereavement (3-0)
Concepts, attitudes, ethics and lifestyle management related to dying, death, grief, and bereavement. The course provides in-depth knowledge of the medical, financial, physical, legal, and social implications of death and dying as related to health promotion and wellness.

3308 Disease Characteristics, Prevention, and Control (3-0)
Study of the nature, prevention, treatment, and control of common communicable and non-communicable human diseases; examination of cultural, social, behavioral, biological, and environmental factors involved in promoting health and preventing disease. *Prerequisite*: BIOL 2313.

3309 Health Psychophysiology (3-0)
Examines relations between psychological processes and physiological outcomes as they relate to physical health. Emphasizes understanding how psychological factors relate to people staying healthy, becoming ill, and how people respond once they do become ill. Class topics include the biological bases of stress, theories of stress and emotion, good and bad stress, and coping with stress and disease.

3311 Introduction to Epidemiology (3-0)
Provides the health care professional with an understanding of the disease process from an epidemiologic and community health point of view. Basic concepts of the science of epidemiology presented with emphasis placed upon preventive health behavior. *Prerequisites*: HSCI 3308 and an undergraduate statistics course.

3315 Research for the Health Professional (3-0)
Introduction to basic research concepts and processes which enable health professionals to use and participate in health science research. Includes associated legal, ethical, and moral issues. *Prerequisite*: Undergraduate statistics course.

4201 Health Education for Elementary School Teachers (2-0)
This course focuses on the identification and study of current health concerns, principles and practice of teaching health; selection and implementation of effective instructional strategies; investigation of the coordinated school health program; curriculum development; and evaluation of instruction and the school health program. *Corequisite*: KIN 4201. *Prerequisites*: Junior status and department approval. HSCI 4201 must be taken concurrently with KIN 4201.

4301 Teaching Health in Secondary School (3-0)
Overview of both traditional and innovative teaching methods, materials, and resources in middle and secondary schools. Responsibilities of schools for curriculum development and

instruction; adolescent health problems and their relationship to instruction. Practice of effective teaching techniques. Field experience required. *Prerequisites*: HSCI 4306 plus 15 semester hours from Health Science core; passing scores on TASP. Course fee required.

4303 Family Life and Human Sexuality (3-0)
The study of sexuality as an aspect of health; examination of society's beliefs and attitudes; the responsibility for sexual behavior as it relates to family values.

4304 Public Health Administration (3-0)
Study of organizational skills and basic principles, theories, and practices of administering health programs in voluntary and governmental agencies. Leadership, motivation, small group process, problem solving, conflict resolution, interorganizational relationship, and organizational change. May include field trips. *Prerequisites*: HSCI 1301 and HSCI 3301.

4306 Health Concerns of Pre-adolescents and Adolescents (3-0)
Addresses major health problems, health risks, transitions, and lifestyle choices of pre-adolescents and adolescents. *Prerequisite*: Sophomore standing.

4307 Planning and Evaluation in Health Science (3-0)
Introduction to the principles and practices used in planning and evaluating health programs. Emphasizes theory and technical skills needed to plan and evaluate health education and health promotion programs. *Prerequisites*: Health Science GPA of 2.7 or better, HSCI 3301, HSCI 3315, HSCI 4311, plus 12 hours of the Health Science core.

4308 Independent Study in Health (0-0-3)
Independent study of a designated health problem or health education issue or trend. *Prerequisites*: 12 semester hours from Health Science core and written consent of Health Science Program Coordinator. *Prerequisite*: Department approval.

4311 Community Health Education (3-0)
Emphasizes contemporary theories, methods, materials used in Wellness intervention, health promotion, and health education programs in the community. Field experience required. *Prerequisites*: Health Science GPA of 2.7 or better, HSCI 3301, plus 15 hours from the Health Science core. Course fee required.

4600 Practicum in Community Health (0-0-21)
Individually arranged practicum planned with official and voluntary community health agencies providing a minimum of 320 hours experience in health education and administration plus 15 hours of seminars. Supervised by University faculty and personnel from the official and/or voluntary health agencies. *Prerequisites*: HSCI 2302, HSCI 3303, HSCI 3305, HSCI 4307, and HSCI 4311, plus 12 additional hours of Health Science courses, Health Science GPA of 2.7 or better, and program coordinator's approval.

See the *Graduate Catalog* for graduate programs and courses.

Kinesiology

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PROGRAM DIRECTOR: Harry Meeuwsen
PROFESSOR: Meeuwsen
ASSOCIATE PROFESSORS: O'Quinn, Smith
ASSISTANT PROFESSORS: Brooks, King, Pederson
LECTURERS: Dorgo, Gamboa

Bachelor of Science in Kinesiology

The Bachelor of Science in Kinesiology requires (1) a General Education Core of 42 + 2 hours, (2) 11 hours of prerequisites (3) 39 hours of Kinesiology courses, (4) an 18-hour minor, and (5) 9 hours of upper-division electives. Students wishing to obtain a teaching certificate must select the Physical Education Concentration and the Education Minor. Students interested in a career in the fitness industry or in graduate study in exercise science, physical therapy, or similar fields should select the Exercise Science Concentration.

Students who already have a bachelor's degree in some other field and who wish to pursue a teaching certificate to teach physical education should refer to the College of Education section of this catalog. Students desiring to pursue a Master of Science in Kinesiology should consult the *Graduate Catalog*.

Those students pursuing a Bachelor of Interdisciplinary Studies degree who wish to specialize in Kinesiology are referred to the College of Education section of this catalog for specific requirements.

1. General Requirements
   a. University Core Requirements (42 + 2 semester hours)
      (1) Communication (9 semester hours)
         (a) English Composition (6 semester hours)
            i. For students whose secondary education was in English
               ENGL 1311
               ENGL 1312 or ENGL 1313
            ii. For students whose secondary education was not in English
               ESOL 1311
               ESOL 1312
         (b) Speech (3 semester hours)
            COMM 1301 or COMM 1302
      (2) Mathematics (3 semester hours)
         MATH 1320 **or**
         MATH 1508
      (3) Natural Sciences (8 semester hours)
         BIOL 1305, 1107
         BIOL 1306, 1108
      (4) Humanities (3 semester hours)
         (Selected from menu in the University Core Curriculum)

(5) Visual and Performing Arts (3 semester hours)
(Selected from menu in the University Core Curriculum)
(6) United States History (6 semester hours)
HIST 1301
HIST 1302
(7) Political Science (6 semester hours)
POLS 2310
POLS 2311
(8) Social and Behavioral Sciences (3 semester hours)
(Selected from menu in the University Core Curriculum)
(9) Institutionally Designated Option (3 semester hours)
(Selected from menu in the University Core Curriculum)

b. Kinesiology Program Prerequisites (11 semester hours)
BIOL 2311, 2111
BIOL 2313, 2113
HSCI 2302

2. Kinesiology - Major Core Requirements (24 semester hours)

KIN	1303	Foundations of Kinesiology
KIN	2332	Motor Learning and Control
KIN	3313	Statistics and Measurement in Kinesiology
KIN	3331	Anatomical Kinesiology
KIN	4312	Exercise Physiology
KIN	4313	Biomechanics
KIN	4314	Special Populations
KIN	4330	Fitness Programs

a. Additional courses required for the Physical Education Teaching Education Program Concentration Plan) (16 semester hours)

	KIN	3202	Developmental Gymnastics
	KIN	3204	Dance
Either	KIN	4309 **or**	Sports Activity Injuries
	HSCI	2309	First Aid and Safety
	KIN	4319	Teaching Elementary School Physical Education
	KIN	4320	Adventure Curricula in Physical Education
	KIN	4321	Teaching Secondary School Physical Education

Plus a total of 4 additional courses taken from Groups A and B with at least 1 from each group (8 semester hours total).

Group A

KIN	3201	Racquet Sports
KIN	3203	Track and Field
KIN	3207	Aquatics
KIN	4222	Outdoor Education and Survival Skills

Group B

KIN	3205	Basketball
KIN	3206	Football
KIN	3209	Soccer
KIN	3210	Baseball/Softball
KIN	3211	Volleyball

b. Additional courses required for the Exercise Science Concentration (15 semester hours)

KIN	4323	Current Issues in Exercise Science
KIN	4334	Coronary Intervention Programs
KIN	4340	Scientific Principles of Strength and Conditioning

Plus 6 hours selected from among the following courses:

KIN	4301	Personal Training
KIN	4309 **or**	Sports Activity Injuries
HSCI	2309	First Aid and Safety Practices
KIN	4350 **or**	Internship
KIN	4351	Internship in Strength and Conditioning

Or any courses from Groups A and B in the Physical Education Concentration.

Students interested in NSCA Personal Trainer and/or Strength and Conditioning Specialist certification should take KIN 4301 and KIN 4351.

c. Pre-Physical Therapy degree plan. Students seeking to pursue a graduate degree in Physical Therapy are required to follow a separate degree plan designed to fulfill the prerequisites for admission to the graduate program in Physical Therapy at UTEP. Prerequisites for programs at other Universities may differ. This degree plan requires the completion of (1) a General Education Core of 42 + 4 hours, (2) 20 hours of Kinesiology and Physical Therapy prerequisites (3) 36 hours of Kinesiology courses, (4) and 23 hours in Biology that lead to a minor in Biology. For specific prerequisites to admission into the Physical Therapy program at UTEP see the UTEP Graduate Catalog.

Additional courses required for the Exercise Science Concentration, Pre-PT;

CHEM	1305-1105	General Chemistry and lab
CHEM	1306/1106	General Chemistry and lab
PHYS	1403	General Physics I
PHYS	1404	General Physics II
ENGL	3359	Technical Writing
PSYC	1303	Statistical Methods
PSYC	2310	Life Cycle Development
BIOL	4388	Mammalian Physiology
ZOOL	4181	Vertebrate Physiology Methods
ZOOL	4380	Vertebrate Physiology
MATH	1508	Precalculus in place of MATH 1320

d. Athletic Training Education Program (ATEP). Contact the Kinesiology Program for details.

3. Minor (18 semester hours)
Students may select an approved minor in another field with consultation from a Kinesiology faculty advisor.

The Education Minor, required for students seeking teaching certification, consists of the following courses:

Block I: EDPC 3300, SCED 3311, SCED 4691
and
Block II: SCED 3317, RED 3342, SCED 4691
* SCED 4691 in Block I results in a “Progress” grade, after Block II students will receive a standard grade and 6 hours of credit.

The Business minor, recommended for students interested in employment in the private fitness and exercise industry, consists of the following courses:

CIS 2300 and 15 hours from the following:
BLAW 3301, MKT 3300, MGMT 3303, FIN 3310, CIS 3345, ECON 3320, ACCT 2301 or ACCT 3309, and ECON 2304 (which fulfills the Social and Behavioral Sciences requirement)

The Kinesiology Minor (not available to students majoring in Kinesiology) consists of the following courses and totals 18 semester hours:

KIN 1303 and at least 9 hours selected from among the following courses:
KIN 3313, KIN 3331, KIN 4309, KIN 4312, KIN 4313, KIN 4314, KIN 4330, KIN 4315, with additional courses selected from among the following courses:
KIN 3232, KIN 3201, KIN 3202, KIN 3203, KIN 3204, KIN 3205, KIN 3206, KIN 3207, KIN 3209, KIN 3210, KIN 3211, KIN 4319, KIN 4321.

4. Electives (9 semester hours)

Degree plans other than the Physical Education Teaching Concentration or Pre-Physical Therapy require that students complete 9 hours of upper-division electives as a part of the degree program.

Kinesiology (KIN)

1303 Foundations of Kinesiology (3-0)
(PHED 1301)
Historical and philosophical aspects of kinesiology and sports. Orientation to programs in public and private settings.
Prerequisite: Department approval.

2332 Motor Learning and Control (3-0)
A study of principles that govern the control and the learning of movements. Topics include control of coordinated movement, stages of learning, augmented feedback, practice conditions, and individual differences. PSYC 2310 recommended. *Prerequisite:* Department approval.

2342 Spanish Dance (2-2)
Provides information on the origins, traditions, music, and choreographic styles relating to the dances of Spain and Spanish America.

3201 Racquet Sports - Analysis and Development (1-2)
Analysis and evaluation of stroke techniques and strategies. Topics include equipment, facilities, drills, rules, and risk management. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. Fee required.

3202 Developmental Gymnastics - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3202. Fee required.

3203 Track and Field - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3203. Fee required.

3204 Dance - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3204. Fee required.

3205 Basketball - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3205. Fee required.

3206 Football - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3206. Course fee required.

3207 Aquatics - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3207. Course fee required.

3209 Soccer - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3209. Course fee required.

3210 Baseball and Softball - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3210. Course fee required.

3211 Volleyball - Analysis and Development (1-2)
Analysis, review, and development of skills in theory and practice. Restricted to majors: IDST and KIN. *Prerequisite*: KIN 2332 and department approval. KIN 2332 may be taken concurrently with KIN 3211. Course fee required.

3313 Statistics and Measurement in Kinesiology (3-0)
Measurement and evaluation of physical attributes and performance. *Prerequisites*: MATH 1320, MATH 1409, or MATH 1508; a computer application course; and department approval.

3318 Growth, Maturation, Health, Motor Behavior, and Movement Experiences in Early Childhood (3-0)
Physical growth, maturation, and motor development occurring in early childhood; principles of and activities for motor skill development; components of health related fitness for life; health needs of young children. *Prerequisite:* Department approval. Fee required.

3331 Anatomical Kinesiology (3-0)
A study of the science of human movement with special consideration given to anatomical and neuromuscular contributions. *Prerequisites*: BIOL 2311 and department approval.

4201 PE for Elementary School Teachers (2-2)
Principles and practice of teaching physical education in elementary school: Personal skill development, promoting a physically active

lifestyle, managing the classroom, motivating diverse student populations, learning and teaching styles, performance assessment, and legal issues. Practical lab experiences included. Fee required. This course is not available for Kinesiology majors.

4222 Outdoor Education and Survival Skills (2-0)
Development of proficiency in basic outdoor education and survival skills, with emphasis on safety and appreciation of the natural environment. Arranged field trips are required. *Prerequisite:* Department approval. Fee required.

4301 Personal Training (2-2)
Experience in the application of exercise technique and prescription in the development of fitness and strength training programs for a variety of populations. *Prerequisites*: KIN 3331 with a grade of "C" or better ; senior standing and department approval.

4309 Sports Activity Injuries, Training, and Emergency Care (3-0)
Recognition and prevention of injuries in sports activities as well as emergency care procedures/provisions for common physical education and playground injuries. *Prerequisite*: Senior standing or department approval. Fee required.

4310 Selected Topics in Kinesiology (0-0-3)
Study of selected topics not included in the regular curricular offerings in kinesiology. *Prerequisite*: Department approval.

4312 Exercise Physiology (2-2)
Study of the physiological adaptations the body makes to exercise stress, the principles of strength development, and muscular and cardiorespiratory endurance development. *Prerequisites*: BIOL 2311-BIOL 2111, BIOL 2313-BIOL 2113, and department approval. Fee required.

4313 Biomechanics (2-2)
The study of biomechanics of human movement with concepts for coaching, rehabilitation, injury prevention, and the enhancement of human performance. *Prerequisites*: MATH 1320 (or equivalent), KIN 3331, and department approval. Fees required.

4314 Special Populations: Characteristics and Motor Behavior (3-0)
Development of an understanding of persons with disabilities and programs of sports and physical activity adapted to their needs. The nature of physical, mental, emotional, and social disabilities will be discussed with application of corrective, developmental, and remedial physical activities in various social settings. Practical laboratory experiences will be provided. *Prerequisite:* KIN 2332 with a grade of "C" or better and department approval.

4319 Teaching Elementary School Physical Education (3-0)
Curriculum planning, materials selection and evaluation, Texas Essential Knowledge and Skills (TEKS), class management, and teaching-learning process for elementary physical education teachers. Field experience required. *Prerequisites:* KIN 2332 and department approval. Course fee required.

4320 Adventure Curricula in Physical Education (2-2)
Enhance the understanding of the principles of experiential education through hands-on experiences with challenge course and adventure activities. Focused on integrating these activities in secondary school curricula. Course is designed to help the beginning teachers implement individual leadership and teamwork challenges for their students. Additional training is required for low challenge courses facilitator certification. Credit:Three hours. *Corequisite*: KIN 4321. Prerequisites: KIN 2332 with a grade of "C" or better and department approval.

4321 Teaching Secondary School Physical Education (3-0)
Curriculum planning, materials selection and evaluation, Texas Essential Knowledge and Skills (TEKS), class management, and teaching-learning process for secondary physical education teachers. Field experience required. *Prerequisites:* KIN 2332 and department approval. Course fee required.

4323 Current Issues in Exercise Science (3-0)
Analysis of current issues related to the exercise science. *Prerequisites:* KIN 4312 and KIN 4313 each with a grade of "C" or better and department approval. Course fee required.

4330 Fitness Programs and Appraisal (2-3)
Programs to enhance physical fitness, methods of fitness assessment, and individualized exercise prescription methods are covered. *Prerequisites*: KIN 4312 and department approval. KIN 4312 may be taken concurrently with KIN 4330. Fee required.

4334 Coronary Intervention Programs (3-0)
The anatomy and physiology of the cardiovascular system, cardiovascular disease, electrophysiology, exercise tolerance testing, ECG interpretation, risk factor analysis, prevention programs, and cardiac rehabilitation programs will be discussed. *Prerequisite*: KIN 4312 or instructor approval. Course fee required.

4340 Scientific Principles of Strength Training and Conditioning (3-0)
Analysis of the conceptual, theoretical, and technical considerations of assessing, designing, and implementing strength training and conditioning programs. Includes analysis and application of contemporary periodization concepts. *Prerequisites*: KIN 4312 with a grade of "C" or better and department approval.

4350 Internship (0-15)
Supervised, participatory experience in a commercial sport or exercise-related setting. Minimum of 15 hours per week for a total of 225 hours. *Prerequisites:* Senior standing and department approval.

4351 Internship in Strength Training and Conditioning (0-0-15)
Supervised, participatory experience in strength training and conditioning. Minimum of 15 hours per week with a National Strength and Conditioning Association Certified Strength and Conditioning Specialist for a total of 225 hours. *Prerequisites*: KIN 4340 with a minimum grade of "C" and department approval.

4390 Independent Study (0-0-3)
Individual directed study in an area of special interest. *Prerequisites*: Senior standing and department approval.

Physical Education Activity Courses (PE)

It should be noted that physical education activity courses often involve strenuous physical activity and/or participation in activities with inherent risk of personal injury. Students are advised to review their physical condition, and consult with a physician if appropriate, before enrolling in these courses. The University is not responsible for illness or injury resulting from participation in these courses.

The following activity courses, all of which are co-educational, are offered by the Professional and Continuing Education (PACE) located in Miner's Hall, Suite 108. Website: pace.utep.edu. These courses may be repeated for credit and are open to all students. Equipment and lockers are provided. There is a fee charged for participation in these courses. This fee is used for the provision and maintenance of equipment used.

1101 Activity Course (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Various topics TBA. Physical Education Course fee required.

1104 Aerobic Dance (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1105 Slide Aerobics (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1106 Water Aerobics (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1116 Basketball (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1120 Walking (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1122 Conditioning (0-3)
(♞ DANC 1115)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1125 Cheerleading (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1128 Beginning Fencing (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1129 Intermediate Fencing (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Beginning Fencing strongly recommended prior to enrollment in this course. Physical Education Course fee required.

1151 Beginning Karate (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1152 Intermediate Karate (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Beginning Karate strongly recommended prior to enrollment in this course. Physical Education Course fee required.

1154 Kick Boxing (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1155 Marksmanship-Rifle and Pistol (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1164 Beginning Racquetball (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1166 Advanced Racquetball (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1170 Self Defense (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1173 Soccer (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1178 Beginning Swimming (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1180 Advanced Swimming (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1182 Beginning Tennis (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1184 Advanced Tennis (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1186 Touch Football (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1188 Volleyball (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1191 Water Polo (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

1194 Beginning Weight Training (0-3)
Activity course. Co-educational. May be repeated for credit. Open to all students. Physical Education Course fee required.

See the *Graduate Catalog* for graduate programs and courses.

Occupational Therapy

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(915) 747-7270
ot@utep.edu

INTERIM PROGRAM COORDINATOR: Karen Funk
PROFESSOR EMERITA: Gretchen Schmalz
ASSOCIATE PROFESSOR: Crabtree
ASSISTANT PROFESSORS: Ahmad, Funk, Hadlock, Haltiwanger

Bachelor of Science in Occupational Therapy

Occupational therapy is a dynamic profession and an integral part of modern comprehensive health care. Men and women, as registered, certified occupational therapists, provide direction for an individual's participation in activities that are related to work and leisure for the purposes of promoting and maintaining health; preventing disability; evaluating and treating physical, social, and emotional disabilities; and regaining, retaining, and attaining maximum human function. Occupational therapists analyze, select, and direct evaluation and treatment, choosing from a wide variety of activities that are creative, manual, educational, related to the care of oneself, recreational, and vocationally oriented. Occupational therapy services are provided in a variety of settings, ranging from medical facilities to community health agencies, schools, and private practice.

The professional course of study in occupational therapy is fully accredited by:
Accreditation Council for Occupational Therapy Education
P.O. Box 31220
Bethesda, MD 30824-1220
(301) 652-2682

The program at The University of Texas at El Paso leads to a Bachelor of Science in Occupational Therapy, and the course of study is twenty-eight months in length. A minimum of 64 semester credit hours in prerequisites is required prior to enrollment as an Occupational Therapy major. The professional course of study is 28 months in length.

Post-baccalaureate Program

Beginning January 2007, the Accreditation Council for Occupational Therapy Education will only accredit post-baccalaureate programs. Consequently, the UTEP Occupational Therapy program will not admit students into the baccalaureate degree program after 2004. The program is in the process of transitioning to a post-baccalaureate program. Any student who is in the baccalaureate program when the transition occurs will be eligible to take make-up courses and graduate with a post-baccalaureate degree. For more information, contact the program faculty at (915) 747-7270 or ot@utep.edu.

Bachelor of Science in Occupational Therapy Degree Program

Course Work

ENGL 1311 or 1611, 1312
HIST 1301, 1302
POLS 2310, 2311
BIOL 1305 -1107
BIOL 1306 -1108
BIOL 2311 - 2111
PSYC 1301, 2310, and three additional hours in PSYC
SOCI 1301
COMM 1301 or 1302
MATH 1320 or 1508
PSYC 1303 or MATH 2380
Visual and Performing Arts (3 semester hours from University Core Curriculum Menu)
Humanities (3 semester hours from University Core Curriculum Menu)
Institutionally Designated Option (3 hours from University Core CurriculumMenu)
Total preprofessional course work is 64 semester credit hours.

Prior to enrollment in upper-division courses, a person is considered to be pre-occupational therapy. To be eligible for consideration for an occupational therapy major, a student needs to have an overall cumulative GPA of 2.7, plus a (biology). A GPA of 2.5, and a behavioral science (psychology, sociology) GPA of 2.5 in the prerequisite course work listed above. Prior to application to the major, the student must have completed a minimum of 6 credit hours of science prerequisites and 6 credit hours of the behavioral science prerequisites. As a rule, prerequisite course work must be completed prior to enrolling in the upper-division courses for the fall semester in which the student is admitted to the major. Exceptions must have departmental approval. A new class is admitted each fall.

Upon enrollment in the professional phase of the program, **a grade of "C" or higher must be earned in each Occupational Therapy course**. If a student earns less than a "C" in any Occupational Therapy course, the next higher course may not be taken until the prerequisite course is repeated and passed with a "C" or better. An Occupational Therapy course may be repeated only once. A student who receives a total of three course grades of less than a "C" while enrolled in the major is no longer able to continue in the Occupational Therapy Program.

The Occupational Therapy Program accepts applications throughout the year. Selection into the Occupational Therapy Professional Program is based upon the number of applicants, space availability, academic performance, and a pre-admission test battery.

At the time of enrollment in the professional phase of the program, the student will submit the results of a recent physical examination, current TB test results, a record of current immunizations (including Hepatitis B vaccinations), and documentation of immunity to chicken pox. All students are required to maintain current CPR certification Level C, according to the American Heart Association Standards. Evidence of this certification is required at the beginning of the first fall semester. Students are expected to be proficient in computer word processing. All Occupational Therapy majors will be required to show evidence of professional liability insurance.

In addition to traditional lecture and laboratory course work, the student is provided with opportunities to integrate theory and practice through clinical placement. Initial placements, known as Preceptorships, are in conjunction

with academic course work. Units of field studies are provided in approved locations in Texas and surrounding states. Relocation to facilities out of the El Paso area, at the student's own expense, is required for most units of field studies.

Upon completion of all curriculum requirements, the designated degree of Bachelor of Science in Occupational Therapy is conferred. Graduates of the program will be able to sit for the national Certification Examination for the Occupational Therapist, Registered that is administered by the National Board for Certification in Occupational Therapy (NBCOT). Successful completion of the NBCOT examination leads to certification by the NBCOT and allows the graduate to use the letters "OTR" (Occupational Therapy, Registered). Application for the certification examination includes some questions that relate to felony convictions.

For further information on potential limitation related to felony conviction, students should contact NBCOT at:

National Board for Certification in Occupational Therapy
800 S. Frederic Ave. Suite 200
Gaithersburg, MD 20877-4150
(301) 990-7979

Conviction of a felony offense may result in ineligibility for state licensure. Each case is considered on an individual basis by the state licensing agency. Successful completion of the program does not, in and of itself, guarantee that a license will be granted.

Many states, including Texas, require a license to practice occupational therapy. Graduates are eligible to take the examination approved by the Texas Board of Occupational Therapy Examiners. Upon successful completion of the examination, candidates become eligible for a license to practice occupational therapy in Texas. Most states with licensure, including Texas, accept the examination administered by the NBCOT.

All occupational therapy students must perform within limits of safe practice. A faculty member may drop a student from a course with a grade of "F" if the student's occupational therapy practice is deemed unsafe as defined in the *Safe and Effective Practice Policy* for students, which is posted on the Official Bulletin Board in the College.

Upper-Division Occupational Therapy Courses

Courses must be taken in the following sequence and in the semester indicated.

Junior Year			**Hours**
Fall			
OT	3410	Functional and Applied Anatomy	4
OT	3311	Human Adaptation to Pathophysiology	3
OT	3321	Basic Concepts in Occupational Therapy	3
OT	3103	Occupational Therapy Practice Skills	1
OT	3301	Therapeutic Media I	3
OT	3114	Medical Terminology	1
			Total 15

Spring

OT	3313	Studies in Human Neurosciences	3
OT	3312	Clinical Psychiatry	3
OT	3222	Biomechanical Approach in Occupational Therapy	2
OT	3122	Biomechanical Approach in Occupational Therapy Lab	1
OT	3202	Therapeutic Media II	2
OT	3223	Evaluations in Occupational Therapy	2
OT	3123	Evaluations in Occupational Therapy Lab	1
OT	3135	Preceptorship A	1
			Total 15

Summer

OT	4204	Therapeutic Media III	2
OT	4315	Legal/Ethical Issues in Health Care	3
OT	4136	Preceptorship B	1
OT		Elective*	(3)
			Total 6 (9)

Senior Year **Hours**

Fall

OT	4228	Rehabilitative Approach in Occupational Therapy	2
OT	4227	Work and Human Occupations	2
OT	4127	Work and Human Occupations Lab	1
OT	4316	Management Skills in Occupational Therapy	3
OT	4225	Developmental Approaches in OT	2
OT	4125	Developmental Approaches in OT Lab	1
HSCI	3315	Research for Health Professionals	3
OT		Elective*	(3)
			Total 14 (17)

Spring

OT	4224	Psychosocial Approaches in Occupationa l herapy	2
OT	4124	Psychosocial Approaches in Occupational Therapy Lab	1
OT	4229	Neurodevelopmental Approaches in Occupational Therapy	2
OT	4129	Neurodevelopmental Approaches in Occupational Therapy Lab	1
OT	4205	Upper Extremity Orthotics and Prosthetics	2
OT	4326	Advanced Professional Concepts in Occupational Therapy	3
OT	4137	Preceptorship	1
OT		Elective*	(3)
			Total 12 (15)

Summer

OT	4338	Field Studies in OT: Elective*	3
OT	4640	& OT 4641; OT 4642 & OT 4643; or OT 4644 & OT 4645 Field Studies in Occupational Therapy	12
		Total	12 (15)

Fall

OT	4640	& OT 4641; OT 4642 & OT 4643; or OT 4644 & OT 4645 Field Studies in Occupational Therapy	12
		Total	12

TOTAL PROFESSIONAL COURSE WORK CREDIT HOURS 89

* 3 hours of required elective credits - suggested possible semesters

Occupational Therapy (OT)

3103 Occupational Therapy Practice Skills (0-2)
Introduction to basic level application of occupational therapy practice skills including: beginning skills in basic physical assessments, life support, and infection control; patient/therapist interaction and verbal/non-verbal communication; physical management techniques relevant to occupational therapy practice; utilization of library resources; computer usage; and basic documentation of the treatment process. *Prerequisite*: OT 3321 with a grade of "C" or better. OT 3321 may be taken concurrently with OT 3103.

3114 Medical Terminology (0-0-1)
A self-paced course designed for the occupational therapy student to gain a working knowledge of medical terminology, symbols, abbreviations, roots, prefixes, and suffixes. *Prerequisite*: Department approval.

3122 Biomechanical Approach in Occupational Lab (0-2)
Techniques in the application of mechanical principles to evaluation and treatment of individuals with problems of strength, range of motion, endurance, and tissue integrity. *Prerequisite*: OT 3222 with a grade of "C" or better. OT 3222 may be taken concurrently with OT 3122.

3123 Evaluations in Occupational Therapy Lab (0-2)
A laboratory learning experience on conducting evaluations in general areas of occupational therapy practice. Laboratory fee required. *Prerequisite*: OT 3223 with a grade of "C" or better. OT 3223 may be taken concurrently with OT 3123.

3135 Preceptorship A (0-0-1)
Seminar and clinical experience that integrates applications of theoretical knowledge to specific areas of practice and patient populations. *Prerequisites*: OT 3222 and OT 3122, each with a grade of "C" or better. OT 3222 and OT 3122 may be taken concurrently with OT 3135.

3202 Therapeutic Media II (1-3)
Use of therapeutic activities which integrate biomechanical and psychosocial concepts to treatment, along with activity analysis and application to a variety of patient populations. Laboratory fee required. *Prerequisites*: OT 3222, OT 3301, and OT 3312, each with a grade of "C" or better. OT 3222 and OT 3312 may be taken concurrently with OT 3202.

3222 Biomechanical Approach in Occupational Therapy (2-0)
Focuses on the biomechanical frame of reference with application of mechanical principles to human function for evaluating and treating people with problems of strength, range of motion, endurance, and tissue integrity. *Prerequisites*: OT 3103, OT 3122, OT 3321, and OT 3410, each with a grade of "C" or better. OT 3122 may be taken concurrently with OT 3222.

3223 Evaluations in Occupational Therapy (2-0)
Focuses on the evaluation step of the occupational therapy process within a variety of frames of reference, patient populations, and practice areas. *Prerequisites*: OT 3321 and OT 3123, each with a grade of "C" or better. OT 3123 may be taken concurrently with OT 3223.

3301 Therapeutic Media I (2-3)
Focuses on basic activity analysis to understand the performance components required for participation in activities. Includes teaching skills and an exploration of the implication of leisure and time management to wellness. *Prerequisites*: Admission to the program; OT 3103 and OT 3321, each with a grade of "C" or better; and department approval. OT 3103 and OT 3321 may be taken concurrently with OT 3301.

3311 Human Adaptation to Pathophysiology (3-0)
The study of pathophysiological processes and their impact on the body systems, with special attention to disease or trauma-induced alterations of regulatory mechanisms in the human organism. Links the foundational body of knowledge of normal human structure and functions to disruptions that affect occupational performance and performance components. *Prerequisite*: Department approval.

3312 Clinical Psychiatry (3-0)
Emphasizes the psychiatric function and dysfunction involved in work, play, activities of daily living, and temporal adaption. *Prerequisite*: OT 3311 with a grade of "C" or better.

3313 Studies in Human Neurosciences (3-0)
Advanced study in human neurosciences with emphasis on the structures and the functions of the nervous system as applied to occupational performance and performance components. *Prerequisite*: OT 3410 with a grade of "C" or better.

3321 Basic Concepts in Occupational Therapy (3-0)
Overview of occupational therapy practice; introduction to the theories, frame of reference, and tools of occupational therapy practice. *Prerequisite*: Department approval.

3410 Functional and Applied Anatomy (3-3)
A study of the structure and function of the skeletal, muscular, and peripheral nervous systems of the human body involved in locomotion

and in the exploration and manipulation of one's environment. Laboratory includes dissection of cadavers. *Prerequisite*: Department approval.

4124 Psychosocial Approaches in Occupational Therapy Lab (0-2)
Lab for practice of technical competencies in the application of psychosocial approaches to therapy. *Prerequisite*: OT 4224 with a grade of "C" or better. OT 4224 may be taken concurrently with OT 4124.

4125 Developmental Approaches in Occupational Therapy Lab (0-2)
Lab using the techniques of the developmental treatment approaches for application of the occupational therapy process to the pediatric population. *Prerequisite:* OT 4225 with a grade of "C" or better. OT 4225 may be taken concurrently with OT 4125.

4127 Work and Human Occupations Lab (0-2)
Laboratory experience for the evaluation of work readiness and physical capacity for work as well as treatment skills related to Work Programs. *Prerequisite*: OT 4227 with a grade of "C" or better. OT 4227 may be taken concurrently with OT 4127.

4129 Neurodevelopmental Approaches in Occupational Therapy Lab (0-2)
Lab using the techniques of the neurodevelopmental treatment approaches for application of the occupational therapy process to adults with neurological disorders. *Prerequisites:* OT 4125, OT 4225, and OT 4229, each with a grade of "C" or better. OT 4229 may be taken concurrently with OT 4129.

4136 Preceptorship B (0-0-1)
This is a continuation of Preceptorship A with special emphasis on the treatment management planning process. *Prerequisites*: OT 3122, OT 3222, and OT 3135, each with a grade of "C" or better. Taken last summer semester prior to beginning Field Studies (OT 4640, 4641, 4642, 4643, 4633, 4645.)

4137 Preceptorship C (0-0-1)
This is a continuation of Preceptorships A and B with a special emphasis on the evaluation process. *Prerequisites*: OT 4136, OT 3223, and OT 3123, each with a grade of "C" or better. OT 3223 and OT 3123 may be taken concurrently with OT 4137. Taken last spring semester prior to beginning Field Studies (OT 4640, 4641, 4642, 4643, 4633, 4645.)

4204 Therapeutic Media III (1-2)
Incorporates higher levels of activity and task analysis with instructions in occupational therapy modalities with emphasis on grading and adapting activities for prevocational and vocational deficits. *Prerequisite*: OT 3202 with a grade of "C" or better.

4205 Upper Extremity Orthotics and Prosthetics (1-2)
Integration of foundational and theoretical knowledge with technical competencies in fabrication, modification, and application of orthotics and prosthetics in occupational therapy practice. *Prerequisite*: OT 3222 with a grade of "C" or better.

4224 Psychosocial Approaches in Occupational Therapy (2-0)
Higher level integrative tasks in the application of psychosocial approaches to occupational therapy treatment planning and intervention. *Prerequisites*: OT 3123, OT 3223, OT 3312, and OT 4124, each with a grade of "C" or better. OT 4124 may be taken concurrently with OT 4224.

4225 Developmental Approaches in Occupational Therapy (2-0)
Integration of basic foundational knowledge, theoretical constructs, and developmental approaches to occupational therapy treatment planning and intervention with the pediatric population. *Prerequisites*: OT 3223, OT 3123, OT 3311, OT 3313, and OT 4125, each with a grade of "C" or better. OT 3223, OT 3123, OT 3311, and OT 4125 may be taken concurrently with OT 4225.

4227 Work and Human Occupation (2-0)
Focuses on human occupation and other frames of reference as it relates to the scope of work-related programs. *Prerequisites*: OT 3123, OT 3223, OT 4127, and OT 4204, each with a grade of "C" or better. OT 3123, OT 3223, OT 4127, and OT 4204 may be taken concurrently with OT 4227.

4228 Rehabilitative Approach in Occupational Therapy (1-2)
This course focuses on higher level integrative tasks to apply the rehabilitation frame of reference to occupational therapy treatment planning and intervention. *Prerequisites*: OT 3122 and OT 3222, each with a grade of "C" or better.

4229 Neurodevelopmental Approaches in Occupational Therapy (2-0)
Integration of foundational neuroscience knowledge, theoretical constructs, and neurodevelopmental approaches to occupational therapy treatment planning and intervention for the adult with neurologically based physical dysfunction. *Prerequisites:* OT 4125, OT 4129, and OT 4225 each with a grade of "C" or better. OT 4129 may be taken concurrently with OT 4229.

4350 Selected Topics in Occupational Therapy (3-0)
Selected topics of current interest. May be repeated when topic varies.

4252 Independent Investigative Studies in Occupational Therapy (0-0-2)
Two credit hours of self-directed study planned to meet the learning objectives of the student in a special area of interest. May be repeated once for credit. *Prerequisite*: Minimum cumulative GPA of 3.20 in major courses.

4315 Legal/Ethical Issues in Health Care (3-0)
A study of legal and ethical principles as they apply to the provision of health care and an in-depth look at how this applies to the allied health professional's roles and responsibilities. *Prerequisite*: Department approval.

4316 Management Skills in Occupational Therapy (3-0)
Application of management principles within the occupational therapy setting. *Prerequisite*: OT 4136 with a grade of "C" or better.

4326 Advanced Professional Concepts in Occupational Therapy (3-0)
Application of clinical reasoning and social systems concepts to a variety of cases integrating foundational knowledge and theoretical

constructs. *Prerequisites*: OT 3311, OT 3312, OT 4225, and OT 4228, each with a grade of "C" or better, and department approval. OT 4225 may be taken concurrently with OT 4326.

4338 Field Studies in Occupational Therapy: Elective (0-0-20)
Elective six week full-time clinical experience designed to provide the student with additional learning experience in applying technical competencies and theoretical constructs acquired during the academic portion of the program to the occupational therapy process in an area of practice selected by the student. These experiences must be under the supervision of a registered occupational therapist (OTR). *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

4352 Independent Investigative Studies in Occupational Therapy (0-0-3)
Three credit hours of self-directed study planned to meet the learning objectives of the student in a special area of interest. *Prerequisites*: Minimum cumulative GPA of 3.2 in major courses and department approval.

4640 Field Studies in Occupational Therapy: Developmental Health (0-0-20)
Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of developmental health. These experiences must be under the supervision of a registered occupational therapist (OTR). This course is graded on a credit/no credit basis. Course related fee required. *Corequisite*: OT 4641. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

4641 Field Studies in Occupational Therapy: Developmental Health (0-0-20)
Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of developmental health. These experiences must be under the supervision of a registered occupational therapist (OTR). This course is graded on a credit/no credit basis. *Corequisite*: OT 4640. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

4642 Field Studies in Occupational Therapy: Mental Health (0-0-20)
Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of mental health. These experiences must be under the supervision of a registered occupational therapist (OTR). This course is graded on a credit/no credit basis. Course related fee required. *Corequisite*: OT 4643. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

4643 Field Studies in Occupational Therapy: Mental Health (0-0-20)
Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of mental health. These experiences must be under the supervision of a

registered occupational therapist (OTR). This course is graded on a credit/no credit basis. *Corequisite*: OT 4642. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

4644 Field Studies in Occupational Therapy: Physical Health (0-0-20) Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of physical health. These experiences must be under the supervision of a registered occupational therapist (OTR). This course is graded on a credit/no credit basis. *Corequisite*: OT 4645. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval. Course related fee required.

4645 Field Studies in Occupational Therapy: Physical Health (0-0-20) Full-time clinical experience in which the student applies technical competencies and theoretical constructs to the occupational therapy process with patients who have problems in the area of physical health. These experiences must be under the supervision of a registered occupational therapist (OTR). This course is graded on a credit/no credit basis. *Corequisite*: OT 4644. *Prerequisites*: All required occupational therapy academic work and preceptorships, and department approval.

Physical Therapy

1101 N. Campbell, Room 500
(915) 747-8207
pt@utep.edu

PROGRAM COORDINATOR: Rhonda K. Stanley
ASSOCIATE PROFESSOR: Stanley
ASSISTANT PROFESSORS: Bybee, Carlson, Dionne, Protsman
CLINICAL ASSISTANT PROFESSOR: Dillon
LECTURER: Bakarich

Physical Therapy is a health profession whose primary purpose is the promotion of optimal physical function. Physical therapists apply scientific principles to prevent and treat acute and chronic movement disorders. Physical therapy encompasses areas of specialization and includes the development of new approaches to more effectively meet existing and emerging health care needs.

The Physical Therapy Program offers a Masters Degree in Physical Therapy. **While acceptance into the Masters Degree Program does not require completion of an undergraduate degree, the competitive nature of the admissions process makes it imperative that interested undergraduates follow a traditional undergraduate major (e.g., Biological Sciences, Health Sciences, Kinesiology, Chemistry) as they complete the program prerequisites and electives. In addition, undergraduates should be aware of the University Core Curriculum and its requirements as they plan a course of study that may lead to consideration for admission to the Masters Degree in Physical Therapy. Candidates with a Bachelor's degree will be given preference.**

Acceptance into the program requires the completion of ninety prerequisite and elective undergraduate credit hours (see below) and selection after a competitive admissions process (see below). Twenty-four students are selected each year and begin their studies in the Fall. Successful completion of the academic and clinical components of the Masters Degree makes the graduate eligible to take the Texas (and other State) licensure examination in Physical Therapy. Successful completion of that examination allows the graduate to practice Physical Therapy.

The program with its academic and clinical components is two and one-half calendar years in length (eight consecutive semesters). The semesters are sequential and require full-time attendance. Included in the program are a total of thirty (30) weeks of full-time clinical internships and a research project.

Admission Requirements

Before admission to the Physical Therapy Program, students must meet all admission requirements as stated below**.**

Undergraduate Courses

At least 72 undergraduate hours must be completed prior to the formal application process and a minimum of 90 semester hours of undergraduate study must be completed prior to starting the program. When planning a course of study that may lead to consideration for the program, students must take courses that apply to the University Core Curriculum, meet requirements for a regular academic major, and satisfy specific program prerequisites. No more than 66 credit hours can be applied to the degree program from a community or junior college. All science (biology, chemistry, physics) and math courses must have been completed in the last 10 years.

Prerequisite Courses

Forty-nine semester hours are required prerequisite courses. These courses must meet specified conditions[1] and include:

		Hours
English (9 credit hours)		
ENGL	1311 (ENGL 1301)*	3
ENGL	1312 (ENGL 1302)*	3
ENGL	3359	3
Chemistry (8 credit hours)		
CHEM	1305/1105 (CHEM 1311/1111)*	4
CHEM	1306/1106 (CHEM 1312/1112)*	4
Biology (8 credit hours)		
BIOL	1305/1107 (BIOL 1306/1106)*	4
and either:		
BIOL	1306/1108* **or**	4
BIOL	3414 **or**	
ZOOL	2406	
Physiology (4 credit hours)		
Upper-division physiology with laboratory (human, animal, or vertebrate physiology)		
ZOOL	4380/4181 **or**	4
BIOL	4388/ZOOL 4181	

Note: BIOL 2313/2113 Human Anatomy and Physiology (BIOL 2302/2102) does **not** meet requirements as upper division.

Psychology (6 credit hours)

PSYC	1301 (PSYC 2301)*	3
PSYC	2310 (PSYC 2312)	3

Physics (8 credit hours)

PHYS	1403 (PHYS 1401)*	4
PHYS	1404 (PHYS 1402)*	4

both courses must include labs

Communication (3 credit hours)

COMM	1301* **or**	3
COMM	1302 * prefer psychology or education based	

Statistics (3 credit hours)

PSYC 1303 (PSYC 2317) 3
should include analysis of variance (ANOVA)

[1] All prerequisites must be completed prior to beginning the professional course of study in the Fall. All prerequisites must be completed with a grade of "C" or better.
* Course meets University Core Curriculum requirement.

Elective Courses

Forty-one semester hours are elective. However, some of these hours must be used to complete the University Core Curriculum. Students are urged to choose courses that complete an academic major, fulfill University Core Curriculum requirements, and promote a well-rounded education.

University Core Curriculum

Physical Therapy Program prerequisite courses do not meet all the University Core Curriculum requirements. Courses must be selected to complete University Core Curriculum requirements in U.S. History (HIST 1301 and HIST 1302), Political Science (POLS 2310 and POLS 2311), Visual and Performing Arts (three credits), Humanities (three credits), and the Institutionally Designated Option (three credits).

Additional Requirements for Admission

1. Completion of the University Core Curriculum prior to beginning the Masters Degree Program in Physical Therapy
   a. UTEP undergraduates without a degree must complete UTEP Core Curriculum requirements.
   b. Undergraduates without a degree from other Texas universities must document that they have completed the University Core Curriculum requirements at their home university.
   c. Students with a baccalaureate degree and undergraduates from non-Texas universities are exempt from the University Core Curriculum requirement.
2. A minimum overall GPA of 3.0 (on a four-point scale).
3. A minimum GPA of 3.0 (on a four-point scale) in math/science (biology, chemistry, physics).
4. 50 clock hours of documented volunteer or paid work experience in a physical therapy setting (must be completed prior to application).
5. Three letters of recommendation-one of which must be from a physical therapist who supervised the work or volunteer experience.
6. Graduate Record Examination (GRE) scores.

7. International students (when English is not the official or first language) must have a minimum score of 213/550 on TOEFL.
8. Completed application for the Graduate School.
9. Official transcripts of all colleges or community colleges attended.
10. Graduate application processing fee ($15 US for permanent residents, $65 International applicants).
11. Completion of an official interview of all eligible candidates.

Selection Criteria

Completion of the above requirements makes a student eligible for selection but does NOT guarantee admission to the Physical Therapy Program. The final selection is competitive and based on academic course work and the other requirements.

Admissions Process

1. Obtain an *Application for Graduate Admission* from the UTEP Graduate School.
2. Complete at least 72 hours of required prerequisite work as an undergraduate student with a cumulative GPA of at least 3.0 and a math/science GPA of at least 3.0.
3. Submit an *Application for Graduate Admission* with the required fee and a written plan for prerequisite course completion.
4. Complete and submit, documentation of, a minimum of 50 clock hours of voluntary or paid experience in a physical therapy setting supervised by a licensed physical therapist.
5. Arrange to take the *Graduate Record Examination* (GRE) and have the official scores sent to the UTEP Graduate School. International applicants must arrange for the TOEFL score to be sent to the Graduate School.
6. Submit official transcripts of all course work and three confidential reference forms.
7. If prerequisites are not completed when application is submitted, subsequent transcripts must be submitted as soon as they are available.
8. Interviews for qualified applicants will occur on the UTEP campus when applications are complete.
9. Letters of admission will be sent from the UTEP Graduate School as students are selected and until the class is filled.

All applications, supporting documentation, transcripts, and test scores should be sent to:

Graduate School
200 Administration Building
The University of Texas at El Paso
El Paso, Texas 79968
(915) 747-5491
gradschool@utep.edu

Inquires may be made to:

Physical Therapy Program
UTEP College of Health Sciences
1101 N. Campbell
El Paso, TX 79902-0581
(915) 747-8207
pt@utep.edu

See the *Graduate Catalog* for more detailed information about the Physical Therapy Program.

Speech-Language Pathology

1101 N. Campbell, Room 107
(915) 747-7250
scphlang@utep.edu

PROGRAM COORDINATOR: Anthony P. Salvatore
PROFESSORS EMERITI: Grace Middleton, Joseph Perozzi
PROFESSOR: Salvatore
ASSOCIATE PROFESSOR: Reynolds
ASSISTANT PROFESSORS: Jenkins, Nelson
LECTURER: Biswas
CLINIC COORDINATOR: Valles

Speech-Language Pathology Program

The Program in Speech-Language Pathology offers an innovative five-year plan, which culminates with the Master of Science Degree. Students who complete the plan fulfill academic course work and clinical practicum requirements for the Texas License, as well as the Certificate of Clinical Competence in Speech-Language Pathology. The plan includes 97 semester hours of undergraduate course work and 37 required semester hours, in addition to registering for five semesters of clinical practicum (15 semester hours), all of which may be completed in five years. Undergraduate students selecting this program will be designated as pre-Speech-Language Pathology majors. Since the plan of study culminates with the Master of Science Degree, undergraduates should be aware of the following:

1. A GPA of 3.0 in upper-division preparatory SPLP undergraduate courses and GRE scores on the Verbal, Quantitative and Written are required for acceptance into the Graduate School. A GPA higher than 3.0 may offset low GRE scores, high GRE scores may offset a GPA lower than 3.0. A description of the Master of Science program is in the *Graduate Catalog*. Admission is competitive. The number of students admitted each semester is dependent on available program resources.
2. Undergraduate students must take the GRE and apply to the Graduate School prior to the completion of the prescribed 97 undergraduate hours.
3. Students whose grades in SPLP courses do not appear to demonstrate the potential for success in Graduate School should discuss the advisability of continuing in the Speech-Language Pathology Program with their advisor prior to beginning the third year.

Academic Core Courses (44 semester hours)

ENGL 1311, 1312
HIST 1301, 1302
POLS 2310, 2311
COMM 1301or 1302
MATH 1320
BIOL 1305, 1107, 1306, 1108
Visual and Performing Arts (3 credit hours from Core Menu)
Humanities (3 credit hours from Core Menu)
Social Behavioral Science (3 credit hours from Core Menu - recommend PSYC 1301)
UNIV 1301 or UNIV 2350

Total preprofessional course work is 44 semester credit hours.

Other Undergraduate Non-Major Course Requirements (16 semester hours)

PSYC	1303, 2310
LING	2320, 3357
BIOL	2311, 2111

Pre-Professional Core Courses (34 semester hours)

SPLP	1312	Survey of Speech, Hearing and Language Disorders
SPLP	2111	General Phonetics Laboratory
SPLP	2313	General Phonetics
SPLP	2320	Hearing Science
SPLP	3310	Language Development
SPLP	3312	Anatomy and Physiology of the Speech Mechanism
SPLP	3313	Disorders of Articulation and Phonology
SPLP	3314	Language Disorders in Pre-School Children
SPLP	3318	Principles of Clinical Management
SPLP	4309	Audiology
SPLP	4312	Neural Bases of Speech and Language
SPLP	4310	Aural Rehabilitation

One course selected from: (3 semester hours)

SPLP	1300	Introduction to Sign Language
SPLP	4320	Independent Study in Speech-Language Pathology and Audiology
SPLP	4340	Clinical Practicum in Audiology

TOTAL UNDERGRADUATE: 97 semester hours

Total Undergraduate Hours

Total course work is 97 semester credit hours. (B.S. is not offered; at the conclusion of required courses, students apply for acceptance in the Speech- Language Pathology Master's program.)

Speech-Language Pathology (SPLP)

1300 Introduction to Sign Language (3-0)
A beginning course in sign language, including finger spelling and the system of signed English.

1312 Survey of Speech, Hearing and Language Disorders (3-0)
A survey of disorders associated with the five parameters of communication: audition, articulation, voice, fluency, and language. Course includes discussion of the professional aspects of speech-language pathology and audiology.

2111 General Phonetics Laboratory (0-2)
Experience using the International Phonetic Alphabet for transcription of standard and nonstandard speakers. *Prerequisite*: SPLP 2313 with a grade of "C" or better. SPLP 2313 may be taken concurrently with SPLP 2111.

2313 General Phonetics (3-0)
Principles of speech sound production, their acoustic correlates, and their perception. Instruction in the use of the International Phonetic Alphabet is included with application to communication disorders. *Prerequisite*: SPLP 2111 with a grade of "C" or better. SPLP 2111 may be taken concurrently with SPLP 2313.

2320 Hearing Science (3-0)
Anatomy and physiology of the auditory mechanism and the nature, measurement, and psychoacoustics of sound.

3310 Language Development (3-0)
Theory and chronology of speech and language acquisition with emphasis on the cognitive and physiological correlates of language as related to communication disorders. Cultural impacts on language development and usage are discussed.

3312 Anatomy and Physiology of the Speech Mechanism (3-0)
The anatomical and physiological bases of speech. Emphasis is placed on respiration, phonation, resonation, articulation, and deglutition.

3313 Disorders of Articulation and Phonology (3-0)
A study of disorders of articulation and phonology in children and adults including characteristics, causes, and procedures for diagnosis and treatment. *Prerequisites*: SPLP 2111 or SPLP 1110, and SPLP 1312 or SPLP 3210, and SPLP 2313 or SPLP 3110, and SPLP 3312, each with a grade of "C" or better.

3314 Language Disorders in Pre-School Children (3-0)
Theoretical foundations, diagnosis, and intervention for language impairments in pre-school populations. Multicultural issues related to language disorders in this population are discussed. *Prerequisites*: SPLP 3310 or SPLP 3315, and SPLP 2111 or SPLP 1110, and SPLP 2313 or SPLP 3110, and SPLP 1312 or SPLP 3210, and SPLP 3312, each with a grade of "C" or better.

3318 Principles of Clinical Management (3-0)
Preparation of diagnostic reports, treatment plans, and other written documentation of client performance and progress. The treatment sequence, ethical decision-making, universal precautions for infection prevention, and the tam approach to treatment are also discussed. Completion of 25 clock hours of supervised clinical observation. *Prerequisites*: SPLP 3310, SPLP 3312, SPLP 3313, SPLP 3314, SPLP 2111 or SPLP 1110, SPLP 2313 or SPLP 3110, and SPLP 1312 or SPLP 3210, each with a grade of "C" or better.

4309 Audiology (3-0)
The study of hearing and hearing disorders with an emphasis on the basic audiological test battery. *Prerequisite*: SPLP 2320 with a grade of "C" or better.

4310 Aural Rehabilitation (3-0)
This course is an introduction to aural rehabilitation of adults and children. Included is information regarding the identification, assessment and remediation of hearing loss. *Prerequisites*: SPLP 4309 with a grade of "C" or better and department approval.

4312 Neural Bases of Speech and Language (3-0)
Study of neuroanatomical and neurophysiological mechanisms related to speech and language. *Prerequisites*: BIOL 2311, BIOL 2111, and SPLP 3312, each with a grade of "C" or better.

4320 Independent Study in Speech-Language Pathology and Audiology (0-0-3)
Individual directed study. May be repeated when topic varies. *Prerequisites*: Completion of 12 semester hours of SPLP course work with a GPA of 3.0 and instructor approval.

4340 Clinical Practicum in Audiology (0-0-3)
Supervised practicum in audiology. *Prerequisites*: SPLP 2320 and SPLP 4309, each with a grade of "C" or better. Liability insurance required. Course fee required.

See the *Graduate Catalog* for graduate programs and courses.

Cooperative Program

UTEP-UT Austin Cooperative Pharmacy Program

1100 N. Stanton, Suite 301
(915) 747-8519

PROGRAM DIRECTOR: José O. Rivera
REGIONAL DIRECTOR, EL PASO INTERNSHIP PROGRAM: William A. Klein III
PROFESSOR: José O. Rivera
CLINICAL ASSOCIATE PROFESSOR: Rivera
CLINICAL ASSISTANT PROFESSORS: Anaya, Hong, Sias
COORDINATORS: Ho, Reilly, Rudder

The University of Texas at Austin College of Pharmacy, in cooperation with The University of Texas at El Paso, offers a six-year curriculum leading to the Doctor of Pharmacy (Pharm.D.) degree. This program offers a course of study in the pharmaceutical and clinical sciences designed to provide the community with pharmacists who are scientifically trained and clinically competent to deliver a full spectrum of pharmaceutical services in all areas of practice.

The Pharm.D. degree is designed to prepare men and women whose abilities and career aspirations suggest significant potential for innovative leadership in professional practice. In addition, this degree will prepare students to practice pharmacy in a contemporary setting, whether in a community or hospital pharmacy, in a long-term care facility, or in the pharmaceutical industry. This objective is met through a balanced program of study in pharmaceutics, pharmaceutical and natural products chemistry, pharmacology, therapeutics, pharmacy administration, natural and social sciences, and the humanities, as well as a structured clinical and professional practice experience program. In addition, the curriculum is aimed at inculcating an understanding of the basic sciences sufficient to prepare the student for graduate study in the pharmaceutical sciences.

The Cooperative Pharmacy Program is designed to facilitate access to the College of Pharmacy at Austin by providing opportunities to fulfill pre-pharmacy requirements in El Paso.

The Pharmacy Scholars Program (PSP), which is an integral part of the Cooperative Pharmacy Program, provides highly qualified high school seniors conditional admission to The University of Texas College of Pharmacy and supplements the usual application process for admission to UT College of Pharmacy. A select number of students will be chosen to enroll into the program each year. These undergraduates will select the pre-pharmacy major and are encouraged to take advantage of the diversity and many opportunities at UTEP. Students selected for this program attend UTEP for approximately two years to complete their pre-pharmacy curriculum (e.g., organic chemistry, calculus, and physics) and, after obtaining required criteria, will move to Austin to attend the College of Pharmacy for approximately two years. The final approximate two years of the six-year curriculum will be completed in El Paso, and successful candidates will receive their degree from The University of Texas at Austin College of Pharmacy, in cooperation with the Cooperative Pharmacy Program at UTEP. Further information about the program can be obtained by calling (915) 747-8519. The program office is located at 1100 N. Stanton, Suite 301, El Paso, TX 79902. Web Site: http//:chs.utep.edu/pharmacy/home.html.

COLLEGE OF LIBERAL ARTS

Aerospace Studies
African American Studies
Asian and African Studies
Art
Ballet and Dance
Chicano Studies
Communication
Criminal Justice
English
History
Honors
Humanities
Languages and Linguistics
Music Theatre
Liberal Arts Interdisciplinary
Latin American and Border Studies
Military Science
Music
Philosophy
Political Science
Pre-Law
Psychology
Religious Studies
Russian and Post-Communist Studies
Social Work
Sociology and Anthropology
Theatre Arts and Film
Translation and Interpretation
Urban Studies
Western Cultural Heritage
Women's Studies

Dr. Howard C. Daudistel, Dean
Dr. Harmon M. Hosch, Associate Dean for Social and Behavioral Sciences
Mr. Myron H. Nadel, Associate Dean for Humanities, Fine and Performing Arts

Liberal Arts Bldg., Room 343
(915) 747-5666 (ph)
(915) 747-5905 (fax)
libarts@utep.edu

College of Liberal Arts

The College of Liberal Arts, the largest of the seven undergraduate colleges, traces its origins to the earliest days of the State School of Mines. Courses in such areas as history, English, Spanish, and art were offered almost from the beginning of the school's history. In July 1931, the institution (then known as The Texas College of Mines and Metallurgy) was authorized to offer the Bachelor of Arts degree; by 1940-41, students taking courses in the arts and sciences far outnumbered those in engineering. The change of name in 1949 to Texas Western College served as recognition of the institution's development as primarily a college of arts and sciences. In 1967, when the School of Arts and Sciences was divided into four Schools—Liberal Arts, Business Administration, Education, and Science—Liberal Arts became a separate academic unit. The name "School" was changed to "College" in 1974.

The College of Liberal Arts offers a wide range of programs and courses in the humanities, fine arts, and social sciences. These programs include major fields of specialized study and minor fields in both specific academic areas and interdisciplinary study. Elective courses taught within the College provide students with further opportunities for intellectual and aesthetic growth.

The College faculty, through teaching, research, and performance on a variety of levels, exemplify their commitment to the values of liberal arts education: a focus on what is fundamental and enduring in human civilization; a respect for and fostering of intellectual diversity; and the development of skills in communication, analysis, and evaluation. Students who receive a liberal arts education are exposed to certain values that offer them an opportunity for success in a wide variety of fields, a foundation for later professional study, and the crucial ability to adapt to change. The College seeks to prepare students for their professional careers and for a lifetime of learning, intellectual growth, and personal enrichment.

Degrees and Majors

Bachelor of Arts

The BA degree is offered in the following major fields: Anthropology, Art, Chicano Studies, Communication, Criminal Justice, English, French, History, Latin American Studies, Linguistics, Philosophy, Political Science, Psychology, Sociology, Spanish, and Theatre Arts; also Biology, Chemistry, Economics, Geological Sciences, Mathematics, and Physics.

Requirements for the Bachelor of Arts degree are designed to provide an essential unity in the programs of all Liberal Arts students and, at the same time, offer each student substantial latitude in course selection. The degree consists of a minimum of 128 semester hours, including at least 45 at the advanced (3000-4000) level. Twenty-four of the last 30 hours must be taken in residence. With exceptions noted in departmental program descriptions, a course taken to satisfy one degree area requirement (University Core Curriculum, Liberal Arts General Education Requirements, major, or minor) *may* be used *once, and only once*, to satisfy one other degree area requirement; however, a course may *not* be used to satisfy a requirement in both the major and the minor.

University Core Curriculum (42 hours – students should refer to the University Core Curriculum section of this Catalog for a complete description)

Liberal Arts General Education Requirements (27-32 hours)

0-3 Communication Skills: ESOL 2303 (for those whose post-primary education has been in a language other than English).

6-8 One Modern or Classical Language: Complete 2301 and 2302 in French, German, Latin, Portuguese, Russian, Spanish (Prerequisites: completion of 1301 and 1302 in the language, or placement by examination); or SPAN 2303 and 2304 (Prerequisite: placement by examination); or LING 2403 and 2404.

9 Western Cultural Heritage: HUMN 3301, 3302, 3303.

3 Social/Behavioral Science: In addition to the course used to fulfill the University Core Curriculum in Social/Behavioral Science, completion of any course in Anthropology, Psychology, Sociology or GEOG 1310, GEOG 3312, LING 2320, or LING 3357.

3 Fine Arts: Select one three-hour course from Art, Music, or Theatre Arts; must be in a discipline *other than* the one used to fulfill the University Core Curriculum requirement in Fine Arts.

3 Literature: To be selected from *literature* courses offered by the Department of English or the Department of Languages and Linguistics (a list of courses that meet this requirement is available from the Office of the Dean of Liberal Arts). If a literature course is selected to fulfill the University Core requirement in Humanities, this requirement will also be fulfilled.

3 Philosophy: To select any junior-level (3000-level) three-hour course taught by the Department of Philosophy.

Major Field (27-36 hours)

Students will complete a major prescribed by an academic department in the College of Liberal Arts (or Science or Business Administration [for the Economics major]) of at least 27 hours, 18 or more of which must be advanced (3000-4000 level). Students should refer to the individual departmental listings in this Catalog for specific major field requirements.

Nine of the advanced hours in the major must be completed in residence within three years prior to the date of graduation. No course taken on a Pass/Fail basis may be counted for the major, even though the student changes majors after having taken the course. A completed degree plan must include a minimum grade point average (GPA) of “C” (2.0) in the major. Credit for courses taken to fulfill the major field requirements may not also be counted to satisfy minor field requirements.

A student who fulfills requirements for two majors prescribed by academic departments in the College of Liberal Arts (or Science or Business Administration [for the Economics major]) may earn a degree with a double major, provided that the two majors are from different fields. The second major fulfills the requirement for a minor field. There must be a minimum GPA of “C” (2.0) in both majors. Credit for courses taken to fulfill the major field requirements in one major may not also be counted to satisfy requirements in the other major field.

Minor Field (18 hours)

Students will complete a minor of at least 18 or more hours, nine of which must be advanced (3000-4000 level). The minor field must be selected from a discipline different from that of the major field. Credit for courses taken to fulfill the minor field requirements may not also be counted to satisfy major field requirements. No course taken on a Pass/Fail basis may be counted for the minor, even though the student changes minors after having taken the course. A completed degree plan must include a minimum GPA of "C" (2.0) in the minor. Students should refer to the individual departmental listings in this Catalog for specific minor requirements.

Liberal Arts minor fields are available in Anthropology, Art, Art History, Communication, Creative Writing, Criminal Justice, Dance, English and American Literature, Film Studies, French, German, History, Linguistics, Music, Philosophy, Political Science, Professional Writing and Rhetoric, Psychology, Sociology, Spanish, and Theatre Arts. Students should refer to the departmental listings for requirements.

Interdisciplinary minors are also available. However, no more than six hours from a student's major field may be counted toward such a minor, and courses so counting may not help satisfy the major requirement. In addition, no more than nine hours from any one discipline will be counted as part of such a minor. Students electing an interdisciplinary *major* may not elect an interdisciplinary *minor*. The following are approved interdisciplinary minors: African American Studies, Asian and African Studies, Border Studies, Chicano Studies, Humanities, Latin American Studies, Military Studies, Religious Studies, Russian and Post-Communist Studies, Translation (Spanish/English), Urban Studies, and Women's Studies. (Students should refer to the section on Interdisciplinary Minors.)

Minors may also be selected from the following approved disciplines in other colleges:

Accounting Minor: ACCT 2301 and ACCT 2302, CIS 2320, and 9 hours from ACCT 3321, ACCT 3322, ACCT 3323, ACCT 3327, ACCT 4301, ACCT 4305, or ACCT 4328

Bilingual Education: BED 4327, BED 4340, BED 4341, BED 4342, BED 4343, BED 4344. Please see Teacher Certification below.

Computer Information Systems Minor: ACCT 2301 and CIS 2320, CIS 2335, CIS 3385, CIS 3350, and CIS 3355

Early Childhood Education: ECED 3333, ECED 3340, ECED 4353, ECED 4356, ECED 4358, ECED 4359. Please see Teacher Certification below.

Economics Minor: ECON 2303, ECON 2304, and either ECON 3302 or ECON 3303, plus 9 hours from ECON 3300 or ECON 4300 level courses

General Business Minor: CIS 2320 and 15 hours from BLAW 3301, ACCT 3309 or ACCT 2301, MKT 3300, MGMT 3303 or MGMT 3304, FIN 3310, ECON 3320, or CIS 3345

Management Minor: CIS 2320, ACCT 2301, and 12 hours from BLAW 3301, MGMT 3303, MGMT 3311, MGMT 3320, POM 3321, or MGMT 4325

Marketing Minor: QMB 2301, ACCT 2301, MKT 3300, MKT 3302; plus 6 hours from MKT 3305, MKT 3320, MKT 4390, MKT 4391, and MKT 4392

Speech-Language Pathology Minor for Bachelor of Arts (Liberal Arts) Students: SPLP 1110, SPLP 1310, SPLP 2310, SPLP 3315, and SPLP 4309 (13 hours), and two courses selected from SPLP 3312, SPLP 3313, SPLP 3314, or SPLP 3317 (6 hours)

Science Minors are available in Biology, Chemistry, Geology, Mathematics, and Physics. Students should refer to the College of Science departmental listings for details.

Electives

Students will complete electives as needed to bring the total semester hours of credit to at least 128. Elective credit cannot also be used in meeting any other degree requirement. Electives of advanced (3000-4000) level may, however, be applied toward satisfaction of the requirement of 45 advanced hours.

Teacher Certification

Elementary Certification

Incoming students who plan to teach in elementary schools will ordinarily earn the Bachelor of Interdisciplinary Studies degree. These students are referred to the description of that degree contained in the Catalog section for the College of Education.

Students who have completed a degree offered in the College of Liberal Arts, or who plan to earn such a degree, should consult with the Education Advising Office in the College of Education concerning the requirements for certification to teach in the elementary schools.

All-Levels Certification

All-levels programs are available in Art and Music. Interested students are referred to the description of those programs in the Catalog section for the Department of Art and the Department of Music.

Secondary Certification

Certification program requirements for students seeking a BA in Mathematics are described in the Catalog section for the College of Science. Other certification programs in the sciences are also described in that section.

Certification for teaching in secondary schools is available in the following Liberal Arts fields: Communication, English, French, History, Spanish, and Theatre Arts. Students who plan to teach these subjects in secondary schools will earn the Bachelor of Arts degree in the selected field after meeting all the requirements for that degree as described above and in the Catalog section for the department of the major. In order to meet TEA's certification requirements, courses must be selected in accordance with the following restrictions and recommendations:

1. 36 semester hours in the major field are required. 21 semester hours in the major must be upper-division courses. A GPA of 2.5 or higher is required in the major. In the case of some majors, specific courses are required for students seeking secondary certification. For further information, students should read the section of the Catalog that describes the requirements of the major department.
2. 12 semester hours of courses in a supporting field are required. The supporting field will ordinarily be in an area where the student is interested in developing a second teaching field.
3. The minor must be taken in Education. A GPA of 2.5 or higher is required in the minor.
4. RED 3342 is required for certification. This course does not meet any of the requirements for the BA degree.
5. The requirement of a course in computing is met by completing EDT 3371.

Teacher certification in **Social Studies Composite** is available to students who complete the requirements above, major in History, minor in Secondary Education, and fulfill the following conditions:

1. Courses taken as part of the History major should include HIST 3317 and either HIST 3309 or HIST 3328.
2. The student should fulfill the University Core requirement in Economics by taking ECON 2303 and the Liberal Arts General Education requirement in Social Sciences by taking GEOG 1310.
3. For certification, the student should also take ECON 2304, GEOG 1306, and nine semester hours from the following: POLS 3335, POLS 3312, POLS 3320, POLS 3336, or POLS 4311. These courses apply to the BA degree only as elective credits.

Teacher certification in **English/Language Arts**, which provides candidates the opportunity to prepare to teach Communication, English, and Reading in secondary schools, is available to students who complete the requirements above, major in English and American Literature, minor in Secondary Education, and take the following additional courses:

1. RED 4341 and RED 4343
2. COMM 2371 and COMM 3313

These additional courses apply to the BA degree only as elective credits.

Minor in Education for the BA with Secondary Certification

Admission to professional teacher certification programs is required before enrollment in the courses. Students should contact the Advising Office in the College of Education for details. The following courses are required for the students in the Liberal Arts disciplines who are seeking secondary certification:

Foundation Block:	EDPC 3300 and SCED 3317
Methods Block	
For English majors:	SCED 3311 and ENGL 4355
For French, or Spanish majors:	SCED 3311 and FREN, GERM, or SPAN 4301
For majors in the Social Sciences:	SCED 3311 and SCED 3312
For other Liberal Arts majors:	SCED 3311 and SCED 3312
Student Teaching Block:	SCED 4391 and 4392

Bachelor of Fine Arts

This professional degree is offered in three fields: Art, Dance, and Music Theatre. The Art degree is offered with the following areas of specialization:

Major: Ceramics, Drawing, Graphic Design, Metals, Painting, Printmaking, and Sculpture

Minor: Ceramics, Drawing, Graphic Design, Metals, Painting, Printmaking, and Sculpture

The BFA graduation exhibition will be considered for outstanding art majors. Art students will be selected by the Art Faculty and given an opportunity to participate in the honors exhibition program during their senior year. For specific requirements, students should refer to the Art Department section of this catalog.

The BFA in Dance is a Ballet Performance major offered by the Department of Music. For specific requirements, students should refer to the Music Department section of this catalog.

The BFA in Music Theatre is a multi-disciplinary degree offered by the Department of Music and the Department of Theatre Arts and Film. For specific requirements, students should refer to the Liberal Arts Interdisciplinary section of this catalog.

Bachelor of Music

Students may pursue this professional Music degree in one of three areas:

1. General Music--choral and instrumental (All-Levels Teaching Program)
2. Performance--orchestra and band instruments, keyboard instruments, or voice.
3. Theory and Composition

For specific requirements, students should refer to the Music Department section of this catalog.

Bachelor of Social Work

The Social Work Program offers a major consistent with the beginning level of professional Social Work practice. The degree reflects a generalist Social Work orientation. Students who wish to earn the BSW degree must apply to and be accepted by the Social Work Program and must demonstrate academic and professional readiness to begin generalist Social Work practice. For specific requirements, students should refer to the Social Work section of this Catalog.

Bachelor of Science in Psychology

The Psychology Department and each department in the College of Science offer the Bachelor of Science (BS) degree. The BS in Psychology is subject to the BS degree plan listed in the College of Science section and the BS degree plan listed in the Psychology Department section.

Graduate Studies

Graduate degrees are offered in most Liberal Arts disciplines, including Art, Communication, English, History, Interdisciplinary Studies, Linguistics, Music, Political Science, Public Administration, Psychology, Sociology, Spanish, Teaching English, and Theatre Arts. Details of graduate programs are contained in the *Graduate Catalog* and are available from individual departments and the Graduate School.

Interdisciplinary Minors

The College offers several interdisciplinary programs of study that can be pursued in conjunction with any major (except an interdisciplinary major). These minors require the completion of a minimum of 18 semester hours:

African American Studies

The African American Studies Program offers students an interdisciplinary opportunity to examine the African American experience in detail. Specific requirements are listed under African American Studies.

Asian and African Studies

The Asian and African Studies minor is a broad, interdisciplinary course of study for students interested in Asian and African cultures or in careers in international business, government service, international health, or in teaching overseas. The core courses are designed to encompass a study of both Asia and Africa (except for the specific area-oriented historical surveys).

Students must take nine hours of courses from the following list that constitutes the core. At least three disciplines must be represented by the core courses. The remaining nine hours may be taken from the core courses not taken to satisfy the core requirement or from the list of optional courses. No more than nine hours may be taken from any one discipline. No more than six hours may be taken from a student's major area.

Core Courses: ENGL 2315, ENGL 2316; HIST 3330, HIST 3336, HIST 3337, HIST 3340; PHIL 3340; POLS 3336

Optional Courses: MICR 2330; ZOOL 3464; ECON 3367; HIST 3324, HIST 3331, HIST 3339; MGMT 4325; POLS 4355

Chicano Studies

The Chicano Studies minor offers students the choice of four options: Social Science, Humanities, Fine Arts, and Interdisciplinary. Specific requirements may be found under Chicano Studies section of this catalog.

Humanities

The minor in Humanities is offered through the Western Cultural Heritage Program. Specific requirements are listed under the Western Cultural Heritage section of this catalog.

Latin American and Border Studies

Minors are available in both Latin American Studies and in Border Studies; they provide a student with any other major the opportunity to take advantage of the University's rich resources in these areas. Specific requirements are listed in the Latin American Studies section.

Military Studies

The Military Studies minor is intended for students with an interest in the military as a social institution and in its policies and problems, not solely as reflected in formal military, air, or naval science instruction, but, particularly, as illuminated by the social sciences and humanities.

Students are required to complete a core course and to elect fifteen hours from among the optional courses. Not more than twelve hours of the optional courses may be selected from a single department; nor may a student elect courses from both Military Science and Aerospace Studies.

Core Course: HIST 3313

Optional Courses (15 hours): AS 3301, AS 3302, AS 4301, AS 4302; HIST 3305, HIST 3307, HIST 3308, HIST 3311, HIST 3312, HIST 3321, HIST 3324, HIST 3369, HIST 3374; MS 3301, MS 3302, MS 4301, MS 4302; POLS 3330, POLS 3332, POLS 3335, POLS 4330, POLS 4331; SOCI 3381; no more than one course from CS 1310, CS 1401, CS 1420; CIS 2315, CIS 2335, CIS 3345, or HSCI 3302.

Religious Studies

The Religious Studies minor is designed to provide an interdisciplinary framework within which students can take courses that explore the nature of religion and its impact on human culture, past and present. Courses are academic and non-sectarian in nature. Specific course listings and requirements may be found under Religious Studies.

Russian and Post-Communist Studies

The Russian and Post-Communist Studies minor is a broad, interdisciplinary plan designed to help acquaint students from any major with the Post-Soviet and East European world. It is especially recommended for students who plan advanced study in Russian and Post-Communist fields at the graduate level or who plan careers in business, education, or government agencies dealing with Russia and Post-Communist countries.

Core Courses: HIST 3332 or HIST 3333; POLS 4332 or POLS 4331; and one course chosen from RUSS 3301, RUSS 3350; ENGL 3381, ENGL 3382.

Optional Courses: HIST 2302, HIST 3369, or HIST 3374; POLS 4341; RUSS 3320; SOCI 3341; GEOG 1310.

Translation and Interpretation (Spanish/English)

The Translation and Interpretation Program is designed to provide qualified students with the opportunity to acquire skills in these fields. Translation Certificates in either Spanish or English or both will be awarded to those who pass professional level competency examinations. Consultation with the Program Coordinator is necessary for students to be admitted into the Program. Details of the Program are listed in the Languages and Linguistics section of this catalog.

Urban Studies

The Urban Studies minor is intended for students with an interest in urbanism as an institutional phenomenon and a social process. It is an appropriate supporting study for all humanities as well as social and behavioral science majors, and is particularly appropriate for students who are pursuing professions or vocations which are functionally dependent on urbanism.

Students are required to complete all three of the core courses and to elect nine hours from among the optional courses. Including both core and optional courses, no mor than six hours may be taken from any one discipline.

Core Courses: ANTH 3315, POLS 3311, and SOCI 3303.

Optional Courses: POLS 3352, SOWK 3360, SOCI 3327, and, with the approval of the Urban Studies advisor, all special topics courses when the topic is related to urbanism.

Women's Studies

The Women's Studies Program provides a broad, interdisciplinary minor in which students can take course work to specialize in issues of gender and/or women. Specific requirements are listed under the Women's Studies section of this Catalog.

Special Programs

Honors

The University Honors Program, now a campus-wide endeavor involving students from all the colleges, began as a Liberal Arts Honors Program. Even today it remains most closely allied with the humanities disciplines, fostering academic excellence as well as intellectual curiosity and debate, establishing meaningful faculty-student dialogue, and building a sense of scholarly community. Honors courses, taught by outstanding faculty and limited in size, have been offered by the departments of Communication, Criminal Justice, English, History, Languages and Linguistics, Music, Philosophy, Political Science, Psychology, Sociology/Anthropology, and Theatre Arts. Moreover, History, Political Science, and Psychology offer departmental honors upon completion of an Honors thesis. Besides enrolling in courses restricted to program participants, Honors students may avail themselves of options for independent study or Honors contracts, in which special projects are carried out under faculty supervision. Through its close alliance with the University Honors Program, the College of Liberal Arts strengthens its commitment toward providing students with the satisfaction of having exercised their intellectual capabilities to the fullest.

Western Cultural Heritage

The College of Liberal Arts offers a special sequence of interdisciplinary courses required to fulfill the Western Cultural Heritage area of the General Education Core. Details on these courses, the creation of which was facilitated by grants from the National Endowment for the Humanities, can be found under the Western Cultural Heritage section of this catalog.

Pre-Law

UTEP is an excellent place to prepare for law school. Law schools seek well-trained graduates from all disciplines, including sciences, math, languages, social sciences, health sciences, business, education, and liberal arts. In selecting students, law schools are less interested in a student's major than in evidence that the student has well-developed analytical skills, writing skills, and skills in critical reading. Any course or major that helps students acquire these skills is appropriate for pre-law students. For more information, students should contact a pre-law advisor.

Certificate in Legal Reasoning: This certificate program is designed to allow students, regardless of major, to become familiar with the types of reasoning, writing, and analysis that are used in the legal world. The program is valuable both for students interested in the study of legal issues and for students intending to apply to law school. The certificate program is open to and will benefit students from any college or major at UTEP. For students in the College of Liberal Arts, the program fulfills the requirement of a minor. While completion of the program is not necessary to gain entry to law school, it is designed to help students gain admittance into law school and to succeed once admitted by developing the skills that are needed for the study of the law. Students are required to complete twelve hours of core courses and six hours of electives.

Core Courses: POLS 4321 or POLS 3340, POLS 4322 or POLS 3322; ENGL 3358, ENGL 3365 (the English sections must be sections for pre-law students).

Electives: ANTH 3308; BLAW 3301, BLAW 4325; HIST 3310; PSYC 3315; and, with the approval of program advisors, appropriate special topics courses from any department.

Military Science

Military Science courses are designed to afford the student an opportunity to become a commissioned officer in the U.S. Army. These courses provide leadership training and military skills training required of an Army officer. Army ROTC is open to all male and female students in all academic majors leading to a bachelor's degree. Specific courses and requirements are listed under the departmental section for Military Science.

Aerospace Studies

The Aerospace Studies curriculum includes the Air Force ROTC education program leading to a commission as second lieutenant in the Air Force. The Air Force ROTC Commissioning Program is open to all qualified male and female students in all academic majors leading to a bachelor's degree. Specific courses and requirements are listed under the departmental section for Aerospace Studies.

Aerospace Studies

106 Military Science/
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CHAIRPERSON: Keith Rountree
PROFESSOR: Rountree
ASSISTANT PROFESSORS: Caranta, Onines

The college Air Force Reserve Officer Training Corps (AFROTC) curriculum provides preprofessional preparation for future Air Force officers. It is designed to motivate and prepare college men and women for their initial active duty assignments as Air Force commissioned officers. The curriculum is designed to give the student an understanding of the military instrument of national power with emphasis on the United States Air Force and how it fits into American society. Inherent in course content and methodology are opportunities for the student to develop the capacity to think creatively, speak and write effectively, and lead and manage efficiently.

The Air Force ROTC Commissioning Program is open to all qualified male and female students in all academic majors leading to a bachelor's degree. The program is also open to graduate students. The program is divided into the General Military Course (Basic Course) and the Professional Officer Course (Advanced Course).

Scholarships

Four-year Scholarships

Air Force ROTC scholarships are available annually. These scholarships are awarded on a nationally competitive basis to high school graduates. Interested high school seniors should obtain application requests from their counselors and submit the request by December. Application forms are also available at the Aerospace Studies Program.

Two and Three-Year Scholarships

These scholarships are awarded on a nationally competitive basis to college students. Students, including those not enrolled in Aerospace Studies, may apply through the Aerospace Studies Program. Contact the detachment personnel for more information on these scholarships.

One-year Scholarships

Limited one-year scholarships are available for certain high demand majors. Contact the detachment personnel for more information on these scholarships.

General Military Course (GMC)

The first two years of Air Force ROTC (AS 1121-1122 and AS 2121-2122) form the basic course known as the GMC. Basic courses are normally taken during the freshman and sophomore years. There is no military obligation associated with basic courses and they count as free elective credit. Scholarships are available for qualified students. All GMC students with Air Force ROTC scholarships must complete one English composition course prior to completion of the first two years of the program. Students may also receive a monthly study stipend from $250-$300 if they qualify.

Professional Officer Course (POC)

The last two years (AS 3301-3302 and 4301-4302) form the advanced course known as the Professional Officer Course (POC). The POC normally requires two academic years to complete. The two academic years can be a combination of junior-senior, senior-graduate, or all graduate years. A one-year program may be offered for specific majors. Students must be physically and mentally qualified for POC entry and have a desire to be commissioned in the Air Force. Completion of the GMC is *not* a prerequisite for the POC. Students must attend a four-week or a five-week summer orientation course. Advanced courses may be taken out of sequence. Students may also receive a monthly study stipend from $350-$400 if they qualify. Cadets also receive payment for the summer orientation course.

Leadership Training

This training is an integral and mandatory portion of the Aerospace Studies curriculum. Within the framework of the cadet wing, it provides a progression of experiences designed to develop each student's leadership potential and serves as an orientation to military life.

Aerospace Studies (AS)

1121 The Air Force Today I (1-1)
A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with followership experiences.

1122 The Air Force Today II (1-1)
A survey course designed to introduce students to the United States Air Force and Air Force Reserve Officer Training Corps. Featured topics include: mission and organization Of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with followership experiences.

2121 The Air Force Way I (1-1)
A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC candidate. Featured topics include: Air Force heritage, Air Force leaders, Quality Air Force, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class.

2122 The Air Force Way II (1-1)
A survey course designed to facilitate the transition from Air Force ROTC cadet to Air Force ROTC candidate. Featured topics include: Air Force heritage, Air Force leaders, Quality Air Force, an introduction to ethics and values, introduction to leadership, group leadership problems, and continuing application of communication skills. Leadership Laboratory is mandatory for Air Force ROTC cadets, and it complements this course by providing cadets with their first opportunity for applied leadership experiences discussed in class.

3301 Air Force Management and Leadership I (3-1)
A study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.

3302 Air Force Management and Leadership II (3-1)
A study of leadership and quality management fundamentals, professional knowledge, Air Force doctrine, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving students the opportunity to apply leadership and management principles of this course.

4301 Preparation for Active Duty I (3-1)
Examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian

control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

4302 Preparation for Active Duty II (3-1)
Examines the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. A mandatory Leadership Laboratory complements this course by providing advanced leadership experiences, giving students the opportunity to apply the leadership and management principles of this course.

African American Studies

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DIRECTOR: Maceo Crenshaw Dailey, Jr.
PROFESSORS: Amastae, Ambler, Armitage, Hall, Jackson, C.E. Martin, McGee Deutsch, Staudt
ASSOCIATE PROFESSORS: Best, Dailey, Rodríguez, Weaver
ASSISTANT PROFESSORS: Haines, J.D. Marquez, C.H. Martin
STUDENT ADVISOR: J.D. Marquez
ARTIST-IN-RESIDENCE: Robert Snead

The African American Studies Program provides for individuals of all backgrounds a humanistic lens and course of study for analysis of the Black experience. Research, teaching, and related academic and social activities focus on African American history and culture and attendant complexities of "race" relations in Texas, the American southwest, the nation, and the Diaspora. The program's curriculum centers on the African American experience as it relates primarily to past, present, and future issues of (1) economic and business development; (2) leadership and service; (3) changing family structures and values; (4) gender politics; (5) the rapidly changing world of science and technology; and the importance of these issues in the local and global consciousness and behavior of African Americans and others of African descent. Students explore these issues using the interdisciplinary approach, comparative methodology, and computer literacy to acquire the critical thinking skills and knowledge for leadership, involvement in community development, preparation for graduate school, and to meet the personal and professional challenges of the 21st century.

Individuals minoring in African American Studies and mastering the subject matter acquire empowering knowledge and self-awareness with respect to race and ethnicity. They are equipped intellectually to become better citizens in their towns, cities, nations, and global communities based on their understanding and problem solving abilities when faced with the damaging and debilitating manifestations of bigotry, segregation, and other discordant "isms." Those seeking employment as teachers, ministers, engineers, scientists, musicians, athletes, aviators, scholars, public servants, social workers, filmmakers, and military personnel will find the African American Studies Program an excellent complement to their major course of study.

To earn a minor in African American Studies, students are required to complete the following core courses:

AFST	2300	Introduction to African American Studies
AFST	2301	Theories in African American Studies
AFST	3390	Topics in African American Studies

With the permission of the director of the African American Studies Program and the chair of the relevant department, the student may substitute an independent study course for "Topics in African American Studies." If the option is selected, the student is strongly encouraged to do an independent study course in some aspect of local, regional, state, national, or global history impacting on the past or present lives of African Americans or their endeavors to envision new societal changes or improvements.

The final three courses for completion of the minor may be selected from the vast variety of General Courses that are listed below, provided that at least six hours are at the upper-division (3300-4300) level. The student is urged, however, to select at least one course that will combine both the major and minor fields of study to address a pertinent and pressing praxis problem in the history of African Americans or those of African descent; their interactions with other groups (Asians, Native Americans, Hispanics, or Anglos); or a national or global aspect of contemporary "race" relations issues. The student may also earn three credits by designing a practicum course that permits him or her to do field work in the community, nation, or a foreign country using cognitive skills, comparative methodologies, or theoretical perspectives acquired while minoring in African American Studies. In addition to the core courses, students may complete the minor by selecting from upper-level courses listed below.

General Courses

College of Business Administration

Economics

ECON	3367	Economic Development

College of Education

Early Childhood Education

ECED	4353	Play Development in Early Childhood
ECED	4359	Children's Thinking in the Early Years

College of Engineering

Computer Science

CS	1310	Introduction to Computer Programming

College of Health Sciences

Nursing

NURS	3319	Cultural Perspectives on Health Care
NURS	3330	Contemporary Perspectives on Death and Dying

Health Science

HSCI	2303	Wellness Dynamics
HSCI	3304	Health Perspectives in Aging
HSCI	3305	Substance Abuse
HSCI	3307	Death, Dying, and Bereavement
HSCI	4303	Family Life and Human Sexuality

Kinesiology

KIN	1303	Foundations, History, Philosophy of Kinesiology and Sports
KIN	3318	Growth, Maturation, Health, Motor, Behavior, and Movement Experiences in Early Childhood

College of Liberal Arts

Aerospace Studies

AS	3301	Air Force Management and Leadership I
AS	3302	Air Force Management and Leadership II

Art

ARTH	3308	Border and Visual Cultural

Chicano Studies

CHIC	2301	Chicano Studies and Analysis
CHIC	3330	Youth at Risk in the U.S.: Cultural Factors

Communication

COMM	1301	Public Speaking
COMM	1304	Mass Media and Society
COMM	2352	Persuasion and Social Influence
COMM	3350	Advanced Interpersonal Communication
COMM	3355	Organizational Communication
COMM	4352	Contemporary Rhetoric

Criminal Justice

CRIJ	1301	Introduction to Criminal Justice
CRIJ	3308	Juvenile Justice
CRIJ	3313	Crime in America

English

ENGL	3315	African American Literature
ENGL	3360	Women in Literature
ENGL	4340	Advanced Literary Studies (May be counted when the topic is relevant)

History

HIST	3309	Mexican American History
HIST	3313	American Military History
HIST	3316	Southwest Frontier
HIST	3323	American Indian History
HIST	3325	History of Immigration and Ethnicity in the United States
HIST	3327	Racial Thought in U.S. History
HIST	3337	Modern Africa
HIST	3339	Pyramids and Prophets: Ancient Egypt, Mesopotamia, and Palestine
HIST	3346	Central America and the Caribbean

Languages and Linguistics

LING	2320	An Introduction to Linguistics
LING	3357	Sociolinguistics

Music

MUSE	1327	Jazz to Rock
MUSE	2217	Jazz Improvisation

Philosophy

PHIL	2306	Ethics: Critical Appraisal of Human Conduct and Motivation
PHIL	3313	American Philosophers: Pierce, James, and Dewey
PHIL	3325	Social Philosophy

Political Science

POLS	3314	Ethnicity and Race in American Politics Civil Rights and Liberties
POLS	3321	Civil Rights and Liberties
POLS	3336	Third World Politics
POLS	4336	Caribbean and Central American Politics

Psychology

PSYC	2302	Social Psychology
PSYC	2305	Psychology of Human Sexuality

Religion

RS	3310	Major World Religions

Social Work

SOWK	2310	Introduction to Social Work and Social Welfare
SOWK	3345	Social Work and the Aging: A Cross Cultural Perspective
SOWK	3346	The Process of Addiction: A Cross-CulturalPerspective

Sociology and Anthropology

SOCI	3306	Cultural Diversity
SOCI	3327	Majority/Minority Relations in the United States

Theatre Arts

THEA	3335	Chicano Theatre and Drama
THEA	3391	African American Film Makers

Women's Studies

WS	2300	Introduction to Women's Studies

College of Science

Science

SCI	1401	Explanatory Power of Science
SCI	1402	Science in the Modern World

Biology

BIOL	1303	Introductory Biology
BIOL	1304	Human Biology

Geology

GEOL	1310	Cultural Geography

African American Studies (AFST)

2300 Introduction to African American Studies (3-0)
A historical survey of the African American Experience from its origins in African culture to the present. Major themes include the African heritage, middle passage, slavery, segregation, second class citizenship, survival skills, gender politics, and their impact on the enduring black community.

2301 Theories in African American Studies (3-0)
A survey of major theories of the African American Experience as seen through the works of African American scholars and writers from the 19th century to the present. Authors studied range from Carter G. Woodson, Anna J. Cooper, and W.E.B. Du Bois to current Afrocentric intellectuals bell hooks, Molefie Asante, Cornell West, and Henry L. Gates.

3390 Topics in African American Studies
An examination of a currently relevant subject from the perspective of African American Studies. Topics will vary and will be drawn from the Social Sciences, Humanities, Fine Arts, Science and Technology, and Education. May be repeated for credit when topic varies.

4304 Environmental Justice and Minority Communities in the U.S. (3-0)
An examination of environmental justice issues in the U.S., with an emphasis on communities, agencies and efforts that address sustainable development in the U.S.-Mexico border region. The underpinnings of the environmental justice movement in the U.S. and the regional policy formulation and practice implications for these communities will be central to the course. The course may require field trips. (AFST 4304 is the same course as CHIC 4304; SOCI 4304; ANTH 4304: and POLS 4304.)

Art

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PROFESSOR EMERITI: Clarke Garnsey
PROFESSORS: Elliott, Fensch, Parish, Thiewes
ASSOCIATE PROFESSOR EMERITUS: John Arnold
ASSOCIATE PROFESSORS: Bauer, Quinnan, Segal, Wong
ASSISTANT PROFESSORS: Burke, Castro
DIRECTOR OF GALLERIES: Kate Bonansinga

The Department of Art offers a comprehensive program in the visual arts. Degrees are awarded in the Bachelor of Fine Arts (BFA), the Bachelor of Arts (BA), and the Bachelor of Arts with All-Levels Teacher Certification (for students interested in certification as art teachers). Students may choose majors in the following areas: Ceramics, Graphic Design, Drawing, Metals, Painting, Printmaking, and Sculpture. Studio Art and Art History minors are available to Liberal Arts BA students.

The Department of Art is located in the Fox Fine Arts Center with over 30 professionally equipped studios, a computer lab, an art history lecture room, and two art galleries, making it one of the finest facilities in the Southwest.

The suggested class schedule for freshmen art majors is as follows:

First Semester: ARTF 1301 Basic Design I, ARTF 1302 Basic Drawing I, ARTH 1305 Art History of the Western World I, along with 3 to 6 additional credits required under the chosen degree plan.

Second Semester: ARTF 1303 Basic Design II, ARTF 1304 Basic Drawing II, ARTH 1306 Art History of the Western World II, along with 3 to 6 additional credits required under the chosen degree plan.

Bachelor of Fine Arts (a minimum of 132 semester hours)

University Core Requirements (42 hours, with a minimum of "C" in each course)

- Composition (6 hours)
  - ENGL 1311*, ENGL 1312, or ENGL 1313; or ESOL 1311 and ESOL 1312
  - *ENGL 1611 or COMM 1611 may be used to meet this requirement.
- Mathematics (minimum 3 hours)
  - MATH 1320 or MATH 1508
- Natural Science (minimum 6 hours)
  - Students select a sequence of 6 hours (plus labs, if indicated). Students should refer to the University Core Curriculum section of this Catalog for options.
- Humanities (3 hours)
  - Students should refer to the University Core Curriculum section of this Catalog for options.
- Visual and Performing Arts (3 hours)
  - Either ARTH 1305 or ARTH 1306

United States History (6 hours)
HIST 1301 and 1302
Political Science (6 hours)
POLS 2310 and 2311
Social/Behavioral Science (3 hours)
Students should refer to the University Core Curriculum section of this Catalog for options.
COMM 1301 or 1302 (ENGL 1611 or COMM 1611 may be used to meet this requirement)
Institutionally Designated Option (3 hours)
Students should refer to the University Core Curriculum section of this Catalog for options.

Additional General Education requirement for students whose post-primary education was in a language other than English: ESOL 2303

Art Foundations (54 hours)

ARTF 1301, ARTF 1302, ARTF 1303, ARTF 1304, ARTF 3315; ARTH 1305, ARTH 1306 (either ARTH 1305 or ARTH 1306 also meets the Visual and Performing Arts requirement in section 1, above), ARTH 2309, plus 3 hours upper-division Art History; ARTG 2306; CERM 2304; DRAW 2308, DRAW 2318; DRAW 4310 or ARTG 1306 (ARTG 1306 Computer Graphics is required for Graphic Design Majors); MTLS 2303; PNTG 2301; PRNT 2305; and SCUL 2302.

Major Art Area (21 hours)

To be selected from one of the following: Ceramics, Drawing, Graphic Design, Metals, Painting, Printmaking, or Sculpture; 18 hours must be upper-division. (Courses required under Art Foundations cannot be applied to the major or minor art areas.)

The drawing major is comprised of 12 upper-division drawing hours, plus 9 hours of studio art electives, 6 of which must be upper-division.

Minor Art Area (12 hours)

Selected from one of the following other than the major area: Ceramics, Drawing, Graphic Design, Metals, Painting, Printmaking, or Sculpture. Nine hours must be upper-division. (Courses required under Art Foundations cannot be counted again in the Minor Art Area.)

Electives to bring the total to 132 semester credit hours.

Bachelor of Arts (128 semester hours)

The Bachelor of Arts degree with a major in Art may be earned by completing the following, for a total of 128 semester hours.

University Core Curriculum (42 hours)

Students should refer to the University Core Curriculum section of this Catalog.

Liberal Arts General Education Requirements (27-32 hours)

Students should refer to the Liberal Arts Introductory section of this Catalog.

Art Foundations (24 hours)

ARTF 1301, ARTF 1302, ARTF 1303, and ARTF 1304; ARTH 1305*, ARTH 1306*; DRAW 2308, DRAW 2318

*ARTH 1305 and ARTH 1306 may be used to fulfill the Visual and Performing Arts requirement in the University Core Curriculum and the Liberal Arts General Education requirement in Fine Arts.

Concentration (21 hours)

To be selected from one or two of the following: Ceramics, Drawing, Graphic Design, Metals, Painting, Printmaking, or Sculpture. Eighteen hours must be upper-division. (Courses required under Art Foundations cannot be counted again in the Major Area.)

Minor Area (18 hours)

May be selected from Art History or a non-art minor area as described in the Liberal Arts introductory section; 9 hours must be upper-division. Courses required under Art Foundations, such as ARTH 1305 and ARTH 1306, cannot be counted again in the Minor Area.

Art History Minor for the Bachelor of Arts with a major in Art: ARTH 1307, 2309, 3308, 3309, 3329, and either ARTH 4309 or an elective taken outside the Department approved by the Art Advisor.

Electives

Completed, if necessary, to bring the total to a minimum of 128 semester credit hours.

Bachelor of Arts with All-Levels Teacher Certification

(a minimum of 129 semester hours)

A Bachelor of Arts degree with all-levels certification allows students to major in Art and minor in Professional Education. In lieu of the Additional Liberal Arts General Education Requirements, student pursuing this degree take additional requirements for certification. To complete this degree, students must fulfill the following:

University Core Curriculum (42 hours)

Students should refer to the University Core Curriculum section of this Catalog.

Additional Requirements (12 hours)

EDT 3371 or ART 3307; RED 3342; six semester hours of English, three of which must be upper-division (three of these hours may be chosen from the English courses that fulfill the University Core requirement in Humanities).

Art Foundations (18 hours)

ARTF 1301, ARTF 1302, ARTF 1303, ARTF 1304, ARTH 1305, ARTH 1306 (Either of the two Art History courses fulfill the University Core Curriculum requirements in Visual and Performing Arts.)

Art (45 hours)

ARTG 2306; CERM 2304; DRAW 2308, DRAW 2318; MTLS 2303; PNTG 2301; PRNT 2305; SCUL 2302; ARTF 3315; ARTH 2309, plus 3 hours upper-division Art History; ARTE 3327, plus 9 hours in Art History (3300 or 4300 level) or Studio classes (3300 or 4300 level).

Professional Education (18 hours)

EDPC 3300; SCED 3317; SCED 3311; ARTE 4347; TED 4696.

Electives

Completed, as necessary, to bring total to 129 semester credit hours.

Students should refer to the catalog section for the College of Education regarding requirements for admission to Professional Education courses.

Minor Degree Plans for Non-Art Majors

The Department of Art also offers Liberal Arts majors the opportunity to seek a minor in Studio Art or Art History.

Art History (18 hours - selected from either the Western or Latin American concentrations listed below)

Western Concentration: ARTH 1305, ARTH 1306, ARTH 2309, plus 9 hours from the following: ARTH 3329, ARTH 3309, ARTH 3310, or ARTH 4309.

Latin American Concentration: ARTH 1305, ARTH 1306, ARTH 1307, plus 9 hours from the following: ARTH 3329, 3309, 3310, or 4309.

Ceramics (21 hours)

ARTF 1303, ARTH 1306; CERM 2304, CERM 2314, CERM 3304, CERM 3314, and CERM 3324

Drawing (18 hours)

ARTF 1302 and ARTF 1304; DRAW 2308, DRAW 3308, DRAW 3318, and DRAW 4310

Graphic Design (24 hours)

ARTF 1301, ARTF 1302, and ARTF 1304; ARTG 1306; ARTG 2306, ARTG 3306, ARTG 3317, and ARTG 4306

Metals (18 hours)

ARTF 1303; MTLS 2303, MTLS 2313, MTLS 3303, MTLS 3313, and MTLS 3323

Painting (21 hours)

ARTH 1306, ARTH 3329; PTNG 2301, PTNG 3301, PTNG 3331, PTNG 3341, and PTNG 4301

Printmaking (21 hours)

ARTF 1302 and ARTF 1304; PRNT 2305, PRNT 2325, PRNT 3305, PRNT 3325, and PRNT 3335

Sculpture (18 hours)

ARTF 1303; SCUL 2302, SCUL 3302, SCUL 3332, SCUL 3342, and SCUL 4302

General Courses (ART)

General Prerequisite: Junior standing for all 3300 and 4300-level courses.

1300 Art Appreciation (non-majors) (3-0)
(♦ ARTS 1301)
A course, with images and text, designed to give the general university student an understanding of the great historic styles in the arts. Course fee required.

3307 Special Topics in Art (3-0) or (0-6)
Lecture or studio art course on topic not included in regular curriculum. May be repeated for credit when topic varies. *Prerequisite*: Department approval. When the topic is in studio art, an appropriate fee will be assessed.

3339 Special Studies (0-6)
Special course work in new or experimental offerings for which there is immediate need and for which special resources and faculty are available. May be repeated for credit for varied subject matter. Primarily for art majors.

See the *Graduate Catalog* for graduate programs and courses.

Art Education (ARTE)

3317 Elementary Art Education (3-1)
For non-art majors only, the course is designed for the prospective classroom teacher. The course will encourage an understanding of the visual/artistic growth and development of children as well as an exploration of the methods and materials available to the elementary teacher.

3327 Introduction to Art Education (3-0)
For Art Education majors only or for those students seeking to teach art as a second teaching field. This is a foundation course that will examine the field of Art Education: its literature, history, trends, theories, and philosophies. The course also includes the study of children's artistic, creative, and aesthetic growth and development.

4347 Methods of Teaching Art (3-0)
A survey of the methods and practices involved in the effective and creative approach to Art Education. Special emphasis is placed on demonstration techniques and opportunities to teach as a part of a group and on an individual basis. Each student will observe in both elementary and secondary art classrooms. This course must be taken prior to student teaching. *Prerequisites*: ARTE 3327 and ARTT 4337. Course fee required.

Basic Studies (ARTF)

1301 Basic Design I (0-6)
(♦ ARTS 1311)
A study of the basic visual elements and materials of two-dimensional design, including value, color, space, and their dynamics. Should be taken concurrently with ARTF 1302. Six hours of studio per week. Laboratory fee required.

1302 Basic Drawing I (0-6)
(ARTS 1316)
Emphasis on basic aesthetic and technical drawing skills including proportion, scale, and the control of illusionistic space, along with compositional structure and effectiveness. Both line and value are explored. Should be taken concurrently with ARTF 1301. Six hours in studio per week. Laboratory fee required.

1303 Basic Design II (0-6)
(ARTS 1312)
An exploration of the elements of three-dimensional design involving both aesthetic and structural principles. Students will develop projects with a variety of materials and concepts to be determined by the instructor. *Prerequisites*: ARTF 1301 and ARTF 1302. ARTF 1304 should be taken concurrently with ARTF 1303. Laboratory fee required.

1304 Basic Drawing II (0-6)
(ARTS 1317)
A continuation of basic drawing aesthetics and skills, with added emphasis on composition and content. Images from both imaginary and historically based sources are investigated. Six hours in studio per week. *Prerequisite*: ARTF 1302. ARTF 1303 should be taken concurrently with ARTF 1304. Laboratory fee required.

3315 Advanced Design (0-6)
In-depth study of the fundamental elements and principles of two and three-dimensional design. Emphasis on individual direction and self-expression. *Prerequisite*: Junior standing. Laboratory fee required.

Graphic Design (ARTG)

1306 Computer Graphics (3-3)
This is an introduction to graphic and illustration software on the Macintosh computers. Students scan, generate, import, process, and combine images and text in black and white and in color. Industry standard desktop publishing software and imaging programs are used. *Prerequisite*: ARTF 1301 with a grade of "C" or better. Laboratory fee required.

2306 Graphic Design I (3-3)
Student will explore the fundamental principles of design as applied to graphic communication. Introduction to basic terminology, tools, and media. Major topics covered are letter form, typographic design, and symbol identification. *Prerequisites*: ARTF 1301, ARTF 1302, and ARTF 1304. Laboratory fee required.

2326 Graphic Design II (3-3)
This course provides basic technical information regarding various technical problems faced by the graphic designer in the preparation of artwork for reproduction. Topics include printing methods, layout formats and elements of the mechanical from single-to multi-color processes. *Prerequisite*: ARTG 1306 with a grade of "C" or better. ARTG 1306 may be taken concurrently with ARTG 2326. Laboratory fee required.

 Indicates Texas Common Course Number (TCCN)

3306 Graphic Design III (3-3)
This is a further investigation of effective visual communication with emphasis on problem solving and conceptual development. *Prerequisites*: ARTG 2306 and ARTG 1306 each with a grade of "C" or better. ARTG 1306 and ARTG 2306 may be taken concurrently with ARTG 3306. Laboratory fee required.

3317 Graphic Design IV (3-3)
This advanced communication course emphasizes design expression and conceptual approaches to solving graphic communication problems. *Prerequisite*: ARTG 3306 with a grade of "C" or better. Laboratory fee required.

4306 Graphic Design V - Special Problems (3-3)
Emphasizes individual direction and achievement in graphic design. *Prerequisite*: ARTG 3317 with a grade of "C" or better. Laboratory fee required.

4316 Graphic Design VI - Portfolio Design (3-3)
This course gives the student guidance to organize a professional portfolio for presentation. Discussion topics include resume, interviews, and slide presentation. *Prerequisite*: ARTG 4306 with a grade of "C" or better. Laboratory fee required.

4325 Illustration (1-5)
The course explores contemporary directions in illustration and experiments with various drawing and painting media and techniques in the discipline. *Prerequisite*: ARTG 3306 and DRAW 2318 each with a grade of "C" or better. Laboratory fee required.

4336 Graphic Design VII-Internship (0-6)
Upon the recommendation of the instructor, the student with a minimum of 3.0 grade point average in Graphic Design may be placed in a design firm, art studio, television station, or an advertising agency. This opportunity provides the student with actual work experience in a professional setting. *Prerequisites*: 18 hours in Graphic Design and instructor's approval. (Elective course)

See the *Graduate Catalog* for graduate programs and courses.

History of Art (ARTH)

1305 Art History of the Western World I (3-0)
(♞ ARTS 1303)
A survey of western art that includes painting, sculpture, and architecture from prehistoric times to the medieval times. Course fee required.

1306 Art History of the Western World II (3-0)
(♞ ARTS 1304)
A survey of western art that includes painting, sculpture, and architecture from the early Renaissance to the twentieth century. Course fee required.

1307 History of Latin-American Art (3-0)
A survey of the major monuments of Latin American art and architecture from the arrival of humans in the region to the present. Topics will include the formation of indigenous civilization and art, the relationship of Spanish and indigenous civilizations, and the relationship of Latin America to European Modernism. Course fee required.

2309 Twentieth Century Art (3-0)
A critical lecture survey of the Western visual arts from 1900 to the present, including the Modern and Post-Modern Arts. Emphasis will be placed upon an analysis of the specific artworks and stylistic groups of this period in terms of their relation to changing cultural conditions: e.g. philosophical, scientific, technological, political, and economic factors. *Prerequisite*: ARTH 1306.

3308 The Border and Visual Culture (3-0)
The class explores the history of art and its role in the civilizations of the El Paso/ Northern Chihuahua region, from Hueco Tanks to the rise of Modernism and the mural renaissance. Using the rich artistic legacy of this area, the class examines the way art functions across borders and how borders have been constructed, debated, and lived through in the art of the past. Course fee required.

3329 Modern and Contemporary Art Theory (3-0)
A seminar that reviews art theory from Kant to Baudrillard. Issues such as art-for-art's sake, Marxism, phenomenology, interpretation, deconstruction, multiculturalism, and hyperreality will be discussed. *Prerequisite*: ARTH 1306. Course fee required.

4309 Research Problems in Art History (3-0)
A special topics seminar for the advanced student. May be repeated for credit if problems vary. *Prerequisites*: ARTH 1305, ARTH 1306, and instructor approval. Course fee required.

4319 Special Problems in Art History (3-0)
A course for the advanced student that allows the student and the instructor to set up individual problems. May be repeated for credit when problems vary. *Prerequisite*: Instructor approval. Course fee required.

Whole Arts (ARTS)

3320 Whole Arts (2-2)
An interarts experience that addresses Texas State requirements in the arts for classroom teachers EC-4. The course explores major themes from the visual and performing arts and uncovers arts tools, methods and resources for teaching and learning. The themes are presented in lectures, activities and interviews. Creative laboratory sections are held on and off campus.

See the *Graduate Catalog* for graduate programs and courses.

Ceramics (CERM)

2304 Ceramics I (0-6)
(ARTS 2346)
Exploring the design principles in the clay media, with major emphasis on hand building in stoneware; an introduction to potter's wheel techniques and glaze theory and application. Six hours in studio per week. *Prerequisites*: (1) ARTF 1301, 1302, 1303, and 1304, or (2) instructor approval. May be taken concurrently with ARTF 1303 and ARTF 1304. Laboratory fee required.

2314 Ceramics II (0-6)
(♦ ARTS 2347)
Stressing wheel production for throwing techniques. Emphasis toward increasing the student's proficiency, control, and aesthetic development. Kiln firing. Six hours in studio per week. *Prerequisite*: CERM 2304 or instructor approval. Laboratory fee required.

3304 Ceramics III (0-6)
Continuation of Ceramics II with emphasis on exploration of utilitarian form and surface treatment in series with further investigation of glaze materials and techniques. Six hours in studio per week. *Prerequisite*: CERM 2314 or instructor approval. Laboratory fee required.

3314 Ceramics IV (0-6)
Continuation of Ceramics III with concentration on designing and fabrication of related functional forms. Six hours in studio per week. *Prerequisite*: CERM 2314 or instructor approval. Laboratory fee required.

3324 Ceramics V (0-6)
Exploration of clay from the non-utilitarian aspects, stressing sculptural relationship of joined forms, both thrown and hand built. Research into clay and clay bodies. Six hours in studio per week. *Prerequisites*: CERM 3314 and instructor approval. Laboratory fee required.

4304 Ceramics VI (0-6)
Continuation of Ceramics V. Six hours in studio per week. *Prerequisite*: CERM 3324 or instructor approval. Course fees required.

4314 Ceramics VII (0-6)
Emphasis upon individual direction and achievement. *Prerequisites*: CERM 4304; 12 semester hours in ceramics or instructor approval. Course fees required.

4324 Special Problems in Ceramics (0-6)
Emphasis upon individual direction and achievement in ceramics. May be repeated for credit when problem varies. *Prerequisite*: Instructor approval. Course fees required.

See the *Graduate Catalog* for graduate programs and courses.

Drawing (DRAW)

2308 Life Drawing I (0-6)
(♦ ARTS 2323)
Human Anatomy for Artists. Academic study and drawing of the skeleton and superficial muscles of the human figure. *Prerequisites*: (1) ARTF 1301 and ARTF 1302 or (2) instructor approval. Laboratory fee required.

2318 Life Drawing II (0-6)
(♦ ARTS 2324)
Drawing the human figure from live model(s). Emphasis on rendering of form through use of line and value, using varied perceptual approaches. Mixed media experience. *Prerequisite*: DRAW 2308 or instructor approval. Laboratory fee required.

3308 Life Drawing III (0-6)
Drawing the human figure from live model(s). Emphasis upon placing the figure in composition, the use of varied media, and encouragement of individual direction. *Prerequisite*: DRAW 2318 or instructor approval. Laboratory fee required.

3318 Life Drawing IV (0-6)
Study of animal forms. Emphasis on learning the differences and similarities among vertebrates. Includes research, gestural sketches, studies, and finished compositions. *Prerequisite*: DRAW 2318 or instructor approval. Laboratory fee required.

4310 Advanced Drawing Techniques I (0-6)
Exploration of mixed drawing techniques. Expansion of subject matter capabilities with emphasis on personal expression. Studies and finished compositions. *Prerequisite*: DRAW 2318. Supplemental Tuition and Coaching fee required.

4320 Advanced Drawing Techniques II (0-6)
Individual assignments. Emphasis upon the combining of drawing techniques/media with the techniques/media from the student's major art area. *Prerequisite*: DRAW 2318 or instructor approval. Supplemental Tuition and Coaching fee required.

4330 Special Problems in Life Drawing (0-6)
Independent study in drawing from living forms. May be repeated for credit. *Prerequisite*: Six semester hours in life drawing or instructor approval. Supplemental Tuition and Coaching fee required.

See the *Graduate Catalog* for graduate programs and courses.

Metals (MTLS)

2303 Metals I (0-6)
(🐄 ARTS 2341)
An examination of several basic metal techniques—sawing, soldering, forming, cold connections, and surface finishes. Six hours in studio per week. *Prerequisites*: (1) ARTF 1301, 1302, 1303, and 1304 or (2) instructor approval. May be taken concurrently with ARTF 1303 and ARTF 1304. Laboratory fee required.

2313 Metals II (0-6)
(🐄 ARTS 2342)
Exploration of forging and hollow construction techniques first half of semester. Last six weeks will cover the basics of lost wax casting with various metal alloys. Six hours in studio per week. *Prerequisites*: MTLS 2303 and ARTF 1304. Laboratory fee required.

3303 Metals III (0-6)
Concentrated work on metal construction techniques including marriage of metals, hammer inlay, mokume, and mechanisms. Six hours in studio per week. *Prerequisite*: MTLS 2313. Laboratory fee required.

3313 Metals IV (0-6)
Continuation of Metals III with emphasis on the die-forming, repousse, and chasing. Six hours in studio per week. *Prerequisite*: MTLS 3303. Laboratory fee required.

3323 Metals V (0-6)
Concentration on various forming techniques, angle raising, shell forming and construction, and work on series problem. Six hours in studio per week. *Prerequisite*: MTLS 3313. Laboratory fee required.

4303 Metals VI (0-6)
Emphasis on advanced metal design with individual investigation. Six hours in studio per week. *Prerequisite*: MTLS 3323. Course fees required.

4313 Metals VII (0-6)
Emphasis upon individual direction and achievement. Minimum of six hours in studio per week. *Prerequisite*: MTLS 4303 or instructor approval. Course fees required.

4323 Special Problems in Metals (0-6)
Emphasis on individual direction and achievement. Minimum of six hours in studio per week. May be repeated for credit if problems vary. *Prerequisites*: MTLS 4303 and instructor approval. Course fees required.

See the *Graduate Catalog* for graduate programs and courses.

Painting (PNTG)

2301 Painting I (0-6)
(ARTS 2316)
Painting in oil, with a concentration in developing color perception, exploring color theory, technical manipulation of media, and beginning to explore personal statements. *Prerequisites*: ARTF 1301, 1302, 1303, 1304, or instructor approval. ARTF 1303 and ARTF 1304 may be taken concurrently with PNTG 2301. Laboratory fee required.

2331 Painting II (0-6)
(ARTS 2317)
Concentration on the issues of the interrelatedness of form and content while beginning to explore contemporary concerns and developing the analytical skills to criticize artworks. Students are encouraged to explore various media. *Prerequisite*: PNTG 2301. Laboratory fee required.

3301 Painting III (0-6)
Continuation of Painting II with an emphasis on developing a personal visual vocabulary while continuing the exploration of contemporary concerns and analytical skills. *Prerequisite*: PNTG 2331. Laboratory fee required.

3331 Painting IV (0-6)
Continuation of Painting III with further emphasis upon development of a personal visual vocabulary and researching a paper on contemporary issues to be presented to the class. *Prerequisite*: PNTG 3301. Laboratory fee required.

3341 Painting V (0-6)
Continuation of Painting IV with added emphasis upon individual direction and achievement. *Prerequisite*: PNTG 3331. Laboratory fee required.

4301 Painting VI (0-6)
Continuation of Painting V with emphasis upon the refinement of concepts and the encouragement of exploratory techniques. *Prerequisite*: PNTG 3341. Laboratory fee required.

4331 Painting VII (0-6)
Continuation of Painting VI with emphasis upon the development of a consistent body of work that could constitute an exhibition. *Prerequisite*: PNTG 4301. Course fees required.

4341 Special Problems in Painting (0-6)
Emphasis on individual direction and achievement in painting. May be repeated for credit when problem varies. *Prerequisite*: 12 semester hours in painting or instructor approval. Course fees required.

See the *Graduate Catalog* for graduate programs and courses.

Printmaking (PRNT)

2305 Printmaking I (0-6)
(TCCN ARTS 2333)
An introductory course focusing on the basics of relief, intaglio, and stone lithographic printmaking techniques, the terminology, and a brief history of these processes. Students will be encouraged to develop personal original imagery to execute in these media. Course will include a brief demonstration of screen techniques. A minimum of six hours in studio per week. *Prerequisites*: ARTF 1301, ARTF 1302, and ARTF 1304. ARTF 1304 may be taken concurrently with PRNT 2305. Laboratory fee required.

2325 Printmaking II (0-6)
(TCCN ARTS 2334)
Continuation of processes presented in Printmaking I with the addition of at least one multi-color print. Exploration of additional print processes including: chine colle, monoprints, monotypes. Possible exploration of screen processes including photoscreen. Personal original imagery further developed. A minimum of six hours in studio per week. *Prerequisite*: PRNT 2305. Laboratory fee required.

3305 Printmaking III (0-6)
Continued exploration of previous print processes with introduction of collographic print techniques and the photographic gum bichromate process. Aluminum plate lithography may also be explored. Emphasis on the production of like multiples and the development of solid drawing skills and personal imagery. A minimum of six hours in studio per week. *Prerequisite*: PRNT 2325. Laboratory fee required.

3325 Printmaking IV (0-6)
Combining two or more print processes into a single image will be explored along with a continuation of the student's personal imagery in chosen print media. Papermaking will also be explored. A minimum of six hours in studio per week. *Prerequisite*: PRNT 3305. Laboratory fee required.

3335 Printmaking V (0-6)
Choice and execution of best print media for student's imagery. Strong personal image and technical development expected. A minimum of six hours in studio per week. *Prerequisite*: PRNT 3325. Laboratory fee required.

 TCCN Indicates Texas Common Course Number (TCCN)

4305 Printmaking VI (0-6)
Emphasis upon further technical development, image, and concept. A minimum of six hours in studio per week. *Prerequisite*: PRNT 3335. Course fees required.

4325 Printmaking VII (0-6)
A continuation of PRNT VI further refining and exploring techniques, images, and concepts. A minimum of six hours in studio per week. *Prerequisite*: PRNT 4305. Course fees required.

4335 Special Problems in Printmaking (0-6)
Emphasis upon individual course of study developed jointly between the instructor and the student or specialized Summer program offering. Written proposal may be required. A minimum of six hours in studio per week. May be repeated for credit when problem varies. *Prerequisite*: PRNT 4325 or instructor approval. Course fees required.

See the *Graduate Catalog* for graduate programs and courses.

Sculpture (SCUL)

2302 Sculpture I (0-6)
(▼ ARTS 2326)
An introduction to basic sculptural concepts and materials with emphasis on simple manipulation of wood, steel, and found objects. Six hours in studio per week. *Prerequisites*: ARTF 1301, ARTF 1302, and ARTF 1303. ARTF 1303 may be taken concurrently with SCUL 2302. Laboratory fee required.

2332 Sculpture II (0-6)
(▼ ARTS 2327)
Continued exploration of Sculptural concepts through the use of combining traditional sculptural materials. Six hours in studio per week. *Prerequisite*: SCUL 2302 or instructor approval. Laboratory fee required.

3302 Sculpture III (0-6)
Sculptural fabrication through the manipulation of steel. To include steel cutting, forging, welding, and safety procedures. Six hours in studio per week. *Prerequisite*: SCUL 2302 or instructor approval. Laboratory fee required.

3332 Sculpture IV (0-6)
Experimentation in the casting of non-ferrous metals to include a variety of techniques and safety procedures. Six hours in studio per week. *Prerequisite*: SCUL 3302 or instructor approval. Laboratory fee required.

3342 Sculpture V (0-6)
The exploration of Sculptural form through the use of non-traditional materials. Six hours in studio per week. *Prerequisite*: SCUL 2302 or instructor approval. Laboratory fee required.

4302 Sculpture VI (0-6)
Investigation into the facets of public Sculpture and formal proposal writing. Six hours in studio per week. *Prerequisite*: SCUL 2302 or instructor approval. Course fees required.

4332 Sculpture VII (0-6)
Advanced sculptural investigation emphasizing individual directional development. Six hours in studio per week. *Prerequisites*: SCUL 2302 and 6 semester hours of sculpture. Course fees required.

4342 Special Problems in Sculpture (0-6)
Continued development of an individual direction in Sculpture. May be repeated for credit when problem varies. *Prerequisites*: SCUL 2302 and 9 semester hours of sculpture. Course Fees required.

See the *Graduate Catalog* for graduate programs and courses.

Chicano Studies

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History: Chávez, Topp
Languages and Linguistics: Amastae, Armangol, Elerick, García, Perez, Ramos, Teschner
Music: Cardon
Nursing: Amaya
Philosophy: Haddox, Springer
Political Science: Rocha, Staudt
Psychology: Zárate
Social Work: Coggins
Sociology and Anthropology: Campbell, Earle, Howard, Morales, Rodríguez, Romero
Teacher Education: Bixler-Márquez, Gonzalez, Izquierdo, Seda

Chicano Studies offers a variety of courses from a number of disciplines. These courses are designed to impart knowledge about the Mexican-origin population, and its distribution in the U.S., its history, literature, culture, social issues, and language. Chicano Studies is designed to provide individuals with the opportunity to prepare for (1) further study in the fields of the humanities, social science, law, and education; (2) careers in community development programs and teaching at all levels; and (3) advanced study in Chicano Studies fields. All courses listed in this interdisciplinary program are open to students meeting the academic prerequisites. Students may start at the freshman or sophomore level. Most Chicano Studies core courses are cross-listed with participating departments. Credit may be counted toward:

1. An interdisciplinary major in Chicano Studies (27 semester hours of core courses; see below)

2. A minor (18 hours): Social Science Option, Humanities Option, Fine Arts Option, and Interdisciplinary Option

Students desiring to pursue one of these programs should consult with the Chicano Studies Director to determine a course of study suitable to their interests and professional needs.

Major in Chicano Studies (27 hours)

Students wishing to major in Chicano Studies must complete the following:

1. 27 semester hours of academic Core Courses as follows:
   a. 3 **CHIC 3311 (It is recommended that this course be taken first.)**
   b. 3 PHIL 2313; SOCI 2358, SOCI 2359; SPAN 3320, SPAN 3330; ARTH 3308; CHIC 4301, CHIC 4304
   c. 3 ENGL 3374; THEA 3335, THEA 4340 (when topic is appropriate)
   d. 3 ENGL 3310
   e. 3 HIST 3309
   f. 3 POLS 4313 or POLS 4315
   g. 3 CHIC 3302 or CHIC 3304
   h. 6 CHIC 3301 (WS 3301), CHIC 3303, CHIC 3339, CHIC 4250, CHIC 4301, CHIC 4304, CHIC 4306, CHIC 4350, CHIC 4450; BED 4340; HIST 3327, HIST 3328, HIST 3342, HIST 3350, HIST 3390 (when topic is appropriate); PHIL 4353; POLS 4330, POLS 4313; SOWK 3326; SPAN 3325, SPAN 4372
2. Proficiency in Spanish must be established by completing SPAN 2302 or 2304 or being placed into a third-year course.
3. A term paper, with a minimum grade of "B," in a Chicano Studies (upper-division level, 3300-4300) course must be on file in the program's office.

Minor in Chicano Studies (18 hours)

For students with multiple interests, a minor in Chicano Studies may be pursued with another major. To complete a minor, students must have 18 hours, at least 12 of which must be upper-division courses. Students have the choice of four options from which to choose:

Social Science Option

1. 3 **CHIC 3311 (It is recommended that this course be taken first.)**
2. 3 CHIC 4301, CHIC 4304; ARTH 3308; POLS 4313, POLS 4315; SOCI 2358, SOCI 2359; SPAN 3320, SPAN 3330
3. 12 CHIC 3301 (WS 3301), CHIC 3303, CHIC 3304, CHIC 3339, CHIC 4250, CHIC 4304, CHIC 4306, CHIC 4350, CHIC 4450; ENGL 3374; POLS 4313, POLS 4315, POLS 4338 POLS 4370 (when topic is appropriate); SOWK 3326, SOWK 3336, SOWK 3366, SOWK 3385; THEA 4340 (when topic is appropriate)

Humanities Option

1. 3 **CHIC 3311 (It is recommended that this course be taken first.)**
2. 3 ARTH 3308; CHIC 3302, CHIC 4301; PHIL 2313; SPAN 3320, SPAN 3330
3. 12 CHIC 3301, CHIC 3303, CHIC 3304, CHIC 4250, CHIC 4350, CHIC 4450; ENGL 3310, ENGL 3374; HIST 3309, HIST 3327, HIST 3328, HIST 3342, HIST 3390 (when topic is appropriate); PHIL 4353 (when topic is appropriate); SPAN 3325, SPAN 4372; THEA 4340 (when topic is appropriate)

Fine Arts Option

1. 3 **CHIC 3311 (It is recommended that this course be taken first.)**
2. 6 MUSL 1326, MUSL 3325; CHIC 3304; MUSA 1140*, MUSA 1142*; KIN 2342 *MUSA 1140 and MUSA 1142 may be repeated for credit. Only 3 credits of 1140 and 1142 (combined) may be applied toward the minor.
3. 3 ARTH 1307, ARTH 3308, ARTH 3309
4. 6 THEA 3335; CHIC 3302, CHIC 3303; SPAN 4390 (when topic is Spanish Cinema)

Interdisciplinary Option

1. 3 **CHIC 3311 (It is recommended that this course be taken first.)**
2. 3 ARTH 3308; CHIC 3302, CHIC 4301, CHIC 4304; PHIL 2313; POLS 4313, POLS 4315; SOCI 2358, SOCI 2359; SPAN 3320, SPAN 3330
3. 12 BED 4340; CHIC 3301 (WS 3301), CHIC 3303, CHIC 3304, CHIC 3339, CHIC 4250, CHIC 4304, CHIC 4306, CHIC 4350, CHIC 4450 (when topic is appropriate); ENGL 3310, ENGL 3374; HIST 3309, HIST 3327; POLS 4315; SPAN 3325; SOWK 3326, SOWK 3336, SOWK 3366, SOWK 3385; THEA 3335, THEA 4340 (when topic is appropriate)

Core Courses

Art History

ARTH	1307	History of Latin-American Art
ARTH	3308	The Border and Visual Culture
ARTH	3309	The Art and Civilization of Ancient Mexico and the Maya

Bilingual Education

BED	4340	Principles of Bilingual Education/ESL

Chicano Studies

CHIC	3301	La Chicana (same as WS 3301)
CHIC	3302	Chicano Cinema
CHIC	3303	The Border in Mexican Film
CHIC	3304	Chicano/Latino Music in the U.S.
CHIC	3311	Chicano Studies: Societal Issues
CHIC	3339	Cultural Diversity and Youth in the U.S.
CHIC	4250	Topics in Chicano Studies
CHIC	4301	Chicano Legal History
CHIC	4304	Environmental Justice and Minority Communities in the U.S.
CHIC	4306	Colonias on the U.S. Mexico-Border
CHIC	4350	Topics in Chicano Studies
CHIC	4450	Topics in Chicano Studies

English

ENGL	3310	Chicana/o Literature
ENGL	3374	Folklore of the Mexican American

History

HIST	3309	Mexican American History
HIST	3327	Racial Thought in U.S. History
HIST	3328	History of Hispanic Peoples in the United States
HIST	3342	The Spanish Borderlands
HIST	3350	The Mexican Revolution
HIST	3390	History Special Topics (when topic is appropriate; advisor's approval required)

Kinesiology

KIN	2342	Spanish Dance

Applied Music

MUSA	1140	Ballet Folklorico
MUSA	1142	Mariachis

Music Literature and History

MUSL	1326	The Music of Mexico
MUSL	3325	Music on the Border

Philosophy

PHIL	2313	Chicanos and American Thought
PHIL	4353	Independent Study (when topic is appropriate; advisor's approval required)

Political Science

POLS	4313	Southwestern Border Politics
POLS	4315	Latinos in the American Political System
POLS	4330	Foreign Policy of the United States
POLS	4338	Relations Between the United States and Mexico
POLS	4370	Readings in Political Science (when topic is appropriate; advisor's approval required)

Social Work

SOWK	3326	Social Work in Mexican-American Communities
SOWK	3336	Child Welfare Practice and Services in a Border/Bi-National Context
SOWK	3366	Comparative Social Policy and Services: U.S./Mexico
SOWK	3385	Generalist Social Work Practice in "Colonias" and Rural Areas

Sociology

SOCI	2358	Chicanos in the Southwest
SOCI	2359	Chicanos and American Society

Spanish

SPAN	3320	Culture and Civilization of Spain
SPAN	3325	The Confluence of Mexican and Chicano Literature
SPAN	3330	Spanish American Civilization
SPAN	4372	Contrastive Linguistics: Spanish/English
SPAN	4390	Topics in Spanish (when topic is appropriate; advisor's approval required)

Theatre

THEA	3335	Chicano Theatre and Drama
THEA	4340	Selected Topics in Drama and Theatre (when topic is appropriate; advisor's approval required)

Recommended Electives

Economics

ECON	3366	Economics of Latin America

English

ENGL	3371	Life and Literature of the Southwest
ENGL	3372	Folklore

History

HIST	3316	Southwest Frontier
HIST	3349	History of Mexico to 1900

Linguistics

LING	3308	Methods of Teaching English to Speakers of Other Languages
LING	3309	The Structure of Spanish for Language Professionals (same as SPAN 3309)
LING	3315	History of the Spanish Language (same as SPAN 3315)

Philosophy

PHIL	3312	Latin American Thought

Political Science

POLS	3333	State and Society

Sociology

SOCI	3327	Majority/Minority Relations in the United States

Spanish

SPAN	3309	Structure of Spanish for Language Professionals (same as LING 3309)
SPAN	3315	History of the Spanish Language (same as LING 3315)

Chicano Studies (CHIC)

3301 La Chicana (3-0)
An interdisciplinary examination of the socioeconomic, political, and cultural forces that affect the status of Chicanas in American society. Special considerations will be given to the role of Chicanas in the Women's and Chicano Movements, as well as the Mexicana/Chicana confluence in the U.S.-Mexico border region.

3302 Chicano Cinema (3-0)
An examination of the American film industry with respect to the Chicano's role, historically and culturally, in the genre. A series of films, including Hollywood commercial and Chicano-made films, will be screened, as part of an analysis of Chicano images and their impact on American

popular culture. This is an interdisciplinary course that employs analytical constructs and techniques used in cultural anthropology, sociology, film criticism, and history. Course fee required.

3303 The Border Image in Mexican Film (3-0)
Analysis of the U.S.-Mexico Border image in Mexican cinema, to include the salient demographic, cultural, linguistic, and political characteristics of the region. Course fee required. The course will be taught in Spanish.

3304 Chicano/Latino Music in the U.S. (3-0)
An examination of the history of Tex-Mex and Latin music – particularly from Mexico, Cuba, Brazil, and Argentina – and its influence in U.S. popular music.

3311 Chicano Studies: Societal Issues (3-0)
An interdisciplinary analysis of the salient historical, cultural, and social issues of contemporary importance to the Chicano population, with a particular emphasis on the U.S.-Mexico border.

3339 Cultural Diversity and Youth in the U.S. (3-0)
Survey of socioeconomic and cultural characteristics of ethnic groups in the U.S. and how they affect the participation of these groups in the American education system. Includes examination of specific policies and practices in those institutions that promote or inhibit participation.

4301 Chicano Legal History (3-0)
An analysis of the salient judicial cases and federal and state legislation that have affected the status of Hispanics and their participation in American society.

4304 Environmental Justice and Minority Communities in the U.S. (3-0)
An examination of environmental justice issues in the U.S., with an emphasis on communities, agencies and efforts that address sustainable development in the U.S.-Mexico border region. The underpinnings of the environmental justice movement in the U.S. and the regional policy formulation and practice implications for these communities will be central to the course. The course may require field trips. (CHIC 4304 is the same course as AFST 4304; SOCI 4304; ANTH 4304; and POLS 4304.)

4306 Colonias on the U.S.-Mexico Border (3-0)
A study of the unincorporated population settlements in various regions along the U.S.-Mexico border. Emphasis on public policy and social service issues. This course may require field trips. (CHIC 4306 is the same as SOCI 4306 and ANTH 4306.)

4350 Topics in Chicano Studies (3-0)
4450 Topics in Chicano Studies (4-0)
An examination of a currently relevant subject from the perspective of Chicano Studies. Topics will vary and will be drawn from the social sciences, humanities, fine arts, and education. May be repeated for credit when topic varies.

Communication

202 Cotton Memorial
(915) 747-5129
communications@utep.edu

CHAIRPERSON: Patricia D. Witherspoon
PROFESSOR EMERITUS: Ray Small
PROFESSORS: Ingle, Witherspoon
ASSOCIATE PROFESSOR EMERITA: Jean H. Miculka
ASSOCIATE PROFESSORS: Barrera, Byrd, Erbert, Riccillo, Yang
ASSISTANT PROFESSORS: Perez, Ruggiero, Trejo
SENIOR LECTURER: Arocha, Mullins, Mitchell

The Department of Communication affords students the opportunity to pursue a Bachelor of Arts degree in Communication. Five study concentrations are available: Communication Studies, Electronic Media, Media Advertising, Organizational Communication/Public Relations, and Print Media. In addition to the three core courses, the student completes the five courses listed under the concentration selected, plus four elective courses. The elective courses may be selected from the list of electives recommended under each concentration or from other 3300-level or 4300-level communication courses approved by an advisor.

Core Courses: All Concentrations (9 hours)

COMM	1370	Introduction to Communication
COMM	2371	Writing for the Mass Media*
COMM	3371	Communication Theory and Analysis

* COMM 2300 is a prerequisite for COMM 2371. Students may test out of 2300 with department exam.

Communication Studies Concentration

Requirements (15 hours)

COMM	2350	Introduction to Interpersonal Communication
COMM	2352	Persuasion and Social Influence
COMM	3357	New Communication Technologies
COMM	4352	Contemporary Rhetoric
COMM	4372	Methods of Research in Communication

Electives (12 hours)

Recommended electives

COMM	3351	General Semantics
COMM	3353	Intercultural Communication
COMM	3354	Small Group Communication
COMM	3355	Organizational Communication
COMM	4300	Communication Internship
COMM	4350	Selected Topics
COMM	4355	Advanced Organizational Communication
COMM	4359	Seminar in Communication
COMM	4371	Communication Law and Society

Electronic Media Concentration

Requirements (15 hours)

COMM	2343	Audio in Media
COMM	2372	Mass Media and Society
COMM	3341	Writing for Electronic Media
COMM	4341	Advanced Writing for Electronic Media
COMM	4371	Communication Law and Society

Electives (12 hours)

Recommended electives

COMM	2342	Introduction to Video Systems
COMM	3342	Advanced Electronic Media Systems
COMM	3344	Media Programming for Radio and Television
COMM	3357	New Communication Technologies
COMM	4300	Communication Internship
COMM	4330	Media Planning
COMM	4350	Selected Topics
COMM	4372	Methods of Research in Communication

Media Advertising Concentration

Requirements (15 hours)

COMM	2330	Principles of Advertising
COMM	3331	Graphics of Print Media
COMM	3333	Ad Layout and Copy
COMM	3335	Advertising Campaigns
COMM	4371	Communication Law and Society

Electives (12 hours)

Recommended electives

COMM	3317	Photography
COMM	3321	Public Relations
COMM	3353	Intercultural Communication
COMM	3357	New Communication Technologies
COMM	4300	Communication Internship
COMM	4330	Media Planning
COMM	4335	Advanced Advertising Campaigns
COMM	4350	Selected Topics
COMM	4372	Methods of Research in Communication

Organizational Communication/Public Relations Concentration

Requirements (15 hours)

COMM	3311	Public Affairs Reporting
COMM	3321	Public Relations
COMM	3354	Small Group Communication
COMM	3355	Organizational Communication
COMM	4372	Methods of Research in Communication

Electives (12 hours)

Recommended electives

COMM	3353	Intercultural Communication
COMM	3357	New Communication Technologies
COMM	4300	Communication Internship
COMM	4323	Case Studies in Public Relations
COMM	4350	Selected Topics
COMM	4355	Advanced Organizational Communication
COMM	4371	Communication Law and Society

Print Media Concentration

Requirements (15 hours)

COMM	2372	Mass Media and Society
COMM	3311	Public Affairs Reporting
COMM	3313	News Gathering and Investigation
COMM	4311	News Editing
COMM	4371	Communication Law and Society

Electives (12 hours)

Recommended electives

COMM	3317	Photography
COMM	3331	Graphics of Print Media
COMM	3333	Ad Layout and Copy
COMM	3351	General Semantics
COMM	3357	New Communication Technologies
COMM	4300	Communication Internship
COMM	4312	Feature Writing
COMM	4350	Selected Topics
COMM	4372	Methods of Research in Communication

Minor in Communication (18 hours)

COMM 1370, 2371, 3371, and nine hours of upper-division Communication courses. A MINOR PROGRAM REQUEST FORM including departmental approval must be filed with the department.

Minor in Screenwriting (Interdepartmental)

Eighteen hours of course work, twelve hours of which are required and six of which are from a menu of options, from the Departments of Communication, English, and Theatre Arts and Film to train students in the art of writing for the cinema.

Required Courses

ENGL	3361	Introduction to Creative Writing
ENGL	3369	Television and Screenplay Writing
THEA	3392 or	Radio, TV, and Film Scripting
THEA	4340 or	Selected Topics, when taught as Screenwriting II
COMM	4350	Selected Topics, when taught as From Script to Screen

Menu Options

THEA	4318	Playwriting
THEA	4340	Selected Topics, when taught as Structural Analysis of Scripts
ENGL	3367	Fiction Techniques
ENGL	3302	Literature and Film
ENGL	4340	Advanced Literary Studies, when taught as Screenplays as Literature
THEA	3325	Directing I

As a prerequisite to the program, students must take THEA 1390, Introduction to the Art of the Motion Picture, either as fulfillment of the Visual and Performing Arts Block of the Core Curriculum or as an elective. It is also recommended that students fulfill the Humanities Block of the Core Curriculum with ENGL 2314, Introduction to American Drama.

Teacher Certification

Students seeking the BA degree in Communication may choose a minor in secondary teacher education with certification in Journalism or Speech. The Print Media Concentration with a minor in secondary education will lead to certification in journalism. The Electronic Media Concentration will also lead to certification in Journalism, provided that COMM 3311, 3313, and 4311 are taken as part of the degree plan electives. The Communication Studies Concentration with a minor in secondary education will lead to certification in Speech.

Communication (COMM)

1301 Public Speaking (3-0)
(♦ SPCH 1315)
Introduction to the theory and practice of public speaking; the inventing, arranging, phrasing, and presenting of ideas to an audience. The complementary skills of speaking and listening are developed through criticism of speeches presented in class. *Prerequisite*: ENGL 0311 or ESOL 1309 or ENGL 1311 or placement into ESOL 1311.

1302 Business and Professional Communication (3-0)
(♦ SPCH 1321)
A course in communication covering both informative and persuasive presentations as these occur in business and professional activities. Instruction and guided practice in informal and semi-formal speaking situations. *Prerequisite*: ENGL 0311 or ESOL 1309 or ENGL 1311 or placement into ESOL 1311.

1370 Introduction to Communication Studies (3-0)
An introduction to the field of communication. A survey of theories and issues associated with the communication process from intrapersonal communication to mass communication.

1611 Written and Oral Communication (6-0)
Integrated study of and practice in oral and written communication, with emphasis on the process leading to the creation of effective essays and speeches. Students are offered the opportunity to develop complementary skills of reading and listening through extensive response to others' written and spoken work. Counts for both ENGL 1311 and COMM 1301. *Prerequisite*: ENGL 0311 with a grade of "C" or better or placement by exam.

2201 Forensic Practicum: Debate (0-4)
Practical laboratory experience in all phases of research, case preparation, argumentation, and analysis of the current National Debate topic and/or the current Cross-Examination Debate Association topic; may include preparation for Lincoln-Douglas and parliamentary debate formats. Offers preparation for intercollegiate competition and for participation in on-campus public debate program that may include topics of local/current interest. May be repeated for credit.

2222 Communication and Organizational Leaders (2-0)
An overview of theories and research related to leadership as a communication process, and an analysis of critical leadership communication behaviors associated with decision making, organizational change, the management of diversity, fostering organization culture and community, etc. *Prerequisite*: Sophomore standing.

2300 Beginning Media Writing (3-0)
(COMM 2311)
An introduction to writing techniques used in media. Emphasis on media style and story construction, grammar, spelling, and punctuation. *Prerequisites*: Sophomore standing; ENGL 1311, ENGL 1611, or COMM 1611; ENGL 1312.

2330 Principles of Advertising (3-0)
(COMM 2327)
The role of advertising in society. Basic concepts include marketing message creation, budget determination, agency-client relationships, creative strategy, media considerations, and social and ethical responsibility of advertisers. *Prerequisites*: Sophomore standing and COMM 1370 with a grade of "C" or better.

2342 Introduction to Video Systems (3-2)
An introduction to the history, theory, technology, and production of visual communication from cameras to computers. *Prerequisite*: COMM 1370. Course fee required.

2343 Audio in Media (3-2)
The history, theory, and production of audio communication. Development and review of audio techniques from analogue to digital formats. *Prerequisite*: COMM 1370. Course fee required.

2350 Introduction to Interpersonal Communication (3-0)
(SPCH 1318)
The study of contemporary interpersonal communication theory and research. Both theory and skills are emphasized. *Prerequisites*: Sophomore standing and ENGL 1312.

2352 Persuasion and Social Influence (3-0)
An introduction to theories of persuasion. Analysis of the communication process as social influence in various contexts of communication. *Prerequisite*: Sophomore standing or instructor approval.

2371 Writing for the Mass Media (3-0)
(COMM 2315)
Fundamentals of newswriting and story structures with emphasis on development of information-gathering skills as well as journalistic style. Concentration on print media. P*rerequisites*: ENGL 1311, or ENGL 1611, or COMM 1611 and ENGL 1312, COMM 1370, COMM 2300 and sophomore standing. Course fee required.

2372 Mass Media and Society (3-0)
(COMM 1307)
An introduction to the mass communication media in the United States, their history, their roles, and issues within these media. Print, electronic, and digital systems are surveyed. *Prerequisite:* Sophomore standing.

3311 Public Affairs Reporting (3-0)
An intensive reporting course that examines public institutions, their structures and operations and provides student practice for publication in reporting on city, county, state, and federal offices. *Prerequisites*: Junior standing, COMM 1370, and COMM 2371. Course fee required.

3313 News Gathering and Investigation (3-0)
Emphasis on developing and writing news stories of substance and depth for publication. Emphasis on more complex issues and story structures with development of journalistic writing style. Includes news features, interpretive and investigative reporting, and news gathering. *Prerequisites*: Junior standing, COMM 1370, COMM 2371 with a grade of "C" or better, and COMM 3311. Course fee required.

3317 Photography (3-0)
Basic instruction in photographic media. Camera lighting and development of techniques. Principles of composition. Development and printing techniques. *Prerequisite*: Junior standing. Course fee required.

3321 Public Relations (3-0)
Principles, techniques, and methods used in public relations. *Prerequisites*: Junior standing and COMM 2371 with a grade of "C" or better.

3322 Conflict and Mediation (3-0)
Examines (a) basic principles and theories of communication, conflict, and mediation, (b) contextual factors affecting conflict and mediation, (c) resolution and management of conflict, (d) the outcomes of productive and destructive conflict, and (e) negotiation processes. *Prerequisite*: COMM 1370 with a grade of "C" or better, or instructor approval.

3330 Advertising Research (3-0)
An introduction to advertising research, design and methodology. Visual methodology into the creation of concepts and copy for the primary ad media. Includes consumer and business media and direct advertising. Offered in fall semester only. Project required. *Prerequistes*: Junior standing and COMM 2330 with a grade of "C" or better.

3331 Graphics of Print Media (3-0)
Use of graphics for effective communication including typography, color, photography, design in advertising, newspaper and magazine, computer-based pagemaker, and printing methods. *Prerequisites*: Junior standing, COMM 1370, COMM 2330, and COMM 2371. Course fee required.

3332 Advertising Design, Graphics and Layout (3-1)
Use of graphics for effective communication including typography, color, photography, design in advertising, newspaper and magazine, computer-based software application, and printing methods. Includes basic production of newspaper, magazine and internet advertising from conceptualization to comprehensives. *Prerequisite*: COMM 2330 with a grade of "C" or better.

3333 Creative Strategy/Copywriting (3-1)
Strategic research, problem definition, planning, creativity, and ethics in advertising and public service announcements. Applying the techniques of research and the principles of communication and persuasion to the development of objectives, strategy and creative concepts. The theory and practice of developing appropriate messages to reach and influence target audiences. Integrating research, strategy and audio/visual methodology into the creation of concepts and copy for the primary ad media. Includes consumer and business media and direct advertising. *Prerequisites*: Junior standing, COMM 2330 and COMM 3332 each with a grade of "C" or better. Course fee required.

3336 International Advertising (3-0)
Introduction to advertising on an international basis. Examines cultural differences and government's role in the marketing process, and appropriate strategic decision-making for global advertising campaigns. *Prerequisites*: Junior standing and COMM 2330 with a grade of "C" or better.

3337 Radio/TV Advertising (3-1)
Development of techniques for commercial and public service advertising in radio and television. Specific strategies and formats will be analyzed and developed for final production. *Prerequisites*: COMM 2330 and COMM 3333 each with a grade of "C" or better.

3341 Writing for Electronic Media (3-0)
The techniques of writing for broadcast news, advertising for radio and television, and public programs for radio, television, and video. *Prerequisites*: Junior standing and COMM 2371.

3342 Advanced Electronic Media Systems (3-0)
Advanced techniques of video production and technology. *Prerequisites*: Junior standing, COMM 2342, and COMM 3341. Course fee required.

3344 Media Programming for Radio and TV (3-0)
History and development of techniques for media programming in radio and television. Specific program formats will be analyzed and developed. *Prerequisites*: Junior standing, COMM 2343, and COMM 3342.

3351 General Semantics (3-0)
A survey of problems in language use, concentrating on theories of meaning. Review of semantics principles from general semantics to general systems theory. *Prerequisite*: Junior standing.

3353 Intercultural Communication (3-0)
The process of communication in culture, verbal, nonverbal cues, values and person perception in cross and intercultural interaction. *Prerequisite*: Junior standing, COMM 1370, or instructor approval.

3354 Small Group Communication (3-0)
An examination of theories, research, and principles to small group communication. Both theory and skill development are stressed. *Prerequisite*: Junior standing or instructor approval.

3355 Organizational Communication (3-0)
An examination of the theory and research on the communication process in organizations. Functional and interpretive theories and applications are explored. *Prerequisite*: Junior standing or instructor approval.

3356 Inter Ethnic Communication (3-0)
Examines communication structures that influence how individuals from different ethnic backgrounds interact. Particular attention is given to interpersonal communication among ethnicities and races in the border region. *Prerequisites*: Sophomore standing, COMM 2350 and ENGL 1312, or instructor approval.

3357 New Communication Technologies (3-0)
The theory and research of the effects of technology on human communication. Surveys the impact of the effects on human interaction mediated by various technologies. P*rerequisite*: Junior standing, COMM 1370, or instructor approval.

3358 Communication and Popular Culture (3-0)
Explores the communicative functions of popular culture and its effects on culture and identity. Emphasizes effects of mass media on American culture and its subcultures. *Prerequisites*: COMM 1370 with a grade of "C" or better or instructor approval.

3371 Communication Theory and Analysis (3-0)
Survey of significant communication theories, providing a history of similarities and differences among theories and theorists. Theories will range from intrapersonal processes to mass communication. *Prerequisites*: Junior standing and COMM 1370.

4300 Communication Internship (1-15)
Students in this program are provided an opportunity to gain practical experience through unremunerated professional participation in the activities of professional firms, agencies, or departments in their major emphasis areas. *Prerequisites*: GPA 2.5, Junior standing, COMM 1370, and COMM 2371.

4311 News Editing (3-0)
Instruction and practice in basic story editing and production with focus on practical experience in editing and copy preparation for publication. Emphasis on development of news judgment, accuracy, and fairness, while exposing students to legal problems confronting the media. *Prerequisites*: Junior standing, COMM 3311, and COMM 3313. Course fee required.

4312 Feature Writing (3-0)
Methods of gathering materials for feature stories through interviews, research and observation; study of feature story form and style; discussion of markets for literary material practice in writing feature stories. *Prerequisites*: Senior standing, COMM 3313 with a grade of "C" or better, COMM 1370, COMM 2371, and COMM 3311.

4323 Case Studies in Public Relations (3-0)
Advanced theory and application of principles of public relations. Significant case studies are reviewed and analyzed. *Prerequisites*: Junior standing and COMM 3321.

4330 Media Planning and Buying (3-0)
Decision making in selection and use of advertising media. Evaluation of media alternatives in terms of marketing objectives, audience analysis, cost, and editorial and program content. Selection of space time units and media schedules. Project required. *Prerequisites*: Senior standing and COMM 2330 with a grade of "C" or better.

4331 Advertising Sales and Management (3-0)
Process of developing an effective sales staff in the advertising industry. Sales policies, procedures techniques, time-management, client relationship, closing and sales services are discussed. Management procedures, policies, and responsibilities in the successful operation of advertising industries. Areas covered are planning, problem-solving, personnel, facilities, government, financial resources, and public service. *Prerequisites*: COMM 2330 and COMM 4330 each with a grade of "C" or better.

4333 Magazine Production (3-1)
Production of small magazines through the use of computer software. Stresses basics of organization, layout, design and copywriting. Project required. *Prerequisites*: COMM 2330, COMM 3332, and COMM 3333 each with a grade of "C" or better.

4335 Advertising Campaigns (3-3)
Strategic research, problem definition, audience definition, planning, creativity, and ethics in advertising and public service campaign development. Applying the techniques of research and the principles of communication and persuasion to the development of advertising objectives, strategy and creative concepts. Project required. Offered in fall semester only. *Prerequisites*: Senior standing and COMM 2330, COMM 3332, COMM 3332 and COMM 4330 each with a grade of "C" or better. Laboratory fee required.

4337 Advanced Advertising Campaigns (3-1)
Advanced study of advertising, marketing and communication theories. Includes advanced research, planning, design, client presentation, and execution of major advertisement campaign for national client. Designed for national student competition for American Advertising Federation. Project required. Offered in spring semester only. *Prerequisites*: COMM 2330, COMM 3332, COMM 3333 and COMM 4335 each with a grade of "C" or better.

4340 Radio Documentaries (3-0)
Advanced writing and production techniques used in the development of documentary programs for radio. *Prerequisites*: Senior standing and instructor approval.

4341 Advanced Writing-Electronic Media (3-0)
Advanced techniques of writing for broadcast news, corporate instructional and promotional video. *Prerequisites*: Junior standing and COMM 3341.

4350 Selected Topics (3-0)
Instruction of students individually and in groups in significant areas of communication which are not covered by regular catalog offerings. May be repeated for credit when content varies. *Prerequisite*: Junior standing.

4352 Contemporary Rhetoric (3-0)
Study of modern humanistic contributions to theories of communication and persuasion. *Prerequisite*: Junior standing.

4355 Advanced Organizational Communication (3-0)
In-depth study of organizational communication. Theory and research emphasis given to the exploration of issues with appropriate communication methodologies employed. *Prerequisites*: Junior standing and COMM 3355 or instructor approval.

4359 Seminar in Communication (3-0)
Seminar for systematic discussion and research of topics in the field of communication. Specific content is determined by participating faculty and students. *Prerequisite*: Junior standing.

4371 Communication Law and Society (3-0)
A study of the rights and responsibilities imposed upon and exercised by the mass media under the American system of law. Ethical considerations in exercising responsibilities vested in the media are highlighted. *Prerequisites*: Junior standing, COMM 1370, and COMM 2371; or instructor approval.

4372 Methods of Research in Communication (3-0)
An overview of the various social science methodologies used in conducting research in the communication discipline. Includes problems of formulation, measurement of concepts, design, collecting, and analyzing data. *Prerequisites*: Senior standing and STAT 2380 or SOCI 2312 or PSYC 1303.

See the *Graduate Catalog* for graduate programs and courses.

Criminal Justice

101 Jack Vowell Hall
(915) 747-7943
crimjust@utep.edu

DIRECTOR: Roy S. Malpass
PROFESSOR EMERITUS: Randolph H. Whitworth
PROFESSORS: Daudistel, Graves, Hosch, Malpass
ASSOCIATE PROFESSORS: Smithey, Rodríguez, Wood
ASSISTANT PROFESSORS: Curry, Lee, Levin, Pallitto
LECTURER: McCleary

The Criminal Justice Program offers an interdisciplinary major leading toward a BA degree designed to provide students with a broad social science background for understanding crime, criminal behavior, and the criminal justice system and to offer the opportunity to prepare for a professional career in criminal justice.

Requirements for the BA Degree in Criminal Justice

The student will:

1. Complete a minimum of 131 semester hours, including at least 54 hours at the advanced (3000 or 4000) level.
2. Fulfill the general education core requirements for the Bachelor of Arts degree in the College of Liberal Arts.
   a. Criminal Justice majors are encouraged to take ENGL 3359 Technical Writing in addition to the Communication Skills sequence.
   b. Criminal Justice majors are encouraged to fulfill the mathematics requirement by taking PSYC 1303, SOCI 2312, or STAT 2380.
   c. Criminal Justice majors are encouraged to take Sociology and Psychology courses to fulfill the social/behavioral science requirements.
3. Complete 33 hours of criminal justice courses including the following required courses: CRIJ 1301, CRIJ 1302, CRIJ 2306, CRIJ 3300,

CRIJ 3302, CRIJ 3313, and CRIJ 4390. A minimum of 24 credit hours in the major must be taken at the advanced (3300-4300) level.

4. Complete a minor of at least 18 hours, nine of which must be at the advanced (3000-4000) level. The minor field must be selected from a discipline different from that of the major field. Credit for courses taken to fulfill the minor may not be used to satisfy the major or general education core requirements. See the general BA minor requirements for a list of acceptable minors.
5. Complete electives as needed to bring the total semester hours of credit to 131. Elective credit cannot be used in meeting any other degree requirement. Electives of advanced (3000 or 4000) level may, however, be applied toward satisfaction of the requirement of 54 advanced hours.

Minor in Criminal Justice

Students who wish to minor in Criminal Justice should complete CRIJ 1301, CRIJ 1302, CRIJ 2306, CRIJ 3300, CRIJ 3302, and CRIJ 3313 for a total of 18 semester hours.

Criminal Justice (CRIJ)

General Prerequisite: Junior standing for all 3300 or 4300-level courses.

1301 Introduction to Criminal Justice I (3-0)
(♞ CRIJ 1301)
Development and philosophy of criminal justice in a democratic society; introduction to agencies involved in the administration of criminal justice.

1302 Introduction to Criminal Justice II (3-0)
(♞ CRIJ 1306)
An introduction to the American legal system with a particular emphasis on situating the criminal justice system in the larger United States legal context. *Prerequisite*: CRIJ 1301 with a grade of "C" or better.

2300 Criminal Law (3-0)
(♞ CRIJ 1310)
History and philosophy of modern criminal law, including the structure, definition, and application of statute and leading case law; the elements of crimes and penalties.

2306 Introduction to Corrections (3-0)
(♞ CRIJ 2313)
A tracing of the evolution and the philosophical underpinnings of institutional and community based correctional practices.

3300 Effectiveness Assessment in Criminal Justice (3-0)
An overview of the process of effectiveness assessment in the development, application, and administration of criminal justice policy. *Prerequisite*: CRIJ 1302 with a grade of "C" or better.

3301 Criminal Investigation (3-0)
Fundamentals of criminal investigation, including theory and history, and collection and preservation of evidence. *Prerequisite*: CRIJ 3350 or consent of instructor.

3302 Police Systems and Practice (3-0)
(✦ CRIJ 2328-Lower Division Credit)
An overview of the structures, functions, and operations of law enforcement agencies in the United States, with emphasis on municipal police departments. The course surveys police operations, staff functions, personnel policies, and current innovations utilized in delivering police services. Covers such topics as police discretion, ethics, police-community relations, and the future of policing in American society.

3303 The Private Sector and Criminal Justice (3-0)
The roles of nongovernmental actors in the justice process, with a focus on the legal and sociological implications of their existence in a democratic society. Both volunteer and profit-making agencies will be examined in relation to the traditional criminal justice agencies of police, courts, and corrections. Private security and loss prevention operations will be surveyed along with private adjudicatory systems and correctional programs.

3306 Community Corrections (3-0)
An examination of the role of the community in the reintegration of offenders. Analysis of those correctional programs which are designed to be administered in a community setting, including probation, parole, halfway houses, restitution, and community service.

3308 Juvenile Justice (3-0)
The law of juvenile delinquency and the administration of the juvenile justice system. The historical development of the concept of delinquency, the special status of juveniles before the law, and juvenile justice procedural law will be examined in detail.

3309 Correctional Counseling (3-0)
Methods used by correctional officers in rehabilitating criminal offenders. *Prerequisite*: Six hours of Psychology.

3311 Crime Control and Prevention (3-0)
An examination of those activities undertaken by public and private organizations to control and prevent crime. Those programs which have been successful in reducing the amount of crime will be analyzed, as well as attempts which have been made at predicting and deterring criminal behavior.

3312 Psychology and Law (3-0)
A review of the relationship of psychology to the legal system. Topics include theories of crime, identification and evaluation of criminal suspects, rights of victims and rights of the accused, forensic assessment, jury processes and decision making, punishment and sentencing, and psychological assumptions of legal systems and processes.

3313 Criminology (3-0)
This course surveys historical perspectives on crime, contemporary criminological theory, penological theory, current trends in crime, and critical thought on current criminal justice practices and procedures. Particular emphasis is given to the development and application of theory in regard to different types of crimes, “crime waves,” and appropriate penal policy. *Prerequisite:* CRIJ 1302 with a grade of “C” or better.

3321 Family Violence (3-0)
This course surveys definitions, prevalence, and theories of family violence in the United States. Special emphasis is given to 1) the impact of variation in definitions of family violence on scientific research and conclusions; 2) the societal response to family violence; and 3) the effectiveness of policing strategies of domestic violence.

3322 Research Methods in Criminal Justice (3-0)
Assessment of data collection and interpretation strategies in criminal justice research, including hypothesis formation, research design, types of data, and data analysis. *Prerequisite*: CRIJ 3300.

3350 The Courts and Legal Process (3-0)
Focuses on the role of the courts in the administration of criminal justice, with special attention to the legal processing of criminal defendants. Topics include the structure of the American courts, due process, right to counsel, pre-trial release, plea bargaining, trial proceedings, and sentencing.

3351 Criminal Justice on the United States-Mexico Border (3-0)
An examination of the nature and scope of crime on the United States-Mexico border and an evaluation of the strategies and programs employed by both governments to control criminal activity on the border.

3370 Victimless Crime (3-0)
This course examines those crimes commonly called “crimes without victims” or “vice crimes,” particularly drug use, prostitution, and gambling. The course examines whether these behaviors are victimless and what social costs and benefits may result. In addition, the course examines criminalization and its alternatives.

3389 Criminal Justice Ethics (3-0)
This course identifies and examines the complexity of ethics pertaining to the practice of criminal justice. It focuses on applied ethics and the reasoning process justice practitioners can use to analyze and evaluate ethical dilemmas.

4300 Selected Topics in Criminal Justice (3-0)
Focuses on those selected issues and problems confronting the various components of the criminal justice system. Topics covered may change each semester. May be repeated for credit upon change of topic.

4301 Readings in Criminal Justice (3-0)
This course is designed for the advanced student who is capable of independent study. Existing regulations, both formal and informal, which govern practitioners in the area of criminal justice will be examined. This course may be repeated for credit when the topics vary. *Prerequisite:* Department approval.

4310 Internship in Criminal Justice (0-0-3)
A program in which the student is assigned two days (or 16-20 hours) each week to a criminal justice agency. A weekly seminar is also required. Designed to provide the student with an opportunity to apply academic training in practical situations. *Prerequisite*: Consent of the Program Director.

4311 Immigration Law and Administration (3-0)
An examination of federal regulations pertaining to legal and illegal immigration into the United States. Among the topics discussed are legalization, employer sanctions, amnesty, and constitutional rights of aliens.

4320 Criminal Justice Organization and Management (3-0)
The structures, functions, and operations of criminal justice agencies, including the police, the courts, and corrections are analyzed from an organizational and managerial perspective. Particular attention is given to supervision, decision-making, and policy analysis in the administration of justice.

4325 Moot Court (3-0)
Substantive and procedural problems encountered in a crminial court proceeding. Focus will be on the role of the law enforcement and correctional officer in the judicial process. *Prerequisite:* CRIJ 2300 or department approval.

4390 The Interdisciplinary Nature of Criminal Justice (3-0)
A critical examination of selected problems and issues in the criminal justice system from an interdisciplinary perspective. Emphasis on theory and research, using comparative and integrative approaches, and case studies. *Prerequisites:* CRIJ 1302 with a grade of "C" or better, CRIJ 2306, CRIJ 3300, CRIJ 3302, CRIJ 3313, and 6 hours of advanced CRIJ courses. CRIJ 3300, CRIJ 3302, and CRIJ 3313 may be taken concurrently with CRIJ 4390.

4399 Research Practicum in Criminal Justice (0-0-3)
A course designed to give students supervised experience in conducting social science research on criminal justice problems. May be taken for a maximum of 9 credit hours. *Prerequisites*: Either (1) CRIJ 3322, (2) PSYC 3201 and PSYC 3101, or (3) SOCI 3311 and instructor approval.

See the *Graduate Catalog* for graduate courses.

English

113 Hudspeth Hall
(915) 747-5731
english@utep.edu

CHAIRPERSON: Evelyn Posey
PROFESSORS EMERITI: Robert Northcutt Burlingame, James Milton Day, Joseph Leach, Gail Mortimer, Ray Small
PROFESSORS: Armitage, Bledsoe, Gladstein, Mangelsdorf, Meyers, Payne, Posey, Smith, Stafford, Ullman
ASSOCIATE PROFESSORS EMERITI: Tommy Boley, Lillian Collingwood, Robert Esch, James K. P. Mortensen, Joan Phelan Quarm, Roberta Walker, Maureen Thompson
ASSOCIATE PROFESSORS: Clark, Dick, Fredericksen, Johnson, Lawson, Marchino, Pollette, Sáenz, Scenters-Zapico, Schmid
ASSISTANT PROFESSORS: Abarca, Brunk-Chavez, Cappell, Chacon, Cohoon, Foster, Gmuca, Henderson, Mansfield-Kelley, Minnick, Ruiter, Ward, Williford
LECTURERS: Al-Tabaa, Berta, Baker, Blystone, Cason, Fourzan, Fox, Gilden, Mearns, Miller, Montoya, Mullins, Perez, Peschka, Scoefield, Shaffer, Sloan, Sobin, Spence, Storey-Gore, Varela

Undergraduate Degree Requirements

Requirements for all undergraduate degrees from The University of Texas at El Paso includes successful completion of ENGL 1312 or 1313 (or ESOL 1312). Course work toward this goal consists of a three-step program to develop college-level competence in composition, rhetoric, and research procedures. This program is designed to provide students with the skills in language and communication which they will need for the remainder of their undergraduate careers and for professional achievement in their selected fields following graduation.

Students place into a first-year composition course by virtue of their placement test scores. Students should be enrolled in a composition course every semester until they complete the first-year composition sequence. All students must present test scores for placement in the first-year composition program. For information concerning placement into the proper freshman composition courses, students should refer to the University College section, under Student Assessment and Testing, of this catalog.

Developmental English Program

The Developmental English Program prepares students for the first-year composition sequence. The program consists of ENGL 0111, 0310, and 0311. The program is located in Education 205; the phone number is (915) 747-5693.

English Degree Concentrations

Students are expected to consult with the Director of Literature and/or the Director of Creative Writing concerning the selection of concentrations and courses.

BA Degree – English and American Literature Concentration

This concentration is directed primarily toward students interested in studying English and American Literature, providing them an opportunity to prepare themselves for postgraduate study in fields as diverse as literature, law, and public relations, or for teaching careers at the secondary and university levels. After completing the freshman English requirement, students selecting the Literature Concentration take 36 hours of English courses, at least 30 of which are at the advanced level.

1. ENGL 2311 British Literature Survey I or ENGL 2312 British Literature SurveyII Note: Students may take both survey courses to count toward the degree plan. See 9 below.
2. ENGL 3300 Introduction to Literary Studies
3. ENGL 3320 Shakespeare's Major Plays or ENGL 3321 Representative Shakespearean Works
4. One of the following in British Literature before 1800: ENGL 3319 Sixteenth-Century Prose and Poetry, ENGL 3323 Seventeenth-Century Prose and Poetry, ENGL 3330 Neo-Classical Literature, ENGL 4308 Chaucer, ENGL 4300 Milton, or ENGL 4347 The English Novel through the Eighteenth Century
5. One of the following in British Literature since 1800: ENGL 3333 Romantic Literature, ENGL 3337 Victorian Literature, ENGL 3343 Twentieth-Century British Poetry, ENGL 4325 British Drama since 1880, ENGL 4348 The English Novel: Nineteenth Century, or ENGL 4349 The English Novel: Twentieth Century
6. ENGL 3311 American Literature to 1860 or ENGL 3312 American Literature since 1860

7. Two of the following in American Literature: ENGL 3344 Twentieth-Century American Poetry, ENGL 4316 American Nonfiction and Poetry through the Nineteenth Century, ENGL 4317 American Fiction to 1900, ENGL 4318 Early Twentieth-Century American Fiction, ENGL 4319 American Fiction since 1945, or ENGL 4322 American Drama
8. ENGL 4350 Major American Author
9. 9 hours of upper-division electives, at least 3 of which must be in literature Note: ENGL 2311 or ENGL 2312, whichever was not taken above, may be counted here. No other sophomore classes may be substituted here.

BA Degree – Creative Writing Concentration

This concentration is directed primarily toward students interested in preparing themselves for careers in professional writing and editorial activities or in teaching creative writing at the secondary or college level. After completing the freshman English requirement, students selecting the Creative Writing concentration take ENGL 2311 and 2312. They take 30 hours in advanced-level English courses as follows:

1. ENGL 3361 Introduction to Creative Writing: Forms and Techniques and ENGL 3362 Creative Writing Workshop: Introduction to Fiction and Poetry Writing
2. Four of the following: ENGL 3365 Advanced Composition and Rhetoric, ENGL 3367 Advanced Fiction Techniques, ENGL 3368 Commercial Fiction, ENGL 3369 Television and Screenplay Writing, ENGL 3370 Poetry Techniques, ENGL 4314 Literary Criticism, ENGL 4341 Advanced Studies: Creative Writing, and ENGL 4360 The Literary Essay
3. Four of the following: ENGL 3311, ENGL 3312, ENGL 3319, ENGL 3320, ENGL 3321, ENGL 3323, ENGL 3330, ENGL 3333, ENGL 3337, ENGL 3344, ENGL 4308, ENGL 4309, ENGL 4316, ENGL 4317, ENGL 4318, ENGL 4319, ENGL 4322, ENGL 4325, ENGL 4347, ENGL 4348, ENGL 4349, ENGL 4350.

Minors in English

There are four options for the minor in English, each of which requires the completion of 18 advanced hours:

1. Literature—3 hours, British literature before 1800; 3 hours, British literature since 1800; 3 hours, American literature; plus 9 elective hours in literature courses. (Note: ENGL 2311 and/or ENGL 2312 may be counted in the minor, but the remaining hours must be advanced hours.)
2. Creative Writing, for students interested in writing poetry, fiction, non-fiction, literary essays, screenplays, or plays—ENGL 3361 and ENGL 3362; 6 hours, literature; 6 hours, creative writing.
3. Composite—The student may elect to concentrate on a specific field such as Folklore, American Studies, Ethnic Studies, or Dramatic Literature, or may elect a more varied course of study. Students selecting this minor should consult with the director of the program in which they intend to complete most of their course work.
4. Professional Writing and Rhetoric—*Required Courses* (9 hours): ENGL 3359 Technical Writing (ENGL 3355 Business Communications may be substituted for English 3359 with permission of PWR Program Director), ENGL 3365 Advanced Composition, ENGL 4300 Senior Writing Practicum. *Elective Courses* (9 hours): ENGL 3303 Grammar and Usage, ENGL 3355 Business Communications, ENGL 3357 Computers and Writing, ENGL 3358 Special Topics in Writing, ENGL 3361 Creative Writing, or other writing-intensive courses as approved by the Director of Professional Writing and Rhetoric.

Minor in Screenwriting (Interdepartmental)

Eighteen hours of course work, twelve hours of which are required and six of which are from a menu of options, from the Departments of Communication, English, and Theatre Arts and Film to train students in the art of writing for the cinema.

Required Courses

ENGL	3361	Introduction to Creative Writing
ENGL	3369	Television and Screenplay Writing
THEA	3392 or	Radio, TV, and Film Scripting
THEA	4340 or	Selected Topics, when taught as Screenwriting II
COMM	4350	Selected Topics, when taught as From Script to Screen

Menu Options

THEA	4318	Playwriting
THEA	4340	Selected Topics, when taught as Structural Analysis of Scripts
ENGL	3367	Fiction Techniques
ENGL	3302	Literature and Film
ENGL	4340	Advanced Literary Studies, when taught as Screenplays as Literature
THEA	3325	Directing I

As a prerequisite to the program, students must take THEA 1390, Introduction to the Art of the Motion Picture, either as fulfillment of the Visual and Performing Arts Block of the Core Curriculum or as an elective. It is also recommended that students fulfill the Humanities Block of the Core Curriculum with ENGL 2314, Introduction to American Drama.

Teacher Certification

Students seeking secondary certification in English must complete the BA requirements as described above. Certification requires 36 semester hours of courses in the major as described in the Liberal Arts section of this Catalog. Students should note that ENGL 3455 may not be counted as part of the major since it is required for the minor in Education. For further information on requirements for certification, students should refer to the catalog sections for the College of Liberal Arts and the College of Education.

Bilingual Professional Writing Certificate

Students in any major who have some fluency in both English and Spanish are eligible to pursue certification. They are required to pass, with a “B’ or better, a combination of two English classes and two Translation classes in the Department of Languages and Linguistics. They then pass an exit exam to receive the certificate. For further information, consult either the Department of English or the Department of Languages and Linguistics.

English (ENGL)

0111 Expository Composition Workshop (1-0)
An intensive composition workshop focusing on issues relating to the writing process. *Corequisite*: ENGL 1311. Prerequisite: Placement by examination.

0310 Reading and Communication Skills (3-0)
Integrated instruction in the reading and writing processes. Emphasis is on (1) the connected nature of reading and writing, (2) the development of literal, inferential, analytical, and evaluative comprehension, and (3) the composition of paragraphs and essays addressing specific audiences and purposes. This course is designed as an introduction to English 0311 and may not be used to satisfy any institutional degree requirements. *Prerequisite*: ENGL 0308 with a grade of "C" or better or placement exam.

0311 Basic English Composition (3-0)
Introduction to the writing process: prewriting, drafting, revision, and editing/proofreading; emphasis on adapting the writer's ideas and purpose to an audience. Editing skills (punctuation, spelling, grammar/usage) are presented within the context of the students' own writing. The course is designed as an introduction to English 1311 or English 1611. *Prerequisite*: ENGL 0310 with a grade of "C" or better or placement by examination. (ESOL 1610 may be substituted by non-native English speakers.)

1311 Expository English Composition (3-0)
(🐎 ENGL 1301)
Instruction in addressing academic writing tasks through the composing process, with emphasis on strategic use of language, of rhetorical form, and of authorial voice and point-of-view to inform and persuade effectively; development of critical thought through writing and reading complex discourse. *Prerequisite*: ENGL 0311 with a grade of "C" or better or placement by examination. (Non-native English speakers may substitute ESOL 1311).

1312 Research and Critical Writing (3-0)
(🐎 ENGL 1302)
Instruction in incorporating research into writing, with emphasis on 1) focusing questions, 2) using academic methods and resources, 3) learning to comprehend, analyze, synthesize, and critically evaluate materials, 4) shaping materials into coherent pieces of persuasive discourse appropriate to the writer's purpose and audience, and 5) understanding the logic and forms of documentation. *Prerequisite*: ENGL 1311, ENGL 1611, or COMM 1611, with a grade of "C" or better, or placement by examination. (Non-native English speakers may substitute ESOL 1312.)

1313 Writing about Literature (3-0)
A research and writing course in the analysis and interpretation of literature, progressing from basic exegesis of diction and syntax to the broad range of critical and stylistic approaches to literary works. Strongly suggested as preparation for junior and senior level courses in literature. Required of all English majors in lieu of English 1312. Strongly advised for all English Education students. Fulfills the catalog requirements for English 1312. *Prerequisite:* ENGL 1311, ENGL 1611, or COMM 1611, with a grade of "C" or better, or placement by examination.

1611 Written and Oral Communication (6-0)
Integrated study of and practice in oral and written communication, with emphasis on the processes leading to the creation of effective essays and speeches. Students are offered the opportunity to develop complementary skills of reading and listening through extensive

response to others' written and spoken work. Counts for ENGL 1311 and COMM 1301. *Prerequisite*: ENGL 0311 with a grade of "C" or better or placement by examination.

2311 English Literature (3-0)
(ENGL 2322)
English literature from its beginning through the eighteenth century. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

2312 English Literature (3-0)
(ENGL 2323)
English literature from the Romantics to the present. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

2313 Introduction to American Fiction (3-0)
(ENGL 2342)
Contemporary works as well as the historical development of the short story and the novel. Emphasis on American fiction. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

2314 Introduction to American Drama (3-0)
(ENGL 2343)
Study of the nature and variety of drama through examination of the contemporary Theatre and its historical development. Emphasis on American drama. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

2318 Introduction to American Poetry (3-0)
Study of the nature and forms of poetry through examination of modern poetry and its historical antecedents. Emphasis on American poetry. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

2322 The Academic Vocabulary of English (3-0)
The study of English vocabulary with emphasis on the academic lexicon. Systematic review of Greek and Latin elements in English. Close attention to derivational patterns and lexical families. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3300 Introduction to Literary Studies (3-0)
An overview of various types of literary criticism, with particular attention to analysis of literary texts. Required of all majors in English and American literature. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3301 Literary Studies (3-0)
A study of special literary subjects of interest to non-English majors. Topic varies with the instructor. May be repeated once for credit when subject changes. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3302 Literature and Film (3-0)
This course examines literature and film as two historically connected art forms. Grounded in textual analysis and literary critical strategies, the course will study the art of the adaptation of literature into film: how a text is turned into a film, how the shaping devices of each genre affect the narrative, and how the medium affects the message. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3303 English Grammar and Usage (3-0)
Concepts and terminology of traditional grammar, the conventions of the written language, issues in contemporary usage. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3304 Gothic Literature (3-0)
A study of gothic literature, with examples from American, British, and continental literatures, with focus on poetry, drama, and short story, and addressing such writers as Mary Shelley, Lord Byron, Stephen Crane, Stephen King, and Anne Rice. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312.

3305 Children's Literature (3-0)
A survey of the major genres of literature for children from the seventeenth century to the present, including traditional to contemporary poetry, folk and fairy tales, fantasy, realistic fiction, biography, and informational books. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3306 Young Adult Literature (3-0)
Study of major works of literature that appeal to the young adult reader, with emphasis on contemporary novels and short stories. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3307 English Phonetics and Phonology (3-0)
Linguistic analysis of the sound system and the orthography of English. Course oriented toward the needs of teachers of English at all levels. Same as LING 3307. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3309 Detective Fiction (3-0)
A study of detective fiction and its relationship to the development of cultural and literary attitudes. Examines ways detective fiction shapes and reflects constructs of gender, race, and ethnicity. Includes discussion of genre, literary theory, and literary criticism. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312.

3310 Chicana/o Literature (3-0)
Study of representative Chicana/o works, in prose, poetry, drama, and folklore, from 1848 to the present. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3311 American Literature to 1860 (3-0)
Representative writers from the Pre-Colonial period to 1860. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3312 American Literature since 1860 (3-0)
Representative writers from the Civil War to the present, with emphasis on major figures. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3313 English Historical Linguistics (3-0)
The development of English from its beginnings to Modern English. A study of the changes in the phonological, morphological, and syntactic systems. *Prerequisite*: ENGL 2311 or ENGL 2312 or LING 2320 or ANTH 3320 or ENGL 2320 with a grade of "C" or better.

3314 The Structure of English for Language Professionals (3-0)
An examination of the structure of English in a descriptive framework. Structural phenomena analyzed in the context of teaching grammar to native and non-native speakers of English. Same as LING 3314. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3315 African-American Literature (3-0)
Study of representative African-American prose and poetry from the Colonial period to the present. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3316 Native American Literature (3-0)
A study of Native American literature representing various tribes of North America. The course includes poetry, short stories, novels, and other genres of Native American writing. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312.

3317 Introduction to Postcolonial Literature (3-0)
The study of literatures written in English from countries formerly in the British Empire/Commonwealth such as Nigeria, Kenya, India, Pakistan, the Caribbean, and other postcolonial areas. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3319 Sixteenth-Century Prose and Poetry (3-0)
The study of the major non-dramatic prose and poetry from More through Drayton, with special emphasis on the period of Spenser. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3320 Shakespeare's Major Plays (3-0)
Detailed study of the major plays, including *Hamlet*, *King Lear*, *Macbeth*, *The Tempest*, and others. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3321 Representative Shakespearean Works (3-0)
Detailed study of Shakespeare's other well-known plays, such as *Romeo and Juliet*, *The Taming of the Shrew*, *Twelfth Night*, *Othello*, *Troilus and Cressida*, as well as non-dramatic works such as the *Sonnets*. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3323 Seventeenth-Century Prose and Poetry (3-0)
A study of the major poets and prose writers, with emphasis on such authors as Donne, Jonson, the Cavalier Poets, Milton, Bacon, Browne, and Hobbes. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3325 Literature of the Bible (3-0)
A study of the English Bible as a collection of literary texts and as an important source of ideas and allusions in English and American literature. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312.

3330 Neo-Classical Literature (3-0)
A study of major poets and prose writers from 1660 to the end of the eighteenth century, with emphasis on such authors as Rochester, Dryden, Pope, Swift, Gay, Fielding, Johnson, Collins, and Cowper. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3333 Romantic Literature (3-0)
A study of the major poets and prose writers, with emphasis on such authors as Burns, Blake, Wordsworth, Coleridge, Lamb, Hazlitt, Byron, Shelley, Keats, Landor, and DeQuincey. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3337 Victorian Literature (3-0)
A study of the major poets and prose writers, with emphasis on such authors as Tennyson, Browning, Macaulay, Carlyle, Arnold, Newman, Ruskin, Pater, Stevenson, Rossetti, Meredith, Morris, Swinburne, Hardy, Hopkins, and Housman. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3343 Twentieth-Century British Poetry (3-0)
A study of British poetry of the twentieth century. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3344 Twentieth-Century American Poetry (3-0)
A study in American poetry of the twentieth century. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312. Junior standing recommended.

3351 The Dynamics of Language (3-0)
This course will focus on the four language arts of listening, speaking, reading, and writing, with an emphasis on the oral delivery of language, to include reading aloud, storytelling, and readers theatre. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3352 Reading and Writing Nonfiction (3-0)
A study of nonfiction for adolescents from both a reading and writing perspective. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3353 Reading and Responding to Literature (3-0)
This course will focus on literature for preteen and early adolescent readers, with an emphasis on both critical and imaginative responses. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3355 Workplace Writing (3-0)
A course that focuses on critical decision making in professional contexts. Principles of professional rhetoric are applied to the composing process; strategies for planning, organizing, drafting, and presenting written and oral communication for a workplace context are emphasized. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3357 Computers and Writing (3-0)
A variable topics writing class exploring the connections between computers and writing. Course may be repeated when topic changes. *Prerequisite:* ENGL 1312 or ENGL 1313 or ESOL 1312.

3358 Special Topics in Writing (3-0)
An advanced writing course emphasizing topics in professional writing and rhetoric. Course may be repeated when the topic changes. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3359 Technical Writing (3-0)
A professionally oriented communication course centered on assembling, organizing, drafting, revising, and presenting technical information for generating written documents and oral reports. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3360 Women in Literature (3-0)
A study of women writers and images of women in literature. Topic varies with the instructor. May be repeated once for credit when the topic changes. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3361 Introduction to Creative Writing: Forms and Techniques (3-0)
An introduction to creative writing, with emphasis on reading and analysis of recent poetry, fiction, and non-fiction to determine how form and technique are used to achieve desired effects and how a given work is put together. Analysis and writing assignments in each genre are designed to give students the opportunity to gain a working knowledge of fundamental elements such as visualization, freewriting, journal writing, prosody, concrete versus abstract language, imagery, characterization, dialogue, and narration. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3362 Creative Writing Workshop: Introduction to Fiction and Poetry Writing (3-0)
An extension of techniques in ENGL 3361, continued in workshop format and aimed towards an understanding of writing as a process that involves the conception, structuring, and revision of complete poems and stories. Students will be asked to critique one another's work and to use critiques of their own work towards making revisions. *Prerequisite*: ENGL 3361.

3365 Advanced Composition and Rhetoric (3-0)
Study of classical and contemporary rhetorical theory with emphasis upon the aims and modes of contemporary discourse; practice in techniques of invention, organization, and style as applied to written composition. Open to freshmen exempted from ENGL 1312. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3366 Advanced Composition II (3-0)
This course continues the development of argumentative writing by examining contemporary issues and ethical questions. The course will be project-based, will include collaborative work, and will emphasize stylistics. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3367 Creative Writing: Fiction Techniques (3-0)
Study and practice in the techniques of contemporary fiction writing, emphasizing such matters as point of view, tone, characterization, plot, setting, and diction, with assignments requiring the resolution of fiction writing problems. *Prerequisite*: ENGL 3362.

3368 Creative Writing: Commercial Fiction (3-0)
Emphasis on writing contemporary fiction for commercial publication. Attention is given to the techniques necessary for the freelance writer to meet the requirements at various levels of the ever-changing literary marketplace. *Prerequisite*: ENGL 3362.

3369 Creative Writing: Television and Screenplay Writing (3-0)
Basic techniques for conceiving and writing the contemporary television and screen play with assignments devoted to resolving specific problems. *Prerequisite*: ENGL 3362.

3370 Creative Writing: Poetry Techniques (3-0)
Study and practice in writing and critiquing poetry, with attention to basic elements such as imagery, the line, and use of formal techniques. *Prerequisite*: ENGL 3362.

3371 Life and Literature of the Southwest (3-0)
The social background of the Southwest and its reflection in literature. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3372 Folklore (3-0)
The types and characteristics of folk literature with particular emphasis on the folklore of the Southwest and Mexico. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3374 Folklore of the Mexican American (3-0)
A study of folklore theory and Mexican-American folk genres, with background readings on Mexico and with a special emphasis on the folklore of the border. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3381 Nineteenth-Century Russian Literature in Translation (3-0)
Prose fiction beginning with Pushkin and extending through the Golden Age of the nineteenth century, with special emphasis on Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, Andreyev, and Gorky. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4300 Senior Writing Practicum (0-0-3)
Required for Professional Writing and Rhetoric minors. Directed study to be taught with the consent of the professor and with the approval of the Department Chairperson. Advanced writing Practicum aimed toward design and completion of a senior project. Students will submit a Practicum proposal and engage in all aspects of a professional-level writing project. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4308 Chaucer (3-0)
A survey of the works of Geoffrey Chaucer with emphasis on *The Canterbury Tales* and on the relationship of Chaucer's poetry to the literary tradition of his time. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4309 Milton (3-0)
An introduction to the works of John Milton, with emphasis on *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4314 Literary Criticism (3-0)
The theory and practice of the major critical approaches to literature. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4316 American Nonfiction and Poetry through the Nineteenth Century (3-0)
A study of American nonfiction and/or poetry through the nineteenth century. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4317 American Fiction to 1900 (3-0)
A study of representative works of fiction in America from their beginnings through early naturalism, with emphasis on such writers as Brown, Cooper, Melville, Hawthorne, Twain, James, Howells, Wharton, and Crane. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4318 Early Twentieth-Century American Fiction (3-0)
A study of representative works of American fiction from the successors of Stephen Crane to 1945, with emphasis on such writers as Dreiser, Norris, London, Glasgow, Cather, Lewis, Anderson, Porter, Fitzgerald, Hemingway, Steinbeck, and Faulkner. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4319 American Fiction since 1945 (3-0)
A study of representative works of contemporary American writers with emphasis on such writers as Wright, Ellison, Heller, Barth, O'Connor, Bellow, Welty, and Oates. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4322 American Drama (3-0)
Drama from the Colonial and Revolutionary periods to modern times, with special attention to the mature period in American drama from Eugene O'Neill to the present. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4325 British Drama since 1880 (3-0)
Historical study of dramatic theory and practice in England during the modern era, through reading of representative plays. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4340 Advanced Literary Studies (3-0)
Seminar involving intensified study of a particular author or topic, to vary with the professor in charge. May be repeated once for credit when the topic varies. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4341 Advanced Creative Writing (3-0)
A creative writing course, the genre to vary with the professor in charge. May be repeated once for credit when topic varies. *Prerequisites:* ENGL 1312 or ENGL 1313 or ESOL 1312, and ENGL 3362.

4347 The English Novel through the Eighteenth Century (3-0)
Prose fiction in England from the Middle Ages through the eighteenth century, with emphasis on such authors as Defoe, Richardson, Fielding, Smollett, Walpole, Burney, and Austen. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4348 The English Novel: Nineteenth Century (3-0)
A continuation of English 4347, with emphasis on such authors as Dickens, Thackeray, the Brontes, Eliot, Meredith, and Hardy. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4349 The English Novel: Twentieth Century (3-0)
The important English novelists of the twentieth century, with emphasis on such authors as Conrad, Lawrence, Joyce, Forster, Waugh, Woolf, Greene, Cary, Golding, Burgess, and Murdoch. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4350 Major Individual American Author (3-0)
Close study of the work, life, and critical reputation of a major American author chosen from such authors as Hawthorne, Melville, Whitman, Dickinson, Twain, Cather, O'Neill, Frost, Faulkner, Steinbeck, and Hemingway. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4354 Writing Processes of Children (3-0)
Current theory and practice in K-8 writing development; review of applicable rhetorical and linguistic theories; evaluation and assessment of written work; relationships between reading and composition. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4355 Teaching Composition and Literature in the Secondary School (3-0)
Current theory and practice in teaching writing and literature in the secondary schools; review of applicable research along with practices for teaching literature and the composing process. Field experience may be required. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4357 Special Subjects in English for Teachers (3-0)
Special subjects in teaching elementary or secondary school English language arts. Topic may vary with professor in charge. May be repeated for credit when the topic varies. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4360 Creative Writing: The Literary Essay (3-0)
An essay course which emphasizes the use of fictional techniques and imagery as a means to exposition and persuasion through autobiographical form such as the memoir and personal essay, and through more journalistic forms such as the profile, the interview, and historical account. *Prerequisite*: ENGL 3362.

4390 Directed Study (0-0-3)
Individual directed study on an approved topic, to be taught with the consent of the professor and with the approval of the Department Chairperson. For English majors only.

LING 2330 and LING 3308 may be taken for English credit (see advisor for special prerequisites).

Students majoring in English are also encouraged to consider taking courses, or to fulfill requirements for the minor, in Translation (TRAN). Students should refer to the Translation section of the Department of Languages and Linguistics course offerings for details.

See the *Graduate Catalog* for graduate programs and courses.

History

320 Liberal Arts
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history@utep.edu

CHAIRPERSON: Michael Topp
PROFESSORS EMERITI: Kenneth K. Bailey, Robert Righter, Kenneth B. Shover, Wilbert Helde Timmons
PROFESSORS: Ambler, Jackson, Kawashima, C.E. Martin, McGee Deutsch
ASSOCIATE PROFESSORS: Brunk, Chavez, Dailey, Etcheson, Hackett, C.H. Martin, Topp, Weber
ASSISTANT PROFESSORS: Edison, Leyva, Marquez, Shepherd
LECTURER: Harding

BA Degree in History

Specific course requirements for History majors are HIST 2301-2302 and HIST 4325 and 21 advanced (3300-4300 level) hours of history courses, which must include courses from at least three of four fields; no more than 12 hours may be taken in any one field of history.

Departmental Honors

A candidate for departmental honors in History must have demonstrated ability in history, must normally have a grade point average (GPA) of 3.5 in history and 3.0 overall by the end of the junior year, and must maintain these averages until graduation. To graduate with Departmental Honors, a student must satisfactorily complete an honors thesis, which will be judged by a thesis committee. A candidate for Departmental Honors must request approval of candidacy during the second semester of the junior year. The Department reserves the right to accept or reject any student, taking into consideration the number of applicants, availability of faculty, and competence of individual students. Once accepted, the honors candidate will enroll in HIST 4390 during both semesters of the senior year, accumulating a total of 6 hours of 4390 credit on completion of the honors program. Students can contact the chairperson or the undergraduate advisor for further information.

Minor in History

Students wishing to minor in History are required to complete HIST 2301 and 2302, plus 12 hours of advanced (3300-4300 level) courses in History. The 12 hours of advanced courses must include courses from at least two of the history fields.

Russian and Post-Communist Concentration

History students wishing a Russian and Post-Communist concentration must meet all of the basic requirements for History majors listed above, including 2301-2302, 4325, and 21 advanced hours in history selected from at least three fields of history. The advanced hours in history must include HIST 3332 and 3333, and 12 hours from among the following: HIST 3312, 3330, 3340, 3369, 3374, and 3390 (when the topic is appropriate). In addition, the student must satisfy the language requirement with RUSS 2301-02 and must complete a minor in Russian and Post-Communist Studies as described elsewhere in this catalog. Courses taken for the major may not also be used for the minor.

Teacher Certification

Students seeking secondary certification in History must complete the BA requirements as described above. Certification requires 36 semester hours of courses in the major as described in the Liberal Arts section of this catalog. HIST 3317 is required and either HIST 3309 or 3328 is strongly recommended for prospective teachers. Students using History as a directly supporting field for another major will take 12 semester hours including the following courses: HIST 2301, 2302, 3317, and 3309 or 3328. For further information on requirements for certification, students can refer to the catalog sections for the College of Liberal Arts and the College of Education. Students interested in Social Studies certification should consult the College of Liberal Arts section of this catalog or the Department of History or the College of Education.

History (HIST)

1301 History of the United States to 1865 (3-0)
(HIST 1301)
Survey of American history through the Civil War, emphasizing the European background, the colonial contribution, the American Revolution, the republican government, growth of democracy, and the background and course of the Civil War. With 1302, fulfills the statutory requirement for American History.

1302 History of the United States since 1865 (3-0)
(HIST 1302)
Reconstruction, rise of big business, clash of economic interests, struggle for reform, imperialism, and world power status. Progressivism, World War I, the Twenties, the New Deal, World War II, post-war America. With 1301, fulfills the statutory requirement for American History.

2301 World History to 1500 (3-0)
(HIST 2321)
An analysis of the development of societies in Asia, Africa, Europe, and the Americas from the origins of mankind to 1500 CE. Societies throughout the world are examined with an emphasis on the rise of empires, the evolution of diverse social systems, and the emergence of distinctive cultures.

2302 World History since 1500 (3-0)
(HIST 2322)
An analysis of the development of societies in Asia, Africa, Europe, and the Americas from 1500 to the present, with an emphasis on their global interactions. Societies throughout the world are studied within the context of growing international contacts, the establishment of European dominance during the 19th century, and the global conflicts and challenges of the 20th century.

General Prerequisite: Appropriate class standing for all upper-division courses.

Field I: The United States

3301 Colonial America to 1763 (3-0)
Background of European exploration and colonization, settlement and development of the English colonies, British imperial policy, and the Anglo-French conflict in North America.

3302 The American Revolution and the New Nation, 1763-1815 (3-0)
The breakdown of the Anglo-American political system, the development of American political principles, the War for Independence and social readjustment, the creation of new governments, the rise of political parties, the Federalist and Jeffersonian administrations, the War of 1812, and the emergence of national character.

3303 The U.S.-Mexican War (3-0)
Studies the war of 1846-1848 in the social and political context of early nineteenth-century Mexico and United States. Emphasis on the military and diplomatic events of the war and the impact of the war on Mexico, the United States, and the border region.

3304 The Age of Jackson, 1815-1850 (3-0)
Political, economic, social, and sectional aspects of the Jacksonian era. The Old South and slavery, the North and reform, Manifest Destiny, nativism, and the disruption of the political party system.

3305 The Civil War and Reconstruction Era, 1850-1877 (3-0)
The Civil War and Reconstruction: breakdown of the political party system, election of Lincoln, outbreak of war, union and confederacy, military problems, nations at war, reconstruction conflicts, triumph of radicalism, and compromise of 1876.

3306 From Plutocracy to Progressivism, 1877-1917 (3-0)
Focuses on the incorporation and urbanization of the United States, the end of the frontier, immigration to the United States, the rise of organized labor and populism, attempts at protest and reform, the pursuit of a colonial empire, and World War I and its consequences.

3308 The United States since 1941 (3-0)
The domestic history of the United States since 1941. Major topics include the home front during World War II, the Red Scare, the expansion of the welfare state, the civil rights movement, the impact of the Vietnam War, and the Reagan revolution.

3309 Mexican American History (3-0)
A survey of Mexican Americans in the southwestern U.S. since the Treaty of Guadalupe Hidalgo, with emphasis on interactions between Mexican-and Anglo-American cultures.

3310 American Legal History (3-0)
Study of the growth of American law from colonial times to the present. Particular emphasis on the operation of the law in a broad social context. Strongly recommended for Pre-Law students.

3311 History of American Foreign Relations to 1914 (3-0)
Analysis of the diplomacy of the American Revolution and of the new nation; diplomatic aspects of the War with Mexico and continental expansion, and the rise of the United States to world power in the late nineteenth and early twentieth centuries, with emphasis on imperial expansion overseas.

3312 History of American Foreign Relations since 1914 (3-0)
Analysis of 20th century American diplomacy, including the diplomatic aspects of the two world wars, the origins and development of the Cold War with the Soviet Union, and the American response to Third World nationalism including the war in Vietnam.

3313 American Military History (3-0)
A study of American military history from colonial times to the present. The course begins with a consideration of the origins of the American military system in seventeenth-century England and concludes with a discussion of issues of contemporary military affairs. Both the problems faced by the American military and the relationships of the military to the rest of American society are examined.

3317 History of Texas since 1821 (3-0)
Spanish and Mexican Texas, Anglo-American colonization, the Texas Revolution, the Republic, statehood, Civil War and Reconstruction, railroad and industrial growth, political, social, and economic trends in the twentieth century, and ethnic and racial change. Note: History majors may count this course in either Field I or Field III.

3321 19th Century American West (3-0)
Focuses on the frontier and the American character, the westward movement to the Pacific Slope, conflict with the American Indian and other ethnic and minority groups, women and the West, and exploitation of the natural resources. The course will center on the Trans-Mississippi frontier with emphasis on the arid West.

3322 20th Century American West (3-0)
Examines the new West in terms of conservation policies, natural resource issues, urbanization, tourism, economic development, immigration, and cultural conflict. Regions covered include the Great Plains, the Rocky Mountain states, the arid West, and the Pacific Slope.

3323 American Indian History (3-0)
A survey of the history of North American Indians from the Pre-Columbian period to the present. Examines inter-tribal relations as well as Indian-European and Indian-Anglo American interactions. Emphasis on trans-Mississippi West tribes and events.

3324 The United States in Vietnam and Southeast Asia (3-0)
American relations with Southeast Asia in the twentieth century, focusing on the American acquisition and governance of the Philippines, the American response to Asian nationalism during and after World War II, and the war in Vietnam.

3325 History of Immigration and Ethnicity in the United States (3-0)
Explores the social, political, cultural, and religious lives of the diverse peoples who immigrated to the United States, as well as their impact on the political and cultural life of the United States as a whole. Primary focus on second-wave immigrants, including Southern and Eastern Europeans, and on Asians and Mexicans.

3326 Life and Labor in the United States in the 19th and 20th Centuries (3-0)
Examines why so few American workers are in unions today, and why the United States is virtually the only Western industrialized nation without a labor party. Explores the history of the cultural and political life of the American working class covering topics ranging from the impact of slavery and immigration to the historic relationship between unions and the Democratic Party to recent organizing efforts.

3328 History of Hispanic Peoples in the United States (3-0)
Traces the historical experiences of the Mexican, Puerto Rican, Cuban, and other Hispanic migrants to the United States; investigates the causes of their migrations, the communities they formed in the United States, their problems of adjustment, the cultural changes they have undergone, and the similarities and differences among their cultures.

3329 African American History (3-0)
A survey of the African American experience, focusing on African heritage, slavery, segregation, the Civil Rights Movement, institutional and organizational growth and development, identity formation, leadership, and gender questions. These topics will be explored within the historical process and context of nomenclature changes from African to African American.

Field II: Africa, Asia, and Russia

3330 East Asia (3-0)
A brief survey of traditional China, Korea, and Japan, westernization and modernization, and East Asia in the twentieth century. Special emphasis on the uniqueness of East Asian societies and on the differences among these countries.

3333 The Soviet Union (3-0)
A history of the USSR including the Russian revolutions of 1917, revolutionary experimentation in the 1920s, collectivization, industrialization, and the purges in the 1930s, World War II, and an overview of Soviet life in the 1970s and 1980s.

3337 Modern Africa (3-0)
Examination of Africa from the imperial conquest of the late nineteenth century to the present day. Emphasis on the social, economic, and cultural impact of colonialism, religious change, African nationalism, decolonization and independence, the struggle for development, and racial conflict in South Africa. Primary focus is on Africa south of the Sahara.

3339 Pyramids and Prophets: Ancient Egypt, Mesopotamia, and Palestine (3-0)
Examines the distinct series of circumstances that led to the development of civilization in the Ancient Near East. Emphasis is upon the government, society, religion, art, and manners that evolved through the eras of Stone Age nomads, Bronze Age temple-states, and Iron Age kingdoms.

3340 The Middle East and Islam (3-0)
The rise and expansion of Islam, the golden age of Arab culture, the Ottoman Empire, the impact of European imperialism, the economics of oil, the Arab-Israeli conflict, and present-day Muslim revitalization.

Field III: Latin America

3342 The Spanish Borderlands (3-0)
A study of the Spanish northern frontier in North America from California to Florida with particular emphasis on the Spanish impact on the American Southwest from the sixteenth-century explorations to 1821. Note: History majors and minors may count this course in either Field I or Field III.

3346 Central America and the Caribbean (3-0)
Social, economic and political patterns in Central America and in the Spanish-, English-, French-, Dutch-, and Creole-speaking Caribbean, emphasizing the twentieth century. Topics include race relations, ideological struggle, nationalism, popular culture, and U.S. involvement.

3347 South America since 1810 (3-0)
The politics, economy, culture, and international relations of South America, emphasizing Argentina, Brazil, and Chile.

3348 Environmental History of Latin America (3-0)
Traces the environmental history of Latin America from Pre-Columbian times to the present. Among the issues it will examine in detail are the environmental results of the arrival of Europeans, the ongoing destruction of rain forests, environmentalism, the impact of urbanization, and the environment on Mexico's border with the United States.

3349 History of Mexico to 1900 (3-0)
The Pre-Columbian civilizations, the conquest, Spanish institutions and culture, the Mexican movement for independence, the era of Santa Anna, Juárez and the Reform, and the Diaz regime.

3350 The Mexican Revolution (3-0)
The background of the Revolution; political, social, economic, and military developments of the Mexican Revolution; and Mexico since the Revolution.

Field IV: Europe, Except Russia

3360 Ancient Greece (3-0)
Surveys the development of Greek society and government from the Bronze Age palace cultures of Crete and Mycenae to the aftermath of the Peloponnesian War. Special emphasis on the evolution of the polis system with consideration of Greek art and literature.

3361 Hellenism and the Coming of Rome (3-0)
Examines how the attitudes and institutions of the Roman city-state energized the conquest of the Mediterranean Basin and then disintegrated into civil war. Special emphasis upon the importance of Alexander the Great and Hellenistic culture in Roman development.

3362 The Medieval World (3-0)
A survey of the period in Western Europe from about 500 to about 1300, focusing especially on the nature and accomplishments of the revolutionary new society which emerged in the three centuries following the invasions of the ninth and tenth centuries.

3363 The Roman Empire (3-0)
Examines the culture that evolved from the chaos of the Roman Republic into the religious, administrative, economic, and legal apparatus that formed the theoretical basis of the first European state systems. Attention shall focus on the development of Christianity and the expressions of Roman ideals in art and literature.

3364 The Age of Renaissance (3-0)
A survey of Western Europe in the fourteenth, fifteenth, and early sixteenth centuries, focusing especially on the great age of the Renaissance in Italy and including an analysis of some of the most famous art and artists of the period seen in their historical context.

3365 The Age of the Reformation (3-0)
A survey of Western Europe in the sixteenth and first half of the seventeenth centuries, focusing on the Reformation and its consequences and including an analysis of the social, economic, political, and intellectual changes that accompanied that split and that ushered in the modern world.

3366 The Age of Absolutism and Enlightenment (3-0)
A survey of Western and Central Europe in the second half of the seventeenth and the eighteenth centuries (until 1789), focusing on the development of absolutism and its alternatives, the scientific revolution, the Enlightenment and the growth of modern rationalism, popular culture and the growing social and institutional crisis in France before the French Revolution.

3367 The French Revolution and Napoleonic Eras (3-0)
An exploration of the French Revolution, which changed the face of Europe and ushered in the modern world. Topics include eighteenth-century origins, the liberal Revolution of 1789, the Terror, Napoleon Bonaparte, the Revolutions impact on Europe and beyond, and recent debates over its meaning and legacy.

3368 Nineteenth Century Europe, 1815-1900 (3-0)
A study of Europe in a process of fundamental economic, political, and social change, with emphasis on the revolutionary movements of the 1820s, 1830s, and 1848, the unification of Italy and Germany, the emergence of parliamentary democracies in France and England, and the development of nationalism, conservatism, liberalism, and socialism.

3369 Twentieth Century Europe, 1900 to the Present (3-0)
The collapse of the European dynastic monarchies, World War I, the Versailles Treaty, totalitarian dictatorships in Italy, Germany, and Russia, World War II, the Cold War, and the Common Market era.

3370 The Holocaust in Europe, 1933-1945 (3-0)
An analysis of the background, causes, events, and aftermath of the destruction of European Jewry in the era of the Second World War; the fate of Gypsies and other victims of Nazi racial policies; and the role of individuals of various nations as perpetrators, bystanders, resisters, and rescuers during that era.

3374 Modern Germany since 1866 (3-0)
The emergence of a unified German national state, relations with neighboring powers, World War I, the revolution of 1918, the Weimar Republic, rise and fall of the Third Reich, and divided Germany.

3381 The History of Spain and Portugal (3-0)
A survey of the Iberian Peninsula from the earliest times to the regimes of Franco and Salazar, with particular emphasis on the rise, development, and decline of the Spanish and Portuguese empires. Note: History majors may count this course in either Field III or Field IV.

3382 Spain in the Age of Expansion, Eighth-Sixteenth Centuries (3-0)
Analysis of the success, then the downfall, of the Muslims; the simultaneous rise of the Christian kingdoms which became Castile, Portugal, and Aragon-Catalonia; the unification of Spain and the conquest of empire; and the character of the societies and intellectual, religious, and artistic currents they produced.

Other Courses

3390 History, Special Topics (3-0)
An examination of a currently relevant subject from a historical perspective. Topics will vary and will be drawn from such fields as minority groups, women's history, local history, ecology, historical methodology, and the relationship of history to other social sciences. History majors and minors should count the course in the appropriate field.

3391 History of Women (3-0)
An examination of the values, roles, and contributions of women in various historical contexts. May be repeated once for credit when topic changes. History majors and minors should count the course in the appropriate field.

4325 Junior-Senior Seminar (3-0)
Readings and discussion on a major issue in history, and individual research into a related topic. The course theme will change from semester to semester. Junior or senior standing required. Required of all History majors; open to History minors and others by permission.

4390 Directed Study (0-0-3)
Individual directed study on approved topic; to be taught at the consent of the professor and with the approval of the department chairperson. History majors and minors should count the course in the appropriate field. *Prerequisite*: Department approval.

See the *Graduate Catalog* for graduate programs and courses.

Languages and Linguistics

137 Liberal Arts
(915) 747-5767
lgsling@utep.edu

CHAIRPERSON: Kirsten F. Nigro
PROFESSORS EMERITI: Joan H. Manley, Edgar T. Ruff
PROFESSORS: Amastae, Blansitt, Elerick, Ford, García, Perez, Natalicio, Sobin, Teschner
ASSOCIATE PROFESSORS EMERITA: Sandra Beyer, Eleanor Greet Cotton
ASSOCIATE PROFESSOR EMERITUS: Frederick Kluck
ASSOCIATE PROFESSORS: Armengol, Bagby, Louden, Ramos
ASSISTANT PROFESSORS: Courtney, Garabano
LECTURERS: Gámez, D. Louden, Suárez

Major in Languages

BA Degree

Students may earn a BA in French or Spanish: 30 semester hours, at least 24 of which must be advanced (3300-4300) level. 1301-1302 may not count toward the major. Courses 2301 and 2302 or 2303 and 2304 must be completed in a language other than the major in order to fulfill the Liberal Arts language requirement. The Spanish major must include 1) SPAN 3300 and SPAN 3357; 2) SPAN 3320 or SPAN 3330; 3) at least two of the following: SPAN 3301, SPAN 3302, SPAN 3303, SPAN 3304; 4) at least one of the following: SPAN 3309, SPAN 3311, SPAN 3315; and 5) at least six hours of 4300-level courses. PORT 4390 and/or any one translation (TRAN) course may count toward the Spanish major.

Major in Linguistics

BA Degree

LING 2320, plus 24 semester hours in Linguistics courses at the 3300-4300 level

Minor in Languages

The basic requirement is 18 hours in a language, at least 12 of which must be advanced (3300-4300) level. SPAN 3357 is required for the Spanish minor.

Minor in Linguistics

LING 2320 plus 15 semester hours in Linguistics courses, at least nine hours of which must be at the 3300-4300 levels.

Placement Examinations

Spanish

Courses at the elementary and intermediate level in Spanish are of two types: Spanish for Non-Native Speakers (SPAN 1301-1302-2301-2302) and Spanish for Spanish Speakers (SPAN 2303-2304). Students with no knowledge or very little knowledge of Spanish will register for SPAN 1301. Those who have acquired a significant knowledge of the language (by taking two or more years of high school Spanish) are strongly urged to take the Placement Exam. Those who know Spanish by virtue of using it with family or friends MUST take the Spanish Placement Exam before enrolling. The Placement Exam is offered by the Student Assessment and Testing Office, 210 Education (915-747-5009 for schedule). The Department of Languages and Linguistics reserves the right to rectify errors in placement caused by a student's failure to observe these guidelines, including the option to drop a student enrolled in an inappropriate course. Students who take the Placement Exam and place out of one or more courses will receive equivalent credit upon completion, with a grade of "C" or better, of the course into which they have placed. No credit is granted by examination only. For further information, including information about the CLEP and AP exams, students should consult the department.

French

Students who have acquired a significant knowledge of French through high school study (usually two years or more) or by some other means are urged to take the French Placement Exam before enrolling. The Exam is offered by the Student Assessment and Testing Office, 210 Education (915-747-5009 for schedule). The Department of Languages and Linguistics reserves the right to rectify errors in placement caused by a student's failure to observe these guidelines, including the option to drop a student enrolled in an inappropriate course. Students who take the Placement Exam and place out of one or more courses will receive equivalent credit upon completion, with a grade of "C" or better, of the course into which they have placed. No credit is granted by examination only. For further information, including information about the CLEP and AP exams, students should consult the department.

German

Students who have acquired a significant knowledge of German through high school study (usually two years or more) or by some other means are urged to take the German Placement Exam before enrolling. Students should contact the Department of Languages and Linguistics for scheduling information. The Department of Languages and Linguistics reserves the right to rectify errors in placement caused by a student's failure to observe these guidelines, including the option to drop a student enrolled in an inappropriate course. Students who take the Placement Exam and place out of one or more courses will receive equivalent credit upon completion, with a grade of "C" or better, of the course into which they have placed. No credit is granted by examination only. For further information, including information about the CLEP and AP exams, students should consult the department.

Latin and Portuguese

Students who have acquired a significant knowledge of any of these languages through high school study (usually two years or more) or by some other means are urged to consult the department's placement director for advising. Students with no or inadequate knowledge of either of these languages should enroll in the first-semester course.

ESOL

A placement exam is required of all students who were admitted based on TOEFL (less than 600) or PAA scores. Information about testing schedules is available from the Student Assessment and Testing Office (915-747-5009).

Teacher Certification

Programs, which combine the BA degree with secondary certification, are available in French and Spanish. An endorsement is also available for ESL. Several Linguistics/Spanish courses are required for certification in Bilingual Education. Interested students must consult with the departmental undergraduate advisor. Certification for secondary teaching in the following three areas requires the courses listed.

French All requirements for the BA degree, as described above, must be met. Secondary certification requires 36 hours in the major (which may include FREN 1301, FREN 1302, FREN 2301, and FREN 2302). FREN 3301 or FREN 3303 and FREN 3357 are required; FREN 3320 is highly recommended. FREN 3305 and FREN 3355 are recommended for students who are not native speakers of French. Note that FREN 4301 may not be counted as part of the major since it is a required course for the minor in Education. In addition, a passing score on the Texas Oral Proficiency Test (TOPT) is required for certification.

Spanish All requirements for the BA degree, as described above, must be met. Secondary certification requires 36 hours in the major (which may include SPAN 1301, SPAN 1302, and SPAN 2301 and SPAN 2302 or SPAN 2303 and SPAN 2304). Note that SPAN 4301 may not be counted as part of the major since it is a required course for the minor in Education. In addition, a passing score on the Texas Oral Proficiency Test (TOPT) is required for certification.

Approved supporting fields for languages are any other language or the 12 hours of course work approved for the ESL endorsement. For further information on certification requirements, students should consult the catalog sections for the College of Liberal Arts and the College of Education.

Bilingual Professional Writing Certificate

Students in any major who have some fluency in both English and Spanish are eligible to pursue certification. They are required to pass, with a "B" or better, a combination of two English classes and two Translation classes. They then pass an exit exam to receive the certificate. For further information, consult either the Department of English or the Department of Languages and Linguistics.

English for Speakers of Other Languages (ESOL)

1305 Oral Communication Skills for Non-Native Speakers of English (3-0)
Practice in spoken English to improve fluency and develop strategies to improve communication skills. Topics will vary. May be repeated for credit when topics vary. *Prerequisite*: ESOL 1610 with a grade of "C" or better.

1309 Writing and Reading in English for Non-Native Speakers (3-0)
Development of writing ability, strategies for the writing process, reading fluency, and vocabulary for non-native speakers of English. *Corequisite*: ESOL 1406. *Prerequisite*: ESOL 1610 with a grade of "C" or better or placement exam.

1310 Reading English as a Second Language (3-0)
Practice in reading academic, informative, and literary texts, with emphasis on vocabulary development, textual analysis, and critical thinking. Study of library research and documentation techniques. *Prerequisites*: ESOL 1309 and ESOL 1406, each with a grade of "C" or better, or placement exam. This course is obligatory for all ESOL students and must be taken prior to or concurrently with ESOL 1312.

1311 Expository English Composition for Speakers of ESL (3-0) (TCCN ENGL 1306)
Practice in composition with emphasis on rhetorical and writing principles for the different expository modes; emphasis on style and variety in sentences, paragraphs, and essays; stress on reading comprehension and outlining. *Prerequisites*: ESOL 1406 and ESOL 1309, each with a grade of "C" or better, or placement exam.

1312 Research and Critical Writing for Speakers of ESL (3-0) (TCCN ENGL 1307)
Study and practice in the use of library facilities and research and documentation techniques; emphasis on research papers and on critical essays. *Prerequisites*: ESOL 1311 and ESOL 1310, each with a grade of "C" or better. ESOL 1310 may be taken concurrently with ESOL 1312.

1406 Basic English Sentence Structure (3-2)
A systematic presentation of English grammar and sentence structure for speakers of English as a foreign language. *Corequisite*: ESOL 1309. *Prerequisite*: ESOL 1610 with a grade of "C" or better or placement exam.

1610 Intermediate English for Speakers of Other Languages II (5-2)
Practice with the basic structures of English, including their expansion into more complex structures. Practice with the conversational patterns of modern English. *Prerequisite*: ESOL 1910 with a grade of "C" or better, or placement exam. Laboratory fee required.

1910 Intermediate English for Speakers of Other Languages I (8-2)
Practice with the basic structures of English, including their expansion into more complex structures. Practice with the conversational patterns of modern English. *Prerequisite*: Placement exam. Laboratory fee required.

2301 English for Science and Technology (3-0)
This course is designed to provide additional practice for non-native speakers of English in the specialized discourse patterns of scientific and technological disciplines. It will emphasize reading and interpretation of technical/scientific articles, reports, and books, and the writing of technical articles and reports. Required of all majors in the Colleges of Science and Engineering who present ESOL 1312 in lieu of ENGL 1312. *Prerequisites*: ESOL 1312 and ESOL 1310, each with a grade of "C" or better, or department approval.

2303 English for Humanities and Social Sciences (3-0)
This course is designed to provide additional practice for non-native speakers of English in the specialized discourse patterns of the humanities and social sciences. It will emphasize reading and interpretation of books and articles in the humanities and social sciences as well as the writing of them. Required of all majors in the College of Liberal Arts who present ESOL 1312 in lieu of ENGL 1312. *Prerequisites*: ESOL 1312 and ESOL1310 or ESOL 1210, each with a grade of "C" or better, or department approval.

French (FREN)

1301 French One (3-2)
(♦ FREN 1311)
An introductory course with emphasis on pronunciation and the basic elements of grammar; practice in understanding, speaking, reading, and writing.

1302 French Two (3-2)
(♦ FREN 1312)
A continuation of FREN 1301, with the introduction of more complex elements of grammar; additional practice in the four basic skills. *Prerequisite*: FREN 1301 or the department placement test.

2301 French Three (3-0)
(♦ FREN 2311)
Oral and written work in French; grammar review; reading from modern French authors. *Prerequisite*: FREN 1302 or the department placement test.

2302 French Four (3-0)
(♦ FREN 2312)
Grammar review; reading from modern French authors. *Prerequisite*: FREN 2301 or the department placement test.

3301 French Literature To 1715 (3-0)
Introduction to French literature through the seventeenth century. *Prerequisite*: FREN 2302.

3303 French Literature Since 1715 (3-0)
Introduction to French literature from 1715 to the present. Main literary trends and principal writers from the Romantic Period to the present. *Prerequisite*: FREN 2302.

3305 French Phonology and Phonetics (3-0)
Analysis of the sound structure of French, as well as corrective phonetics directed toward individual students in the class. The course is intended to improve the student's pronunciation as well as to give a theoretical basis for teaching the sounds of French. *Prerequisite*: FREN 2302. FREN 2302 may be taken concurrently with FREN 3305.

3320 French Civilization (3-0)
A survey of the political, social, intellectual, and artistic history of France and the francophone world. *Prerequisite*: FREN 2302.

3355 Advanced Conversation (3-0)
Practice in pronunciation, comprehension, and oral expression. Selected readings and written exercises designed to promote development of oral skills. Recommended for non-native speakers before progressing to other advanced courses. *Prerequisite*: FREN 2302.

3357 Advanced Composition (3-0)
Review of aspects of grammar essential to effective writing, introduction to elements of style and rhetoric, vocabulary building, and intensive practice with written assignments and graded compositions. *Prerequisite*: FREN 2302.

4301 Methods of Foreign Language Instruction (3-0)
Practical application of linguistic principles to the teaching of modern foreign languages. Classroom techniques, and development and evaluation of teaching and testing materials appropriate to the written and spoken language. May not be counted for credit in addition to SPAN 4301 or LING 4301, *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4387 Poetry (3-0)
May be repeated once for credit when the topic varies. *Prerequisite*: Six hours of advanced French courses.

4388 Prose (3-0)
May be repeated once for credit when the topic varies. *Prerequisite*: Six hours of advanced French courses.

4389 Theatre (3-0)
May be repeated once for credit when the topic varies. *Prerequisite*: Six hours of advanced French courses.

4390 Topics in French (3-0)
May be repeated for credit when topics vary. *Prerequisites*: Six hours of advanced French and instructor approval.

See the *Graduate Catalog* for graduate programs and courses.

German (GERM)

1301 German One (3-2)
(TCCN GERM 1311)
An introductory course with emphasis on pronunciation and the basic elements of grammar; practice in understanding, speaking, reading, and writing.

1302 German Two (3-2)
(TCCN GERM 1312)
A continuation of GERM 1301, with the introduction of more complex elements of grammar; additional practice in the four basic skills. *Prerequisite*: GERM 1301 or the department placement test.

2301 German Three (3-0)
(TCCN GERM 2311)
Oral and written work in German, with some more advanced grammar and an introduction to the writing of compositions. Reading from contemporary authors. *Prerequisite*: GERM 1302 or the department placement test.

2302 German Four (3-0)
(TCCN GERM 2312)
Grammar review, compositions, and reading from contemporary authors. *Prerequisite*: GERM 2301.

4388 Prose (3-0)
May be repeated once for credit when the topic varies. *Prerequisite*: Six hours of advanced German.

Greek (GREK)

3350 Greek Literature in Translation (3-0)
Readings in English translation from various periods and genres of classical Greek Literature, with a particular emphasis on an overview of Greek Mythology. *Prerequisite*: ENGL 1312.

Latin (LATN)

2303 Accelerated Latin One (3-0)
(LATI 1311 and LATI 1312)
An introductory accelerated course in reading and writing Latin. Emphasis will be placed on acquiring a firm grasp of grammar and building vocabulary.

2304 Accelerated Latin Two (3-0)
(LATI 2311 and LATI 2312)
A continuation of Latin 2303 with the introduction of more complex elements of grammar and syntax and additional practice in reading and writing as well as exposure to more advanced Latin prose and poetry. *Prerequisite*: LATN 2303.

3301 Advanced Latin (3-0)
Readings in Latin prose and poetry with alternate emphasis on fluency and close attention to text. May be repeated for credit when materials vary. *Prerequisite*: LATN 2304.

Linguistics (LING)

2303 Intensive Language Study (3-0)
Presentation and analysis of the fundamentals of a language that is structurally distinct from modern English and other modern European languages. Reading of elementary texts. May be repeated for credit as language varies.

2304 Intensive Language Study (3-0)
Presentation and analysis of the fundamentals of a language that is structurally distinct from modern English and other modern European languages. Reading of elementary texts. May be repeated for credit as language varies. Prerequisite: LING 2303 with a grade of "C" or better.

2320 An Introduction to Linguistics (3-0)
Introduction to basic concepts and techniques of modern linguistics. (May be taken as ENGL 2320 or ANTH 2320.)

2322 The Academic Vocabulary of English (3-0)
The study of English vocabulary with emphasis on the academic lexicon. Systematic review of Greek and Latin elements in English. Close attention to derivational patterns and lexical families. *Prerequisites*: ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3301 Phonological Analysis (3-0)
Techniques of analyzing sound patterns in a variety of languages. Formulating phonological rules, including the use of distinctive features. *Prerequisite*: LING 2320, ANTH 2320, or ENGL 2320.

3302 Syntactic Analysis (3-0)
Techniques of analyzing syntax and aspects of morphology, as applied to English and a variety of other languages. Emphasis on understanding the range of possible syntactic phenomena in language. *Prerequisite*: LING 2320, ANTH 2320, or ENGL 2320.

3307 English Phonetics and Phonology (3-0)
Linguistic analysis of the sound system and the orthography of English. Course oriented toward the needs of teachers of English at all levels. Same as ENGL 3307. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3308 Methods of Teaching English to Speakers of Other Languages (3-0)
Modern foreign language teaching techniques with particular attention to the problems of the learner of English. Theories of language learning and testing, and the practical use of audio-visual equipment. (May be taken as ENGL 3308.) *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

3309 The Structure of Spanish (3-0)
Linguistic analysis of Spanish morphology and syntax. Course oriented toward needs of teachers of Spanish at all levels. Same as SPAN 3309. *Prerequisites*: (1) SPAN 2302 or SPAN 2304 or department placement exam and (2) department approval.

3311 Spanish Phonetics and Phonology (3-0)
Linguistic analysis of the orthography and the sound system of Spanish. Course oriented toward the needs of teachers of Spanish at all levels. Same as SPAN 3311. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3313 English Historical Linguistics (3-0)
The development of English from its beginnings to Modern English. A study of the changes in the phonological, morphological, and syntactic systems. *Prerequisites*: ENGL 2311 and ENGL 2312, or LING 2320, ANTH 2320, or ENGL 2320.

3314 The Structure of English for Language Professionals (3-0)
An examination of the structure of English in a descriptive framework. Structural phenomena analyzed in the context of teaching grammar to native and non-native speakers of English. Same as ENGL 3314. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3315 History of the Spanish Language (3-0)
A survey of the development of the Spanish language from Vulgar Latin to modern Spanish. (May be taken as SPAN 3315.) *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3357 Sociolinguistics (3-0)
Language variables and sociological correlates, a review of current research, theories, and applications. Recommended background: LING 2320.

4306 Language Acquisition (3-0)
Overview of recent findings in child language acquisition. Includes theories of acquisition, application of linguistic theory, and research techniques. *Prerequisites*: LING 2320, and LING 3301 or LING 3302.

4316 Language and Cognition (Cross-listed PSYC 4316)
An investigation of language as a cognitive capacity. Topics will include perception, processing, acquisition, and mental representation of language. *Prerequisite:* PSYC 1301 or LING 2320.

4348 Analyses of Second Language Acquisition (3-0)
A theoretical and practical examination of various (though complementary) theories of second language learning, with their implications for the second language classroom.

4371 Studies in Linguistics (3-0)
Topics to be discussed will be selected. May be repeated for credit when topic varies. *Prerequisites*: Six hours of 3300-4300 linguistics and department approval.

4372 Contrastive Linguistics: Spanish/English (3-0)
The contrastive study of the phonological, morphological, and syntactic systems of Spanish and English. Recommended background: LING 2320, ENGL 2320, or ANTH 2320 and LING 3309 or SPAN 3309. *Prerequisite*: SPAN 2302 or SPAN 2304.

See the *Graduate Catalog* for graduate programs and courses.

Portuguese (PORT)

2301 Accelerated Portuguese One (3-0)
(PORT 1311 and PORT 1312)
An introductory accelerated course in pronunciation and grammar of Brazilian Portuguese; practice in speaking, understanding, reading, and writing. *Prerequisite*: One year in or working knowledge of another Romance language. Course fee required.

2302 Accelerated Portuguese Two (3-0)
(PORT 2311 and PORT 2312)
A continuation of PORT 2301 with the introduction of more complex elements of grammar and additional practice in the four basic skills. Reading from modern Brazilian and Portuguese writers. *Prerequisite*: PORT 2301. Course fee required.

4390 Topics in Portuguese (3-0)
May be repeated when topics vary. *Prerequisites*: Six hours of advanced Portuguese and instructor approval.

Spanish (SPAN)

1301 Elementary Spanish One (3-2)
(SPAN 1311)
An introductory course for non-native speakers with emphasis on pronunciation and the basic elements of grammar; practice in understanding, speaking, reading, and writing. *Prerequisite*: Department approval.

1302 Elementary Spanish Two (3-2)
(SPAN 1312)
A continuation of SPAN 1301, with the introduction of more complex elements of grammar; additional practice in the four basic skills. *Prerequisite*: SPAN 1301 or department placement exam.

2301 Intermediate Spanish One for Non-Native Speakers (3-0)
(SPAN 2311)
A course emphasizing development of conversational and reading skills. Review and continuation of grammar study begun in SPAN 1301 and SPAN 1302. Readings from contemporary sources. *Prerequisite*: SPAN 1302 or department placement exam.

2302 Intermediate Spanish Two for Non-Native Speakers (3-0)
(SPAN 2312)
A continuation of SPAN 2301, with some grammar review and more extensive readings from the contemporary period. *Prerequisite*: SPAN 2301 or department placement exam.

2303 Spanish for Spanish Speakers One (3-0)
A first course for bilingual students who have acquired listening and speaking skills in Spanish because it is spoken in their home or social environment. Development of reading and writing skills, with attention to spelling and use of the written accent. Entrance into SPAN 2303 is by examination only; completion of this course with a grade of "C" or better entitles a student to 8 hours of credit by examination for SPAN 1301 and SPAN 1302. *Prerequisite*: Department placement exam.

2304 Spanish for Spanish Speakers Two (3-0)
A continuation of SPAN 2303, with additional opportunities for reading and composition, a review of the written accent, and an introduction to the systematic study of Spanish grammar. *Prerequisite*: SPAN 2303 or department placement exam.

3300 Critical Introduction to Hispanic Literature (3-0)
An overview of major literary movements, genres, and writers from the Middle Ages to the present. Introduction to literary analysis, with special emphasis on uniquely Hispanic elements such as Spanish prosody, the *romances*, the *auto sacramental*, character types and the like. Required of all Spanish majors, to be taken preferably before other upper-division literature courses. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3301 Spanish Literature before 1700 (3-0)
Main literary trends and principal writers from the Middle Ages through the Golden Age. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3302 Spanish American Literature to Modernism (3-0)
Main literary trends and principal writers in Spanish America from the sixteenth century to Modernism. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3303 Spanish Literature since 1700 (3-0)
Main literary trends and principal writers from the eighteenth century to the contemporary period. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3304 Spanish American Literature since Modernism (3-0)
Main literary trends and principal writers in Spanish America from the Modernist period to the present. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3309 Structure of Spanish for Language Professionals (3-0)
Linguistic analysis of Spanish morphology and syntax. Course oriented toward needs of teachers of Spanish at all levels. Same as LING 3309. *Prerequisites*: (1) SPAN 2302 or SPAN 2304 or department placement exam and (2) department approval.

3311 Spanish Phonetics and Phonology (3-0)
Linguistic analysis of the orthography and the sound system of Spanish. Course oriented toward the needs of teachers of Spanish at all levels. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3315 History of the Spanish Language (3-0)
A survey of the development of the Spanish language from Vulgar Latin to modern Spanish. Same as LING 3315. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3320 Culture and Civilization of Spain (3-0)
A survey of the country and its peoples, emphasizing historical, geographic, political, social, and artistic elements. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3325 The Confluence of Mexican and Chicano Literature (3-0)
Comparative study of representative works in both Mexican and Chicano literature, stressing differences and correlations between the two. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3330 Spanish American Civilization (3-0)
A survey of historical, geographic, political, social, and artistic elements of Spanish America, including the cultures of Spanish-speaking groups in the United States. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3357 Advanced Composition (3-0)
Review of aspects of grammar essential to effective writing, introduction to elements of style and rhetoric, vocabulary building, and intensive practice with written assignments and graded compositions. *Prerequisite*: SPAN 2302 or SPAN 2304 or department placement exam.

3361 Introduction to Creative Writing in Spanish (3-0)
Basic techniques of imaginative writing applicable to fiction, poetry and non-fiction. For students wishing to pursue an interest in writing through advanced workshop courses and/or expand their powers of written expression through exercise of the senses, memory, and imagination. The course introduces students to the uses of concrete language, imagery, character portrayal, and plotting techniques. Writing assignments and readings in Spanish. *Prerequisite*: SPAN 2302 or 2304 or department placement exam.

4301 Methods of Foreign Language Instruction (3-0)
Practical application of linguistic principles to the teaching of modern foreign languages. Classroom techniques, and development and evaluation of teaching and testing materials appropriate to the written and spoken languages. May not be counted for credit in addition to FREN 4301 or LING 4301. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312.

4324 The Literature of Mexico (3-0)
Principal genres and major works of Mexican literature. *Prerequisite*: Six hours of advanced Spanish.

4328 Golden Age Drama (3-0)
A study of the leading dramatists: Lope de Vega, Tirso de Molina, Calderón de la Barca, Ruiz de Alarcón, Moreto, and others. *Prerequisite*: Six hours of advanced Spanish.

4335 19th Century Spanish Literature (3-0)
Consideration of the two major literary movements of the century: Romanticism and Realism. Readings from representative authors, including Lara, Bécquer, and others. Prerequisite: Six hours of advanced Spanish.

4339 The Short Story (3-0)
Shorter fictional forms in Spain and Spanish America from Juan Manuel to the present. *Prerequisite*: Six hours of advanced Spanish.

4341 Modern Drama (3-0)
Readings from representative Spanish American and Spanish dramatists. *Prerequisite*: Six hours of advanced Spanish.

4358 Twentieth Century Spanish Literature (3-0)
Readings in outstanding works by the principal authors of Spain in this century. Emphasis on a genre or type. *Prerequisite*: Six hours of advanced Spanish.

4360 Twentieth Century Spanish American Novel (3-0)
Reading and analysis of works by some major Spanish American novelists of the twentieth century. Emphasis on the development and evolution of major themes and techniques in these works, as typified by the novels of such writers as Juan Rulfo, Carlos Fuentes, Mario Vargas Llosa, Gabriel García Márquez, Isabel Allende, and others. *Prerequisite*: Six hours of advanced Spanish.

4361 Cervantes (3-0)
The literary value and influence of the Quixote and the *Novelas ejemplares*. Traditional and modern interpretations. The life and times of Cervantes. *Prerequisite*: Six hours of advanced Spanish.

4363 Spanish American Poetry (3-0)
Study and interpretation of major poets and movements from the Colonial period to the present. Emphasis on the Modernist period and contemporary poetry. *Prerequisite*: Six hours of advanced Spanish.

4372 Contrastive Linguistics: Spanish/English (3-0)
The contrastive study of the phonological, morphological, and syntactic systems of Spanish and English. Recommended background: LING 2320, ENGL 2320, or ANTH 2320 and LING 3309 or SPAN 3309. *Prerequisite*: SPAN 2302 or SPAN 2304.

4390 Topics in Spanish (3-0)
May be repeated when topics vary. *Prerequisites*: Six hours of advanced Spanish and department approval.

See the *Graduate Catalog* for graduate programs and courses.

Translation and Interpretation Program

The program in Spanish-English, English-Spanish translation is designed to complement any academic major and to provide qualified students with the opportunity to acquire skill and experience in translating and interpreting. It may be taken as a minor to satisfy the BA degree requirements of the College of Liberal Arts. Students will receive instruction primarily in the practice of translation, including utilization of available resource materials, but will also examine translation theory and issues of professional ethics and responsibilities. A second objective of the program is to develop students' writing ability in both English and Spanish. Students normally begin with TRAN 3359 and then take senior-level classes. Those who wish to take 4300-level classes first must consult the Program Coordinator.

Program participants who have completed at least two (2) semesters of work in translation are eligible to take professional-level certification examinations, either English to Spanish or Spanish to English or both. Translation Certificates will be awarded to those who demonstrate professional-level competency in this manner. Students should consult the Program Coordinator for additional information about certification testing.

The Minor in Translation will consist of 18 hours, which includes TRAN 4390 and five courses chosen from the following: TRAN 3359, TRAN 4381, TRAN 4382, TRAN 4383, TRAN 4384, and TRAN 4389.

Translation (TRAN)

3359 Introduction to Translation (3-0)
Exploration of basic notions of translation, with special emphasis on defining the translator's goals, resources, and methods. Practice in rendering texts, with careful attention to grammatical and lexical correctness in both Spanish and English. *Prerequisites*: SPAN 2302 or SPAN 2304 or department placement and ENGL 1312 or ESOL 1312.

4381 Commercial and Legal Translation (3-0)
Consideration of the particular characteristics of business and legal texts (commercial correspondence, company policy documents, advertising copy, product-related literature, contracts, official documents, law enforcement, etc.) as they differ in English and Spanish. Study of specialized vocabulary and conventions governing such texts. Careful attention to the translator's responsibility to the client. Practice in translating a wide variety of authentic materials. *Prerequisite*: TRAN 3359 or permission of the Program Coordinator.

4382 Translation from the Information Media (3-0)
This course deals with material taken from newspapers, magazines, and other media. Journalistic practices in English- and Spanish-language publications will be compared and contrasted. Special emphasis on the vocabulary of current events, public issues, and news reporting. *Prerequisite*: TRAN 3359 or permission of the Program Coordinator.

4383 Literary Translation (3-0)
An introduction to the theory and practice of translating literature, emphasizing short fiction, the essay, and poetry. Comparative study of the role of essential rhetorical devices in Spanish and English. Students will have the opportunity to analyze reliable models (published translations) as well as to generate their own original versions of various works. *Prerequisite*: TRAN 3359 or permission of the Program Coordinator.

4384 Introduction to Interpreting (3-0)
Examination of the special nature of interpreting (translating orally) and the particular skills the interpreter must develop. Overview of the role and responsibilities of interpreters in the judicial setting. Extensive practice in sight translation and in simultaneous as well as consecutive interpreting. *Prerequisite*: TRAN 3359 or permission of the Program Coordinator.

4389 Topics in Translation (3-0)
Examination of a particular area or skill in translation/interpretation, such as technical, scientific, or medical translation, translation into English, translation into Spanish, consecutive interpreting, simultaneous interpreting, and the like. Course may be repeated once for credit as topic varies. *Prerequisite*: TRAN 3359.

4390 Senior Project in Translation (3-0)
Students will take this course during their last semester of enrollment in the Translation Program. In consultation with the instructor, they will select an area of interest and define a task within that area.

Project translations will normally be exclusively into the student's dominant language. The instructor and student will confer on a frequent basis throughout the course of the semester. A copy of the final project will be bound and retained as part of the departmental Translation Program Library. *Prerequisites*: At least two of the following: TRAN 4381, TRAN 4382, TRAN 4383, TRAN 4384, and department approval.

Latin American Studies

Physical Address:
1514 Hawthorne Street
(915) 747-5196/5157
cibs@utep.edu
Mailing Address:
500 W. University Boulevard
El Paso, Texas 79968

DIRECTOR: Jon Amastae
PROFESSORS EMERITI: C. Richard Bath, James M. Day, Julius Rivera, Ellwyn Stoddard, Roberto Villarreal
PROFESSORS: Cardon, Elerick, Ford, García, Haddox, Ibarreche, Lopez, C.E. Martin, McGee Deutsch, Natalicio, Pérez, Staudt, Teschner
ASSOCIATE PROFESSORS: Armangol, Bagby, Brunk, Campbell, Carmichael, Earle, Howard, Ramos, Rippberger, Rocha
ASSISTANT PROFESSORS: Abarca, Barracca, Coronado, Edison, Fernández, Garabano, Leyva, Morales, Romero

The program in Latin American/Border Studies (LABS) is designed to play a critical role in the fulfillment of UTEP's institutional mission, which includes providing students with perspectives based on UTEP's geographic and social setting, thereby contributing to the formation of a broader intellectual and artistic foundation for the 21st Century and to the search for solutions to regional, national, and international problems. UTEP's location in the largest urban center on the U.S.-Mexico border provides a unique opportunity for understanding the modern world through an immediate and concrete experience in the study of Latin America, and for development of a comprehensive view of the Americas and the ways in which different parts of the Americas interact at various points of contact, including the U.S.-Mexico border. The program includes study of Latin America and of the Border as the zone of expanding connections and fusions between North and South America.

BA in Latin American Studies

The Latin American Studies degree is an interdisciplinary major consisting of interrelated fields designed to provide students with the opportunity to prepare themselves for appropriate employment in business, government, or education or for advanced study in a Latin American area at the graduate level. In addition to the regular academic program, lectures, special seminars, and other Latin American resource opportunities are provided. Students should contact the Center for Inter-American and Border Studies for assignment to an advisor.

In addition to fulfilling the general requirements for the Bachelor of Arts degree, the student must complete 30 hours of credit toward the major. In order to provide flexibility and relevance in the program, the student may choose among five concentrations. In fulfilling the concentrations, no single course may be used to satisfy more than one course requirement.

Students may satisfy the language requirement by successfully completing SPAN 2301 and SPAN 2302 (for non-native speakers) or SPAN 2303 and SPAN 2304 (for native speakers). This requirement may be waived upon successful completion of an approved competency examination. If the requirement is waived, students must complete one of the following: SPAN 3320 Hispanic Civilization (recommended for students relatively fluent in the language), SPAN 3355 Advanced Conversation, SPAN 3356 Advanced Conversation for Native Speakers, or SPAN 3357 Advanced Composition (recommended for students needing enhancement of either oral or writing skills).

Behavioral Science Concentration (30 semester hours)

— 6 hours from ECON 3366; GEOG 3312; POLS 4335; or HIST 3346, HIST 3347, or HIST 3350
— 9 hours of 4300-level Political Science courses in Latin American politics or 9 hours of 3300-4300 level Economics courses with Latin American content
— 6 hours CS 1310; SOCI 2312 or SOCI 3311 (SOCI 2312 may not count in the BA Mathematics/Sciences block)
— 9 hours of 4300-level courses with Latin American content, selected from an approved list

Border Studies Concentration (30 semester hours)

— 6 hours from ECON 3366; GEOG 3312; POLS 4335; or HIST 3346, HIST 3347, or HIST 3350
— 6 hours from ECON 4368 or HIST 3349 or POLS 4337
— 3 hours from HIST 3342 or HIST 3343
— 3 hours from ANTH 3361 or SOCI 3361
— 3 hours from ANTH 3310 or HIST 3316 or POLS 4313
— 3 hours from MUSL 3325 or THEA 3335
— 3 hours from ENGL 3371 or SPAN 3325
— 3 hours from an approved list of courses with a border focus

Business-Economics Concentration (30 semester hours)

— 6 hours from GEOG 3312; POLS 4335; HIST 3346, HIST 3347, or HIST 3350
— 6 hours of Accounting
— 9 hours, FIN 3310, MGMT 3303, and MKT 3300
— 9 hours, ECON 3366, ECON 3367, and ECON 4368

Humanities Concentration (30 semester hours)

— 6 hours from ECON 3366; GEOG 3312; POLS 4335; HIST 3346, HIST 3347, or HIST 3350
— 9 hours of 3300-4300 level modern languages or English courses in Latin American literature
— 9 hours of 3300-4300 level history courses with Latin American content
— 6 hours from PHIL 3312, ARTH 3310, or MUSL 3126

Spanish-Linguistics Concentration (30 semester hours)

— 6 hours from ECON 3366; GEOG 3312; POLS 3435; HIST 3346, HIST 3347, or HIST 3350
—15 hours of 3300-4300 level Spanish courses with Latin American content
— 6 hours in the linguistics of Spanish
— 3 hours of 3300-4300 level course work with Latin American content, selected from an approved list

Minor in Latin American/Border Studies

The minor in Latin American/Border Studies is structured to serve as a complement for the widest possible variety of major fields and thus prepare students for careers in business, industry, government, education, public service, research, law, health, as well as the demands of citizenship in a complex, inter-related world. The minor includes courses that are broadly integrating and problem-based as well as courses that are more narrowly focused. It is envisioned as a means for integrating the specialized majors with a cross-disciplinary and international context.

The 18-hour minor in LABS may be combined with any major. It includes the following requirements:

- 3 hours, SPAN 2302, SPAN 2304. This requirement may be waived upon successful completion of an approved competency examination.
- LABS 3300 The Americas
- 12 hours of electives in courses of Latin American or Border content, selected with the approval of the Latin American/Border Studies Advisor. These electives are designed to provide appropriate complements to the student's major, thereby adding the perspectives of disciplinary breadth and a Latin American/Border perspective.

Latin American/Border Studies (LABS)

Courses in Latin American/Border Studies include a wide variety of courses taught in departments. The Latin American/Border Studies Advisor maintains a list of approved courses in other departments. The course schedule each semester identifies the courses for that semester. Special courses in Latin American/Border Studies include the following:

2330 The Border (3-0)
A multidisciplinary exploration of US-Mexico border issues from the varied and sometimes contentious perspectives of participants/observers on both sides. Students will examine local and non-local perceptions to understand the border as fact and metaphor. Emphasis on appreciating the fragile and complex systems of the border: ethnic, social, cultural, historical, economic, linguistic, legal, and others.

3300 The Americas (3-0)
This course treats selected modern themes as manifested in the Americas, including population movements, the arts, economic change, identity, socio-political structures and events, health, the environment, international relations, borders, and technology. Consideration of each theme includes a discussion of its dynamic historical development and a team-taught, interdisciplinary perspective. *Prerequisite*: Junior standing.

4301 Topics in Latin American/Border Studies (3-0)
Selected topics in Latin American, Inter-American, or Border Studies. May be repeated for credit when topic varies. *Prerequisites*: Junior standing and department approval.

LIBERAL ARTS INTERDISCIPLINARY PROGRAM

Bachelor of Fine Arts in Music Theatre

343 Liberal Arts
(915) 747-5666 (ph)
(915) 747-5905 (fax)
mnadel@utep.edu
www.musictheatre.utep.edu

MUSIC THEATRE FACULTY COMMITTEE: Myron Howard Nadel, Chair; Mitch Baker, Suzanne Bowles, Paul Gilbert, Gregory Taylor, Elisa Wilson

The faculties of both the Department of Music and the Department of Theatre Arts and Film offer this professional interdisciplinary degree. The Department of Theatre Arts and Film offers a Bachelor of Fine Arts Degree with a Theatre Concentration designed to educate those students who exhibit strong acting skills and wish to further their music and dance skills; 135 semester hours are required. The Department of Music offers a Bachelor of Fine Arts Degree with a Music Concentration designed to educate those students who exhibit strong singing skills and wish to further their acting and dance skills; 136 semester hours are required.

Admission Standards

Students must first meet the general entrance requirements for The University of Texas at El Paso. In addition, each prospective student must notify the Chair of the Music Theatre Committee of his/her intention to pursue a Music Theatre degree. Students will be asked to audition for program placement by the Music Theatre Committee.

Continuation in the program demands a 2.5 GPA in all major subjects. It is a demanding and rigorous program of interdisciplinary study emphasizing acting, dance, and voice.

Performance Opportunities

Students will be able to audition for roles in musicals, plays, operas, operettas, zarzuelas, and workshops produced by both Departments and the University Dinner Theatre. In the junior and senior years, all students are a part of the UTEP Music Theatre Company and will participate in various performances and workshops designed to further skills and experiences in a “professional company” setting, not always precisely concurrent with a typical semester format.

The University of Texas at El Paso Music Theatre Advisory Board includes Broadway choreographer/director Rob Marshall (Chicago-the film, Cabaret, Damn Yankees, Annie-TV Special); Broadway Musical Performer, Burke Moses (Beauty and the Beast, Kiss Me Kate); Brent Barrett (Brigadoon-London Production, Chicago-Broadway, Annie Get Your Gun); lyricist, Sir Tim Rice (Jesus Christ Superstar, Evita, and The Lion King); Merri Sugarman (Casting Director, ABC Television); and performer Craig Wells (Les Miserables, Chess, and Forbidden Broadway).

Degree Requirements

University Core Requirements (42 semester hours for the Theatre Concentration or 43 semester hours for the Music Concentration)

Fine Arts Core Requirement			
THEA	1313	Introduction to Theatre (Theatre Concentration)	3
MUSL	1221	and	
MUSL	1222	Introduction to Music (Music Concentration)	4

Professional Foundations (48-52 semester hours)

Stage Foundations			
THEA	2313	Acting I	3
THEA	2314	Acting II	3
THEA	3355	The Musical Theatre	3
THEA	1113	Basic Theatre Production (2 semesters)	2
THEA	1111	Basic Theatre Practice	1
THEA	3311/		
MUSA	3311	Music Theatre Company I (2 semesters)	6
THEA	4311/		
MUSA	4311	Music Theatre Company II (2 semesters)	6
Movement Foundations			
DANC	1351	Dance and Movement for the Stage I	3
DANC	2351	Dance and Movement for the Stage II	3
DANC	3351	Dance and Movement for the Stage III	3
DANC	4351	Dance and Movement for the Stage IV	3
Musical Foundations			
MUSA	1291 or	Individual Instruction (Applied Voice, 4 semesters)	
MUSA	1391	Individual Instruction (Applied Voice, 4 semesters)	8-12
MUSA	1091	Student Recital Lab (4 semesters)	0
MUSA	1271	Piano Class I	2
MUSA	1272	Piano Class II	2

Theatre Concentration (45 semester hours)

THEA	1103	Voice and Articulation Laboratory	1
THEA	1303	Voice and Articulation	3
THEA	2321	Stagecraft	3
Two of the following three courses:			6
THEA	3351	History of the Theatre I:The Early Theatre	(3)
THEA	3352	History of the Theatre II: Renaissance Through Romanticism	(3)
THEA	3353	History of the Theatre III: The Modern Theatre	(3)
THEA	3313	Acting III	3
THEA	4313	Acting IV	3
THEA	3322	Script Analysis	3
MUSA	3291	Individual Instruction (Applied Voice, 2 additional semesters)	4

MUSA	1091	Student Recital Lab	0
MUSA	1311	Fundamentals	3
MUST	1181	Sight Singing for Music Theatre	1
MUST	1182	Sight Singing for Music Theatre	1
MUST	2181	Sight Singing for Music Theatre	1
MUST	2182	Sight Singing for Music Theatre	1
Electives			12

Music Concentration (45 semester hours)

MUST	1313 /1111	Music Theory and Essentials of Acoustics/Aural Skills	4
MUST	1314/ 1112	Music Theory and Essentials of Acoustics/Aural Skills	4
MUST	2313/ 2111	Harmony/Aural Skills	4
MUST	2314/ 2112	Harmony/Aural Skills	4
MUSA	3391	Individual Instruction (Applied Voice, 4 semesters)	12
MUSA	1091	Student Recital Lab (4 semesters)	0
MUST	2315	Analytical Processes in Music	3
MUSL	2328	Topics in Music History	3
MUSA	3291	Vocal Coaching (2 semesters)	4
MUSA	1196	Music Theatre Repertory	1
MUSA	1251	English Diction	2
MUSA	1155	University Chorus or	
MUSA	1145	University Chorale (4 semesters)	4

(Music and Dance course descriptions are found under the Music Department section and Theatre course descriptions are found under the Theatre Arts and Film Department section.)

Military Science

107 Military Science Building
(915) 747-5621
hragler@utep.edu

CHAIRPERSON: Lieutenant Colonel Johnee Carr

Courses offered by this department are designed to offer qualified students an opportunity to become a commissioned Army officer. The curriculum provides opportunities for leadership training and experience that are not duplicated in other college courses. Instruction encourages the development of resource management skills, self-assurance, confidence, personal discipline, executive abilities, personal responsibility, professional ethics, physical stamina, bearing, and other fundamental qualities required of an Army officer. These same qualities will enhance any civilian career.

The first two years (MS I and MS II) comprise the Basic Course which offers an introduction to Military and Confidence Building Skills, First Aid and Survival Skills, Land Navigation, and Leadership Assessment and Managerial Skills. Basic Courses are normally taken during the freshman and sophomore years without any military obligation. The last two years (MS III and MS IV) constitute the Advanced Course and are normally taken during the student's junior and senior years. All MS courses require a non-credit Leadership Lab. Additionally, Advanced Course students are required to satisfactorily complete selected courses in Written Communication, Human Behavior, Computer Literacy, Math Reasoning, and Military History prior to commissioning.

Eligibility

Basic Course

Enrollment in the Basic Course is open to all students at any academic level. Credit for all or part of the Basic Course may be granted by the Professor of Military Science (PMS) for participation in high school ROTC or for active military service of four or more months. This is done on a case-by-case basis.

Two-Year Program

Students who did not enroll in the Basic Course, or who cannot be given credit for the Basic Course by virtue of active military service or participation in Junior ROTC (high school), may qualify for the Advanced Course by attending a four-week summer training course (Leaders' Training Course, located at Fort Knox, Kentucky). Applicants for the camp should visit the Department of Military Science no later than May 1st to obtain application forms and schedule a physical examination. Students must have a minimum of four semesters remaining prior to completion of a baccalaureate or advanced degree.

Advanced Course

Admission requires approval of the PMS based on medical fitness, an acceptable degree plan, a cumulative GPA of 2.0 or higher, and military qualification under one of the following plans:

1. Prior military service
2. Completion of the Basic Course requiring MS 1101, 1103, 2202, and 2204
3. Completion of Leaders' Training Course at Fort Knox, Kentucky
4. Junior ROTC-advanced placement (approved on an individual basis by the PMS)

The student is required to sign a contract with the U.S. government to accept a commission in the Army or Army Reserve upon graduation.

Scholarships

Four-Year Scholarships

Army ROTC scholarships are available annually. These scholarships are awarded on a nationally competitive basis to high school graduates. Interested high school seniors should obtain application requests from their counselors and submit the request by November 15th. Application forms are also available at the Military Science Department. Students majoring in nursing may apply for dedicated nursing scholarships.

Three-Year Scholarships

The Professor of Military Science awards these scholarships to college freshmen. Freshmen, including those not enrolled in Military Science, may apply through the Military Science Department. Applications may be submitted from mid-November through mid-April. Nursing students may apply for a three-year dedicated nursing scholarship.

Two-Year Scholarships

The Professor of Military Science awards these scholarships to college sophomores. Sophomores who have not been in ROTC must attend Summer Camp at Fort Knox, Kentucky where they will receive the "hands on" foundation of the basic ROTC course. Applications may be submitted from mid-November through the end of May.

Pay and Allowances

All students enrolled in Army ROTC are furnished uniforms, textbooks, and equipment on a loan basis. All advanced course cadets are paid $350 per month during the Junior year and $400 during the Senior year, for a maximum of twenty months, excluding the five-week Advanced Leadership Camp. The U.S. Government pays the tuition, required fees, textbooks, and essential classroom supplies for Army ROTC scholarship students. Additionally, four-year and three-year ROTC scholarship recipients are paid $250 per month during the fall and spring semesters of their freshman and sophomore years.

Additional Programs

Qualified cadets may attend Airborne School, Air Assault School, Cadet Field Training, Drill Cadet Leader Training, Mounted Maneuver Training, Army Science Board, Northern Welfare Cadet Orientation, Combat Survival Training, United Officer Training, and ROTC nurse summer training. Additionally, Advanced Course cadets may attend Cadet Troop Leadership Training (CTLT), serving a two to three-week tour with an active Army unit upon completion of the National Advanced Leadership Camp.

Commissions Offered

Upon successful completion of all Military Science studies and requirements for a baccalaureate degree, a cadet is awarded a commission as a Second Lieutenant in the United States Army or Army Reserve/National Guard and may be required to serve on active duty not to exceed three years (four years for ROTC scholarship students). Since UTEP offers a general Military Science curriculum, a commission in most branches of the Army is possible. Following graduation, newly commissioned officers are sent to an Officer Basic Course (OBC) to qualify for a specific branch, and then complete a tour of active duty through a variety of challenging assignments. Reserve officers return to a local Reserve unit upon completion of OBC. Active duty can be delayed for those students who wish to pursue graduate studies leading to a master's degree, law degree, medical degree, or others.

Military Science (MS)

Basic Course (MS I and II)

1101 Introduction to Basic Military Skills (1-1)
An introduction of basic military skills and professional knowledge of subjects essential for the development of the novice military leader. No military obligation.

1103 Introduction to Basic Military Skills (1-1)
A continuing introduction of basic military skills and professional knowledge of subjects essential for the development of the novice military leader. No military obligation.

2202 Military Skills (2-1)
A study of various military skills and professional knowledge of subjects essential to a military leader. No military obligation. *Prerequisite*: MS 1101, MS 1103, or instructor approval.

2204 Military Skills (2-1)
A continuing study of various military skills and professional knowledge of subjects essential to a military leader. The MS 2204 course concludes with a leadership assessment evaluation which provides a screening technique, involving behavioral simulations, to determine the competency of potential junior officers. No military obligation.

Advanced Course (MS III and IV)

3301 Military Science III (3-1)
A comprehensive treatment of those qualities and skills fundamental to the military profession. This course addresses the role of the Army in national affairs as well as from the historic context. Concurrently, it provides instruction in the organizational, planning, and directive processes of control while incorporating those leadership dimensions associated with written and verbal communicative forms, training procedures, counseling techniques, systems and resource management. This body of information is superimposed over a framework involving selected military skills. *Prerequisites*: Completion/credit for Basic Course and PMS approval.

3302 Military Science III (3-1)
A comprehensive treatment of those qualities and skills fundamental to the military profession. This course addresses the role of the Army in national affairs as well as from the historic context. Concurrently, it provides instruction in the organizational, planning, and directive processes of control while incorporating those leadership dimensions associated with written and verbal communicative forms, training procedures, counseling techniques, systems and resource management. This body of information is superimposed over a framework involving selected military skills. *Prerequisites*: Completion/credit for Basic Course and PMS approval.

3401 Summer Field Training (0-0-4)
Intensive field training course stressing practical application of leadership, management, and performance with emphasis on tactical and technical military skills. *Prerequisites*: MS 3301, MS 3302, fully enrolled as an Advanced Course Student, and PMS approval.

3402 ROTC Nurse Summer Training Program (0-0-4)
A three week long clinical leadership experience. Open only to nursing students with at least one clinical nursing course and after completion of MS 3401. The student receives pay. Travel, lodging, and most meal costs are defrayed by the U.S. Army. A 120-hour clinical assignment with an Army Nurse Corps Preceptor at an Army hospital in the U.S. or overseas. Designed to improve clinical skills and self-confidence with the nursing and ROTC curriculum. *Prerequisites*: MS 3401 and department approval.

4301 Military Science IV (3-1)
An in-depth examination of the profession of arms as it relates to military ethics and professionalism and the national security system. Provides the opportunity to develop executive leadership and managerial skills associated with their attendant functions such as planning and analysis; training management; Command and Staff relationships; personnel, fiscal, and logistics management. Concurrently the MS IV student is placed in leadership, managerial, and instructional roles within an Army Command and Staff framework, and is required to exercise those skills in day-to-day operations. *Prerequisites*: MS 3301, MS 3302, and PMS approval.

4302 Military Science IV (3-1)
An in-depth examination of the profession of arms as it relates to military ethics and professionalism and the national security system. Provides the opportunity to develop executive leadership and managerial skills associated with their attendant functions such as planning and analysis; training management; Command and Staff relationships; personnel, fiscal, and logistics management. Concurrently the MS IV student is placed in leadership, managerial, and instructional roles within an Army Command and Staff framework, and is required to exercise those skills in day-to-day operations. *Prerequisites*: MS 3301, MS 3302, and PMS approval.

Elective Courses

1113 Marksmanship (0-3)
An extensive skill course emphasizing the techniques of marksmanship and the firing of .22 caliber rifles, pistols, and match-grade air rifles. No military obligation. Laboratory fee required.

1116 Marksmanship (Advanced) (0-3)
An intensive, advanced skill course emphasizing the techniques of competitive marksmanship with match-grade .22 caliber rifles. May be repeated for credit. No military obligation. *Prerequisites:* MS 1113 and department approval. Laboratory fee required.

1199 Civilian and Military Leadership (1-0)
A study of leadership principles with an emphasis on leadership dynamics, ethics, decision-making skills, and effective methods of communication. Effective management and leadership skills will be studied through the use of historical case study and practical exercises.

Music

301 M Fox Fine Arts
(915) 747-5606 (ph)
(915) 747-5023 (fax)
music@utep.edu

CHAIRPERSON: Lowell Graham
PROFESSOR EMERITUS: Arryl Paul
PROFESSORS: Cardon, Fountain, Graham, Hufstader, Ross, White
ASSOCIATE PROFESSORS: Colgin, Gibson, McMillan, Tredway, Trimble, Warren, Wilkinson
ASSISTANT PROFESSORS: Heuser, Jones, Leinberger, Schweigart, S. Wilson
LECTURERS: Bowles, Gutierrez, E. Wilson

The Department of Music offers programs leading toward the Bachelor of Music (BM) degree in three major fields of Performance, Music Theatre, and Theory and Composition. The department also offers the Bachelor of Fine Arts (BFA) in both Dance and Music Theatre.

Major in Performance

Performance majors may select orchestra/band instruments, keyboard instruments, keyboard performance pedagogy, voice, or guitar as a concentration within the major.

Academic Requirements

English/Humanities from Core*	9
COMM 1301 or 1302*	3
HIST 1301-1302*	6
POLS 2310-2311*	6
Math from Core*	3
Science from Core*	6
Institutionally Designated Option from Core*	3
Social/Behavioral Science from Core*	3
Visual/Performing Arts course from Core*+	3
Total Core Hours	**42**
MUSL 1221-1222+	4

Academic Requirements total: 46 hours if MUSL 1221-22 not used to fill Core requirement; 43 hours if used in Core.

* indicates Core requirement which must be passed with a grade of "C" or better

\+ may be used to fill Visual/Performing Arts Core requirement above; if so used, must be passed with a grade of "C"

Music Major Basics

Music Theory: MUST 1313/1111, 1314/1112, 2313/2111, 2314/2112, 3215, 3218, 1315	23
Applied Music: Instrumental/vocal lessons: 4 semesters MUSA 1391; 4 semesters MUSA 3391; MUSA 3331	27

Major ensemble participation every semester (minimum 8 hours)	8
Recital attendance (MUSA 1091) every semester	
Piano proficiency to level of MUSA 2272 (0-8 hours)	0
Literature/History: 4 semesters from MUSL 3219, 3220, 3221, 3222, 3223, 3228 (exception: Piano Pedagogy majors take only 2 semesters)	4-8
Total Music Major Basics: 62 hours for Piano Pedagogy majors; 66 for all other Performance majors	

Concentration Requirements

Orchestra/Band Instruments: (19 hours in concentration; minimum 128 hours for degree)

2 semesters MUSA 1265	4
15 hours electives	15
Junior year, half recital; Senior year, full recital	

Keyboard Instruments: (20 hours in concentration; minimum 129 hours for degree)

2 semesters MUSA 1265	4
4 hours voice study	4
12 hours electives	12
Junior year, half recital; Senior year, full recital	

Keyboard Performance Pedagogy: (23 hours in concentration; minimum 128 hours for degree)

2 semesters MUSA 1265	4
6 hours Psychology: PSYC 1301 plus 3 hours from PSYC 2302, PSYC 2304, PSYC 2306, or PSYC 2310	6
4 hours voice study, class or private	4
3 semesters MUSE 4394	9
Junior year, half recital; Senior year, full recital	

Voice: (18 hours; minimum 127 hours for degree)

Diction: MUSA 1251, MUSA 1252, MUSA 2251, and MUSA 2252	8
Pedagogy: MUSA 42937	2
2 semesters from MUSA 2253, MUSA 2254, MUSA 3253, and MUSA 3254	4
Foreign language, 1301	3
Junior year, half recital; Senior year, full recital	

Guitar: (18 hours; minimum 127 hours for degree)

2 semesters MUSA 1148 or MUSA 1149	6
2 semesters MUSA 1381 (Classical or Jazz Guitar as secondary instrument)	6
Minimum 6 hours Choir, Band, or Orchestra in ensemble requirement (already counted in ensemble hours)	
6 hours electives	6
Junior year, half recital; Senior year, full recital	

Major in Music Theatre

Students should refer to the Liberal Arts Interdisciplinary Program section for degree requirements (directly before the Music section).

Major in Theory and Composition

Academic Requirements

English/Humanities from Core*	9
COMM 1301 or 1302*	3
HIST 1301-1302*	6
POLS 2310-2311*	6
Math from Core*	3
Science from Core*	6
Institutionally Designated Option from Core*	3
Social/Behavioral Science from Core*	3
Visual/Performing Arts course from Core*+	3
Total Core Hours	42
MUSL 1221-1222+	4

Academic Requirements total: 46 hours if MUSL 1221-22 not used to fill Core requirements; 43 hours if used in Core

* indicates Core requirement which must be passed with a grade of "C" or better

\+ may be used to fill Visual/Performing Arts Core requirement above; if so used, must be passed with a grade of "C"

Music Major (91 hours; minimum 134 hours in degree)

Music Theory: MUST 1313/1111, 1314/1112, 2313/2111, 2314/2112, 3215, 3218, MUST 1315	23
Applied Music: 4 semesters MUSA 1391; 2 semesters MUSA 3391; MUSA 3331	21
Major ensemble participation every semester (minimum 8 hours)	8
Recital attendance (MUSA 1091) every semester	
Piano proficiency to level of 2272	0-8
MUSA 1273 and 6 hours electives (Instrumental majors); MUSA 1251, 1252, 2251, 2252 (Vocal majors)	8
Music Lit/History: 4 semesters from MUSL 3219, 3220, 3221, 3222, 3223, 3228	8
Theory and Composition: MUST 3315; 2 semesters MUST 2219; 2 semesters MUST 3319; 10 hours other advanced theory	23
Senior composition recital or major theoretical project	

Major in General Music with Teacher Certification (137 hours for degree)

Academic Requirements

English/Humanities from Core*%	9
COMM 1301 or 1302*	3
HIST 1301-1302*	6
POLS 2310-2311*	6

Math from Core*	3
Science from Core*	6
Institutionally Designated Option from Core*	3
Social/Behavioral Science from Core*	3
Visual/Performing Arts course from Core*+	3
Total Core Hours	**42**
MUSL 1221-1222+	4
ENGL 23__ or above	3
Education Courses: MUSE 3336, 4333; RED 3342, SCED 3317; EDPC 3300; TED 4697	21

Academic Requirements total: 70 hours if MUSL1221-22 not used to fill Core requirement; 67 hours if used in Core

* indicates Core requirement which must be passed with grade of "C" or better

\+ may be used to fill Visual/Performing Arts Core requirement above; if so used, must be passed with a grade of "C"

% English/Humanities portion of Core must include a sophomore literature class to meet state certification requirements

Music Major (70 hours; minimum 137 hours in degree)

Music Theory: MUST 1313/1111, 1314/1112, 2313/2111, 2314/2112, 3215 or 3218, 1315	21
Music Lit/History: 2 semesters from MUSL 3219, 3220, 3221, 3222, 3223, 3228	4
Applied Music: All certification candidates must have a minimum 9 hours of either a band/orchestra instrument or of voice	
Instrumental/vocal lessons: 4 semesters MUSA 1391; 3 semesters MUSA 3391	21
MUSA 3331, MUSA 3333	6
Area specific applied courses: Instrumental: MUSA 2375-76; 2 semesters 1265 or 4 semesters MUSA 1148 or 1149 Vocal: MUSA 1251-2, 2251-2; MUSE 4293	10
Major ensemble participation every semester (minimum 8 hours)	8
Recital attendance (MUSA 1091) every semester	
Piano proficiency to level of 2272	0-8
Senior year, half recital	

Minor in Music

Students pursuing the BA degree in another discipline may minor in music, with either an applied music or an academic music option. Some background in music is required and the student will take placement tests in both theory and applied music. Requirements are:

For the Applied Music Option
8 hours (4 semesters) MUSA 1291
9 hours (3 semesters) MUSA 3391, MUSL 1221, and MUSL 1222

For the Academic Music Option
MUST 1313, MUST 1314, MUST 1111, MUST 1112, MUSL 1221, MUSL 1222, MUSL 3219, MUSL 3220, MUSL 3221, and MUSL 3222

Whole Arts (ARTS)

3320 Whole Arts (2-2)
An interarts experience that addresses Texas State requirements in the arts for classroom teachers EC-4. The course explores major themes from the visual and performing arts and uncovers arts tools, methods and resources for teaching and learning. The themes are presented in lectures, activities and interviews. Creative laboratory sections are held on and off campus.

Applied Music (MUSA)

Ensemble: Symphonic Wind Ensemble, Symphonic Band, Marching Band, Lab Stage Band, Ballet Corps, Chorale, Chorus, Orchestra, Guitar, and small chamber groups are maintained. These organizations are open to all students who wish to enjoy the performance of a great variety of music. On special occasions each year, several organizations are combined in large productions including operas, ballets, and oratorios. Home concerts and concert tours are a part of the program. Consent of the instructor is required for some ensemble courses, and all may be repeated for credit.

1102 Golddiggers (0-6)
A course for women in dancing, twirling, pom pom, and marching activities; participation in football shows and other public appearances. May be repeated for credit. *Prerequisite*: Admission by try-out only.

1137 Jazz Band (2-1)
May be repeated for credit. Equipment Maintenance fee required.

1138 Concert Band (2-1)
A study of selected works in the field of band literature. May be repeated for credit.

1139 Wind Ensemble (2-1)
This is a Wind Ensemble performance group. Equipment Maintenance fee required.

1142 Mariachis (1-0)
This course explores the performance aspects of the mariachis. Participants must be able to perform on one of the mariachi instruments. Open to all through audition. Equipment Maintenance fee required.

1143 Symphonic Band (2-1)
May be repeated for credit. Equipment Maintenance fee required.

1150 Percussion Ensemble (2-1)
The study of percussion ensemble literature in a performance setting. Equipment Maintenance fee required.

1151 University Chorus (2-1)
A mixed singing organization open to all students interested in any kind of choral work. Audition is not required. Oratorios and operas are presented with orchestral accompaniment, occasionally in combination with the University Chorale. Open to all. May be repeated for credit.

1156 University Jazz Singers (2-1)
This is a vocal jazz performing group.

1162 Orchestra-Winds and Percussion (2-1)
May be repeated for credit. Equipment Maintenance fee required.

1236 Jazz Ensemble (4-2)
May be repeated for credit. Equipment Maintenance fee required.

1241 Marching Band (4-2)
Provides instruction in drill design and show music that results in marching band performances. This will replace MUSA 1141.

1244 Symphonic Winds (4-2)
Study of wind ensemble music in a performance setting. This course replaces MUSA 1143.

1250 University Chorale (4-2)
May be repeated for credit.

1261 Orchestra – Strings (4-2)
May be repeated for credit. Equipment Maintenance fee required.

1265 Chamber Music and Accompanying (0-0-3)
Reading of music and study of selected works characteristic of the performing group. May be repeated for credit.

Group Instruction: Credit granted only when taken as a secondary instrument or elective. Open to all students with permission of instructor.

1251 English Diction and Repertory (2-0)
Introduction to English singing diction and its application through selected repertory.

1252 Italian/Spanish Diction and Repertory (2-0)
Introduction to Italian and Spanish singing diction and its application through selected repertory.

1271 Piano Class I (0-3)
Equipment Maintenance fee required.

1272 Piano Class II (0-3)
Prerequisite: MUSA 1271. Equipment Maintenance fee required.

1273 Voice Class (2-0)
1274 Voice Class (2-0)

1280 Beginning Guitar Class (0-0-2)
An introduction to beginning techniques of classical and folk guitar styles with emphasis on note reading. Open to all.

1291 Individual Instruction (0-0-6)
One thirty-minute lesson and five practice hours per week. May be repeated for credit. *Prerequisite*: Department approval.

2251 German Diction and Repertory (2-0)
Introduction to German singing diction and its application through selected repertory.

2252 French Diction and Repertory (2-0)
Introduction to French singing diction and its application through selected repertory.

2253 Music Theatre Workshop (2-0)
Exploration through active participation of the aspects of stage production peculiar to music theatre, styles and techniques of acting with music, stage directing problems in treating a musical score, and rudimentary technical production. Brief survey of literature for the musical stage appropriate to public school, community, and television productions. May be repeated for credit.

2254 Music Theatre Workshop (2-0)
Exploration through active participation of the aspects of stage production peculiar to music theatre, styles and techniques of acting with music, stage directing problems in treating a musical score, and rudimentary technical production. Brief survey of literature for the musical stage appropriate to public school, community, and television productions. May be repeated for credit.

2271 Piano Class III (0-3)
Prerequisite: MUSA 1272. Equipment Maintenance fee required.

2272 Piano Class IV (0-3)
Prerequisite: MUSA 2271. Equipment Maintenance fee required.

2280 Intermediate Guitar Class (2-0)
Continued work on the classical techniques and literature of the guitar. *Prerequisite*: MUSA 1280 or instructor approval.

2375 Secondary Instruments I (3-0)
A study of instrumental technique and pedagogy for teachers and conductors. *Prerequisites*: MUST 1314 and MUST 1112. Equipment Maintenance fee required.

2376 Secondary Instruments II (3-0)
A study of instrumental technique and pedagogy for teachers and conductors. *Prerequisite*: MUSA 2375. Equipment Maintenance fee required.

3137 Jazz Band (2-1)
This is adding an upper level for an existing course. (MUSA 1146) Equipment Maintenance fee required.

3138 Concert Band (2-1)
This is adding an upper level for an existing course. (MUSA 1138) Equipment Maintenance fee required.

3139 Wind Ensemble (2-1)
Study of wind ensemble literature in an advanced performance setting. This course replaces MUSA 1141. Equipment Maintenance fee required.

3143 Symphonic Band (2-1)
This is an upper level section that is being added for an existing course. Equipment Maintenance fee required.

3150 Percussion Ensemble (2-1)
This is an upper level for MUSA 1150. Equipment Maintenance fee required.

3151 University Chorus (2-1)
This is an upper division class to follow MUSA 1151 which replaces MUSA 1155.

3156 University Jazz Singers (2-1)
This is an upper level course to follow MUSA 1156.

3162 Orchestra-Winds and Percussion (2-1)
This is an upper level course to follow MUSA 1162. Equipment Maintenance fee required.

3236 Jazz Ensemble (4-2)
This is an upper division course for an existing course (MUSA 1146). Equipment maintenance fee required.

3241 Marching Band (4-2)
Upper level course that is similar to MUSA 1241 but with more in-depth study. This will replace MUSA 1143. Equipment Maintenance fee required.

3244 Symphonic Winds (4-2)
Study of advanced wind ensemble music in a performance setting. This course replaces MUSA 1143. Equipment Maintenance fee required.

3250 University Chorale (4-2)
This is an upper division course to follow MUSA 1250. It is an advanced study of chorale literature in a performance setting.

3253 Music Theatre Workshop (2-0)
Continuation of MUSA 2253. May be repeated for credit.

3254 Music Theatre Workshop (2-0)
Continuation of MUSA 2254. May be repeated for credit.

3261 Orchestra-Strings (4-2)
This is the upper level course for MUSA 1261. Equipment Maintenance fee required.

3311 Music Theatre Company I (0-12)
Faculty directed study, practice and performance of music theatre repertory in scenes and full productions. Workshops and seminars that develop specialized performance skills and business acumen in Musical Theatre will be provided. May be repeated for credit.

3331 Beginning Conducting Techniques (3-0)
Techniques of conducting and organizing vocal and instrumental ensembles. Baton techniques, score reading, interpretation, rehearsal techniques, and literature of various ensembles. *Prerequisites*: MUST 2314 and MUST 2112.

3333 Advanced Conducting Techniques (3-0)
Continued study of conducting begun in MUSA 3331. *Prerequisite*: MUSA 3331.

4293 Pedagogy of Voice (2-0)
Methods of voice development through voice-building and song literature. The study of psychological and physiological vocal problems, including the changing voice, the monotone and registers of all voice classifications. Attention also given to training voices for choral singing and solo performance. *Prerequisites*: Senior standing in music or equivalent vocal study and experience; MUSA 3391, MUSA 1251-MUSA 1252, and MUSA 2251-MUSA 2252; and instructor approval.

4311 Music Theatre Company II (0-12)
Faculty directed study, practice and performance of music theatre repertory in scenes and full productions. Workshops and seminars that develop specialized performance skills and business acumen in Musical Theatre will be provided. May be repeated for credit. *Prerequisite*: MUSA 3311 with a grade of "C" or better.

Individual Instruction: Placement auditions are required on the major and secondary instruments. Students who demonstrate adequate proficiency on any required instrument or voice will be encouraged to substitute other courses outside of the music area. Students will perform before the music faculty at the close of each semester. The audition at the close of the second year also determines admission to upper-division courses. For full description of the course of study for any applied music course, students should consult the Music Department Handbook, which is available in the department office.

Students are expected to study on campus with members of the University music faculty. Performance majors must present a full graduation recital approved by the music faculty. Music Education majors must present a partial recital. Consent of the instructor is required for all individual instruction.

1091 Student Recital Lab (0-0-1)
Lab for MUSA 1291, MUSA 1391, MUSA 3291, and MUSA 3391. Required of all students registered in these courses. May be repeated for credit. Graded Pass/Fail.

1281 Individual Instruction (0-0-6)
For non-majors, as a secondary instrument, and for students needing preparatory study. One thirty-minute lesson and five practice hours per week. May be repeated for credit. Music course fee required.

1291 Individual Instruction (0-0-6)
Lower level applied lessons for Music Education and Theory/Composition majors. One thirty-minute lesson and five practice hours per week. May be repeated for credit. *Prerequisite*: Department approval. Music course fee required.

1381 Individual Instruction (0-0-10)
For non-majors, as a secondary instrument, and for students needing preparatory study. Two thirty-minute lessons and nine practice hours per week. May be repeated for credit. Music course fee required.

1390 Individual Instruction (0-0-3)
Private lessons for those preparing for entry into music major curriculum. Music course fee required.

1391 Individual Instruction (0-0-10)
Lower level applied lessons for Music Education, Performance, and Theory/Composition majors. Two thirty-minute lessons and nine practice hours per week. May be repeated for credit. *Prerequisite*: Department approval. Music course fee required.

3391 Individual Instruction (0-0-10)
Upper-level applied lessons for Music Education and Theory/Composition majors. Two thirty-minute lessons and nine practice hours per week. May be repeated for credit. *Prerequisite*: Department approval. Music course fee required.

Repertory Class: Repertory classes offer the student performance experience and added instruction in technique and literature in a two-hour class. These courses must be taken concurrently with an appropriate Individual Instruction class. All repertory classes may be repeated for credit.

1192 Piano Repertory (0-0-2)
May be repeated for credit.

1194 Guitar Repertory (0-0-2)
May be repeated for credit.

See the *Graduate Catalog* for graduate programs and courses.

Music Education (MUSE)

3336 Teaching of Music in the Elementary Schools (3-0)
Pre-adolescent growth and development as the basis of procedures in the teaching of music in the elementary grades. Designed to meet the needs of the special music teacher. The child voice, its development and classification. Introduction of notation, song materials, rhythm bands, appreciation methods, and creative music for children. For Elementary School Music majors. *Prerequisites*: MUST 2314 and MUST 2112.

4333 Teaching of Music in the Junior and Senior High Schools (3-0)
The study of the adolescent growth and development, and related procedures in the teaching of music in the upper level grades and in high school. Choral and instrumental music materials, organization of ensembles, teaching of music appreciation and theory; correlation and integration with the entire school curriculum; public school type music as it is related to the life and needs of a community. *Prerequisites*: MUST 2314 and MUST 2112.

4335 Selected Problems in Music Education (0-0-3)
The student may receive individual instruction and guidance in the area in which a specific need is demonstrated. Credit may be received in the elementary or secondary school field. *Prerequisites*: Six hours of Education, six hours of Music, senior standing, or equivalent background as determined by the instructor and chairman of the department.

See the *Graduate Catalog* for graduate programs and courses.

Literature and History (MUSL)

1221 Introduction to Music Literature (2-0)
A general survey of the history of music in the Western world, including some discussion of the music of non-western cultures. Emphasis on skills needed for oral and written communication about music. *Prerequisite*: Department approval.

1222 Introduction to Music Literature (2-0)
A general survey of the history of music in the Western world, including some discussion of the music of non-western cultures. Emphasis on skills needed for oral and written communication about music. *Prerequisite*: Department approval.

1324 Music Appreciation (3-0)
(♦ MUSI 1306)
A survey of music and its roots in Western civilization. Emphasis on music listening skills as well as relationships between music and other arts and society. Performance of live and recorded music offered to class. No musical background is assumed. Open to all.

1326 The Music of Mexico (3-0)
A survey of Mexican musical development including Pre-conquest Mayan, Aztec, colonial, and 20th century periods as well as the Mariachi and folk styles. Representative literature demonstrated by guest artists and recordings. Open to all.

1327 Jazz to Rock (3-0)
(♦ MUSI 1310)
A study of the styles, performers, and composers of American Jazz music, beginning with the evolution of early jazz styles which combine English, Spanish, and French folk songs with African tribal rhythms, and continuing to the present. Guest artists and audio-visual aids are used. Open to all.

3219 Music in the Middle Ages and Renaissance (2-0)
Music history and style from the fall of Rome through 1600. *Prerequisites*: MUST 1314 and MUST 1112; MUSL 1221 and MUSL 1222.

3220 Music in the Baroque Period (2-0)
Music history and literature from 1600 to 1750. *Prerequisites*: MUST 1314 and MUST 1112; MUSL 1221 and MUSL 1222.

3221 Music in the Viennese Classical Period (2-0)
Music history and literature from 1770 to 1830. *Prerequisites*: MUST 1314 and MUST 1112; MUSL 1221 and MUSL 1222.

3222 Music in the Romantic Period (2-0)
Music history and literature in the nineteenth century. *Prerequisites*: MUST 1314 and MUST 1112; MUSL 1221 and MUSL 1222.

3223 Music in the Twentieth Century (2-0)
The history and literature of music in the twentieth century. *Prerequisites*: MUST 1314, MUST 1112, MUSL 1221, and MUSL 1222.

3228 Topics in Music History (2-0)
The history and literature of music from varying perspectives. *Prerequisites*: MUST 1314, MUST 1112, MUSL 1221, and MUSL 1222.

3324 Introduction to World Music (3-0)
General introduction to the relationships between music and culture with special emphasis upon the music of Asians, Africans, and Native Americans. Listening and ethnomusicological activities. Open to all.

3325 Music on the Border (3-0)
An investigative course designed to promote a greater awareness of the role music plays in contemporary life along the U.S./Mexico border, with special attention to folk and popular styles. Supervised field research will be emphasized in which each student is encouraged to relate music to his personal interest and/or major field. No musical background is assumed.

See the *Graduate Catalog* for graduate programs and courses.

Theory (MUST)

1111 Aural Skills I (2-0)
(🐎 MUSI 1116)
Experience in aural recognition of tone relations through sight-singing, dictation, and keyboard activities. *Corequisite*: MUST 1313. *Prerequisite*: MUST 1311 or MUST 1312.

1112 Aural Skills II (2-0)
(🐎 MUSI 1117)
Experience in aural recognition of tone relations through sight-singing, dictation, and keyboard activities. *Corequisite*: MUST 1314. *Prerequisites*: MUST 1313 and MUST 1111.

1181 Music Theatre Sight Singing I (1-0)
Experience in aural recognition of tone relations through sight singing, simple dictation and keyboard activities. Emphasis on development of singing and keyboard skills and tonal memory. *Corequisite*: MUST 1311. *Prerequisite:* Department approval.

1182 Music Theatre Sight Singing II (1-0)
Experience in aural recognition of tone relations through sight singing, simple dictation and keyboard activities. Emphasis on development of singing and keyboard skills and tonal memory. *Prerequisite*: MUST 1181 with a grade of "C" or better or department approval.

1196 Music Theatre Repertory (1-0)
(🐎 MUSI 1159)
A survey of the vocal literature of the Music Theatre with emphasis on English language repertoire. May be taken twice for credit. *Prerequisite:* Department approval.

1312 Music Fundamentals (3-0)
Functional experiences in the basic fundamentals of music with simple melodic, harmonic, and rhythmic activities; one through four-part singing and dictation. Open to all.

1313 Music Theory I (3-0)
(🐎 MUSI 1311)
The combination, transmission, and effects of musical sounds, utilizing symbols. The logic of order in music as exemplified in acoustics, overtone series, scales, diatonic harmony, rhythm, melody writing, non-harmonic devices, and simple modulation. *Corequisite*: MUST 1111. *Prerequisite*: MUST 1311 or MUST 1312.

1314 Music Theory II (3-0)
(♦ MUSI 1312)
The combination, transmission, and effects of musical sounds, utilizing symbols. The logic of order in music as exemplified in acoustics, overtone series, scales, diatonic harmony, rhythm, melody writing, non-harmonic devices, and simple modulation. *Corequisite*: MUST 1112. *Prerequisites*: MUST 1313 and MUST 1111.

1315 Introduction to Electronic Music (3-2)
(♦ MUSI 1390)
Creating sounds with digital synthesis. Computer controlled digital synthesizers. Tape recording of music. May be repeated once for credit.

2111 Aural Skills III (2-0)
(♦TCCN MUSI 2116)
Continuation of MUST 1112. *Corequisite*: MUST 2313. *Prerequisites*: MUST 1111, MUST 1112, MUST 1313, and MUST 1314.

2112 Aural Skills IV (2-0)
(♦ MUSI 2117)
Continuation of MUST 1112. *Corequisite*: MUST 2314. *Prerequisites*: MUST 2313 and MUST 2111.

2181 Music Theatre Sight Singing III (1-0)
Advanced experience in aural recognition of tone relations through sight singing, keyboard and tonal memory activities. *Prerequisite*: MUST 1182 with a grade of "C" or better or department approval.

2182 Music Theatre Sight Singing IV (1-0)
Advanced experience in aural recognition of tone relations through sight singing, keyboard and tonal memory activities. *Prerequisite*: MUST 2181 with a grade of "C" or better or department approval.

2219 Introduction to Composition (0-0-3)
Traditional and contemporary styles of composition with an emphasis on small forms. May be repeated for credit. *Prerequisite*: Department approval.

2313 Music Theory III (3-0)
(♦ MUSI 2311)
Continuation of melodic and harmonic dictation and part writing; harmonic analysis and simple forms; seventh chords; altered chord, keyboard practice. *Corequisite*: MUST 2111. *Prerequisites*: MUST 1314 and MUST 1112.

2314 Music Theory IV (3-0)
(♦ MUSI 2312)
Continuation of melodic and harmonic dictation and part writing; harmonic analysis and simple forms; seventh chords; altered chord, keyboard practice. *Corequisite*: MUST 2112. *Prerequisites*: MUST 2313 and MUST 2111.

2316 Introduction to Commercial Music (3-0)
Topics may include any of the following: historical and theoretical aspects of structures used in the commercial music industry. Time formats, MIDI programming, combining live and synthetic elements. Introduction to Recording Techniques. May be repeated for credit. Open to all.

3215 Analytical Processes in Music (2-0)
Detailed study of the logic of musical structure as exemplified in representative works of all historical periods. Introduction to graphic analysis. *Prerequisites*: MUST 2314 and MUST 2112.

3216 Theory Seminar (2-0)
An upper level course, which exposes the student to a wide variety of traditional and contemporary analytical and compositional, thought. Includes counterpoint, advanced analysis, orchestration, non-western music, choral arranging, etc. Intended for theory/composition majors, but may be taken by all upper level music students. May be repeated for credit three times. *Prerequisite*: MUST 3215.

3218 Composing and Arranging Instruments and Voice (2-0)
Techniques for writing idiomatically for various performing forces. *Prerequisites*: MUST 2314 and MUST 2112.

3291 Vocal Coaching (0-0-2)
An upper-level lab course designed to prepare Music Theatre students' junior and senior performance projects. This course will meet one hour per week to be arranged on an individual basis with a member of the Music Theatre faculty. *Corequisite*: MUSA 3291 or MUSA 3391. *Prerequisites*: Department approval and 4 semesters of MUSA 1291, MUSA 1391, or MUSA 3391 each with a grade of "C" or better. May be taken twice for credit (4 hours total).

3315 Advanced Electronic Music (3-2)
Digital and analog synthesis of music. Computer control of MIDI systems. Sound sampling and manipulation. May be repeated for credit. *Prerequisite*: MUST 1315.

3316 Commercial Music Composition (3-0)
Study of commercial composition. Topics may include any of the following: scoring for small and large ensembles as well as for various electronic media. Study of modern musical styles and traditional hybrids. Analysis of commercial music from radio and television to film scores. May be repeated for credit. *Prerequisites*: MUST 2316 and department approval.

3317 Applied Audio Production (3-0)
Advanced study of recording techniques and post-audio production. Topics may include advanced MIDI programming, live instruments, microphone techniques. Includes artistic and business theories and how they apply to production. May be repeated for credit. *Prerequisite*: MUST 2316.

3319 Advanced Composition (3-0)
Advanced study of composition with increasing emphasis on contemporary techniques and larger forms. May be repeated for credit. *Prerequisites*: MUST 2219 and admission to the theory/composition curriculum as a major or equivalent.

See the *Graduate Catalog* for graduate programs and courses.

Bachelor of Fine Arts in Dance

The BFA in Dance provides an education through dance: studio, stage to careers. It builds upon the technical strengths of ballet, contemporary dance and a core of academic subjects, along with Dance Appreciation, Music Theatre Dance including jazz and tap, World Dance, Dance History, Composition and Choreography, Music, Kinesiology, and Movement Analysis. Students may choose either an option in performance or teaching with a certification.

All dance majors take the following University Core and dance fundamentals:

ENGL	1311	English Composition	3
ENGL	1312	Research and Critical Writing	3
COMM	1301	Public Speaking	3
MATH	1320	Math for the Social Sciences	3
BIOL	1303	Introductory Biology	3
BIOL	1304	Human Biology	3
BIOL	1104	Human Biology Laboratory	1
HIST	2302	World History since 1500	3
MUSL	1324	Music Appreciation	3
HIST	1301	US History to 1865	3
HIST	1302	US History since 1865	3
POLS	2310	Intro to Politics	3
POLS	2311	American Government & Politics	3
PSYC	1301	Introduction to Psychology	3
UNIV	1301	Seminar in Critical Inquiry	3
			43

All dance majors take the following dance fundamentals:

DANC	1304	Dance Appreciation	3
DANC	1151	Dance Performance	4
DANC	1341	Ballet I	3
DANC	1342	Ballet II	3
DANC	2341	Ballet III	3
DANC	2342	Ballet IV	3
DANC	3303	History of Theatrical Dance I	3
DANC	3304	History of Theatrical Dance II	3
DANC	3151	Dance Performance	2
DANC	3301	Dance Theory & Composition	3
DANC	2345	Contemporary Dance 1	3
DANC	2346	Contemporary Dance 2	3
DANC	3345	Contemporary Dance 3	3
DANC	3346	Contemporary Dance 4	3
DANC	3371	Dance for the Music Theatre 3	3
DANC	4371	Dance for the Music Theatre 4	3
DANC	4301	Choreography	3
DANC	4390	Seminar (Capstone)	3
MUST	1311	Fundamentals of Music	3
THEA	2321	Stagecraft	3
KIN	2332	Motor Learning and Control	3
			63

Dance Performance Option

DANC	3341	Ballet V	3
DANC	3342	Ballet VI	3
DANC	4341	Ballet VII	3
DANC	4342	Ballet VIII	3
DANC	3151	Dance Performance	2
KIN	2342	Spanish Dance (2) OR	
DANC	3322	World Dance (3)	2-3
DANC	3361	Move Analysis & Preservation OR	
DANC	4394	Dance Pedagogy	3
THEA	2413	Acting I	3
MUSA	1155	Chorus	2
MUSA	1271	Piano Class	2
			26-27

Dance Teacher Certification Option

KIN	2342	Spanish Dance	2
DANC	3222	World Dance	3
DANC	3361	Movement Analysis Preservation	3
DANC	4394	Dance Pedagogy	3
DANC	4333	Dance in the Jr/Sr High Schools	3
EDPC	3300	Developmental Variations	3
SCED	3311	Curriculum Planning- Second. Schools	3
SCED	3317	Multi-Cultural Education	3
RED	3342	Reading/Study in Content	3
SCED	4393	Intern. Secondary Education I	3
SCED	4394	Intern. Secondary Education II	3
EDT	3371	Educational Technology	0-3
			32-35

Minor in Dance

Students entering a dance minor program must demonstrate technical competence in ballet, modern dance, or jazz beyond the elementary level. All students must take a minimum of 18 credit hours including 9 upper-division credits.

The following courses are required of all students:

DANC	1304	Dance Appreciation	3
DANC	3301	Dance Theory and Composition	3

Students should design a coherent program of 13 dance credits with the approval of a dance minor advisor from the following courses to include a variety of techniques that complement a student's major field.

DANC	1151	Dance Performance	1
DANC	1341	Ballet I	3
DANC	1342	Ballet II	3
DANC	2341	Ballet III	3
DANC	2342	Ballet IV	3
DANC	3341	Ballet V	3
DANC	3342	Ballet VI	3

DANC	4341	Ballet VII	3
DANC	4342	Ballet VIII	3
DANC	3151	Dance Performance	1
DANC	2345	Contemporary Dance 1	3
DANC	2346	Contemporary Dance 2	3
DANC	3347	Character and Jazz Dance I	3
DANC	3348	Character and Jazz Dance II	3
DANC	1371	Dance for the Music Theatre I	3
DANC	2371	Dance for the Music Theatre II	3
DANC	3371	Dance for the Music Theatre III	3
DANC	4371	Dance for the Music Theatre IV	3
DANC	1140	Ballet Folklorico	1
PE	1146	Hispanic Dance	1

Education majors, in order to apply for an additional field of certification in dance, must also take:

DANC	4394	Dance Pedagogy	3
DANC	4333	Dance in the Jr/Sr High Schools	3

Dance (DANC)

1140 Ballet Folklorico (1-0)
(♞ DANC 1149)
This course explores the performance aspects of Ballet Folklorico. Open to all through audition.

1151 Dance Performance (0-0-10)
(♞ DANC 1151)
Performing techniques and participation in the University Ballet Corps. Ballet majors are required to participate for eight semesters and/or each semester in attendance. May be repeated for credit. Open to all through audition.

1341 Ballet I (0-0-5)
(♞ DANC 1341)
Basic ballet techniques combining the methods of the Russian, Cechetti, and French schools. Sections open to all students, meets three days a week. Sections open to Ballet majors, meets five days a week.

1304 Dance Appreciation (3-0)
(♞ DANC 2303)
The forms, history, choreography, criticism, notation, meanings and major issues in dance such as the roles of dance in the visual and performing arts and world dance are surveyed. Course work is supported through performance and documentary videos as well as attendance at ballet, contemporary and folk dance concerts.

1342 Ballet II (0-0-3)
(♞ DANC 1342)
Basic ballet techniques combining the methods of the Russian, Cechetti and French Schools. Sections open to all students, meets three days a week. Sections open to ballet majors, five days a week.

1371 Dance for the Music Theatre I (3-1)
The first semester of a four-semester sequence designed to give the student actor and singer the tools to move efficiently and evoke excitement in a variety of stage roles and situations. Fundamentals of mind body coordination and non-verbal communication are stressed. Techniques of improvisation and dance are introduced.

2341 Ballet III (5-0)
(★ DANC 2341)
Continuation of 1342 with more advanced work in the creative aspects of dance movements. *Prerequisite*: DANC 1342.

2342 Ballet IV (5-0)
(★ DANC 2342)
Continuation of 1342 with more advanced work in creative aspects of dance movements. *Prerequisite*: DANC 1342 or department approval.

2345 Contemporary Dance I (2-2)
(★ DANC 1345)
The movement vocabulary of Martha Graham, Jose Limon, Kathryn Dunham, Merce Cunningham and other great dance artists of the last century are synthesized in an intermediate level technique class.

2346 Contemporary Dance II (2-2)
(★ DANC 1346)
A continuation of Contemporary Dance I. *Prerequisite*: DANC 2345 with a grade of "C" or better.

2371 Dance for the Music Theatre II (3-1)
Additional tools and enhanced movement skills for student actors and singers. Forms, patterns, and individual creativity are stressed. *Prerequisite*: DANC 1371.

3151 Dance Performance (0-6)
Upper-level stage experiences in ballet, modern dance or music theatre dance.

3301 Dance Theory and Composition (3-0)
Concepts such as repetition, manipulation, development, contrast, variety and musicality are presented through lecture, discussion, improvisation and representation through the composition of formal dance studies. Intermediate level technical proficiency recommended.

3303 History of Theatrical Dance I (3-0)
A survey of the evolution of theatrical dance from the Renaissance to the present with emphasis upon the evolution of ballet theatre. Relevant social, political and artistic movements are considered along with choreographic styles and traditions and the philosophies and contributions of major dance artists.

3304 History of Theatrical Dance II (3-0)
A survey of theatrical dance emphasizing major developments in 20th Century concert dance and dance for the musical stage. Relevant social, political and artistic movements are considered along with choreographic styles and traditions and the philosophies and contributions of major dance artists.

3322 World Dance (3-0)
The ethnic, recreational and theatrical dance of a variety of world cultures is studied, compared and sampled. The rich folkloric heritage and diverse cultures of the El Paso area provide a living laboratory for observation, participation and research.

3341 Ballet V (0-0-5)
Continuation of 2342; advanced techniques with increased emphasis on certain creative aspects of dance movements. *Prerequisite*: Department approval.

3342 Ballet VI (5-0)
Continuation of 2342; advanced techniques with increased emphasis on certain creative aspects of dance movements. *Prerequisites*: DANC 2342 or equivalent, junior standing, and department approval.

3345 Contemporary Dance III (3-0)
A continuation of Contemporary Dance II with emphasis on the multitude of styles called "The Modern Dance. "

3346 Contemporary Dance IV (3-0)
A continuation of Contemporary Dance III with emphasis on today's professional-level performance demands.

3347 Character and Jazz Dance I (3-0)
Interpretation of national dancing; fundamentals and techniques of jazz dance. May be repeated for credit.

3348 Character and Jazz Dance II (3-0)
Interpretation of national dancing; fundamentals and techniques of jazz dance. May be repeated for credit.

3361 Movement Analysis and Preservation (3-0)
The analysis, coding and decoding of spatial, rhythmic and dynamic aspects of human movement through systems such as Labanotation. Attention to computer-assisted recording and reconstruction along with applications for teaching and choreography is included. Advanced technical level recommended. *Prerequisites*: DANC 1342 and DANC 2346 each with a grade of "C" or better.

3371 Dance for the Music Theatre III (3-1)
Introduction to and practice in more advanced movement tools; deepened and expanded dance techniques. Nineteenth and Twentieth Century Period dance styles are stressed.

4301 Choreography (3-0)
Principles of composition, rehearsal, and execution of theatrical dance. *Prerequisite*: DANC 3342.

4333 Teaching Dance in High School (2-2)
Materials and methods for the activity classroom, the teaching of dance appreciation, the relationship of movement to learning in other academic settings, the presentation of student concerts, musicals, folklorico and related dance activities in relation to adolescent growth and development. *Prerequisite*: DANC 4394 with a grade of "C" or better.

4341 Ballet VII (0-0-10)
For students wishing to study ballet as a principal performance medium. Concentrated study including points and adagio work. Admission is by audition only. *Prerequisite*: DANC 3342.

4342 Ballet VIII (4.50-0)
For students wishing to study ballet as a principal performance medium. Concentrated study including points and adagio work. Admission is by audition only. *Prerequisite*: DANC 3342.

4371 Dance for the Music Theatre IV (3-1)
Refinement of dance and movement techniques. Movement workshop units in areas such as Baroque and Renaissance dance styles, tap and folk dance, mime, pantomime, Feldenkreis, Alexander, Tai Chi, improvisation, stage combat, tumbling, and voice and movement. Take advantage of community and other professional resources to broaden performers' exposure to stage movement techniques. May be repeated for credit. *Prerequisite*: DANC 3371.

4390 Seminar (3-0)
Capstone assignments and presentations demanding research and performance or choreography. Current trends and careers in dance and the arts are highlighted.

4394 Dance Pedagogy (2-2)
Materials and methods for teaching dance in a variety of public and private studio situations. Observation and internship included. *Prerequisites*: DANC 3203 or DANC 3204, and DANC 4301 each with a grade of "C" or better. DANC 3203, 3204, or 4301 may be taken concurrently with DANC 4394.

Philosophy

203 Worrell Hall
(915) 747-6617
philos@utep.edu

CHAIRPERSON: Steven Best
ASSOCIATE PROFESSOR EMERITUS: Peter Robinson
PROFESSOR: Haddox
ASSOCIATE PROFESSORS: Best, Springer
ASSISTANT PROFESSORS: Ferret, Simon, Symons

BA Degree

The requirements for a Bachelor of Arts in Philosophy are 30 semester hours of philosophy courses, 21 hours of which are advanced (3300-4300) and 3 hours of which are at the lower level. The following courses are required: PHIL 1304, PHIL 3314, PHIL 3317, PHIL 3335, PHIL 4351, PHIL 4352, and either PHIL 3315 or PHIL 3318.

The requirements for a minor in Philosophy are 18 semester hours of Philosophy of which 12 are advanced (3300-4300). The following courses are required: PHIL 3314, PHIL 3317, PHIL 3335, and either PHIL 4351 or PHIL 4352.

Philosophy (PHIL)

1301 Introduction to Philosophy (3-0)
(♦ PHIL 1301)
This course introduces students to some of the major issues in philosophy. The ideas, eras, and important philosophers will be examined. The traditional categories of reality, knowledge, values, and meaning will be the focus, though recent and comparative areas may be included. The development of the student's critical thinking skills is the major objective of this course.

1304 Logic (3-0)
(♦ PHIL 2303)
A survey of modern logic including traditional logic, fallacies, sentential logic, and predicate logic.

2306 Ethics (3-0)
(♦ PHIL 2306)
An introduction to topics and core problems relating to the moral evaluation of human motivation and action. The course examines the positions of classical philosophers such as Aristotle, Hume, Kant, Mill, and Sartre, as well as contemporary moral problems that relate to human rights, animal eights and environmental ethics.

2313 Chicanos and American Thought (3-0)
After an analysis of the intellectual heritage (Pre-Hispanic, Spanish, and Mexican) of the present-day Chicano, contemporary Chicano value orientations are compared and contrasted with such orientations in American society. *General Prerequisite*: Junior standing for all 3300 and 4300-level courses.

3301 Philosophy of Mind (3-0)
This course is a survey of central issues in contemporary philosophy of mind. We will consider different accounts of the relation between minds and the physical world, including whether computers could ever have thoughts or consciousness. Central to our investigation will be the problem of how mental states causally interact with neural states. In addition, we will address questions concerning how much our thoughts and experiences depend on the nature of our environments, and how much they are determined by our innate dispositions. *Prerequisite*: 1 undergraduate philosophy course or permission of instructor and department approval.

3302 Ethical Theory (3-0)
Considers the history and development of ethical theory in a comparative Asian/Western context. Theories such as utilitarianism, deontology, contractarianism, communitarianism, pacifism, anarchism, pragmatism, and virtue ethics may be discussed within the context of a diversity of thinkers and textual resources.

3303 Philosophy of Education (3-0)
Analyzes classical and contemporary theories and practices of education in a global perspective, using mainstream, alternative, and critical approaches. This course often team taught with professors from Education.

3304 Philosophy of History (3-0)
Topics will include matters such as the debate between idealist and materialist interpretations of history, the question of historical "laws" and determinism, the debate over "progress" in history, and the relation between the social and natural sciences. *Prerequisite*: PHIL 1301 or PHIL 2306 or PHIL 1304 each with a grade of "C" or better, or instructor approval.

3305 Philosophy of Law (3-0)
Analyzes legal issues, theories, and case studies within the framework of Western ethical, social, and political philosophies and the history of jurisprudence. Topics include the origins of law, the relations of law, custom, and ritual, the question of legal "rights", justice, authority and sovereignty, responsibilities and obligations, property rights and distributive justice, pacifism, and civil disobedience. *Prerequisite*: PHIL 1301 or PHIL 2306 or PHIL 1304 each with a grade of "C" or better, or instructor approval.

3308 Aesthetics: Philosophy of Art (3-0)
An overview of the principal philosophical theories regarding the nature of art and aesthetic sensibility. Examines attempts to define art, explores the foundational ideas of art criticism and also attempts to relate art to other concerns such as religion, sciences, ethics, politics, and everyday life.

3311 Philosophy of Science (3-0)
Diversity of topics and issues open to the instructor, including the debate between scientific realists and various anti-realists (empiricists, phenomenologists, instrumentalists, social constructivists); Kuhn and the sociology of knowledge, post-Kuhnian thinkers such as Lakatos, Latour, and Feyerabend; and feminist and post modern/postcolonial critiques of science. May also focus on the work on major scientific thinkers like Galileo, Newton, Darwin, and Einstein.

3312 Latin American Thought (3-0)
After a survey of philosophical developments in Latin America during the colonial period, during the struggles for independence, and in the nineteenth century, the thought of major twentieth century intellectual leaders in Latin America is examined. These include professional philosophers but also certain literary and political figures who expressed significant and influential philosophical positions.

3313 American Philosophy (3-0)
A consideration of principal figures who have shaped the American philosophical sensibility. Such individuals may include Edwards, Jefferson, Franklin, Emerson, Thoreau, Whitman, Dickinson, Melville, Pierce, James, Dewey, and Rorty.

3314 Ancient Philosophy: The Origins of Western Thought (3-0)
Studies the origin and development of those ideas and problems which have come to characterize the philosophic tradition in the West as reflected in the thought of the Pre-Socratics, Socrates, Plato, Aristotle, and the Stoics.

3315 Medieval Philosophy: The Scholastic Synthesis (3-0)
Studies the philosophies of the medieval Western and Eastern Mediterranean cultures. Philosophers to be examined include Augustine, Boethius, Ibn-Cina, Ibn-Rushd, Ibn-Gabirol, Maimonides, Aquinas, Scotus, Bonaventure, and Occam.

3317 Modern Philosophy (3-0)
This course focuses on the classical philosophical traditions of Rationalism (Descartes, Spinoza, Leibniz), Empiricism (Locke, Berkeley, Hume), and the critical, ethical philosophy of Kant. Other topics could also include examination of the emergence of the scientific method, and Enlightenment figures such as Voltaire and Diderot.

3318 Nineteenth Century Philosophy (3-0)
Examines topics such as the reaction to Kant's critiques by Positivism (Comte and followers) on the one hand, and Idealism (Fichte, Schelling, Hegel) on the other. The course also examines the philosophical impact of major figures such as Darwin, Marx, Kierkegaard, and Nietzsche.

3322 Philosophy of Religion (3-0)
This course is not a comparative study of religion, but rather provides an opportunity to examine the phenomena of western and non-western religions philosophically. The content of this course will vary according to the instructor but could examine such issues as belief and knowledge in God, goddess, gods, or goddesses; religious myth, experience and ritual; religious community; and religious ethics.

3325 Social Philosophy (3-0)
This course examines the philosophical and political issues of social existence. It considers topics such as justice, freedom, rights, authority, social contract theory, political legitimacy, civil disobedience, feminism, postmodern theory, environmental theory, distributive justice, as well as various socio-political ideologies such as liberalism, capitalism, socialism, fascism, and anarchism.

3335 Twentieth Century Philosophy (3-0)
This course will consider the principal forms of contemporary philosophy, such as logical positivism, linguistic analysis, existentialism, phenomenology, critical theory and postmodernism. May be repeated when course content varies.

3340 Asian Philosophies (3-0)
A consideration of classical Asian philosophical texts and traditions. Topics are normally selected from either the Chinese or Indian traditions. A course on classical Chinese philosophy would focus upon the principal texts of Confucianism and Daoism. A focus upon Indian philosophy would lead to a consideration of schools such as Advaita Vedanta, Upanishadic Theism, and Nyaya.

4302 Metaphysics (3-0)
Often called ontology or speculative philosophy, metaphysics studies the attempts to develop coherent sets of principles by which to understand comprehensive notions such as being and change, appearance and reality, God, freedom, mind, and the universe.

4304 Latin American Philosophy (3-0)
A detailed examination of the philosophical positions of such nineteenth and twentieth century Latin American scholars as Domingo Faustino (Argentina), Jose Enrique Rodo (Uruguay), Francisco Romereo (Argentina), Carlos Vaz Ferreira (Uraguay), and the Mexicans: Jose Vasconcelos, Antonio Caso, Vincente Lombardo Toledano, and Samuel Ramos. Prerequisites: 1 Undergraduate Philosophy course or instructor approval and department approval.

4306 Philosophical Methods (3-0)
A close analysis of specific texts in World Philosophy, the sciences, and literature aimed at understanding the origins of the plurality of perspectives in accordance with which we have come to understand the world. Presents students with a variety of approaches used to learn and practice philosophy, ranging from the Socratic method, phenomenology, analytical philosophy to feminism, critical theory, and postmodern theory. *Prerequisites*: 1 Undergraduate Philosophy course or instructor approval and department approval.

4311 Theories of Knowledge (3-0)
Analysis of the philosophical problems regarding the origins, criteria, and limits of knowledge. Discusses classic debates such as between rationalism and empiricism and realism and non-realism, as well as more current issues including cognitive science, cognitive neuroscience, cognitive ethology (animal intelligence), artificial intelligence, robotics, artificial life, and how these developments are producing new paradigms of mind and knowledge.

4351 Great Philosophers (3-0)
The life and work of one or more of the most influential thinkers in world philosophy will be the focus of this course. Such thinkers include Confucius, Plato, Aristotle, Ortega, Nietzsche, Marx, Kant, Hegel, Dewey, Singer. May be repeated when the course content varies. *Prerequisite*: Junior standing.

4352 Problems in Philosophy Seminar (3-0)
A course with issues of current interest to contemporary philosophers. Recent topics have included postmodernism, literature and philosophy, technological society, movies and the making of the American mind, the emergence of world philosophy, and medical ethics. *Prerequisite*: Junior standing.

4353 Independent Study (0-0-3)
Student research under supervision of the staff. *Prerequisite*: Instructor Instructor approval.

See the *Graduate Catalog* for graduate courses.

Political Science

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CHAIRPERSON: William G. Weaver
PROFESSORS EMERITI: C. Richard Bath, Kenneth E. Beasley, Howard D. Neighbor, Melvin P. Straus, Roberto E. Villarreal
ASSOCIATE PROFESSOR EMERITUS: Thomas J. Price
PROFESSORS: Graves, Kruszewski, Staudt, Webking
ASSOCIATE PROFESSORS: Rocha, Weaver
ASSISTANT PROFESSORS: Barracca, Boehmer, Coronado, Levin, Mack, Pallitto, Payan

Major in Political Science

In addition to POLS 2310-POLS 2311, the major requires 27 semester hours in Political Science, including POLS 2312, which should be taken in the sophomore year and POLS 4900, which must be taken during the final semester of study. At least one course must be taken in three of the following subfields: American Political Processes, Public Law, Comparative Politics, International Politics, Political Theory and Thought, and Public Administration. Each major must also complete a minor of at least 18 hours. The minor may be from another liberal arts discipline, from approved inter-disciplinary minors, or from approved disciplines in other colleges, and should be selected in consultation with the departmental undergraduate advisor.

Minors in Political Science

Three options are available to students majoring in other disciplines:

Political Science-18 hours, including POLS 2312, one advanced course in each of three of the six subfields, and 6 additional hours in Political Science.

Comparative and International Politics-18 hours, including POLS 2360, POLS 2330, and 12 advanced hours from the subfields.

Public Administration-18 hours, including POLS 3350, POLS 3352, and POLS 4354 and 3 courses from POLS 3311, POLS 3351, POLS 3352, POLS 4310, POLS 4355, and POLS 2314.

European Studies

For students who wish to complete an education in European Studies that is more thorough and rigorous than a minor, the Department of Political Science offers a major in Political Science with a concentration in European Studies. Students wishing to take advantage of this concentration should follow this plan:

1. Major in Political Science and include in the courses used to satisfy the requirements for the major POLS 2360, POLS 3332, POLS 2330, POLS 4330, POLS 4346, POLS 4347, and POLS 3345.
2. Minor in European Studies (as described elsewhere in this catalog), substituting other core courses for POLS 4346 and POLS 4347.
3. Satisfy the language requirement with GERM 2301 and GERM 2302, FREN 2310 and FREN 2302 or SPAN 2301 and SPAN 2302.

Departmental Honors in Political Science

Outstanding students may complete an Honors Thesis. For details, students should consult with the Chairperson.

Teacher Certification

For information on certification in the composite social studies area, students should refer to the Liberal Arts section of this catalog.

Political Science (POLS)

POLS 2310-POLS 2311 fulfill the legislative requirements of the State of Texas for courses on the Constitutions of the United States and Texas.

2310 Introduction to Politics (3-0)
(GOVT 2305)
An overview of the concepts, principles, and practices of politics as background for the study of American and Texas political institutions. The course may employ an international, comparative, or theoretical focus. *Prerequisite*: Freshman standing.

2311 American Government and Politics (3-0)
(GOVT 2306)
A survey of contemporary American national, state, and local political processes and institutions, with emphasis upon the Constitutions of the United States and Texas. This course meets teacher certification requirements for out-of-state graduate students. *Prerequisite*: Freshman standing.

2312 The Study of Politics (3-0)
A review of the various techniques used in the study of politics. Students will examine political situations and prepare written reports on their findings. Grade of "C" or better required for majors and minors. *Prerequisite*: POLS 2310.

General Prerequisite: Junior standing for all 3300 and 4300-level courses.

American Political Behavior and Institutions

3312 The Party System Campaigns and Elections (3-0)
An analysis of the nature and role of political parties and interest groups and their impact on both the electoral and policymaking processes. *Prerequisites*: POLS 2310 and POLS 2311.

3313 Public Opinion, Media and Technology (3-0)
An analysis of the influence of American culture, politics and the media, and technology on political socialization and public opinion. The measurement of public opinion and its influence on our elected officials and public policymaking will also be considered. *Prerequisites*: POLS 2310, POLS 2311.

3314 Ethnicity and Race in American Politics (3-0)
An analysis of how the combined effects of race, ethnicity and social class affect both citizens and the political process. *Prerequisites*: POLS 2310, POLS 2311.

4304 Environmental Justice and Minority Communities in the U.S. (3-0)
An examination of environmental justice issues in the U.S., with an emphasis on communities, agencies and efforts that address sustainable development in the U.S.-Mexico border region. The underpinnings of the environmental justice movement in the U.S. and the regional policy formulation and practice implications for these communities will be central to the course. The course may require field trips. (POLS 4304 is the same course as AFST 4304; SOCI 4304; ANTH 4304; and CHIC 4304.) *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4310 American Legislatures (3-0)
An examination of the organization, behavior and work of Congress and/or state legislatures in the practice of lawmaking. It will include discussion of the interaction of those legislatures with executives (the president and governor), bureaucracies, and the judiciary in the policymaking process. *Prerequisites*: POLS 2310 and POLS 2311.

4311 The Presidency (3-0)
An analysis and interpretation of the office of the President in relation to the functions, roles, powers, and duties in both domestic and foreign affairs. *Prerequisites*: POLS 2310 and POLS 2311.

4313 Southwestern Border Politics (3-0)
An examination of how the structure of state and local governments on the United States-Mexico border affects politics in the region. Special emphasis will be given to the study of the electorate, cross-boundary issues and the relationship between the border regions to the federal governments of both countries. *Prerequisites*: POLS 2310, POLS 2311.

4314 Women, Power, and Politics (3-0)
This course focuses on the distribution of power between women and men in society and the political implications of that distribution. *Prerequisites*: POLS 2310, POLS 2311.

4315 Latinos in the American Political System (3-0)
An overview of Latinos in the American political system with emphasis on their impact on political participation, representation, demographic changes, and their quest for political empowerment. *Prerequisites*: POLS 2310, POLS 2311.

4318 Teaching Democracy (3-0)
Examines various civic education content and pedagogical strategies in K-12 education. Also examines public education policy. Especially useful for those who may enter the teaching profession. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4319 Special Topics in American Politics (3-0)
A special listing for courses in the field of American politics that are outside the purview of the above courses but are offered by the departmental faculty. P*rerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

Law and Politics

3320 Constitutional Law (3-0)
A study through the use of court cases of the allocation of governmental powers with emphasis on the national government, and an introduction to the judicial function and the American legal system. *Prerequisites*: POLS 2310, POLS 2311.

3321 Civil Rights and Liberties (3-0)
A study of the limitations on governmental power in the United States, with primary emphasis on civil and political rights. *Prerequisites*: POLS 2310, POLS 2311.

3322 Law and Society (3-0)
An examination of the legal-judicial arrangements in the Western world and particularly the United States, with emphasis on the interaction of legal systems with society. *Prerequisites*: POLS 2310, POLS 2311.

4322 Legal Reasoning (3-0)
An examination of the method of reasoning about legal problems which arose out of the common law tradition. A core area of the common law (torts, criminal law, contracts, or property) will be explored in depth through the reading and analysis of case law. The techniques of reasoning in cases will be applied to hypothetical and new case materials. *Prerequisites:* POLS 2310 and POLS 3211.

4323 Courts in Action (6-0)
This unique course combines instruction in both the theory and practice of law. Through case readings, students will learn about substantive legal issues, how they are analytically treated in legal theory and how they are applied in litigation. Students will also learn about the practical aspects of law by attending actual trials, sentencings, and hearings held both on and off campus, and by talking with lawyers, judges, juries, and law enforcement officers. The course will also include tours through prison and detention facilities, courts, and other institutional settings. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4324 Introduction to Private Law (3-0)
This course introduces students to the main concepts and considerations and public policy implications of the law of torts, contracts, and property. Issues discussed may range from governmental liability for injuring and killing citizens to the patenting and ownership of new genetic configurations or genetically engineered animals and plants. Particular attention will be given to governmental abuse of power and the private law remedies for such abuse. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4325 Special Topics in Law and Politics (3-0)
A special listing for courses in the field of Law and Politics offered by the Departmental faculty that are outside the purview of the above courses. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

International Relations

2360 International Relations (3-0)
The theory and practice of international politics with particular attention to the forces and processes contributing to conflict and cooperation among global political structures and institutions. *Prerequisite*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4330 Foreign Policy of the United States (3-0)
A study of the structures and processes of United States foreign policy decision-making. *Prerequisites*: POLS 2310, POLS 2311.

4339 U.S.-Latin American Relations (3-0)
Explores the relations between the United States and the countries of Latin America. Issues examined may include economic integration, narcotrafficking, environmental policy, and immigration. Issue and country focus may vary depending on the instructor. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4365 International Organizations (3-0)
Examines the development of international organization, such a NATO and the United Nations and considers the legal and constitutional aspects of their creation. It also presents the tools to evaluate the success of international organizations in the management of conflict and the advancement of social, economic and political cooperation. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4366 Special Topics in International Relations (3-0)
A special listing for courses in the field of International Relations offered by the departmental faculty that are outside the purview of the above courses. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

Comparative Politics

2330 Comparative Political Systems (3-0)
An examination of theories and methods used in comparative political analysis with illustrative cases drawn from a variety of political cultures. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

3332 Political Geography (3-0)
The study of political phenomena and the impact of decision-making in their special context. *Prerequisites*: POLS 2310, POLS 2311.

3334 Politics in World Regions (3-0)
The study of political institutions and processes in regions such as Africa, the Middle East and Asia. The course may be repeated under a different topic and/or instructor. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

3337 Latin American Politics (3-0)
A survey of the political institutions and processes of major countries in Latin America. Emphasis is placed on sources of political cleavage and the problems of stability and instability within countries of the region. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

3345 Democracy and Democratization (3-0)
Examines the nature and requisites of democracy, the phenomenon of transitions from non-democratic rule, and the challenges of consolidating and deepening new democracies. Case studies of democratic transition from various world regions will be discussed for comparative purposes. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4337 The Politics of Mexico (3-0)
A study of the political processes and institutions within Mexico. Attention will be given to the political culture of Mexico, the role of interest groups and political parties, the nature of federalism and separation of powers, public policy and administration, and human rights. *Prerequisites*: POLS 2310 and POLS 2311.

4346 Russia's Challenges in the 21st Century (3-0)
An analysis of the sociopolitical problems and challenges facing Russia at the onset of the 21st Century, against the background of the policy choices available in the post-communist and post-9/11 conditions. An assessment of those choices will be made in terms of Russia's historical and political experiences. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4347 European Union Politics (3-0)
An advanced study of the political structures emerging from the integration of New Europe. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4348 Politics of Developing Countries (3-0)
The study of political culture, institutions and processes of developing countries. Emphasis is placed on institution building, economic development, and ethnic conflict. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4350 Special Topics in Comparative Government (3-0)
A special listing for courses in the field of comparative politics offered by the departmental faculty that are outside the purview of the above courses. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

Political Thought and Theory

3340 Western Political Heritage I (3-0)
A study of the ideas of the major political philosophers from the ancient and medieval periods. *Prerequisites*: POLS 2310, POLS 2311.

3341 Western Political Heritage II (3-0)
A study of the ideas of the major political philosophers from the Renaissance through the Nineteenth Century. *Prerequisites*: POLS 2310, POLS 2311.

3342 American Political Thought (3-0)
A study of American political thought from the colonial period to the present. *Prerequisites*: POLS 2310 and POLS 2311.

4340 The American Constitution (3-0)
An analysis of America's founding document and its evolution over time. *Prerequisites*: POLS 2310, POLS 2311.

4342 Contemporary Political Thought (3-0)
The ideas of contemporary political thinkers concerning the issues of democracy, dictatorships, and the relations between economic systems and political systems. Emphasis also will be placed upon the process of political theorizing today. *Prerequisites*: POLS 2310, POLS 2311.

4344 Special Topics in Political Theory (3-0)
A special listing for courses in the field of political theory offered by the departmental faculty that are outside the purview of the above courses. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

Public Administration

3350 Introduction to Public Administration (3-0)
A study of management processes involved in the accomplishing of government; analysis of the structure and procedures of the administrative or executive branch of government, with particular reference to national, state, and local governments in the United States. *Prerequisites*: POLS 2310 and POLS 2311.

3351 Public Policy Process (3-0)
Issues and techniques in the analysis of public agenda-building, decision-making, implementation, and evaluation. Course may be comparative in content and may be repeated under different topic and/or instructor. *Prerequisites*: POLS 2310, POLS 2311.

3353 State and Local Administration (3-0)
The administration of state government in the United States with emphasis on administration in the state of Texas. *Prerequisites*: POLS 2310, POLS 2311, and Junior standing.

4356 Grant Writing for Development (3-0)
A skill-building course that takes students through the grant-writing process, from narrative to budget, timeline, and evaluation. Focus: international and border. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4357 Leadership and Civic Participation (3-0)
Theories and applications on leadership development, relationships with others and strategies in different contexts. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4358 Special Topics in Public Administration (3-0)
A special listing for courses in the field of Public Administration offered by the departmental faculty that are outside the purview of the above courses. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

General

2314 Internship (0-0-3)
Approval of the Instructor and Departmental Chair are required. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better and department approval.

4300 Advanced Research Methods in Political Science (3-0)
A study of advanced data generation and statistical analysis techniques. Students will use these techniques in individual or group research projects. *Prerequisites*: POLS 2310 , POLS 2311 and POLS 2312 each with a grade of "C" or better.

4370 Independent Reading and Research in Political Science (0-0-3)
A research and writing experience for undergraduates in Political Science. Prior approval of the instructor and departmental chair is required before enrollment. *Prerequisites*: POLS 2310, POLS 2311.

4392 Advanced Analysis of Politics (3-0)
A research course that stresses the use of qualitative research methods and techniques. Prior approval of the instructor and departmental chair is required before enrollment. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better.

4399 Senior Capstone (0-0-3)
A course that is designed to assess the ability of the student to utilize what he or she has learned through the research and writing of a senior paper. Prior approval of the instructor and departmental chair is required before enrollment. *Prerequisites*: POLS 2310 and POLS 2311 each with a grade of "C" or better and department approval. The student must be in the final semester of study.

See the *Graduate Catalog* for graduate programs and courses.

Psychology

112 Psychology Building
(915) 747-5551
psychology@utep.edu

CHAIRPERSON: John M. de Castro
PROFESSORS EMERITI: Guido A. Barrientos, Edmund B. Coleman, James V. Devine, Philip Himelstein, Randolph H. Whitworth
PROFESSORS: Cohn, de Castro, Goggin, Hosch, Malpass, Moss, Zarate
ASSOCIATE PROFESSORS: Crites, Lucker, Wood
ASSISTANT PROFESSORS: Blume, Francis, Morera, Wiebe

The Psychology Department offers two programs leading to a Bachelor's Degree.

BS Degree

The BS degree is recommended for students who intend to pursue graduate work in psychology because the BS requires a more extensive mastery of mathematics and laboratory science than the BA. Training in science and mathematics is advantageous for students who elect to continue in psychology beyond the baccalaureate. Required courses are:

Major- 36 hours (21 advanced) including PSYC 1301, PSYC 1303, PSYC 3201-PSYC 3101, PSYC 4317, and at least three of the following: PSYC 3320, PSYC 3330, PSYC 3348, PSYC 4309, or PSYC 4324.

Minor- 18 hours (6 advanced) selected from Biological Sciences, Chemistry, Mathematics, or Physics.

Foreign language, while not required, is strongly recommended.

For additional requirements, students should refer to the Bachelor of Science degree plan in the College of Science section.

BA Degree

Specific requirements are as follows:

Major- 30 hours (15 advanced) including PSYC 1301, PSYC 1303, PSYC 3201-PSYC 3101, and at least one of the following: PSYC 3320, PSYC 3330, PSYC 3348 or PSYC 4324.

Minor- 18 hours (9 advanced) Minors may be chosen from any of the areas listed under the Bachelor of Arts degree plan.

Minor in Psychology

Specific requirements are as follows:

18 hours (12 advanced) including PSYC 1301, PSYC 1303, PSYC 3201-PSYC 3101, and at least one of the following: PSYC 3320, PSYC 3330, PSYC 3348 or PSYC 4324.

For additional requirements, students should refer to the Bachelor of Arts degree plan.

Departmental Honors in Psychology

A candidate for departmental honors in psychology will have demonstrated ability in psychology, will have maintained a grade point average (GPA) of 3.0 overall and in psychology by the end of the junior year, and will maintain these averages until graduation. The candidate may be enrolled in either the BS or BA degree plan in psychology. The main requirement for Departmental Honors will be the satisfactory completion of the honors thesis that will be judged by the thesis-research director in conjunction with the Honors Committee.

The candidate for departmental honors must request approval of candidacy during the second semester of the junior year. The Department of Psychology reserves the right to accept or not accept a qualified student, taking into consideration the number of applications, the number of available faculty, and the competence of an individual student. The accepted honors candidate will enroll in PSYC 4352 during both semesters of the senior year and will have accumulated a total of 6 hours of PSYC 4352 credit on completion of the honors program. Other regulations, procedures, and dates of use by honors candidates are available from the Chairperson, Department of Psychology.

Psychology (PSYC)

General Prerequisites: PSYC 1301 is prerequisite for all psychology courses, with the exceptions of PSYC 1303 and PSYC 2305. Junior standing for all 3300 and 4300-level courses is recommended.

1301 Introduction to Psychology (3-0)
(♦ PSYC 2301)
A survey of basic principles in general psychology.

1303 Statistical Methods (3-0)
(PSYC 2317)
A study of the basic concepts of descriptive and inferential statistics as applied to research in the behavioral sciences. Topics may include descriptive statistics, experimental design, correlation, analysis of variance, and non-parametric tests. Required of all psychology majors and minors. *Prerequisite*: MATH 1320 or MATH 1409 or MATH 1508.

2302 Social Psychology (3-0)
(PSYC 2319)
The study of the individual in the social context. Consideration of topics such as social cognition, person perception, nonverbal communication, social influence, attitudes, prosocial behavior, aggression, and applied social psychology. *Prerequisite*: PSYC 1301.

2305 Psychology of Human Sexuality (3-0)
(PSYC 2306)
A study of human sexuality on a broad range of levels. Topics will include the biological and hormonal factors that affect sexual behavior, developmental aspects, sexual differentiation, various types of sexual behavior, sexual dysfunction, cultural differences, and a comparison of sex-related differences in abilities.

2306 Psychology of Personality (3-0)
(PSYC 2316)
A study of the normal personality. Includes such topics as biological and social determinants of personality; appraisal of personality; and reactions to anxiety, frustration, and conflict. *Prerequisite*: PSYC 1301.

2310 Life Cycle Development (3-0)
(PSYC 2314)
The study of the psychological development and adjustment of the individual through the life span. *Prerequisite*: PSYC 1301.

2312 Introduction to Abnormal Psychology (3-0)
A review of historical approaches to the problems of abnormal behavior. Topics will include the dynamics of abnormal behavior, its classification, symptomatology, and treatment. *Prerequisite*: PSYC 1301.

3101 General Experimental Psychology Laboratory (0-2)
Laboratory experience in experimental psychology. *Corequisite*: PSYC 3201. Laboratory fee required.

3201 General Experimental Psychology (2-0)
Introduction to the planning and execution of experiments in psychology and to the analysis and interpretation of data. *Corequisite*: PSYC 3101. *Prerequisites*: PSYC 1301 and PSYC 1303.

3315 Psychology and the Law (3-0)
A review of the relationship of psychology to the criminal justice system. Topics may include an examination of the premises of criminal responsibility, psychological testimony in court, and psychological evaluation and management of public offenders, including juveniles and prison populations. *Prerequisite*: PSYC 1301.

3320 Learning and Memory (3-0)
An introduction to the basic concepts of learning and memory, with a review of both human and animal experimentation. *Prerequisites*: PSYC 3201, PSYC 3101, and PSYC 1303.

3330 Sensation and Perception (3-0)
Study of the major experimental findings and contemporary theory in sensation and perception. Emphasis on audition and vision. *Prerequisites*: PSYC 3201, PSYC 3101, and PSYC 1303.

3331 Cross-Cultural Psychology (3-0)
This course focuses on how culture affects the thoughts and behavior of individuals and small groups. Specific issues covered vary but may include defining culture, cross-cultural research methods, and identification of cultural differences and cultural universals. *Prerequisites:* PSYC 1301 and PSYC 2302.

3347 Behavior Modification (3-0)
A review of the application of experimental principles of learning for behavior change. Topics include: applications of classical, operant, and cognitive learning in clinical, educational, family, and socio-cultural settings. *Prerequisite*: PSYC 1301.

3348 Psychology of Thinking (3-0)
An analysis of thought that will include principles and research approaches to information processing, concept formation, decision processes (judgment), and creative accomplishment. *Prerequisites*: PSYC 3201 and PSYC 3101.

3350 Health Psychology (3-0)
Introduces students to the concepts, theory, and research that comprise health psychology. Emphasis is placed on understanding the relations among psychological and behavioral factors, and psychological well-being, wellness, and disease. *Prerequisites*: PSYC 3201 and PSYC 3101.

General Prerequisite: The following courses require six advanced hours in psychology.

4301 Psychological Testing (3-0)
Introduction to and training in the administration, scoring, and interpretation of psychological tests. *Prerequisites*: PSYC 1301, PSYC 1303, and PSYC 4317.

4309 History and Systems of Psychology (3-0)
A review of the main systems and schools of psychology since 1879. The main assumptions of structuralism, functionalism, psychoanalysis, behaviorism, gestalt psychology, physiological psychology, cognitive psychology, information theory, and current trends are comparatively examined. *Prerequisite*: PSYC 1301.

4312 Advanced Abnormal Psychology (3-0)
A study of the psychological factors contributing to pathological behavior. Emphasis will be placed on current research in genetics, biochemistry, and learning theory in the area of schizophrenia and neurotic processes. *Prerequisite*: PSYC 2312.

4316 Language and Cognition (3-0)
(Cross-listed with LING 4316)
An investigation of language as a cognitive capacity. Topics will include perception, processing, acquisition, and mental representation of language. May be taken as LING 4316. *Prerequisite:* PSYC 1301 or LING 2320.

4317 Advanced Statistics (3-0)
Further study of experimental design, analysis of variance, covariance, correlation, orthogonal polynomials, complex experimental designs, and non-parametric statistics. *Prerequisites*: PSYC 1303; MATH 1410-MATH 1411 or MATH 1508; and some knowledge of computer software recommended.

4321 Judgment and Decision Making (3-0)
An overview of current models and empirical research on cognitive processes in human decision-making and judgment under risk or uncertainty.

4324 Psychobiology (3-0)
A study of the physiological and biochemical basis of psychopathology in humans and models of psychopathology studied in animals. Background in chemistry and physiology recommended. *Prerequisites*: PSYC 1301 and Senior standing.

4343 Seminar in Meta-Analysis (3-0)
This course will provide students with training in interpreting and conducting quantitative reviews of research findings. Basic meta-analytic techniques will be examined, and students will initiate their own meta-analytic review of a research area. *Prerequisites*: PSYC 1301, PSYC 1303 with a grade of "B" or better, and PSYC 3201.

4345 Seminar in Psychology (3-0)
Topic to be selected. May be repeated when topic varies. *Prerequisite*: Instructor approval.

4352 Independent Research (0-0-3)
Independent student library or laboratory research under the supervision of a faculty member. Regular meetings and reports are required. May be repeated once when topics vary. *Prerequisite*: Permission of instructor of student's choice. Psychology Research Course fee required.

4353 Honors Thesis (0-0-3)
Advanced laboratory research under the supervision of a faculty member. Research work will be directed towards completion of Departmental Honors Thesis. Regular meetings and progress updates are required. Course may be repeated once. *Prerequisites*: PSYC 1301, PSYC 1303, PSYC 3201, and instructor approval.

See the *Graduate Catalog* for graduate programs and courses.

Religious Studies

202 Worrell Hall
(915) 747-7945
religion@utep.edu

COORDINATOR: Bruce Lawson

Minor in Religious Studies

The Religious Studies Program is designed to provide an interdisciplinary framework within which students can take courses to explore the nature of religion and its impact upon human culture, past and present. Courses are academic in nature and non-sectarian.

Students must complete 18 hours of courses approved by the Coordinator of Religious Studies, of which at least 12 must be at the upper-division level. Of the18 hours, students must take 9 hours of core courses, selecting one course from each of the following categories:

1. Introduction to Religious Studies: RS 1301 Introduction to Religious Studies
2. World Religions: HIST 3331 History of Religion in the East, HIST 3359 History of Religion in the West, RS 3310 Major World Religions
3. Nature of Religious Experience: PHIL 3322 Philosophy of Religion

The remaining 9 hours of courses needed for the concentration may be selected from among core courses not taken to satisfy the core requirement, non-core courses (listed below), or other courses approved by the Coordinator. No more than six hours from a student's major may be counted toward the minor, and courses so counting may not be used to satisfy major requirements.

Non-Core Courses

ARTH	1305	Art History of the Western World I
GREK	1405	Koine Greek
GREK	1406	Koine Greek
HIST	3340	The Middle East and Islam
HIST	3365	The Age of Reformation
PHIL	3315	Medieval Philosophy
PHIL	3340	Oriental Philosophy
RS	3350	Special Topics in Religious Studies

Religious Studies (RS)

1301 Introduction to Religious Studies (3-0)
An introduction to religious concepts, sociology, phenomena, and ideas; survey of world religions; exploration of the relationship between ethics and religion.

3310 Major World Religions (3-0)
Brief examination of the world's major religions, followed by an in-depth study of one religion, such as Buddhism, Christianity, Hinduism, Islam, or Judaism. Course may be repeated for credit when main focus of the course varies.

3350 Special Topics in Religious Studies (3-0)
An advanced course in some aspect of Religious Studies. May be repeated for credit when topic varies.

Social Work

116 Liberal Arts
(915) 747-5095
socialwork@utep.edu

PROGRAM DIRECTOR: Bonnie Hatchett
ASSOCIATE PROFESSOR: Coggins, Hatchett
ASSISTANT PROFESSORS: Connell, Thomas
LECTURER: Cabada-Gomez

Social Work is a challenging and rewarding profession with the primary goal of helping individuals, families, small groups, organizations, and communities develop knowledge, values, and skills to help themselves to a better quality of life. The purpose of the professional social work education is to enable students to integrate the knowledge, values, and skills of the social work profession into competent practice. Fully accredited by the Council on Social Work Education, the Social Work Program at UTEP prepares students for beginning professionally supervised practice.

Social Work Program Mission

The mission of the Social Work Program is derived from UTEP's own statement of purpose, the standards of accreditation of the Council on Social Work Education, and the region served by the University. More specifically, the Social Work Program at UTEP has as its primary mission the training of culturally competent generalist social work practitioners capable of providing an array of social services to the unique bicultural, bi-national populations living within the service areas identified by the University.

More specifically, the program seeks to achieve its mission through the fulfillment of the following goals:

1. The preparation of students for beginning generalist professional social work practice with individuals, families, groups, communities, and organizations from an ethnocultural perspective
2. The preparation of beginning generalist social workers with cultural competence for practice with the bi-national, multicultural populations of the El Paso/Juárez border region with particular emphasis on Hispanics, Mexican Americans, and persons of Mexican descent
3. The preparation of students for graduate education in social work
4. The preparation of students/graduates to meet the person power needs of social service agencies in Southwest Texas, El Paso, and Ciudad Juárez, Mexico

Bachelor of Social Work Degree

Professional social work advisement allows for early and periodic evaluation of each student's performance and guides students in selecting areas of course work. Professional academic advising is therefore essential for all students (pre-professional, transfer, and admitted) to ensure that course work complies with the current BSW degree plan. Professional academic advising for social work and pre-social work majors may be done only by UTEP social work faculty.

The BSW degree plan is designed to assure coverage of CSWE accreditation mandated curriculum content. This degree plan is based on the building block analogy of Social Work education. The freshman year is considered the liberal arts year. The sophomore year is the pre-professional year. The junior year is the foundation professional year. The senior year is the advanced professional year. Students shall be considered a pre-professional if they have completed at least 30 hours in the Liberal Arts Core Curriculum and have officially declared Social Work as their major.

Social Work classes are sequentially offered and include content on values, ethics, diversity, social and economic justice, populations at risk, human behavior and the social environment, social welfare policy and services, social work practice, research, and field practicum.

The Social Work program places a strong value on community involvement and students begin early (SOWK 2310 Introduction to Social Work and Social Welfare) in their course of study to gain practical experience through volunteer hours in approved agencies. In the foundation professional (junior) year, a pre-internship experience of 60 hours is incorporated into SOWK 3355 Practice I.

BSW Admissions Policy

All students who wish to graduate from the BSW Degree Program at UTEP must apply for a separate admission into the Program and gain either clear or conditional acceptance. This acceptance is granted through the Social Work Program office. Only students who have been admitted into the BSW Degree Program and have completed all degree plan requirements in both the liberal arts core and the social work major will be recommended for graduation with a BSW degree.

All UTEP students who completed course work before the program was accredited in June 1995 and transfer students should review the Policy on Certification of Coursework to ensure that social work courses comply with the requirements of the current BSW degree plan.

Admissions Criteria

1. UTEP Students
    a. Completion of the University Core Curriculum and additional required Liberal Arts pre-professional courses (a total minimum of 61 hours). The following is the list of UTEP courses from which the 61 hours will be counted (a minimum of "C" in University Core requirements, indicated by a +):
        (1) English Composition (6 hours): ENGL 1311+ and ENGL 1312+ *ENGL 1611 or COMM 1611 may be used to meet this requirement.
        (2) History (6 hours): HIST 1301+ and HIST 1302+
        (3) Political Science (6 hours): POLS 2310+ and POLS 2311+
        (4) Language (6 hours): Spanish recommended (2300 and above) (placement exam)
        (5) Humanities from menu (3 hours): PHIL 1301+ recommended
        (6) Mathematics from menu (3 hours): MATH 1320+ recommended (placement exam)
        (7) Statistics (3 hours): one course from PSYC 1303, SOCI 2312, STAT 1380, or STAT 2380
        (8) Science (6 hours): University Core Natural Science+
        (9) Biology (7 hours): BIOL 1303 and 1304, plus 1103 or 1104; may be used to meet the University Core requirement
        (10) Social/Behavioral Science (3 hours): University Core Social/ Behavioral Science+

(11) PSYC 1301 and SOCI 1301; either course may be used to satisfy the University Core requirement (6 hours)
(12) Visual/Performing Arts (3 hours): University Core Visual/ Performing Arts+
(13) Communications (3 hours): COMM 1301+ or 1302+; ENGL 1611 or COMM 1611 may be used to meet this requirement.
(14) Institutionally Designated Option from menu (3 hours)

b. Completion of social work prerequisite courses (SOWK 2310 and 2370)
c. An overall GPA of 2.5 at the time of application
d. Approval of the Admissions Committee

2. Transfer Students
   a. Transfer coursework from community college (2-year program)
      (1) A maximum of 66 semester hours is transferable to a UTEP degree program from a two-year institution.
      (2) Students may satisfy up to 18 semester hours of the 66 semester hours from community college from the following:
         (a) An introduction to social work or human services course (3 hours)
         (b) A computer course (3 hours)
         (c) A course in human behavior in the social environment (3 hours)
         (d) A course in social policy (3 hours)
         (e) Six academic hours in lower-division elective courses in human services (6 hours)
      (3) Students must have a UTEP GPA of 2.5 at the time of application.
      (4) Students must have approval of the Admissions Committee.
   b. Transfer coursework from a four-year university CSWE accredited BSW program:
      (1) Student may transfer up to 30 semester hours from a CSWE accredited BSW degree program from the following:
         (a) An introduction to social work course (three hours)
         (b) Up to six hours of social policy
         (c) Up to six hours of HBSE
         (d) Up to nine hours of practice and/or field courses
         (e) Up to six hours of research courses
      (2) Students must have an overall GPA of 2.5 at the time of application.
      (3) Students must have approval of the Admissions Committee.

Students must complete at least 25% of the semester hours needed for graduation (a minimum of 32 hours) in residence.

Students must complete 24 of the last 30 semester hours needed for graduation hours in residence.

Students must complete 12 advanced hours in their major in residence within 3 years of graduation.

BSW Admissions Application Process

1. Admissions Application: All students who wish to apply for the BSW Degree Program must complete an admissions application available from the Social Work Program office. A completed application includes:
   a. Completed application form
   b. Copy of official transcripts
   c. Two letters of professional reference
   d. Completed *Transfer Credit Evaluation* form, if applicable

2. Applications Reviews: Application deadlines are December 1st and May 1st of each academic year. Admissions applications are individually reviewed by the BSW Admissions Committee during the months of December and May of each year. Students are notified of faculty decisions by mail.
3. Admissions Decisions: The following decisions are made on admissions application folders by the Admissions Committee:
   a. Clear Admission: Application is accepted with no problems.
   b. Conditional Admission: Application is accepted with a GPA condition. In order to remain in the BSW degree program following conditional admission, students are required to post a 2.5 GPA in coursework the succeeding semester. Students who post less than a 2.5 GPA in the succeeding semester following conditional admission will not be allowed to enroll in social work practice courses.
   c. Pending Status: Application decision is delayed pending the completion of the admissions application.
   d. Denied Admission: Application is not accepted. Students denied admission should see their advisor and may reapply the following admissions cycle. A designation other than clear admission requires a meeting of the student with the faculty advisor. The purpose of the meeting is to design a plan to address any outstanding concerns in the file.

Professional/Advanced Professional Courses

To complete the requirements for the BSW degree, the student takes the following courses (for admission to and additional requirements for the Field Work sequence, see below).

Professional/Advanced Professional Courses (a total of 66 hours)

Professional Support (6 hours)	ENGL 3359 Technical Writing 3 hours open elective
Social Work Core (36 hours)	SOWK 2331, 2320, 3341, 3355, 3320, 3330, 3358, 4480, 4281, 4370, 4490, 4282.
Social Work Electives (12 hours)	select 12 hours from SOWK 3346, 3336, 3345, 3365, 3366, 3385, 3326, 3370.
Social Work Support Courses (12 hours, approved by Advisor)	Subject to approval by the Advisor, courses may be chosen from Psychology, Sociology, Anthropology, Criminal Justice, Political Science, Chicano Studies, African American Studies, Asian and African Studies, Women's Studies, and Health Sciences.

Total hours required for BSW degree: 127

Field Instruction

During their professional (senior) year, students complete their field practicum, working 16 hours per week in an approved social service or health care agency under the supervision of a degreed social worker. Students are required to make formal application for the field practicum by contacting the Coordinator of Field Practicum in the academic semester preceding their placement.

Admission to Field Instruction

All BSW students must complete a supervised field instruction sequence. In order to be considered eligible for field instruction, students must meet the following criteria:

1. Have a 2.0 or better cumulative GPA on a 4.0 scale in the Liberal Arts foundation
2. Have a 2.5 or better cumulative GPA for all courses completed in Social Work by the end of the second semester of the foundation professional year of study
3. Completed SOWK 2310, SOWK 2331, SOWK 2320, SOWK 2370, SOWK 3320, SOWK 3330, SOWK 3341, and SOWK 3355 with a grade of "C" or better in each of these courses

Upon completion of the program and all requirements for graduation, the student is eligible to test for licensure from the Texas State Board of Social Worker Examiners as a Licensed Social Worker (LSW).

Social Work (SOWK)

2310 Introduction to Social Work and Social Welfare (3-0) (SOCW 2361)
Introduction to the human service delivery system in the United States, with an emphasis on the social work profession: its mission, philosophy, ethics, values, diverse fields, and ethnocultural perspectives. Observations of social service agencies and guest speakers provide a career orientation to the social work profession. Volunteer experience required.

2320 Social Welfare Policy and Services I (3-0)
Examination of the historical evolution of Social Welfare and the social work profession, with focus on the social policies which comprise the foundation of the welfare state in the United States. Present patterns of social welfare services will also be examined. Emphasis is on the historical evolution of contemporary social problems in the El Paso/ Juárez, urban/rural border region. Oppression, discrimination, justice/immigration issues and policies, and their impact on diverse populations at risk will be explored. Required for pre-social work majors. *Prerequisites*: SOWK 2310 and SOWK 2370.

2331 Human Behavior and Social Environment I (3-0)
Designed to introduce beginning social work students to some mainstream theoretical explanations by which to view individuals, groups, and families. Students will be given an opportunity to compare traditional mainstream models with newer alternative paradigms that focus on human growth and development from a strengths perspective. Special emphasis is placed on issues of cultural, racial, ethnic diversity, racism, sexism, ageism, and disabling mental or physical conditions. *Prerequisites*: SOWK 2310 and SOWK 2370.

2370 Computers and Social Services: Application to Practice and Evaluation (3-0)
Introduction to the application of computers and information systems to social services, social work practice, and evaluation. Provides "hands-on" experience and application of software. *Prerequisites*: SOWK 2310 and department approval.

3320 Social Welfare Policy and Services II (3-0)
An analysis of current major issues and problems in the formulation of social welfare policies on the local, state, and federal levels in the U.S. Social Security, health, education, public welfare and income maintenance, immigration, and international agreements will be highlighted. The impact of various policies upon Hispanics and other at risk populations in the El Paso/Juárez, urban/rural border region. Application of strategies of change will be emphasized. *Prerequisites*: SOWK 2320, POLS 2310, and POLS 2311.

3326 Social Work in Mexican-American Communities (3-0)
Emphasis is placed on special needs of the Spanish-speaking population in the El Paso/Juárez, urban/rural border region. This course will focus on the following areas: language and culture as barriers or facilitators to service delivery; cultural competence needed in the delivery of services; international considerations for service delivery; cultural pluralism considerations for service delivery; community organization with groups in Spanish-speaking communities.

3330 Research Methods in Social Work (3-0)
An understanding and appreciation of a scientific, analytic approach to building knowledge for practice and for evaluating service delivery in all areas of intervention including student's own practice. Ethical standards, critical thinking, and writing skills will be emphasized. Various methods for analyzing, evaluating, and utilizing research findings will be presented. Theoretical constructs for conducting culturally sensitive, quantitative/ qualitative research in the El Paso/ Juárez, urban/rural border region will be examined. For Social Work majors only. *Prerequisites*: SOWK 2320, SOWK 2331, SOWK 2370, and SOWK 3341.

3336 Child Welfare Practice and Services (3-0)
Overview of practice and policy issues, problems, and opportunities in the provision of child welfare services in the El Paso/Juárez, urban/rural border region. Emphasis will be given to: collaborative international efforts, culturally sensitive intervention approaches, case management, family preservation, and other intervention strategies. *Prerequisites*: SOWK 2320 and SOWK 2310.

3341 Human Behavior and Social Environment II (3-0)
Designed to introduce beginning social work students to various theoretical models by which to view how groups, communities, and organizations interface and interact with the social environment. Students will also examine various theoretical models of poverty, particularly as these influence social welfare policies and/or affect the delivery of social services to impoverished populations. For Social Work majors only. *Prerequisites*: SOWK 2310 and SOWK 2370.

3345 Social Work and the Aging: Cross-Cultural Perspective (3-0)
An examination of the needs and concerns of the aging person in our society from a social/cultural/physiological/ emotional perspective and of methods used to address those needs and concerns. Emphasis will be on advocacy, case management, networking, and direct care methods, and their application to Hispanics and other diverse populations in the El Paso/Juárez, urban/rural border region.

3346 The Process of Addiction: A Cross-Cultural Perspective (3-0)
An examination of the cross-cultural implications of the process of addiction in the El Paso/Juárez, urban/rural border region. Focus is on the comparative patterns of addictions by gender, age, family, and ethnocultural culturally competent intervention modalities will be explored.

3350 Diagnostic Systems for Social Workers (3-0)
Survey of selected diagnostic classification systems, including the DSM-IV, curanderismo/folk-healing practices, and alternative schema based on themes of conflict. Assessment and diagnosis of client and community situations, including cultural understandings of mental and emotional disorders.

3355 Generalist Social Work Practice I (3-0)
This is the first of three generalist practice courses designed to provide-entry level theory, knowledge, research, values, and skills for social work practice with individuals. Self-awareness, problem solving, interviewing, professional relationships, intervention planning and skills, and ethics are included. An ethnocultural perspective with particular focus on the El Paso/Juárez, urban/rural border region is emphasized. For Social Work majors only. Sixty hours of volunteer service are required. *Prerequisites*: SOWK 2331 and SOWK 2370.

3358 Generalist Social Work Practice II (3-0)
This is the second of three generalist practice courses designed to provide entry-level theory, knowledge, research, values, and skills for social work practice with groups and families. This course continues to build on the problem-solving model, intervention methods, and planning introduced in Social Work 3355. An ethnocultural perspective with particular focus on the El Paso/Juárez, urban/rural border region is emphasized. Sixty hours of volunteer service are required. For Social Work majors only. *Prerequisites*: SOWK 2331, SOWK 3320, SOWK 3330, SOWK 3341, and SOWK 3355.

3365 Social Work with Special Populations (3-0)
Emphasis is placed on theories, concepts, and techniques of social group work in a wide range of social work settings. This course also covers content on the importance of age, gender, ethnicity, socio-economic status, women, sexual orientation, and disabilities in group processes. *Prerequisite*: Junior standing.

3370 Special Issues in Social Work (3-0)
Professional concerns and issues of social work will be selected by the instructor dependent on student needs.

3375 Independent Study (0-0-3)
Supervised individual reading and research leading to development of a major paper or report. *Prerequisites*: 9 hours of advanced course work in Social Work and department approval.

4281 Introductory Generalist Field Seminar (2-0)
A capstone seminar that enables students to integrate the theory, knowledge, values, skills, ethics, and ethnocultural competence of generalist social work practice. *Corequisite*: SOWK 4480. *Prerequisites*: SOWK 2331, SOWK 3320, SOWK 3330, and SOWK 3355.

4282 Advanced Generalist Field Seminar (2-0)
A capstone seminar that enables students to integrate the theory, knowledge, values, skills, ethics, and ethnocultural competence of generalist social work practice. Emphasis will include an evaluation of one's own practice. For Social Work majors only. *Corequisite*: SOWK 4490. *Prerequisites*: SOWK 2370, SOWK 4281, and SOWK 4480.

4370 Generalist Social Work Practice III (3-0)
This is the third of three generalist practice courses designed to provide entry-level theory, knowledge, research, values, and skills for social work practice with organizations and communities. This course continues to build on the problem-solving model, intervention methods, and planning introduced in SOWK 3355 and SOWK 3358 with an emphasis on community development skills and strategies of change. An ethnocultural perspective with particular focus on the El Paso/Juárez, urban/rural border region is emphasized. For Social Work majors only. *Prerequisites*: SOWK 4281 and SOWK 4480.

4480 Field Instruction I (0-0-4)
First of two field courses in a supervised, laboratory learning experience in a selected social welfare agency consisting of 240 hours. A weekly seminar (SOWK 4281) accompanies this course which enables the student to integrate and apply classroom learning (theory and practice) in a field setting. An ethnocultural practice perspective is emphasized. For Social Work majors only. *Corequisite*: SOWK 4281. *Prerequisites*: Formal admission to field placement, SOWK 3330, and SOWK 3355. Course fee required.

4490 Field Instruction II (0-0-4)
The second course of the field learning experience in a selected social welfare agency requires a minimum of 240 minimum. It is accompanied by a seminar (SOWK 4282) to optimally integrate and apply generalist social work practice. An ethnocultural practice perspective is emphasized. For Social Work majors only. *Corequisite*: SOWK 4282. *Prerequisites*: SOWK 3355, SOWK 3358, SOWK 4281, and SOWK 4480.

Sociology and Anthropology

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(915) 747-5740
soci@utep.edu

CHAIRPERSON: Josiah Heyman
PROFESSORS EMERITI: Julius Rivera, Ellwyn Stoddard
PROFESSOR: Daudistel, Heyman
ASSOCIATE PROFESSORS: Campbell, Carmichael, Earle, Howard, Rodríguez, Smithey
ASSISTANT PROFESSORS: Curry, Fernandez, Lee, Morales, Romero

Major in Sociology

Specific requirements are 30 semester hours in Sociology, of which 24 must be at the advanced (3300-4300) level, including SOCI 1301, 2312 3311, and 4301.

Major in Anthropology

Specific requirements are 30 semester hours in Anthropology, of which at least 18 must be at the advanced (3300-4300) level. ANTH 1301, 1302, and 4380 are required. In addition, at least one course must be taken from each of three groups: cultural anthropology (3306, 3319, 3320, 3321, 3358, 3361, 4306), archaeology (1300, 3310, 3313, 3347, 3359, 3360, 3647), and general anthropology (2320, 3303, 3304, 3309, 3314, 3315, 3357, 3380, 4346, 4365). Students are encouraged to gain fieldwork experience; ANTH 3347 and/or 3647 and/or 3358 are strongly recommended. Two semesters of field courses may be counted toward the major, provided the research topics differ.

Minor in Sociology

Eighteen semester hours of Sociology, of which 9 must be advanced level (including SOCI 1301, 3311, and 4301) are required.

Minor in Anthropology

Eighteen semester hours in Anthropology, including at least 9 at the advanced level. ANTH 1301, 1302, and 4380 are required.

Anthropology (ANTH)

1101 Laboratory for ANTH 1301 (0-2)
Introduction to the nature and interpretation of archeological artifacts and hominoid remains. Emphasis is on processes of making inferences from physical remains. *Prerequisite*: ANTH 1301. ANTH 1301 may be taken concurrently with ANTH 1101.

1300 Popular Archeology: Exploring Myths and Mysteries (3-0)
Introduction to the field of archeology and what it means to the public. Emphasis is on developing students' abilities to identify and evaluate scientific and pseudoscientific treatments of the archeological record. Includes discussion of ancient astronauts, lost continents, the Moundbuilders, scientific creationism, and psychic archeology.

1301 Introduction to Physical Anthropology and Archeology (3-0) (ANTH 2346)
Introduction to the evolution of the human adaptive system with particular attention to the somatic and technological components. The biological development of man, from 3.5-million-year-old Lucy to modern *Homo sapiens*, is discussed and correlated with developments in stone and bronze tools, dwelling types, social groupings, political organization, etc. This course is not prerequisite to ANTH 1302.

1302 Introduction to Cultural Anthropology (3-0) (ANTH 2351; EDUC 1301; TECA 1303)
Introduction to the evolution of human behavioral systems with particular attention to the social and cultural, or ideational components. The variety of types of societies and ideologies is discussed together with the ecological situations to which they are adapted.

1310 Cultural Geography (3-0)
Introduction to cultural elements, their spatial distribution, and their interrelationship to the physical environment. (ANTH 1310 is the same course as GEOG 1310 and SOCI 1310.)

1311 Social Dimensions of Science and Technology (3-0)
Science and technology examined from the perspective of sociological and anthropological theories and methods. The course emphasizes the social character of scientific and technological activities from early to contemporary societies. Possible topics include technologically-oriented workplaces, complex technical systems in society, science and technology in development, and interactions between scientific and non-scientific cultural frameworks. (ANTH 1311 is the same course as SOCI 1311.)

2320 Introduction to Linguistics (3-0)
Introduction to basic concepts and techniques of modern linguistics.

2358 Chicanos in the Southwest (3-0)
Introductory course to major themes in Mexican American studies; cultural pluralism, bilingualism, biculturalism, ethnicity and race, assimilation, cultural nationalism, and folk culture.

2359 Chicanos and American Society (3-0)
Analysis of Chicano experiences in selected institutions such as schools, churches, governmental structures, military, and mass media.

3303 Ecological Anthropology (3-0)
The study of human societies as part of ecological systems. The use of ecological principles and models in anthropological description and explanation is discussed. Folk models of ecology are also considered. Recommended background: ANTH 1301 and ANTH 1302. (ANTH 3303 is the same course as SOCI 3300.)

3304 Biological Anthropology (3-0)
The course focuses on human evolution and the biological basis for human behavior. Topics include human phylogeny, physical and behavioral adaptation, genetics, and human diversity. *Prerequisite*: ANTH 1301.

3306 Cultural Diversity (3-0)
A cross-cultural comparison of human behavior addressing the areas of family life, marriage, kinship, and ritual. The course will also deal with the potential for misunderstandings that arise in the context of cross-cultural interactions.

3309 Mesoamerican Cultures (3-0)
A survey of the prehistoric, through contemporary cultures of Mesoamerica, including (among others) Olmec, Maya, Toltec, Aztec, colonial New Spain, Mexico, and Central America. Emphasis will be put on the historical continuities and transformations of Mesoamerica, connecting the past to the present. Recommended background: ANTH 1301 and ANTH 1302. (ANTH 3309 is the same course as SOCI 3309.)

3310 Southwestern Archeology (3-0)
The development and characteristics of prehistoric Indian societies, from the Elephant Hunters to the Pueblos, is considered with

particular attention to the Mogollon, Hohokam, Anasazi, and Casas Grandes areas. Ties of the area to nuclear Mesoamerica will be discussed. Recommended background: ANTH 1301.

3313 Historic Archeology of the El Paso - Ciudad Juárez Area (3-0)
The course provides an overview of the historic development of the El Paso-Ciudad Juárez region from the earliest mission and presidio settlements to the modern bi-national metropolis. Evidence from archeological materials and archival documents will be considered. Recommended background: ANTH 1301.

3315 Urban Anthropology (3-0)
A consideration of the nature of cities, both non-Western and Western, Pre-industrial and industrial. The impact of urbanization upon a region and upon individuals will be discussed. Recommended Background: ANTH 1302. (SOCI 3315 is the same course as ANTH 3315.)

3319 Indigenous Cultures of Latin America (3-0)
A survey of the Native American cultures of Latin America, focusing on patterns of similarity among groups, and the distribution of different adaptations relative to environmental diversity. Attention will be paid to circumstances and actions of indigenous peoples in contemporary Latin America. Recommended background: ANTH 1302. (SOCI 3317 is the same course as ANTH 3319.)

3320 Indigenous Cultures of North America (3-0)
A survey of Native American cultures of the United Sates and Canada, with an emphasis on their development in various environmental settings, and the regulatory and legal contexts in which they now exist. Recommended background: ANTH 1302. (ANTH 3320 is the same course as SOCI 3320.)

3321 Indians of the Southwest (3-0)
Ethnographic and ethnohistorical perspectives on the socio-politics, economics, belief systems, and technologies of contemporary Native American groups such as the Apache, Hopi, Hualapai, Navajo, Pima, Tarahumara, and Tohono O'odham. May include guest lectures by tribal representatives. Recommended background: ANTH 1302. (ANTH 3321 is the same course as SOCI 3321.)

3347 Archeological Field Studies (0-0-3)
Intensive field course on the recovery and analysis of archeological data. Includes archeological survey and/or excavation and preliminary laboratory analysis. Variable credit. May be repeated when study area or research topic differs. Transportation and/or lodging fees vary according to project location. *Prerequisite*: ANTH 3359 or instructor approval.

3357 Sociolinguistics (3-0)
Language variables and sociological correlates, a review of current research, theories, and applications. Recommended background: LING 3220.

3358 Ethnographic Methods (3-0)
Theory and practice in the elicitation of ethnographic data. Participant observation, interviewing, and the development of questionnaires will be conducted in the laboratory and field settings. *Prerequisite*: ANTH 1302 or instructor approval. (ANTH 3358 is the same course as SOCI 3358.)

3359 Archeological Methods (3-0)
Introduction to the analytical methods used to interpret archeological sites. Topics addressed include sampling, statistical analysis, formulation of hypotheses, and survey and excavation techniques. *Prerequisite*: ANTH 1301 or instructor approval.

3360 Laboratory Methods in Archeology (0-3)
Methods for, and practical experience in, the analysis and interpretation of archeological materials, including ceramics, stone tools, floral and faunal remains, archeological dating, and spatial data. Course will be taught as one 3-hour lecture lab, but individual or group lab projects involving additional time outside class will be required. *Prerequisite*: Open only to majors in anthropology or instructor approval.

3361 Contemporary Mexican Culture (3-0)
A course about social and regional diversity of modern Mexico with special emphasis on indigenous cultures. Recommended background: ANTH 1302.

3379 Independent Study (0-0-3)
Individual investigation of an area of anthropology that is not adequately covered by an organized class. Periodic meetings, reports, and a major paper are required. *Prerequisite*: Department approval.

3380 Environmental Policy and Applied Anthropology (3-0)
Provides an introduction to environmental laws and policies that affect the practice of archeology, history, and ethnography in the context of development projects and land management. Among the topics discussed are environmental impact assessment, social impact assessment, historic preservation planning, and traditional cultural properties.

3647 Archeological Field Studies (0-0-6)
Intensive field course on the recovery and analysis of archeological data. Includes archeological survey and/or excavation and preliminary laboratory analysis. Variable credit. May be repeated when study area or research topic differs. Transportation and/or lodging fees vary according to project location. *Prerequisite*: ANTH 3359 or instructor approval.

4304 Environmental Justice and Minority Communities in the U.S. (3-0)
An examination of environmental justice issues in the U.S., with an emphasis on communities, agencies and efforts that address sustainable development in the U.S.-Mexico border region. The underpinnings of the environmental justice movement in the U.S. and the regional policy formulation and practice implications for these communities will be central to the course. The course may require field trips. (ANTH 4304 is the same course as AFST 4304; POLS 4304; SOCI 4304; and CHIC 4304.)

4306 Colonias on the U.S.-Mexico Border (3-0)
A study of the unincorporated population settlements in various regions along the U.S.-Mexico border. Emphasis on public policy and social service issues. The course may require field trips. (ANTH 4306 is the same as CHIC 4306 and SOCI 4306.)

4346 Health and Illness in Cross-Cultural Perspective (3-0)
This course examines the cultural and social dimensions of health systems, disease, wellness, and physical and mental illness, both in

traditional communities and modern settings. Healing alternatives, health beliefs, and the cultural conflicts between clients and health providers are examined. Because the course explores the culture of professional medical practice as well as the illness and healing concepts of diverse cultures, it is ideal for those pursuing the health professions in cross-cultural settings. Recommended background: ANTH 1301. (ANTH 4346 is the same course as SOCI 4346.)

4365 Museum Fundamentals (2-8)
An introduction to practical aspects of museum work, including organization and display of exhibits, care of collections, communication with visitors, and other museum tasks. Lectures will be combined with opportunities for solving concrete problems.

4370 Studies in Anthropology (3-0)
Subject matter will be announced each semester. May be repeated for credit when topic varies. Among the material that may be covered are the following: foraging bands; tribes; chiefdoms; states; peasant and plantation communities; forensic anthropology; primate behavior; lithic technology.

4380 Theory in Anthropology (3-0)
A discussion of the goals of anthropology with a critical review of current theory and methodology. Recommended background: ANTH 1301 and ANTH 1302.

Sociology (SOCI)

1301 Introduction to Sociology (3-0)
(SOCI 1301)
Nature and scope of sociology, its terminology and concepts; study of social processes, social institutions, development of society, and characteristics of group life.

1302 Social Problems (3-0)
(SOCI 1306)
A study of selected social problems in our society, including causes, interrelationships, and programs of amelioration. Recommended background: SOCI 1301.

1310 Cultural Geography (3-0)
Introduction to cultural elements, their spatial distribution, and their interrelationship to the physical environment. (SOCI 1310 is the same course as GEOG 1310 and ANTH 1310.)

1311 Social Dimensions of Science and Technology (3-0)
Science and technology examined from the perspective of sociological and anthropological theories and methods. The course emphasizes the social character of scientific and technological activities from early to contemporary societies. Possible topics include technologically-oriented workplaces, complex technical systems in society, science and technology in development, and interactions between scientific and non-scientific cultural frameworks. (SOCI 1311 is the same course as ANTH1311.)

2312 Measurement and Inference in Social Research (3-0)
Sociological factors and their measurement, development and use of scales, assumptions underlying the use of statistical models in analysis of social data, application and limitations of statistical analysis. *Prerequisite*: MATH 1320, MATH 1409, or MATH 1508.

2315 The Sociology of Marriage and the Family (3-0)
(♦ SOCI 2301)
The historical development, current problems, and prospects of the American marriage and family institutions. Recommended background: SOCI 1301.

2358 Chicanos in the Southwest (3-0)
Introductory course to major themes in Mexican American studies; cultural pluralism, bilingualism, biculturalism, ethnicity and race, assimilation, cultural nationalism, and folk culture.

2359 Chicanos and American Society (3-0)
Analysis of Chicano experiences in selected institutions such as schools, churches, governmental structures, military, and mass media.

3300 Ecological Sociology (3-0)
The study of human societies as part of ecological systems. The use of ecological principles and models in sociological description and explanation is discussed. Folk models of ecology are also considered. Recommended background: SOCI 1301. (SOCI 3300 is the same course as ANTH 3303.)

3306 Cultural Diversity (3-0)
A cross-cultural comparison of human behavior addressing the areas of family life, marriage, kinship, and ritual. The course will also deal with the potential for misunderstandings that arise in the context of cross-cultural interactions. *Prerequisite*: SOCI 1301 or ANTH 1301. (SOCI 3306 is the same course as ANTH 3306.)

3309 Mesoamerican Cultures (3-0)
A survey of the prehistoric through contemporary cultures of Mesoamerica, including (among others) Olmec, Maya, Toltec, Aztec, colonial New Spain, Mexico, and Central America. Emphasis will be put on the historical continuities and transformations of Mesoamerica, connecting the past to the present. Recommended background: SOCI 1301. (SOCI 3309 is the same course as ANTH 3309.)

3311 Methods of Research (3-0)
Basic procedure and methodology of sociology as applied by the profession to various areas of social investigation. *Prerequisite*: SOCI 1301.

3315 Urban Sociology (3-0)
A consideration of the nature of cities, both non-Western and Western, preindustrial and industrial. The impact of urbanization upon a region and individuals will be discussed. Recommended background: SOCI 1301. (SOCI 3315 is the same course as ANTH 3315.)

3317 Indigenous Cultures of Latin America (3-0)
A survey of the Native American cultures of Latin America, focusing on patterns of similarity among groups and the distribution of different adaptations relative to environmental diversity. Attention will be paid to circumstances and actions of indigenous peoples in contemporary Latin America. Recommended background: SOCI 1301. (SOCI 3317 is the same course as ANTH 3319.)

3320 Indigenous Cultures of North America (3-0)
A survey of the Native American cultures of the United States and Canada, with an emphasis on their development in various environmental settings and the regulatory and legal contexts in which they now exist. Recommended background: SOCI 1301. (SOCI 3320 is the same course as ANTH 3320).

3321 Indians of the Southwest (3-0)
Ethnographic and ethnohistorical perspectives on the socio-politics, economics, belief systems, and technologies of contemporary Native American groups such as the Apache, Hopi, Hualapai, Navajo, Pima, Tarahumara, and Tohono O'odham. May include guest lectures by tribal representatives. Recommended background: SOCI 1301. (SOCI 3321 is the same course as ANTH 3321.)

3327 Majority/Minority Relations in the United States (3-0)
A study of the racial and ethnic group relationships in the U.S. concentrating on the dynamics and consequences of prejudice, discrimination, and related factors. *Prerequisite*: SOCI 1301.

3331 Family Violence (3-0)
This course surveys definitions, prevalence, and theories of family violence in the United States. Special emphasis is given to 1) the impact of variation in definitions of family violence on scientific research and conclusions; 2) the societal response to family violence; 3) the effectiveness of policing strategies of domestic violence. *Prerequisite*: SOCI 1301 with a grade of "C" or better. (SOCI 3331 is the same course as CRIJ 3321.)

3333 Juvenile Delinquency (3-0)
An investigation of the social and legal definitions of juvenile delinquency; major theories of juvenile deviancy; the social system of the gangs; factors contributing to apprehension, conviction, detention, and parole; assessment of present and potential prevention programs. *Prerequisite*: SOCI 1301.

3341 Special Undergraduate Topics (3-0)
Special topics of current interest in Sociology. May be repeated for credit when topic varies. Topics may include, for example:
—La Chicana
The role of the Chicana in the family and the community as well as Chicanos' participation in the labor force and liberation movements.
—Women in Society
Women in social institutions such as the family, education, economy, and politics in American society as well as their images in popular culture. *Prerequisite*: SOCI 1301.

3348 Criminology (3-0)
Theories, causes, characteristics, and social function of crime in our society. Methods of prevention and reduction of crime will be analyzed. *Prerequisite*: SOCI 1301.

3358 Ethnographic Methods (3-0)
Theory and practice in the elicitation of ethnographic data. Participant observation, interviewing, and the development of questionnaires will be conducted in the laboratory and field settings. *Prerequisite*: SOCI 1301 or instructor approval. (SOCI 3358 is the same course as ANTH 3358.)

3361 Contemporary Mexican Culture (3-0)
A course about social and regional diversity of modern Mexico with special emphasis on indigenous cultures. Recommended background: ANTH 1302. (SOCI 3361 is the same course as ANTH 3361.)

3362 Medical Sociology (3-0)
Cultural factors in medical beliefs and practices; professionalization of medical practitioners; group factors in medical practice and medical care programs. *Prerequisite*: SOCI 1301.

3370 Gender Roles and Society (3-0)
Sociological evaluation of the emergence and institutionalization of gender stratification and the relationship between gender roles and social status, class, and power. Gender socialization, changing roles, and consequences for society will be analyzed. *Prerequisite*: SOCI 1301.

3381 Complex Organizations (3-0)
Examines structures, processes, interactions, and human problems of modern organizations. Classical and contemporary sociological theories of organizations are compared. Issues regarding organizational authority; change, conflict, control, cooperation, division of labor, efficiency, goals, and relationships with consumer-clients are studied. *Prerequisite*: SOCI 1301.

4301 General Sociological Theory (3-0)
Study of the major concepts of general sociology as these have been developed by contemporary sociologists and by the founding fathers of the field. *Prerequisites*: SOCI 1301 and nine hours of advanced sociology.

4304 Environmental Justice and Minority Communities in the U.S. (3-0)
An examination of environmental justice issues in the U.S., with an emphasis on communities, agencies and efforts that address sustainable development in the U.S.-Mexico border region. The underpinnings of the environmental justice movement in the U.S. and the regional policy formulation and practice implications for these communities will be central to the course. The course may require field trips. (SOCI 4304 is the same course as AFST 4304; POLS 4304; ANTH 4304; and CHIC 4304.)

4306 Colonias on the U.S.-Mexico Border (3-0)
A study of the unincorporated population settlements in various regions along the U.S.-Mexico border. Emphasis on public policy and social service issues. The course may require field trips. (SOCI 4306 is the same as CHIC 4306 and ANTH 4306.)

4346 Health and Illness in Cross-Cultural Perspective (3-0)
This course examines the cultural and social dimensions of health systems, disease, wellness, and physical and mental illness, both in traditional communities and modern settings. Healing alternatives, health beliefs, and the cultural conflicts between clients and health providers are examined. Because the course explores the culture of professional medical practice as well as the illness and healing concepts of diverse cultures, it is ideal for those pursuing the health professions in cross-cultural settings. Recommended background: ANTH 1301. (SOCI 4346 is the same course as ANTH 4346.)

4347 Population Analysis and Problems (3-0)
Statistical analysis of the population of the world, the United States, and the Southwest. Study of fertility, mortality, and migration patterns and their social consequences. *Prerequisite*: SOCI 1301.

4390 Independent Study (0-0-3)
Independent study in an area which is too specialized to offer as an organized class. Supervised individual reading and research leading to development of a major paper or report. *Prerequisites*: SOCI 1301, 12 hours of advanced sociology, and consent of Department Chairperson, advisor, or instructor.

See the *Graduate Catalog* for graduate programs and courses.

Theatre Arts and Film

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CHAIR: Mimi Gladstein
PROFESSORS EMERITI: R. Milton Leech, Gifford Wingate
PROFESSORS: Gladstein, Nadel
ASSOCIATE PROFESSOR EMERITUS: Charles L. Etheridge
ASSISTANT PROFESSORS: Baker, Haines, Heuser, Gilbert, Murray, Ramos, Stoughton, Taylor, Varela
LECTURERS: Carranza, Smith

The University of Texas at El Paso's Department of Theatre Arts and Film is rooted in the liberal arts tradition to help prepare its students for careers in both professional and academic theatre, television, and film. The department provides thorough training in contemporary performance practices and thorough study of theatre and film history, dramatic literature, aesthetics, and theory. The department also helps students to develop conceptual, critical, and argumentation skills fundamental to a liberal arts education. Instruction emphasizes cultural, social, and historical traditions that helped to create and continue to sustain dramatic theatre, television, and film. The faculty encourages a global perspective of performance through training that fosters an awareness of the intellectual, social, and political life of the contemporary world. Finally, the department seeks to visibly contribute to the quality of life in El Paso and the surrounding region by offering works of artistic merit that reflect the multicultural characteristics of its geographical location.

Major in Theatre Arts

Students pursuing the BA degree with a major in Theatre Arts must take the following:

1. THEA 1303 and THEA 1103
2. THEA 1310, THEA 1313, THEA 2310, THEA 2321, THEA 2413, THEA 3325, and THEA 3332 or THEA 3342
3. 6 hours from THEA 3340, THEA 3351, THEA 3352, THEA 3353; plus 6 advanced Theatre Arts hours selected in consultation with the advisor
4. The Fine Arts requirement of the BA must be met with one 3-hour course in Art and one in Music.

Major in Music Theatre with a Theatre Concentration (BFA)

Students should refer to the Liberal Arts Interdisciplinary Program section for degree requirements.

Minor in Theatre Arts

The minor requires 18 semester hours, 12 of which must be advanced (3300-4300) level, including:

1. THEA 1313; plus one course from THEA 1310, THEA 2315, THEA 2321, THEA 2322, THEA 2413; plus four courses from THEA 3310, THEA 3325, THEA 3332, THEA 3335, THEA 3340, THEA 3342, THEA 3350, THEA 3351, THEA 3352, THEA 3353, THEA 3413, THEA 4318, AND THEA 4340.
2. The Fine Arts requirement of the BA must be met with one 3-hour course in Art and one in Music.

Minor in Film Studies

The minor requires 18 semester hours of film courses, 12 of which must be advanced (3300-4300) level, including:

1. Required courses: THEA 1390, THEA 3390, and THEA 4390
2. Elective courses: THEA 2391, THEA 2396, THEA 3302, THEA 3303, THEA 3391, THEA 3392, THEA 3393, THEA 3394, THEA 3395, SPAN 5303, ENGL 3302, PHIL 3325

Minor in Screenwriting (Interdepartmental)

Eighteen hours of course work, twelve hours of which are required and six of which are from a menu of options, from the Departments of Communication, English, and Theatre Arts and Film to train students in the art of writing for the cinema. Coursework culminates in the production of a short screenplay.

Required Courses

ENGL	3361	Introduction to Creative Writing
ENGL	3369	Television and Screenplay Writing
THEA	3315 or	Screenwriting
THEA	4340 or	Selected Topics, when taught as Screenwriting II
COMM	4350	Selected Topics, when taught as From Script to Screen

Menu Options

THEA	4318	Playwriting
THEA	4340	Selected Topics, when taught as Structural Analysis of Scripts
ENGL	3367	Fiction Techniques
ENGL	3302	Literature and Film
ENGL	4340	Advanced Literary Studies, when taught as Screenplays as Literature
THEA	3325	Directing I

As a prerequisite to the program, students must take THEA 1390, Introduction to the Art of the Motion Picture, either as fulfillment of the Visual and Performing Arts Block of the Core Curriculum or as an elective. It is also recommended that students fulfill the Humanities Block of the Core Curriculum with ENGL 2314, Introduction to American Drama.

Teacher Certification

Students seeking secondary certification in Theatre Arts must complete the BA requirements as described above. Certification requires 36 semester hours of courses in the major as described in the Liberal Arts section of this catalog. For further information on requirements for certification, students should refer to the catalog sections for the College of Liberal Arts and the College of Education.

Whole Arts (ARTS)

3320 Whole Arts (2-2)
An interarts experience that addresses Texas State requirements in the arts for classroom teachers EC-4. The course explores major themes from the visual and performing arts and uncovers arts tools, methods and resources for teaching and learning. The themes are presented in lectures, activities and interviews. Creative laboratory sections are held on and off campus.

Theatre Arts (THEA)

1103 Voice and Articulation Laboratory (0-1)
This laboratory is required for students enrolled in THEA 3103. Practice in the skills of relaxation, respiration, phonation, resonation, and articulation through exercises and the use of recording equipment. May be taken twice for credit. *Corequisite*: THEA 1303.

1111 Basic Theatre Practice (0-4)
(🐴 DRAM 1120)
1211 Basic Theatre Practice (0-8)
(🐴 DRAM 1220)
Play production experience in faculty directed drama productions. All cast and crew members of such productions are eligible to enroll for the appropriate number of hours of credit after consultation with the undergraduate advisor in Theatre Arts. This course may be taken only as a free elective.

1113 Basic Theatre Production (0-4)
Technical theatre experiences in faculty-directed productions.

1303 Voice and Articulation (3-0)
(🐴 DRAM 2336)
A course designed to improve the student's speech. Includes the study of and personal application to the speech anatomy and the processes of speech, phonetics, and the major dialects of American English and stage diction. The required laboratory is THEA 1103. Credit will not be given for THEA 1303 unless THEA 1103 is taken and passed at the same time. May not be used to fulfill the Fine Arts requirement.

1310 Theatre Company and Production Process (0-12)
(🐴 DRAM 1323)
This begins a sequence of courses through which the major drama productions of the season will be realized. Entering freshman drama majors should take THEA 1310 in their first semester. (2310, 3510, 4310 complete the sequence)

1313 Introduction to Theatre (3-0)
(♦ DRAM 1310)
Analysis of the principles and techniques involved in representing human experience in a play; the relationship of acting, directing, staging, lighting, costuming, and other Theatre Arts to one another and to the written word. The course is designed to serve not only as an introduction to drama for departmental majors, but as a general survey for non-majors. Course fee required.

1390 Introduction to the Art of the Motion Picture (3-0)
(♦ DRAM 2366)
Understanding and appreciating film as a unique medium for communication and artistic expression. Introduces students to basic theory across a broad range of types of films. Films viewed in class and on campus and discussed in class. Course fee required.

2310 Theatre Co. & Production Process (0-12)
(♦ DRAM 1320)
This is a sequence of courses through which the major drama productions of the season will be realized. Entering freshman drama majors should take THEA 1310 in their first semester.

2313 Acting I (3-2)
(♦ DRAM 1351)
The fundamentals of role preparation and performance. Students will learn basic, critical concepts and techniques and will practice them in exercises and in performance of monologues and scenes taken from modern and contemporary dramatic literature.

2314 Acting II (3-2)
(♦ DRAM 1352)
Detailed study of role preparation and role execution. Combines exercises and scene study to deepen the understanding and playing of action. Scenes are primarily selected from modern and contemporary dramatic literature. *Prerequisite*: THEA 2313 with a grade of "C" or better.

2321 Stagecraft (3-0)
(♦ DRAM 1330)
An introduction to theatre architecture, stage rigging, scenic construction, painting, hardware, shop tools, scene shifting mechanisms, and operating techniques. Course fee required.

2322 Makeup (3-0)
(♦ DRAM 1341)
Study of the history of makeup, types and kinds of makeup, and techniques of application for stage, film, and television. Course includes practical applications of techniques learned. Course fee required.

2391 Cinematic Genres (3-1)
This course will be centered around the evolution of distinct cinematic styles and themes, which have evolved within narrative film and the subsequent impact genre has had on contemporary film practice. Course topic will vary. *Prerequisite*: THEA 1390. THEA 1390 may be taken concurrently with THEA 2391. Course fee required.

2396 Video as Personal Expression (3-1)
Conceptualizing and production of a series of short individual and group projects in video. Under the guidance of the instructor, the student will be exposed to key practitioners in the field and will engage in intensive viewing and feedback sessions with the instructor and classmates. *Prerequisites:* THEA 1390 and department approval. Course fee required.

3302 Chicano Cinema (3-0)
An examination of the American film industry with respect to the Chicano's role, historically and culturally, in the genre. A series of films, including Hollywood commercial and Chicano made films, will be screened, as part of an analysis of Chicano images and their impact on American popular culture. This is an interdisciplinary course that employs analytical constructs and techniques used in cultural anthropology, sociology, film criticism, and history. Course fee is required.

3303 The Border Image in Mexican Film (3-0)
Analysis of the U.S.-Mexico Border image in Mexican cinema, to include the salient demographic, cultural, linguistic, and political characteristics of the region. Course will be taught in Spanish. Course Fee required.

3310 Theatre Company and Production Process (0-12)
This is a sequence of courses through which the major drama productions of the season will be realized. Entering freshman drama majors should take THEA 1310 in their first semester.

3311 Music Theatre Company I (0-12)
Faculty directed study, practice and performance of music theatre repertory in scenes and full productions. Workshops and seminars that develop specialized performance skills and business acumen in Musical Theatre will be provided. May be repeated for credit.

3313 Acting III (3-2)
Advanced script and character work with special attention paid to the integration of vocal and physical skills as they directly relate to the demands of the script. This is a scene study class with scenes selected from the range of world dramatic literature. *Prerequisite*: THEA 2314 with a grade of "B" or better.

3314 Acting for the Camera (3-2)
Fundamental principles and techniques of acting for the camera integrated with basic and advanced acting techniques. Students will work on camera and review their work during playback sessions. Performance situations will duplicate those found in commercials, television, and film. *Prerequisites*: THEA 2313 with a grade of "B" or better and department approval.

3315 Screenwriting (3-0)
A workshop where students will be introduced to the tools and discipline necessary to write tightly structured, dramatic scenes in order to tell stories through moving images, dramatic action, characterization, and dialogue. Each student will also write two short screenplays intended for minimal production. Emulation of the broadest possible spectrum of film styles and approaches is encouraged.

3316 Audition Techniques (3-2)
Basic principles and techniques of auditioning for stage, television, film, and commercials. Students will learn about and practice within the various audition situations. Covers everything from headshots and resumes to the business of acting. Special attention is given to the application of detailed acting principals and techniques for auditioning. Includes both cold and prepared readings. *Prerequisites*: THEA 2313 and THEA 2315 each with a grade of "B" or better.

3320 Introduction to Playwriting (3-0)
Introduction to Playwriting addresses rudiments of dramatic forms, structure, and styles, as a foundation for general theatre study. Students will engage in writing exercises, write scenes, and a short script intended for minimal production.

3322 Script Analysis (3-0)
The study of the structure of play scripts from classicism to post-modernism. Students are provided basic analytical tools necessary to comprehend the literary texts of plays and the application of those texts to the various areas of production.

3325 Directing I (3-0)
Study of techniques in various styles, modes, and periods together with analysis of the problems of the producer and Theatre manager. Scene work required. *Prerequisite*: THEA 2313 or instructor approval.

3335 Chicano Theatre and Drama (2-4)
Examination of the Chicano and Chicanismo through drama and theatrical presentations. Chicano Theatre and drama is studied as literature, as a political statement, and as a social and ethnic phenomenon. Several short plays of the Chicano Theatre are prepared for presentation to the public.

3340 A History of Costume Design (3-0)
A study of costume design from the earliest time to the present and its implementation on the stage. Practical experience in designing and executing costumes for actual production.

3341 Costume Production (3-0)
The study of costume technology including design analysis, pattern development, fabric selection and modification, and construction techniques. Offers experience in executing costumes for theatrical production. Course fee required.

3342 Lighting Design (3-0)
A history of lighting and an analysis of contemporary lighting practice as applied to Theatre and television lighting including a study of lighting instruments, use of color media, control equipment, and designing for different staging and studio configurations. Course fee required.

3343 Scenic Painting (3-7)
Discussion of the formulation and handling of scene paints and dyes, brushes and tools, and painting techniques. Practical laboratory work in problems of the realistic representation of a variety of textures and materials at scenic scale leads to fully developed illusionistic and pictorial stage scenery. *Prerequisite:* Department approval.

3344 Costume Design (3-7)
This course introduces the student to interpreting theatrical works, and transforming concepts into visual aesthetics for costume design.

3350 Creative Drama (3-0)
Methods of developing original dramatizations with children and creating plays from children's literature. Discussion of basic skills for the teaching of creative theatre and drama. Recommended for Education majors.

3351 History of the Theatre I: The Early Theatre (3-0)
Historical survey of theatre and drama from earliest times through the close of the Middle Ages.

3352 History of the Theatre II: Renaissance Through Romanticism (3-0)
Historical survey of theatre and drama from the beginning of the Renaissance through the Romantic Movement.

3353 History of the Theatre III: The Modern Theatre (3-0)
Historical survey of theatre and drama from the rise of Realism to the present.

3355 The Musical Theatre (3-0)
A survey of the American Musical Theatre as evolved since the mid-nineteenth century to the present. With the use of film-videos, recorded material, and slides. This course will explore the historical and aesthetic contributions of the genre to the American Theatre.

3356 Women in Drama (3-0)
This course will investigate the writings of feminist playwrights who are committed to the development and vision of women in the theatre. These dramatic works will be examined in light of the sociological and humanistic realities that are a part of contemporary American life.

3390 Cinematic Directors (3-0)
An examination of the stylistic cinematic works of modern and contemporary European and American film directors and their aesthetic relationship to their political, religious, socio-cultural, and commercial environment. *Prerequisite*: THEA 1390 or instructor approval. Course fee required.

3391 African-American Filmmakers (3-0)
The unique contributions to independent and studio film production by African-Americans will be the focus of this course. By incorporating a historical perspective of the roles of African-Americans in movies and behind the camera, the course will offer students an opportunity through reading and writing assignments to increase their awareness of the sociological, political, and artistic associations between the film industry and American society.

3393 American Avant-Garde Film (3-0)
The development and significance of the experimental, or avant-garde film, that evolved in direct opposition to the hegemony of the commercial narrative film, will be studied. Through the viewing, study, and critical discussion of the works of such artists as Stan Brakhage, Andy Warhol, Jonas Mekas, Maya Deren, and many others, students will gain an awareness of and appreciation for America's alternative cinema. *Prerequisite*: THEA 1390 or instructor approval.

3394 Documentary Cinema (3-0)
This course will concentrate on an examination of the aesthetics, history, cultural context, social significance, and critical methodologies of the documentary film. Study will begin with the earliest examples of this form, including the pioneering works of such documentarians as Robert Flaherty and Leni Riefenstahl, and continue through the most recent extensions of this form as exemplified in the work of the Maysles Brothers and Frederick Wiseman. Students will investigate the ideological and formal principles of the non-fiction narrative film. *Prerequisite*: THEA 1390 or instructor approval.

3395 Women and Film (3-0)
The significant participation of women in front of and behind the camera will be studied in this course. Emphasis will be placed on the historical contributions of women writers, producers, and directors and the recent increase in the number of women actively involved in the production of feature films. Attention will also be given to screen images of women and how they reflect American culture. *Prerequisite:* THEA 1390 or instructor approval.

4310 Theatre Co. and Production Process (0-12)
This is a sequence of courses through which the major drama productions of the season will be realized. Entering freshman drama majors should take THEA 1310 in their first semester.

4311 Music Theatre Company II (0-12)
Faculty directed study, practice and performance of music theatre repertory in scenes and full productions. Workshops and seminars that develop specialized performance skills and business acumen in Musical Theatre will be provided. May be repeated for credit. *Prerequisite*: THEA 3311 with a grade of "C" or better.

4313 Acting IV (3-2)
Emphasis on classical dramatic literature with special attention given to the problems of language and the advanced techniques necessary for the integration of voice and movement. Students will perform scenes and monologues, as well as participate in a variety of exercises. *Prerequisite*: THEA 3313 with a grade of "B" or better.

4318 Playwriting (3-0)
Playwriting is a workshop course in the basics of writing for the stage. It includes techniques for the development of dialogue, plot, character, and structure, and provides practical experience in each area. Students undertake the creation of plays of varying lengths; these plays are given readings in class and may be selected in addition for public presentations as readings or productions.

4340 Selected Topics in Drama and Theatre (3-0)
Special research and production projects—individual or group—under the supervision of a faculty member. *Prerequisite*: Instructor approval.

4390 Film Theory and Criticism (3-0)
To identify the philosophical ideas and theoretical approaches that have influenced filmmakers and film scholars and to study the writings of some of the best exponents of film criticism in its popular and scholarly forms. *Prerequisite*: THEA 1390 or instructor approval. Course fee required.

See the *Graduate Catalog* for graduate programs and courses.

Western Cultural Heritage

233 Liberal Arts Bldg.
(915) 747-5835
wch@utep.edu

DIRECTOR: Ronald Weber
PROFESSORS: Haddox, Stafford
ASSOCIATE PROFESSORS: Best, Johnson, Louden, Springer, Weber
LECTURERS: Harding, Wren

The Western Cultural Heritage sequence (HUMN 3301, 3302, and 3303) is required of all BA students and is open to students from other colleges as well. The objective of the sequence is to promote the sort of awareness that will situate the student in his or her cultural environment (culture being that complex of aims, ideals, and interests that define and organize human social activity and its productions). An articulate understanding of Western Cultural Heritage requires examination of the character and interrelations of the cultural interests of the fine arts, history, literature, philosophy, politics, religion, and science. The sequence is designed to foster such an understanding by focusing, in a carefully coordinated three-semester sequence, on selected Western epochs characterized by peculiarly intense activity in the various aspects of culture.

Through a combination of lecture and discussion, the Western Cultural Heritage sequence seeks to ensure that students receive a systematic, broad (but also intense) exposure to the thinkers, ideas, texts, and art works that have been produced by Western civilization. The fundamental emphasis will be on ways of thinking about basic human questions. Such questions concern the nature of the state; the rights and responsibilities of individuals as citizens and members of the community; concepts of human nature; the human species as victim, antagonist, or part of nature; the supernatural; esthetics; technology; and epistemology.

Such questions as these will be explored by raising them in the context of pivotal epochs or focal loci in which interest in them has been demonstrably widespread. Although the sequence is structured chronologically in the broadest sense, attention will focus on selected moments of intense activity, from which vantage-points collateral lines of influence and ramification will be scrutinized.

Minor in Humanities

For Non-Liberal Arts Majors (other than BIS students)

1. Complete the 9-hour Western Cultural Heritage sequence.
2. Complete 9 hours advanced level courses in Art, Communications, History, Languages and Linguistics, Literature, Music, Philosophy, Religious Studies, Theatre Arts, or HUMN 4390. (With the approval of the Director of Western Cultural Heritage, appropriate lower-level courses may be accepted.)
3. Students should design a proposal for a coherent course of studies that includes courses from at least three disciplines in the Humanities. The proposal must be approved by the Director and be on file with the Western Cultural Heritage Office.

For BIS Majors

1. Complete the 9-hour Western Cultural Heritage sequence.
2. Complete 9-15 hours advanced level courses in Art, Communication, History, Languages and Linguistics, Literature, Music, Philosophy, Religious Studies, Theatre Arts, or HUMN 4390. (With the approval of the Director of Western Cultural Heritage, appropriate lower-level courses may be acceptable.)
3. Students should design a proposal for a coherent course of studies that includes courses from at least three disciplines in the Humanities. The proposal must be approved by the Director and be on file with the Western Cultural Heritage Office.

For Liberal Arts Majors

1. Complete the 9-hour Western Cultural Heritage sequence.
2. Complete 18 hours advanced level courses in the Humanities beyond the Western Cultural Heritage requirement. This includes courses from Art, Communication, History, Languages and Linguistics, Literature, Music, Philosophy, Religious Studies, Theatre Arts, and HUMN 4390.
3. Students should design a proposal for a coherent course of studies that includes courses from at least three disciplines in the Humanities. The proposal must be approved by the Director and be on file with the Western Cultural Heritage Office.

"C" Rule

All courses used to satisfy humanities credit from the Western Cultural Heritage Program must be completed with a "C" or better. This also applies to transferred courses.

Western Cultural Heritage (HUMN)

3301 Ancient Roots of Western Culture (3-0)
This course examines significant cultural developments in Classical Greece and Rome through close study of the literature, history, philosophy, and arts of these civilizations. For comparison, the course also considers the literature/history of Near Eastern cultures, including selections from the Bible. Required of all Liberal Arts majors. *Prerequisite*: ENGL 1312 or ENGL 1313 or ESOL 1312 with a grade of "C" or better.

3302 Medieval and Renaissance Culture (3-0)
This course surveys the matrix of concepts that inform the political and religious institutions of Western culture from the 3rd century CE to approximately 1600 CE. The survey examines the arts and philosophies of the era, relating them to political and social-historical contexts. Required of all Liberal Arts majors. *Prerequisite*: HUMN 3301.

3303 Modern Western Culture (3-0)
The purpose of this course is to foster in students an appreciation of the complexity and diversity of our Western cultural heritage through a survey of four major revolutions that were instrumental in shaping the modern world from 1650 to the present. These include the scientific, the social, the industrial, and the artistic. Through readings of primary sources, excerpts from major works, reproductions of art and musical works, and lectures, students will be stimulated to develop a capacity for critical assessment of many of the ideas and movements that have helped to shape the world they live in. *Prerequisite*: HUMN 3301 or HUMN 3302.

4390 Special Topics in Humanities (3-0)
Intensified study of a special topic such as Postmodern Culture, Western and Non-Western Cultures, the Cultures of the Humanities and the Sciences, and other areas of special interest in the Humanities. Topic varies with professor in charge. May be repeated for credit when the topic varies. *Prerequisite*: HUMN 3303 or instructor approval.

Women's Studies

233 Liberal Arts
(915) 747-5200
womenstudies@utep.edu
www.utep.edu/womens/

INTERIM DIRECTOR: Martha Smithey
PROFESSORS: Gladstein, Hatchett, Martin, McGee Deutsch, Staudt
ASSOCIATE PROFESSORS: Byrd, Howard, Marchino, Rippberger, Smithey, Topp
ASSISTANT PROFESSORS: Abarca, Cohoon, Coronado, Garabano, Haines, Hatchett, Henderson, Leyva, Ramos, Romero, Simon, Wiebe

Women and men are invited to participate in this interdisciplinary program that studies women, gender relations, and sexuality. The program offers both: 1) interdisciplinary courses studying a range of issues that cross disciplines and 2) courses which deal with the impact of gender within individual disciplines, such as History, Political Science, and Sociology, to name a few. While the Women's Studies Program was created in 1981, UTEP has offered individual courses in Women's Studies since the early 1970's. The program's primary goal is to foster gender equality in scholarship, the workplace, and in society as a whole.

Women's Studies courses offer students a rigorous education in theories of women's oppression, diverse gender roles and sexual identities, the history of gender relations, contemporary economic and social policies affecting women and men, and the creative work of women in the United States, Mexico, and around the globe. Women's Studies courses also demonstrate that knowledge is created both in and outside of the University; therefore, many courses integrate the knowledge and experience of community activists, community organizations, and women in the El Paso/Juárez region.

A minor in Women's Studies complements any major at the University and will prepare students for a wide range of careers. Whether a student plans to be a lawyer, a journalist, business executive, social worker, educator, or political official, women's studies courses can help students learn about the specific challenges women face and develop solutions to gender inequity. If a student plans to attend graduate school, the minor in Women's Studies will prepare her or him for advanced study as a Women's Studies scholar.

Minor in Women's Studies

To complete a Women's Studies minor, students must earn at least 18 hours in courses approved for Women's Studies credit. WS 2300, Introduction to Women's Studies is required. At least 12 hours must be completed at the upper-division level and in more than one discipline. Students desiring to pursue a minor in Women's Studies should consult with the Women's Studies Director to determine a course of study suitable to their interests and professional

needs. The following list of courses has been approved for Women's Studies credit. Courses that are not listed but contain a substantial women's studies component may be approved for the minor by the Women's Studies Director.

Certificate in Women's Studies and Gender Studies

To complete a Certificate in Women's and Gender Studies, students must earn at least 12 hours in courses approved for Women's Studies credit from at least two different disciplines. WS 2300, Introduction to Women's Studies is required. Students desiring to pursue a certificate in Women's Studies should consult with the Women's Studies Director to determine a course of study suitable to their interests and professional needs. The following list of courses has been approved for Women's Studies credit. Courses that are not listed but contain a substantial women's or gender studies component may be approved for the minor by the Women's Studies Director.

Chicano Studies:

CHIC	3301	La Chicana

Criminal Justice:

CRIJ	3321	Family Violence
CRIJ	3370	Victimless Crime
CRIJ	4300	Selected Topics: Women and Crime

English:

ENGL	3360	Women in Literature

Health Sciences:

HSCI	4303	Family Life and Human Sexuality

History:

HIST	3390	Special Topics: Women and the West
HIST	3391	History of Women

Kinesiology:

KIN	4310	Selected Topics: Women and Sports

Languages and Linguistics:

FREN	4390, GERM 4390, PORT 4390, RUSS 4390,	
SPAN	4390	Special Topics in Literature and Women

Management:

MGMT	4399	Current Topics: Men and Women as Colleagues

Political Science:

POLS	4314	Women, Power and Politics

Psychology:

PSYC	2305	Psychology of Human Sexuality

Social Work:

SOWK	3365	Social Work with Special Populations

Sociology and Anthropology:

SOCI	2315	The Sociology of Marriage and the Family
SOCI	3341	Special Topics in La Chicana and Women and Society
SOCI	3370	Sociology of Sex Roles

Theatre Arts:

THEA	3356	Women in Drama
THEA	3395	Women in Film

Women's Studies (WS)

2300 Introduction to Women's Studies (3-0)
Introduces students to the interdisciplinary field of women's studies. Course may include, but is not limited to, the following topics: the historical basis of gender inequality; the history of social movements for gender equality; women's achievements throughout history in various professional and academic fields; women's social, economic, and political status in the U.S., Mexico, and around the globe; gender relations; intersections of race, sexuality, class and gender; cultural representations of women.

3310 Directed Study (0-0-3)
Directed program of independent readings and/or a research project on an approved topic in women's studies. Requires consent of the course instructor and the program director. *Prerequisite*: Department approval.

3320 Internship in Women's Studies (0-0-3)
Field-based learning experience to explore the relationship between feminist theory and collective action. Student is assigned two days (or 12-16 hours) each week to an agency or organization in the El Paso/Juárez area that addresses women's or gender or sexuality issues. Includes a weekly seminar and final research project. Requires consent of the course instructor and the program director. *Prerequisites*: WS 2300 with a grade of "C" or better and department approval. WS 2300 may be taken concurrently with WS 3320.

3390 Special Topics in Women's Studies (3-0)
Examination of a particular theme or topic in women's studies from an interdisciplinary or discipline-specific perspective. See the schedule of classes for designated topic. Topics will vary according to instructor. May be repeated for credit when topic varies.

4310 Feminist Theory (3-0)
Traces evolving definitions of feminism through history, as theorists seek to understand the causes of gender inequality and women's diverse identities and oppressions. In addition to examining the impact of feminist theory across academic disciplines, the course also explores the political and practical application of contemporary feminist thought. *Prerequisite*: WS 2300 with a grade of "C" or better. WS 2300 may be taken concurrently with WS 4310.

4360 Junior/Senior Seminar in Women's Studies (3-0)
Advanced research, readings and discussion on a major theme in women's studies. Students will refine research methods and theoretical approaches to the field, and they will develop an original research paper related to the course topic. Themes will vary with instructor. See the schedule of classes for designated topic. May be repeated for credit when the topic varies. *Prerequisites*: ENGL 1312 and Junior/Senior standing.

COLLEGE OF SCIENCE

Biological Sciences
Chemistry
Geological Sciences
Mathematical Sciences
Physics

Dr. Michael P. Eastman, Interim Dean
Dr. Nancy Marcus, Associate Dean
Dr. Kate Miller, Associate Dean

Bell Hall, Room 100
(915) 747-5536 (ph)
(915) 747-6807 (fax)
science@utep.edu

College of Science

The College of Science was formed in 1965 when Texas Western College divided the Arts and Sciences College into the Colleges of Liberal Arts and Science. However, the College's academic departments have roots that start at the beginning of the institution. In 1913, the curriculum of the Texas State School of Mines and Metallurgy included physics and mining, engineering, mathematics, chemistry, geology, mineralogy, shop work, and drawing. From these roots, The University of Texas at El Paso's College of Science has grown to over 100 faculty in five academic departments—Biological Sciences, Chemistry, Geological Sciences, Mathematical Sciences, and Physics—offering fourteen Bachelor of Science degree programs.

The preparation of these students for graduate and professional schools and careers as scientists and teachers is the primary mission of the College. In addition, the College offers basic science and mathematics courses needed by students seeking other careers.

Faculty of the College share a commitment to the idea that teaching and research are critically important in the education of students in science. The College is proud of the large number of undergraduates that participate in research laboratories. Although many of the faculty have achieved international reputations for their research, all have classroom teaching responsibilities.

Reflecting the long connection between the arts and sciences, each academic department also offers a Bachelor of Arts degree program through the College of Liberal Arts, and the Department of Psychology in that College offers the BS in Psychology through the College of Science. The *Graduate Catalog* describes the Master of Science degree programs offered by each academic department and the Doctor of Philosophy degree programs offered in Biological Sciences and Geological Sciences. Doctor of Philosophy degrees in the interdisciplinary areas of Materials Science and Engineering and Environmental Science and Engineering are listed in the Interdisciplinary Studies section of the *Graduate Catalog*.

Undergraduate Programs

Each department of the College of Science and the Department of Psychology offers the BS degree subject to the general requirements listed below.

A student planning a technical career or graduate work is advised to follow the BS degree route. Either the BS or the BA degree is suitable for admission to health professional schools (students should refer to the Preprofessional Programs section).

BS programs that include course work leading to Secondary Teacher Certification are offered by each department and in three different interdisciplinary programs in science. BA programs leading to Teacher Certification are also available.

Departmental Honors Programs

The Departments of Biological Sciences, Chemistry, Geological Sciences, Physics, and Psychology have departmental honors programs for qualified undergraduates. Information about these programs is found in each department's section of this catalog.

Bachelor of Science Degree Requirements

The BS degree in all science disciplines requires a minimum of 128 semester hours of credit including a minimum of 45 upper-division (junior and senior) semester hours. A GPA of 2.0 must be achieved in all course work at UTEP and in all course work in the major department. In addition, a grade of "C" or better must be achieved in the following courses: all courses used to fulfill the University Core Curriculum requirements, all lower-division courses in the major and minor, and all lower-division MATH and STAT courses. Individual degree plans may restrict or extend some of the general education requirements, which are:

Communication: Completion of the English composition and speech component of the University Core Curriculum and ENGL 3359 (Technical Writing).

Mathematics: Completion of MATH 1411 and either MATH 1312 or the sequence STAT 2380, 2182, and 2381.

Natural Science: Completion of two semesters of a natural science (lecture and laboratory).

Humanities: Completion of the humanities component of the University Core Curriculum.

Visual and Performing Arts: Completion of the visual and performing arts component of the University Core Curriculum.

U.S. History: HIST 1301 and 1302.

Federal and State Government: POLS 2310 and 2311.

Social and Behavioral Sciences: Completion of the social and behavioral sciences component of the University Core Curriculum.

Institutionally Designated Option: Completion of UNIV 1301 or UNIV 2350.

Major: Completion of a major field concentration of prescribed courses. Specific disciplines have requirements that range from 36 to 44 semester hours, with a minimum of 21 semester hours of upper-division credits. In addition, Interdisciplinary majors are also offered; they range from 49 to 56 semester hours. All lower-division courses in the major must be completed with a "C" or better.

Minor: The completion of a minimum of 18 semester hours, at least 6 of which must be upper-division in an area related to the major. All lower-division courses in the minor must be completed with a "C" or better. Each degree plan specifies acceptable minors and College of Science minors are listed by each department. Secondary teacher certification requires a minor in secondary education. If secondary education is selected as the minor, each department may specify an additional minor.

Elective Courses: In addition to the above requirements, elective courses of general interest or relevance to the major field of the student as needed to complete the required 128 semester hours credit and the minimum 45 upper-division semester hours of credit are required. Courses in which the material is repetitive of, or included within, courses required by the Department or College may not be applied as elective credit toward the BS degree.

Major Fields

The College of Science offers BS degrees in the following disciplines: Applied Mathematics, Biological Sciences, Chemistry, Earth Science, Geological Sciences, Geophysics, Mathematics, Microbiology, Physics, and Psychology. The specific requirements for these disciplines and various options may be found in the academic department sections of this catalog (Psychology is listed under the College of Liberal Arts). In addition, BS degrees are offered in the following interdisciplinary areas: Environmental Science, Life/Earth Sciences, Natural Sciences, and Physical Sciences.

Students planning to obtain a degree in the College of Science must major in one of the above fields. Students planning to enter medical or dental schools normally obtain a BS or BA degree in science and, for this reason, should declare a major field (pre-medical and pre-dental are not major fields).

Double Majors

A student who fulfills requirements for two majors prescribed by academic departments in the College of Science (or any other college) may earn a degree with a double major. Double majors in a single department are not allowed, nor are double majors that include the degree plans for Earth Science, Life/Earth Science, Natural Science, or Physical Science. Double majors must satisfactorily complete all course work required of the major in each department/college.

Second Baccalaureate Degrees

Students who have earned a baccalaureate degree at an accredited institution may enroll as candidates for a second baccalaureate degree in the College of Science. This degree will be awarded upon satisfactory completion of all Bachelor of Science degree requirements in the College of Science. Students seeking a second baccalaureate degree must complete at least 24 semester hours, specified by the department, following the award of the first baccalaureate degree. Students may petition the Dean of Science to reserve up to 9 semester hours taken during the last semester of the initial degree work for credit toward the second BS degree. Students may not obtain a second baccalaureate degree in the same academic department as the first degree.

Pre-Science Program

Entering students wishing to obtain a BS in mathematics or science will be classified as pre-science students for not less than one semester after their admission to the University. Pre-science students must complete all the requirements of a pre-science program designed to prepare them for college success. Pre-Science students must make satisfactory progress toward completing the pre-science program, including:

1. Completion of the specified orientation program
2. Meeting with a pre-science advisor each semester
3. Completion of an approved program of study. The program of study depends upon the intended major and includes specific courses in mathematics and English composition dependent upon placement.
4. Enrollment in a mathematics course each semester until completion of Calculus I
5. Maintaining a minimum overall GPA of 2.0 in all courses and a “C” or better in mathematics and science courses

Upon completion of the pre-science program, students shall petition for a change of major from pre-science to a selected major. Students who do not make satisfactory progress toward completion of the pre-science program may be placed on college probation or college suspension (students should refer to the College/Major Academic Standing section of this Catalog).

Advising

All students enrolled in the College of Science must be advised prior to registration. Students should follow the directions for obtaining academic

advice outlined in the *Class Schedule* under the Advising: College of Science section. Although the Department of Psychology may not require advising, it is strongly recommended that students seeking the BS in Psychology obtain degree plan advice from the Office of the Dean of Science. In particular, these students are advised not to postpone the required courses in mathematics.

Students planning a career in Clinical Laboratory Science, Nursing, Physical Therapy, or other allied health fields are referred to the College of Health Sciences section of this catalog and should be advised in that College.

Pre-professional Advising

Information about entrance requirements to health professional schools may be obtained from the Medical Professions Institute which houses the Preprofessional Advisor in the Office of the Dean of Science. Students should work closely with this office if they are interested in entering medical, dental, veterinary, or physician assistant schools. These professions normally require a baccalaureate degree. No particular major is required for entrance, although a minimum of two years of biology, two years of chemistry (including a year of organic chemistry), a semester of calculus, and one year of physics are required for admission to most health professional schools. Thus, a major in Chemistry, Biological Sciences, Microbiology, or Physics might be appropriate.

Secondary Teacher Certification

The College of Science encourages students to consider teaching in the secondary schools as a career goal. This is in the College's self interest. It is assumed that better prepared teachers will result in better prepared freshmen who enroll in college. Certification for teaching in the secondary schools is available in the following BS degree fields: Biological Sciences, Chemistry, Earth Science, Mathematics, and Physics. The College of Science also offers interdisciplinary degrees in Life/Earth Sciences (biology and geology), Natural Sciences (science composite—biology, chemistry, geology, and physics), and Physical Sciences (chemistry and physics), which lead to secondary certification. School systems especially seek those with interdisciplinary degrees since they are prepared to teach different subjects.

Students planning to teach mathematics or science may also obtain certification with a BA degree in Biological Sciences, Chemistry, Mathematics, or Physics (offered by the College of Liberal Arts). In addition, those who already hold a baccalaureate degree in mathematics or a science may obtain secondary teacher certification in the College of Education. Students should refer to the College of Education section of this catalog for details on these programs. Students of mathematics and the sciences considering teaching should inform themselves on these options and decide which is best for them.

Minors in Secondary Education

Secondary certification requires a minor in Secondary Education. The BS in Mathematics requires an additional minor, while other fields of certification require only the minor in Secondary Education. Secondary Education minors for BS degrees for Mathematics or Science consist of 21 semester hours. The following courses are required for these minors:

EDPC	3300	Developmental Variations
RED	3342	Reading and Study in the Content Areas
SCED	3311	Curriculum Planning in the Secondary School
SCED	3317	Multicultural Education in the Secondary School
SCED	4691	Student Teaching in the Secondary School.

The minor for Mathematics students includes

SCED 4367 Teaching Math in Secondary School

Whereas the minor for Science students includes

SCED 4368 Teaching Science in Secondary School

In addition, the speech component of the University Core Curriculum is restricted to COMM 1301 and the humanities component is restricted to an English literature course for minors in Secondary Education.

Admission to Secondary Teacher Education

The College of Education secondary education professional development program consists mainly of two semesters of blocked courses, normally taken during the student's last year of course work. In order to enroll in these courses, a student must be admitted to secondary teacher education, which requires the following:

1. Credit for ENGL 1311, ENGL 1312, and COMM 1301 with a grade of "C" or better
2. Credit for MATH 1508 or higher with a grade of "C" or better
3. Completion of a minimum of 60 hours of college courses with a minimum overall GPA of 2.5

Application for admission to the program is to be filed in the College of Education Student Services Office, Education Room 412. Additional requirements may be found in the College of Education section of this catalog.

Secondary Teacher Preparation Programs

Students preparing to teach are advised to carefully plan their last two years of course work. COMM 1301 is required for application to the Secondary Teacher Preparation Program, so the course should be completed early. After admission, the present plan is that the courses EDPC 3300, RED 3342, SCED 3311, and SCED 3317 must be enrolled in concurrently as Field Based Block I. Students in this program must block out either 8 a.m. to 12 p.m. or 12 p.m. to 4 p.m. Monday through Friday for this part of the program because field experiences in secondary schools are required in addition to the course work. Normally, students in morning blocks may enroll in afternoon laboratories or those in afternoon blocks may only enroll in morning lecture sections. This often requires prudent planning of upper-division majors course selection since it is not assured which block one may be forced to enroll in.

Field Based Block II consists of SCED 4691 and students are interns in secondary schools from 8 a.m. to 3:30 p.m. every school day, demanding that any additional courses be in the evening. SCED 4367 and SCED 4368 are often offered in the evening, which finishes the teacher preparation program. It is almost impossible to complete upper-division majors courses during this semester.

Minors Outside the College of Science

Approved College of Science minors of Biology, Chemistry, Geology, Mathematics, and Physics are detailed in the academic department sections of this catalog. These minors are approved minors for the BS in Psychology. In addition to these minors, the following minors outside the College of Science are approved for the listed BS degrees:

Accounting (BS in Applied Mathematics and Mathematics)
Students should refer to the College of Business Administration section of this catalog.

Anthropology (BS in Biological Sciences, Earth Science, and Geological Sciences)
Students should refer to the Department of Sociology and Anthropology, College of Liberal Arts section of this catalog.

Computer Science (BS in Applied Mathematics, Biological Sciences, Chemistry, Geological Sciences, Mathematics, and Psychology)
Students should refer to the Department of Computer Science, College of Engineering section of this catalog.

Economics (BS in Applied Mathematics and Mathematics)
Students should refer to the College of Business Administration section of this catalog.

Environmental Science (BS in Chemistry)
BIOL 1305, BIOL 1107, BIOL 3414; CE 3325, CE 4390; and an additional course selected from GEOL 4380, GEOL 4384, or MICR 3328-MICR 3128. (The additional science, not the major of minor, cannot include BIOL 1305-BIOL 1106.)

General Business (BS in Mathematics)
Students should refer to the College of Business Administration section of this catalog.

Management (BS in Mathematics)
Students should refer to the College of Business Administration section of this catalog.

Psychology (BS in Biological Sciences)
Students should refer to the Department of Psychology, College of Liberal Arts section of this catalog. (PSYC 1303 is waived if STAT 2380, STAT 2182, and STAT 2381 are completed with a "C" or better.)

Secondary Education/Mathematics (BS in Mathematics)
Students should refer above.

Secondary Education/Science (BS in Biological Sciences, Chemistry, Earth Science, Life/Earth Sciences, Natural Sciences, Physical Sciences, or Physics) Students should refer above.

Degree Plans

Any student who has completed 60 credit hours and is calculus-ready is required to file for a degree plan. The degree plan, which is a listing of the outstanding requirements for graduation, must be obtained from the Office of the Dean of the College of Science (Dean of the College of Liberal Arts for the BA degree). A copy of the degree plan will also be filed with the student's major department. The degree plan must be updated following the completion of 90 credit hours. Each student is required to obtain confirmation of their standing from the Office of the Dean of the College of Science prior to registering for the semester in which all course work for a degree will be completed. (Details of the above "paper" degree plans may change with the introduction of "electronic" degree plans.)

Lower-Division Courses

The prerequisite structure in science programs requires careful attention to course sequences.

Freshman courses required of all BS degrees include (all must be completed with a grade of "C" or better)

ENGL 1311, ENGL 1312 (or equivalent ESOL courses)

HIST 1301, HIST 1302

MATH 1411

These courses should be completed before the student reaches junior standing (60 semester credit hours). These and *all* freshman courses specified as required for the degree must be completed before Senior standing (90 semester credit hours) in order to count toward the minimum hours required for the degree.

Enrollment in MATH 1411 or equivalent is required in order to declare a major. It is to the student's advantage to continue enrolling in the other required mathematics courses since success in these courses largely depends upon what was learned in the previous course and delaying enrollment in higher level courses often requires considerable review.

Required Lower-Division Courses in the Major and Minor should be completed with a grade of "C" or better before enrollment in upper-division courses. These lower-division courses are listed below. Other lower-division College of Science courses required for the various degree plans are included in brackets. These courses should also be completed with a "C" or better before enrolling in upper-division courses if the discipline is the minor.

Applied Mathematics
MATH 1411, MATH 1312, MATH 2313, MATH 2300
[CS 1401 or CS 1420; PHYS 2420, PHYS 2421]

Biological Sciences
BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; (for biomedical track) MICR 2440
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; MATH 1411, MATH 1312 (or STAT 2380-STAT 1182, STAT 2381)]

Chemistry
CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 2101, CHEM 2261-CHEM 2161
[CS 1401 or CS 1420; MATH 1411, MATH 1312, MATH 2313; PHYS 2420, PHYS 2421]

Earth Science
ASTR 1307-ASTR 1107; GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304)
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; MATH 1411, MATH 1312 (or STAT 2380-STAT 1182, STAT 2381)]

Environmental Science
ESCI 1301-ESCI 1101, ESCI 2201, ESCI 2101, ESCI 2102, ESCI 2103
[BIOL 1305-1107 (or GEOL 1301-GEOL 1101), BIOL 1306-BIOL 1108 (or GEOL 1302-GEOL 1102 or PHYS 2420); CHEM 1305-CHEM 1105, CHEM 1306-1106; MATH 1411, MATH 1312 (or STAT 2381); STAT 2380-STAT 2182]

Geological Sciences
GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411, GEOL 2412
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; CS 1401 or CS 1420; MATH 1411, MATH 1312; PHYS 2420, PHYS 2421]

Geophysics
GEOL 1301-GEOL 1101, (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411, GEOL 2412
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; CS 1401 or CS 1420; MATH 1411, MATH 1312, MATH 2313; PHYS 2420-PHYS 2421]

Life/Earth Sciences
ASTR 1307-ASTR 1107; SCI 1405 (or BIOL 1305-BIOL 1107); BIOL 1306-BIOL 1108, BIOL 2316-BIOL 2117 (or BOT 2410 or ZOOL 2406);

GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302- GEOL 1102 (or GEOL 1304), GEOL 2411
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; MATH 1411, MATH 1312 (or STAT 2380-STAT 1182, STAT 2381)]

Mathematics
MATH 1411, MATH 1312, MATH 2313
[CS 1401 or CS 1420; PHYS 2420, PHYS 2421]

Microbiology
BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; MICR 2440
[CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; MATH 1411, MATH 1312 (or STAT 2380-STAT 1182, STAT 2381); PHYS 1403-PHYS 1404 (or PHYS 2420-PHYS 2421)]

Natural Science
BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 2302-GEOL 1102 (or GEOL 1304); PHYS 2420, PHYS 2421
[MATH 1411, MATH 1312]

Physical Sciences
CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 2261; PSCI 2303; PHYS 2420, PHYS 2421
[MATH 1411, MATH 1312]

Physics
PHYS 2420, PHYS 2421, PHYS 2230
[CS 1401 or CS 1420; CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; MATH 1411, MATH 1312, MATH 2313]

Psychology
PSYC 1301, PSYC 1303
[MATH 1411, MATH 1312 (or STAT 2380-STAT 1182, STAT 2381)]

Upper-Division Courses

A minimum of 45 semester hours of upper-division course work is required. The various majors require 21 to 32 semester hours of upper-division course work. In addition, the minor requires a minimum of six upper-division semester hours (Secondary Education requires 21 semester hours), and an additional 3 hours are required by the general college requirements. Thus, 4 to 15 free elective upper-division courses are required. Upper-division courses are not often offered each semester and summer. Students are cautioned to plan ahead in terms of when these courses are generally offered and what prerequisites are needed. Due to the blocking of upper-division education courses, this planning is particularly important for students seeking secondary teacher certification.

INTERDISCIPLINARY DEGREES

Bell Hall, Room 100
(915) 747-5536
science@utep.edu

The interdisciplinary BS degrees (Life/Earth Sciences, Natural Sciences, and Physical Sciences) are administered from the Office of the Dean of Science. These degrees do not require a minor unless certification in Secondary Teaching is sought. An interdisciplinary BS degree in Environmental Science is administered by a separate program director, as indicated. All interdisciplinary degrees are described below.

BS in Life/Earth Sciences

The requirement to obtain the BS in Life/Earth Sciences consists of the general College of Science requirements plus the following specific requirements:

Interdisciplinary Major (a minimum of 51 semester hours including 25 semester hours of upper-division course work): ASTR 1307-ASTR 1107; SCI 1405 or (BIOL 1305-BIOL 1107); BIOL 1306-BIOL 1108 and (1) BIOL 2316-BIOL 2117 or (2) BOT 2410 or (3) ZOOL 2406; plus 12 upper-division semester hours in Biological Sciences. GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411, GEOL 3405, GEOL 3420, or GEOL 3380; and 2 courses selected from the following: GEOL 3311, GEOL 3340, GEOL 3350, GEOL 3355, GEOL 3359, GEOL 3360, GEOG 3306.

Additional Science: The additional science is restricted to CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106.

BS in Natural Sciences

The requirement to obtain the BS in Natural Sciences consists of the general College of Science requirements plus the following specific requirements:

Interdisciplinary Major (a minimum of 56 semester hours including 24 semester hours of upper-division course work): BIOL 1305-BIOL 1107 and BIOL 1306-BIOL 1108; CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106; GEOL 1301-GEOL 1101 (or GEOL 1303) and GEOL 1302-GEOL 1102 (or GEOL 1304); and PHYS 2420-PHYS 2421 are required lower-division courses. In addition, a minimum of 24 semester hours of approved upper-division course work in Biological Sciences, Chemistry, Geological Sciences, and Physics is required. This must include a minimum of 3 semester hours in each of the disciplines and a minimum of 12 semester hours of upper-division course work must be taken in a single department.

Additional Science: The College's additional science requirement is satisfied by the major.

Other: MATH 1312 is required.

BS in Physical Sciences

The requirement to obtain the BS in Physical Sciences consists of the general College of Science requirements plus the following specific requirements:

Interdisciplinary Major (a minimum of 49 semester hours including 26 semester hours of upper-division course work): CHEM 1305-CHEM 1105,

CHEM 1306-CHEM 1106, CHEM 2261, CHEM 3324, CHEM 3124, CHEM 3325, CHEM 3125, CHEM 4330, and three additional semester hours of upper-division course work in chemistry; PHYS 2420, PHYS 2421, PHYS 3325, and PHYS 3243 (taken three times); PSCI 2303 and PSCI 3304.

Additional Science: The additional science requirement may be met by BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; or BIOL 1303-BIOL 1304; or GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304).

Other: MATH 1312 is required.

Secondary Education Concentration

This concentration may be selected by students majoring in any of the above interdisciplinary degree programs and simply requires a minor in Secondary Education.

Environmental Science

307 Geology Building
(915) 747-5968
langford@utep.edu

PROGRAM DIRECTOR: Richard Langford

The Environmental Science Program offers students an interdisciplinary degree plan in which the student will select a concentration area in Environmental Biology, Environmental Chemistry, Environmental Geosciences or Environmental Hydrosciences.

All students will fulfill the University Foundation courses and the Environmental Science Core, a sequence of environmental science classes. In addition, students take courses in their selected concentration area. Because each concentration area is different and contain unique course requirements, the degree plan semester-hour totals vary slightly.

	Semester Hours
Foundation Courses (University Core Curriculum, classes not included in this major)	33
Environmental Science Core	35
Concentration	60-62
Total (SCH)	128-130

Courses required of all students in the program:

Environmental Science Core (35 semester hours)

MATH	1411	Calculus I-(Satisfies University Core Requirement See University Core Curriculum section in catalog)
MATH	1312	Calculus II-(Biology Option students may substitute STAT 2381 for MATH 1312)
STAT	2380-2182	Statistical Methods I + Computing Lab
ESCI	1301-1101	Introduction to Environmental Science + Lab

ESCI	2201	Environmental Science Practice
ESCI	2101	Laboratory for Environmental Practice I
ESCI	2102	Laboratory for Environmental Practice II
ESCI	2103	Laboratory for Environmental Practice III
ESCI	4301	Environmental Science Senior Seminar
ESCI	4398	Environmental Science Internship
ENGL	3359	Technical Writing

Plus students will take a minimum of six semester hours from the following list (Classes taken for the Environmental Science Core cannot be counted as part of a concentration):

BIOL	3427	Desert Ecology
BIOL	3416	Ecology
MICR	3328, 3128	Micro-organisms in Ecosystems
CHEM	3324-3124	Organic Chemistry I
CHEM	4330	Biochemistry Structure and Function
CE	3325	Environmental Engineering Fundamentals
CE	3490	Introduction to Air Pollution
GEOG	3306	Weather and Climate
GEOG	4307	Geography of Arid Lands
GEOL	4385	Geographical Information Systems
GEOL	4316	Geochemistry
GEOP	4336	Remote Sensing
HSCI	3306	Environmental Health
PHYS	3243	Advanced Laboratory Practice
PHYS	3325	Survey of Modern Physics
PHYS	3331	Thermal Physics
PHYS	4341	Electromagnetics
POLS	4352	Environmental Law and Policy

Environmental Science Concentration

Students will also choose a concentration from among Environmental Biology, Environmental Chemistry, Environmental Geoscience, and Environmental Hydroscience. (See descriptions below.)

Environmental Biology Concentration

			Semester Hours
Foundation Courses (University Core Curriculum, classes not included in this major)			33
Environmental Science Core			35
BIOL	1305-1107	General Biology + Topics in Study of Life I (Satisfies University Core, Science)	4
BIOL	1306-1108	Organismal Biology + Lab (Satisfies University Core, Science)	4
CHEM	1305-1105	General Chemistry I + Lab	4
CHEM	1306-1106	General Chemistry II + Lab	4
BIOL	3416	Ecology	4
BIOL	4428	Environmental Stressors in Ecosystems	4
Plus three (3) of the following courses:			12
BOT	2410	General Botany	
MICR	2440	General Microbiology	
ZOOL	2406	General Zoology	
ZOOL	2466	Invertebrate Zoology	

Plus 22 hours of upper division electives from the following: 22

BIOL	3321	Evolutionary Theory
BIOL	3414	Molecular Cell Biology
BIOL	3427	Desert Ecology
BIOL	4317	Plant Ecology
BIOL	3326	Animal Ecology
BIOL	4225	Field Biology
BIOL	4325	Field Biology
BIOL	4324	Animal Behavior
BOT	3330	Comparative Plant Morphology
BOT	3437	Plant Taxonomy
CHEM	3324-3124	Organic Chemistry I
CHEM	3325-3125	Organic Chemistry II
CHEM	4330 or 4332	Biochemistry : Structure and Function or Biochemistry: Dynamics and Information
MICR	3328-3128	Microorganisms in Ecosystems
ZOOL	4476	Fish, Amphibians and Reptiles
ZOOL	4478	Birds and Mammals
ZOOL	3468	Entomology

Plus two (2) additional semester hours of electives 2

Total 128

Environmental Chemistry Concentration

Semester Hours

Foundation Courses (University Core Curriculum, classes not included in this major) 33

Environmental Science Core 35

In order to satisfy the University Core Curriculum, students will select 8 hours from:

BIOL	1305-1107	General Biology + Topics in Study of Life I	4
BIOL	1306-1108	Organismal Biology + Lab	4
or			
GEOL	1301-1101	Physical Geology + Lab	4
GEOL	1302-1102	Historical Geology + Lab	4
CHEM	1305-1105	General Chemistry I + Lab	4
CHEM	1306-1106	General Chemistry II + Lab	4
PHYS	2420	Introductory Mechanics	4
MATH	2313	Calculus III	3
CHEM	3321-3221	Organic Chemistry I + Lab	5
CHEM	3322-3222	Organic Chemistry II + Lab	5
CHEM	3310-3110	Analytical Chemistry + Lab	4
CHEM	3351-3151	Physical Chemistry I + Lab	4
CHEM	3352-3152	Physical Chemistry II + Lab	4
CHEM	4211-4212	Instrumental Methods of Analytical Chemistry	4
CHEM	4330	Biochemistry: Structure and Function	3
CE	3325	Environmental Engineering Fundamentals	3
GEOL	4316	Geochemistry	3

Plus two (2) additional semester hours of electives 2

Total 128

Environmental Geoscience Concentration

			Semester Hours
Foundation Courses (University Core Curriculum, classes not included in this major)			33
Environmental Science Core			35
GEOL	1301-1101	Physical Geology + Lab (Satisfies University Core, Science)	4
GEOL	1302-1102	Historical Geology + Lab (Satisfies University Core, Science)	4
BIOL	1305-1107	General Biology + Topics in Study of Life I	4
CHEM	1305-1105 +	General Chemistry + Lab	4
CHEM	1306-1106	General Chemistry + Lab	4
PHYS	2420	Introductory Mechanics	4
GEOL	2411	Mineralogy and Petrology	4
GEOL	2412	Geoscience Processes	4
GEOL	3425	Sedimentology	4
GEOL	3423	Structural Geology	4
GEOL	4316	Geochemistry	3
GEOL	4383	General Hydrogeology	3
GEOL	4384	Nuclear Waste Disposal	3
GEOP	4336	Remote Sensing	3
Plus ten (10) hours of upper division electives from the following:			10
GEOL	3330	Applied Geomorphology	
GEOL	3350	Oceanography	
GEOL	3359	Minerals, Economics and the Environment	
GEOL	3420	Invertebrate Paleontology	
GEOL	4362	Stratigraphy	
GEOL	4380	Environmental Geology and Geophysics	
GEOL	4665	Field Geology	
GEOP	4332	Exploration Geophysics: Seismic Methods	
GEOP	4334	Exploration Geophysics: Non-seismic Methods	
Total			130

Environmental Hydroscience Concentration

			Semester Hours
Foundation Courses (University Core Curriculum, classes not included in this major)			33
Environmental Science Core			35
GEOL	1301-1101	Physical Geology + Lab (Satisfies University Core, Science)	4
BIOL	1305-1107	General Biology + Topics in Study of Life I (Satisfies University Core, Science)	4
CHEM	1305-1105 +	General Chemistry + Lab	4
CHEM	1306-1106	General Chemistry + Lab	4
PHYS	2420	Introduction to Mechanics	4
PHYS	2421	Fields and Waves	4
GEOL	4380	Environmental Geology and Geophysics	3
GEOL	4383	General Hydrogeology	3
GEOL	4316	Geochemistry	3
GEOL	3425 or 3423	Sedimentology or Structural Geology	4

CE	3325	Environmental Engineering Fundamentals	3
GEOL	4373	Groundwater Contamination and Reclamation	3
BE	2375	Introduction to Thermal-Fluid Science	3
or			
PHYS	2230	Thermal and Fluid Physics	2
MATH	2326	Differential Equations	3

Plus eleven (11) hours of upper division electives from the following: 11

CE	4342	Water and Wastewater Engineering
CE	4153	Water and Wastewater Laboratory
CE	4456	Hydraulic Engineering
CE	4375	Engineering Problems-Seminar
GEOL	4385	Introduction to Geographic Information Systems
BIOL	3416	Ecology
MICR	3328-3128	Microorganisms in Ecosystems
GEOL	4384	Nuclear Waste Disposal
GEOP	4332	Exploration Geophysics, Seismic Methods
GEOP	4334	Exploration Geophysics, Non-seismic Methods

Plus one (1) additional semester hour of electives 1
(If PHYS 2230 was selected instead of PHYS 2375)

Total 128

Minor in Environmental Science

(18 hours required, including a minimum of 6 hours in upper division courses)

ESCI	1301-1101	Introduction to Environmental Science + Lab
ESCI	2201	Environmental Practice
STAT	2380-2182	Statistical Methods I and Computing Laboratory for Statistics 2380 (if STAT 2380 not required by major)
ESCI	4301	Environmental Science Senior Seminar

<u>At least two from:</u>

ESCI	2102	Laboratory for Environmental Practice I (rocks, sediment)
ESCI	2102	Laboratory for Environmental Practice II (water, air)
ESCI	2103	Laboratory for Environmental Practice III (biologic)

<u>Three to six hours from*:</u>

CE	3325	Environmental Engineering Fundamentals
CE	3490	Introduction to Air Pollution
CHEM	3324-3124	Organic Chemistry I and Laboratory for Chemistry 3324
CHEM	3310	Analytical Chemistry
GEOG	3306	Weather and Climate
GEOG	4307	Geography of Arid Lands
GEOL	4385	Introduction to Geographical Information Systems
GEOL	4316	Geochemistry

GEOL	4380	Environmental Geology and Geophysics
GEOL	4384	Nuclear Waste Disposal
GEOP	4332 or 4334	Exploration Geophysics: Seismic Methods or Non-Seismic Methods
GEOP	4336	Introduction to Remote Sensing
HSCI	3306	Environmental Health
PHYS	3325	Survey of Modern Physics
PHYS	3331	Thermal Physics
POLS	4352	Environmental Law and Policy

*courses listed here that are offered by the student's major department cannot be counted towards the minor

Interdisciplinary Courses, Environmental Science (ESCI)

1101 Environmental Science Laboratory (0-3)
(ENVR 1101)
Concurrent enrollment in ESCI 1301 suggested. Enrollment in ESCI 1101 required for environmental science majors. Laboratory fee required.

1301 Introduction to Environmental Science (3-0)
(ENVR 1301)
An introduction to environmental science, emphasizing the multi-disciplinary approach required to document, understand, and solve environmental problems. Topics include such large scale challenges as global warming, deforestation, and energy consumption, as well as more local problems such as water and air quality, organic and inorganic toxins, and human health. Material of regional and current interest is incorporated.

2101 Laboratory for Environmental Practice I (0-3)
Field and laboratory sampling methods for the collection and description of unconsolidated sediments and rocks. *Prerequisite*: ESCI 2201 or concurrent enrollment in STAT 2380. Laboratory fee required. Transportation fee required.

2102 Laboratory for Environmental Practice II (0-3)
Field and laboratory sampling methods for the collection and description of water and gas samples. *Prerequisite*: ESCI 2201 or concurrent enrollment in STAT 2380. Laboratory fee required.

2103 Laboratory for Environmental Practice III (0-3)
Field and laboratory sampling methods for the collection and description of biological samples. Field trips required. *Prerequisite*: ESCI 2201 or concurrent enrollment in STAT 2380. Laboratory fee required. Transportation fee required.

2201 Environmental Practice (2-0)
A survey of the practical knowledge required to begin a career in the environmental arena. Topics include an overview of environmental agencies, laws, and regulations; quality control/quality assurance (QA/QC) procedures; environmental sampling, including field-work; sample custody, analysis and record-keeping; ethics; the roles of the public and private sectors in environmental management. *Prerequisites*: ESCI 1101, ESCI 1301, and sophomore standing in the College of Science or College of Engineering.

4166 Directed Study, Environmental Science (0-0-1)
4266 Directed Study, Environmental Science (0-0-2)
4366 Directed Study, Environmental Science (0-0-3)
Directed study problems in environmental science; hours and subjects to be arranged with each student; for undergraduate students who wish to do special work on a special problem. No student may receive credit for more than six hours of directed study work. Application of a directed study towards required upper division elective hours in the major is subject to prior approval by the departmental undergraduate studies committee. *Prerequisite*: Department approval.

4301 Senior Seminar (3-0)
Examination of case studies of the application, successful and unsuccessful, of environmental science at the local, regional, national, and international levels. Examples will illustrate the political, legal, and technical interactions that occur among government, industry, and science as society addresses environmental issues. *Prerequisite*: Senior standing in the College of Science or the College of Engineering.

4398 Environmental Science Internship (0-0-6)
Practical on-the-job experience in federal, state, city-county governmental, and/or private agencies or industries. *Prerequisites*: ESCI 2201 with a grade of "C" or better and department approval.

Interdisciplinary Courses Science (SCI)

The College of Science offers seven interdisciplinary (SCI) courses:

1100 Science Seminar (1-0)
This course will prepare entering students to succeed in the college and introduce students to careers in engineering and science.

1300 Introduction to Science and Engineering (3-0)
This course will help the student develop learning, study and group skills, improve math applications skills and develop critical thinking and basic computer and problem solving skills. Basic concepts in engineering and science will be introduced. (SCI 1300 is identical to ENGR 1300.) *Prerequisite:* MATH 0310. MATH 0310 may be taken concurrently with SCI 1300.

1401 Explanatory Power of Science (3-3)
Milestones in the development of science, including science in the Ancient and Medieval Worlds, the scientific revolution in the late Renaissance; the emergence of working models in physics, chemistry, and biology in the period of the Enlightenment through the mid-nineteenth century; the changing view of the Earth's history with the emergence of geology as a new science; evolutionary theory and the founding of genetics. Consideration of such topics as the explanatory power of empirical data and their interpretation, science vs. pseudo-science, science and theology. Laboratory exercises in science as a progress of investigation. *Prerequisite*: MATH 0310 or placement into MATH 0311 or higher level mathematics course. Laboratory fee required.

1405 Introduction to Earth and Life Sciences (3-3)
Integrated introduction to the earth and life sciences, based on review of fundamental physical and chemical principles. Energetics; thermodynamics; atoms and molecules; origin of the universe, starts, and planetary systems; origin and evolution of life; principles of geology and biology. Interdisciplinary treatment, with emphasis on quantitative analysis and composition.

Biological Sciences

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CHAIRPERSON: Eppie D. Rael
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PROFESSORS: Aguilera, Arenaz, Brady, Ellzey, Freeman, Goldstein, Harris, Irwin, Johnson, Jones, Lieb, MacKay, Rael
ASSOCIATE PROFESSOR EMERITUS: Peter S. Chrapliwy
ASSOCIATE PROFESSORS: Aley, Das, Ellzey, Walsh, Webb, Worthington
ASSISTANT PROFESSORS: Bain, Baldwin, Cabeza, Garza, Perez, Primm, Zhang
RESEARCH PROFESSOR: Mayberry

The Department of Biological Sciences offers the BA and the BS degrees in Biological Sciences and the BS degree in Microbiology. The BS degrees in Biological Sciences and Microbiology may be used to obtain a concentration in Secondary Teacher Certification.

BS in Biological Sciences

Requirements for the BS degree in Biological Sciences have the general College of Science requirements plus the following specific requirements:

Major (a minimum of 40 semester hours including 21 semester hours of upper-division course work): BIOL 1305-1107, 1306-1108, 4192; and one of these options:

a. **Biomedical Concentration:** MICR 2440, BIOL 3414, ZOOL 4181, and either ZOOL 4380 or BIOL 4388, plus a minimum of 19 semester hours (12 or more upper-division) of elective courses in Biological Sciences. BIOL 3320 is strongly recommended as one of the upper-division electives for this track. Students preparing for careers in the health sciences or for postgraduate study in medicine, dentistry, veterinary science, or advanced degrees in cell or molecular biology should select the Biomedical concentration. A minor in Chemistry is highly recommended.
b. **Ecology/Evolutionary Biology Concentration:** BIOL 3416, 3320, 3321, plus a minimum of 21 semester hours (10 or more upper-division) of elective courses in Biological Sciences. Students preparing for careers and/or advanced degrees in such fields as ecology, evolutionary biology, systematics, zoology, plant sciences, bioarcheology, paleontology, or wildlife and fisheries should select the ecology/evolutionary biology concentration. In addition to the required courses listed above for this track, at least two of the following are strongly recommended: BOT 2410, MICR 2440, ZOOL 2406, ZOOL 2466.

Minor: Acceptable minors are Anthropology, Chemistry, Computer Science, Environmental Science, Geological Sciences, Mathematics, Physics, Psychology, and Secondary Education.

Additional Science: CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106 are required. If chemistry is the minor, the additional science requirement may be met by GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304); or PHYS 1403-PHYS 1404; PHYS 2420 and PHYS 2421.

BS in Microbiology

The requirement for the BS degree in Microbiology consists of the general College of Science requirements plus the following specific requirements:

Major (a minimum of 42 semester hours, including 30 semester hours of upper-division course work): BIOL 1305-BIOL 1107; BIOL 1306-BIOL 1108; BIOL 3414; MICR 2440; MICR 3443; MICR 3445; MICR 3449; MICR 4453; BIOL 4192; at least nine semester hours to be selected from BIOL 3330, BIOL 3318-BIOL 3119, BIOL 4322, MICR 3328-MICR 3128, MICR 4329, MICR 4351-MICR 4152, MICR 4355, ZOOL 4380-ZOOL 4181, ZOOL 4384, and ZOOL 3464.

Minor :(19 semester hours of Chemistry course work including 11 semester hours of upper-division course work): CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 3324-CHEM 3124, CHEM 3325-CHEM 3125, and CHEM 4330 or CHEM 4332 are required. Under exceptional circumstances, other acceptable minors are (18 semester hours, including at least 6 semester hours of upper-division course work) in Computer Science, Geological Sciences, Mathematics, Physics, and Psychology.

Additional Science: The additional science is restricted to PHYS 1403-PHYS 1404 (or PHYS 1120, PHYS 2420, and PHYS 2421).

Other: BIOL 4390 and BIOL 4398 are highly recommended.

BA in Biological Sciences

Students should refer to the College of Liberal Arts section of this catalog for the general requirements for the BA degree. The major requirements are the same as for the BS in Biological Science. The minor requirements follow the requirements of the College of Liberal Arts.

Secondary Education Concentration

This concentration requires the following:

Major (a minimum of 40 semester hours including 21 semester hours of upper-division course work): Any of the Biological Sciences degree plans may be followed. However, it is recommended that upper-division courses be selected from BIOL 4225, 3320, 3321, 4370, 3414, 3416, 3427; BOT 3332, 3341, 3437; ZOOL 4476 or 4478.

Minor: This concentration requires a minor in secondary education if the Ecology/Evolutionary Biology concentration is selected, and double minor in both Secondary Education and Chemistry if the Biomedical concentration is selected.

Additional Science: CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106 are required. Secondary certification requires a minimum of 12 semester hours of a directly supporting field. If chemistry is selected as this field, an additional 4 semester hours of chemistry are required and the College of Science additional science requirement may be fulfilled by GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304);

or PHYS 1403-PHYS 1404; PHYS 2420 and PHYS 2421. If chemistry is **not** selected as the supporting field, a minimum of 12 semester hours of geology, mathematics, physics, or psychology are required for the directly supporting field.

Minor in Biology

A minor in Biology requires BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108, and an additional minimum of 10 semester hours, including at least 6 (9 for a BA degree) upper-division hours of organized courses in the Department of Biological Sciences.

Advising/Placement

Biological Sciences and Microbiology majors are required to consult with and have their enrollment approved by a departmental advisor. An entering freshman with at least one year of high school biology may take an advanced placement examination given by the Student Assessment and Testing Office covering BIOL 1305 and BIOL 1306. It is recommended that students taking the placement examination have an SAT combined score of at least 1000.

Departmental Honors in Biological Sciences

Any UTEP student having at least 90 hours of undergraduate credit, and a GPA of at least 3.3 either in Biological Sciences or Microbiology, and an overall GPA of at least 3.3, may apply for admission to the Departmental Honors Program. The Departmental Honors Committee retains the right to accept or not accept a qualified student, taking into consideration the number of applicants, the number of available faculty, and the competence of the individual student. The main requirements for Departmental Honors in Biological Sciences or Microbiology will be the satisfactory completion of an Honors Thesis based upon research in Biological Sciences or Microbiology, maintenance of an overall 3.3 GPA or better until graduation, and the presentation of a seminar on the thesis topic. The student will register for two semesters of BIOL 4398, and the research will be carried out under the direction of a member of the faculty in Biological Sciences. The satisfactory completion of the Honors Thesis will be judged by the thesis-research director and the Departmental Honors Committee. Departmental Honors may be awarded with or without other currently awarded honors.

Pre-professional Advising

Information about entrance requirements to professional schools may be obtained from the Pre-professional Advisor in the Office of the Dean of Science. Students should seek this advice by the time they have completed 60 hours of credit toward a degree. A degree in the Department of Biological Sciences provides excellent preparation for postgraduate study in a number of professions related to biology. While a degree in the Biological Sciences is not required for admission to professional schools and postgraduate programs, the following academic backgrounds are strongly recommended:

1. **Medicine, Dentistry, or Veterinary Medicine -** A minimum of one year of biology, two years of chemistry including one year of organic chemistry, one year of physics, and one semester of calculus are required for admission to most professional schools. A BS in Microbiology or Biological Sciences (Biomedical Track option) provides an excellent overall preparation for these careers.

2. **Physical Therapy -** The Pre-professional curriculum includes one year each of biology, chemistry, physics, and psychology; and one semester each of physiology, statistics, and technical writing. Students are strongly recommended to follow the requirements for a BS in Microbiology or Biological Sciences (Biomedical Track option) until they are admitted to the professional program. Specific requirements for the UTEP Physical Therapy Program may be found in the *Graduate Catalog*.
3. **Fisheries, Wildlife, Forest, and Range Sciences -** The BS in Biological Sciences (Ecology/Evolutionary Biology Track option) is strongly recommended as the best preparation for careers in these fields.

Biology (BIOL)

1103 Introductory Biology Methods (0-2)
(↳ BIOL 1108)
Elementary aspects of evolution, physiology, development, genetics, and ecology in plants and animals. Concurrent enrollment in BIOL 1303 is recommended. Laboratory fee required.

1104 Human Biology Laboratory (0-2)
Exercises and computer simulations of development, physiology, and heredity in humans. Concurrent enrollment in BIOL 1304 is recommended. Laboratory fee required.

1107 Topics in the Study of Life (0-2)
(↳ BIOL 1106)
Elementary aspects of cell structure, function, and genetics. Concurrent enrollment with BIOL 1305 recommended. Laboratory fee required.

1108 Organismal Biology (0-2)
(↳ BIOL 1107)
Laboratory experiments and observation on plants, animals, and fungi. Prerequisite: BIOL 1306. BIOL 1306 may be taken concurrently with BIOL 1108.

1303 Introductory Biology (3-0)
(↳ BIOL 1308)
Evolution and ecology, biotic diversity, and an introduction to principles of cell biology for BIS students and other non-science majors.

1304 Human Biology (3-0)
Introduction to the physiology, reproduction, development, and heredity of humans. Recommended for students in social work and other non-science majors.

1305 General Biology (3-0)
(↳ BIOL 1306)
A molecular approach to the principles of biology emphasizing cell biology and genetics. Prerequisite to upper level biology courses. *Prerequisites:* BIOL 1107 and MATH 0311 or an adequate score on a placement examination. BIOL 1107 may be taken concurrently with BIOL 1305.

1306 Organismal Biology (3-0)
(BIOL 1307)
Principles of structure and function at the organismal level; survey of biodiversity in plants, animals, and fungi. *Prerequisites*: BIOL 1108 and MATH 0311 or an adequate score on a placement examination. BIOL 1108 may be taken concurrently with BIOL 1306.

2111 Human Anatomy/Physiology Lab I (0-2)
(BIOL 2101)
Computer simulations and laboratory exercises in human anatomy and physiology with emphasis on the skeletal, muscular, and nervous systems. *Prerequisite*: BIOL 2311. BIOL 2311 may be taken concurrently with BIOL 2111. Laboratory fee required.

2113 Human Anatomy/Physiology Lab II (0-2)
(BIOL 2102)
Computer simulations and laboratory exercises in human anatomy and physiology with emphasis on homeostatic systems. *Prerequisite*: BIOL 2313. BIOL 2313 may be taken concurrently with BIOL 2113. Laboratory fee required.

2311 Human Anatomy/Physiology I (3-0)
(Normally offered in Spring semesters)
(BIOL 2301)
Biological molecules, body organization, and correlated structure and function of the human skeletal, integumentary, muscular, and nervous systems. *Prerequisites*: BIOL 1305-1107 or ZOOL 2406 (or equivalent); BIOL 2111. BIOL 2111 may be taken concurrently with BIOL 2311.

2313 Human Anatomy/Physiology II (3-0)
(BIOL 2302)
Correlated structure and function of the human cardiovascular, respiratory, digestive, urinary, reproductive, endocrine, and immune systems. *Prerequisites*: BIOL 1305-1107 or ZOOL 2406 (or equivalent); BIOL 2113. BIOL 2113 may be taken concurrently with BIOL 2313. BIOL 2311 recommended. Normally taught fall semester only.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3119 Experimental Embryology (0-3)
Techniques and observations of development in invertebrates and vertebrates, as well as regulatory patterns of plant hormones. *Prerequisite*: BIOL 3318. BIOL 3318 may be taken concurrently with BIOL 3119. Laboratory fee required.

3318 Developmental Biology (3-0)
A study of growth, differentiation, and developmental patterns in plants and animals. *Prerequisites*: BIOL 1305-1107; BIOL 3119. BIOL 3119 may be taken concurrently with BIOL 3318.

3320 Genetics (3-0)
The nature and functions of hereditary material with emphasis on the experimental procedures and data that have led to the current concepts in genetics. *Prerequisites*: BIOL 1305-1107 and BIOL 1306-1108.

3321 Evolutionary Theory (3-0)
Development of evolutionary thought, evidences of evolution, and evolutionary processes. *Prerequisites*: BIOL 3320.

3326 Animal Ecology (3-0)
Animal population dynamics, food habits, and nutritional aspects of ecosystem study. *Prerequisite*: BIOL 2316. GEOG 1306 is recommended.

3330 Histology (2-2)
Survey of tissue structure at the light microscopic level, with emphasis on animal specimens and identification. Not a course in preparative technique. *Prerequisite*: ZOOL 2406 or BIOL 1306-1108 or BIOL 2311 or BIOL 2313. Laboratory fee required.

3341 Plants in Southwest Cultures (3-0)
Study of food, fiber, medicinal and dye plants utilized by Southwest cultures with an emphasis on ethnobotany. Students may be required to take a one weekend field trip. *Prerequisites*: BIOL 1306, BIOL 1108 and BOT 2410.

3414 Molecular Cell Biology (3-3)
Biochemical and ultrastructural study of cells, including gene regulation, cell signaling, membrane transport, conduction, and contraction. Includes experimental techniques of cell and molecular biology. *Prerequisites*: BIOL 1305 and BIOL 1107 and CHEM 1306 or CHEM 1408. MICR 2440 is strongly recommended. Laboratory fee required.

3416 Ecology (3-3)
Interactions between populations of organisms and their environments at community and ecosystem levels. *Prerequisites:* BIOL 1306-1108 and (1) BOT 2410 or (2) ZOOL 2406 or (3) ZOOL 2466. MATH 1411 is recommended. Laboratory fee required.

3427 Desert Ecology (3-3)
Physical and biological characteristics of deserts, including behavioral and physiological adaptations of organisms to physical extremes, with emphasis on Chihuahuan Desert organisms. Field trips and research projects are required. *Prerequisites*: BIOL 2316 and BIOL 2117 or department approval.

4192 Senior Seminar (1-0)
A capstone review of basic biological principles, evaluation of student success, and preparation for postgraduate study or careers for majors in Biological Sciences and Microbiology. *Prerequisite*: Senior standing.

4198 Special Problems (0-0-2)
4298 Special Problems (0-0-4)
4398 Special Problems (0-0-6)
Laboratory research conducted by advanced students. No more than 6 hours of 4198-4398 may be counted toward graduation. *Prerequisite*: Instructor approval. Laboratory fee required.

4223 Transmission Electron Microscopy (0-4)
Techniques of analyzing cell ultrastructure. *Prerequisite*: BIOL 4322. BIOL 4322 may be taken concurrently with BIOL 4223. Laboratory fee required.

4225 Field Biology (0-6)
Collection and study of organisms under field conditions. Variable credit. No more than six hours of Field Biology may be counted toward degree. *Prerequisites*: BIOL 2117, BIOL 2316, and department approval. ZOOL 2466 recommended. Transportation fee varies according to destination of trip.

4320 Endocrinology (3-0)
Study of the effects and actions of animal hormones, the physiology of hormone control systems, and basic endocrinology research methods. BIOL 3414 or BIOL 4388 or ZOOL 4380 is recommended, but may be taken concurrently. *Prerequisites*: BIOL 1305-1107 and CHEM 1306-1408 each with a grade of "C" or better.

4322 Biological Ultrastructure Interpretation (3-0)
Explanation of the techniques of electron microscopy and interpretation of the fine structure and correlated biochemistry of viruses, prokaryotes, and eukaryotes. *Prerequisites*: BIOL 1107, BIOL 1305, and 12 hours of chemistry or department approval.

4324 Animal Behavior (3-0)
Theories and experiments that elucidate the biological basis for the behavior of animals. *Prerequisites*: BIOL 1108 and BIOL 1306, or ZOOL 2406.

4370 History and Philosophy of Biology (3-0)
Historical and philosophical dimensions of biology, as illustrated by selected themes such as Darwin and his critics, classical experiments in biology, evolutionary epistemology, and historical controversies in biology. *Prerequisites:* BIOL 1108 and BIOL 1306.

4388 Mammalian Physiology (3-0)
Physiological and homeostatic mechanisms in mammals, with emphasis on cardiovascular, respiratory, renal, digestive, and endocrine systems in mammals. *Prerequisites*: BIOL 1108 and BIOL 1306. BIOL 3414 and ZOOL 4384 recommended.

4390 Biological Practicum (0-0-6)
Practical on-the-job experience in federal, state, city-county governmental, and/or private agencies or industries. No more than 6 hours of BIOL 4390 and/or 4198-4398 will count toward graduation. *Prerequisites*: Senior standing, minimum of 15 advanced hours in designated subject matter areas of biological sciences necessary for job experience, and instructor approval.

4395 Topics in Biology (3-0)
Advanced study of contemporary research topics in molecular, cellular, organismic, environmental, or evolutionary biology. Topics vary according to instructor. May be repeated once for credit. *Prerequisite*: Department approval.

4428 Environmental Stressor in Ecosystems (3-3)
Study of the effects of biotic and abiotic stressors on plants and animals in terrestrial and aquatic environments, and practice of laboratory techniques used to measure such stressors. Field trips required: *Prerequisites*: ESCI 2103, CHEM 1106, CHEM 1306, and BIOL 3416. One semester of Organic Chemistry is recommended.

See the *Graduate Catalog* for graduate programs and courses.

Botany (BOT)

2410 General Botany (3-3)
(♦ BIOL 1411)
A general introduction to the diversity of eukaryotic autotrophs. The structure, growth, physiology, and importance of the flowering plants as the dominant land plants will be emphasized. *Prerequisites*: BIOL 1305, BIOL 1107, and MATH 1508. MATH 1508 may be taken concurrently with BOT 2410. Laboratory fee required.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3330 Comparative Plant Morphology (3-0)
Life histories, phylogenetic relationships of vascular and non-vascular plants. *Prerequisites*: BIOL 1306 and BIOL 1108, or BOT 2410.

3332 Economic Botany (3-0)
Origin and utilization of plants important to humans, with emphasis on nutritional aspects. *Prerequisites*: BIOL 1108 and BIOL 1306, or BOT 2410.

3437 Plant Taxonomy (2-4)
Characteristics, classification, and phylogenetic studies of native and ornamental vegetation. *Prerequisite*: BOT 2410. Laboratory fee required.

Microbiology (MICR)

2330 Microorganisms and Disease (3-0)
(♦ BIOL 2320)
A survey of microorganisms important to humans with emphasis on pathogens. Diagnostic procedures for pathogenicity of and immune responses to the more common pathogens. A terminal course not to be used as a prerequisite for any other course. A course for non-majors, including those in the nursing program. *Prerequisites*: BIOL 1107 and BIOL 1305.

2440 General Microbiology (3-3)
(♦ BIOL 2421)
Survey of microorganisms and their characteristics; aspects of biochemical cytology, physiology, and genetics; introduction to applied microbiology. Techniques used in the study of microorganisms. *Prerequisites*: BIOL 1107 and BIOL 1305; CHEM 1106 and CHEM 1306; MATH 1508. CHEM 1106, CHEM 1306, and MATH 1508 may be taken concurrently with MICR 2440. Laboratory fee required.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3328 Microorganisms in Ecosystems (3-0)
The relationship between microorganisms (viruses, bacteria, fungi, algae, and protozoa) and their environment (air, water and soil microbiology decomposition, and pollution). *Prerequisites*: CHEM 1106, CHEM 1306, and MICR 3128. MICR 3128 may be taken concurrently with MICR 3328. MICR 2440 recommended.

3443 Pathogenic Microbiology (3-3) (Offered only in Spring semesters)
Epidemiology, pathogenicity, and host response to disease-producing microorganisms. Diagnostic procedures for isolating and identifying pathogens. *Prerequisite*: MICR 2440. Laboratory fee required.

3445 Microbial Physiology (3-3)
Biochemical cytology, growth, nutrition, metabolism, and genetics of microorganisms. Techniques for studying physiological activities of microbial cells. *Prerequisites*: MICR 2440, CHEM 3325, and CHEM 3125. Laboratory fee required.

3449 Prokaryotic Molecular Genetics (3-3)
Molecular biology of prokaryotes. Transfer of genetic information, structure and organization of the prokaryotic genome, regulation of gene expression, and genetic engineering. *Prerequisite*: BIOL 3320 or MICR 2440. Laboratory fee required.

4329 Epidemiology (3-0)
Distribution and determinants of health-related states or events in specific populations and their applications to the control of health problems. Basic concepts and methodologies used in epidemiological research are also covered. MICR 3443 is recommended, and may be taken concurrently. *Prerequisites*: MICR 2440 and CHEM 1306-1408 each with a grade of "C" or better.

4351 General Virology (3-0)
Biochemistry and virus-host interactions of animal, bacterial, insect, and plant viruses. *Prerequisites*: MICR 2440 or MICR 4152, and BIOL 3320. MICR 3445 also recommended.

4355 Medical Mycology (3-0)
A study of the fungi of medical importance. *Prerequisite*: MICR 2440.

4453 Immunology (3-3) (Offered only in Fall semesters)
Antigens and antibodies, humoral and cellular immunity, transplantation, complement, and diseases of the immune system. *Prerequisites*: MICR 2440, CHEM 3125, and CHEM 3325. Laboratory fee required.

Zoology (ZOOL)

2406 Vertebrate Zoology (3-3)
(BIOL 2428)
A survey of basic classification, functional systems, and biology of vertebrates. *Prerequisites*: BIOL 1107 and BIOL 1305, BIOL 1108 and BIOL 1306, and MATH 1508. MATH 1508 may be taken concurrently with ZOOL 2406. Laboratory fee required.

2466 Invertebrate Zoology (3-3)
(BIOL 1413)
Survey and laboratory exercises concerning the invertebrates with emphasis on phylogeny. *Prerequisites*: BIOL 1107 and BIOL 1305, and BIOL 1108 and BIOL 1306. Laboratory fee required.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3464 Medical Parasitology (3-3)
A survey of medically important parasites. *Prerequisite*: ZOOL 2406, or BIOL 1108 and BIOL 1306. Laboratory fee required.

3468 Entomology (3-3)
Evolution, phylogeny, ecology, physiology, morphology, and systematics of insects. Field trips and an insect collection are required. *Prerequisites*: BIOL 1108 and BIOL 1306.

4155 Vertebrate Paleontology Techniques (0-3)
Collection, preservation, identification, and curation of vertebrate fossils. This course is identical to GEOL 4155. *Prerequisite*: ZOOL 4354. ZOOL 4354 may be taken concurrently with ZOOL 4155. Lab fee required.

4157 Advanced Vertebrate Paleontology Techniques (0-3)
Collection, preservation, identification, and curation of vertebrate fossils. This course is identical to GEOL 4157. *Prerequisite*: ZOOL 4356. ZOOL 4356 may be taken concurrently with ZOOL 4157. Laboratory fee required.

4181 Vertebrate Physiology Methods (0-3)
Techniques and instrumentation used in the study of vertebrate function. *Prerequisite*: ZOOL 4380. ZOOL 4380 may be taken concurrently with ZOOL 4181. Laboratory fee required.

4354 Paleozoic and Mesozoic Vertebrate Paleontology (3-0)
Study of evolution, biologic history, biostratigraphy, and classification of the Paleozoic and Mesozoic vertebrates with emphasis on the lower vertebrates and an introduction to early mammalian development. This course is identical to GEOL 4354. *Corequisite:* ZOOL 4155. *Prerequisite*: (1) GEOL 1302-1102, (2) ZOOL 2406, (3) BIOL 1306-1108, or (4) department approval.

4356 Cenozoic Vertebrate Paleontology (3-0)
Study of the evolution, biologic history, biostratigraphy, and classification of the Cenozoic vertebrates with major emphasis on the mammals. This course is identical to GEOL 4356. *Prerequisites*: ZOOL 4157 and (1) GEOL 1302-1102, (2) ZOOL 2406, (3) BIOL 1306-1108, or (4) department approval. ZOOL 4157 may be taken concurrently with ZOOL 4356.

4380 Vertebrate Physiology (3-0)
Vertebrate systemic functions emphasizing nerve action and movement, endocrinology and metabolic controls, osmoregulation, cardio-physiology, and respiration. *Prerequisites*: CHEM 1306-1106, ZOOL 4181, and (1) BIOL 3414, (2) ZOOL 2406, or (3) BIOL 1306-1108. ZOOL 4181 may be taken concurrently with ZOOL 4380.

4384 Neurobiology (3-0)
Neural organization in animals. Evolution of nervous systems in different phyla, with emphasis on network and neurochemical mechanisms for information processing. *Prerequisite*: ZOOL 2406, ZOOL 4380, or BIOL 1306 and BIOL 1108.

4476 Fish, Amphibians, and Reptiles (3-3)
Classification and natural history of fish, amphibians, and reptiles. *Prerequisite*: ZOOL 2406, or BIOL 1306 and BIOL 1108. Laboratory fee required.

4478 Birds and Mammals (3-3)
History of the study, literature, and biology of birds and mammals. *Prerequisite*: ZOOL 2406, or BIOL 1306 and BIOL 1108. Laboratory fee required.

Chemistry

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ASSOCIATE PROFESSOR EMERITUS: Joseph Scruggs
ASSOCIATE PROFESSORS: Becvar, Salvador, Stec
ASSISTANT PROFESSOR: Gardner, Lee, Martinez, Noveron, Saupe

The Department of Chemistry offers both a BA degree and a BS degree in Chemistry. Both degrees include the opportunity to obtain a concentration in Secondary Teacher Certification.

BS in Chemistry

The requirement to obtain a BS in Chemistry consists of the general College of Science requirements plus the following specific requirements:

Major (44 semester hours including 32 semester hours of upper-division courses): CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 2101, CHEM 2261-CHEM 2161, CHEM 3310-CHEM 3110, CHEM 3321-CHEM 3221, CHEM 3322-CHEM 3222, CHEM 3351-CHEM 3151, CHEM 3352-CHEM 3152, CHEM 4211-CHEM 4212, CHEM 4365, CHEM 4330 or CHEM 4332

Minor: If the minor is Biology, BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108, BIOL 3318, and BIOL 3320 are required, plus additional course work to meet the minimum standard of 18 semester hours. Other acceptable minors are Computer Science, Environmental Science, Geology, Mathematics, Physics, and Secondary Education.

Additional Science: PHYS 2420 and PHYS 2421 are required. If physics is the minor, the additional science requirement may be met by BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; or GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304).

Other: CS 1401 or CS 1420, MATH 1312, and MATH 2313 are required.

Secondary Education Concentration

Major The requirement of CHEM 4330 or CHEM 4332 is waived. (This may affect the ACS certification of the BS in Chemistry.)

Minor: This concentration requires a minor in Secondary Education.

Other: PHYS 2420-PHYS 2421 are required. The recommended 12 semester hour supporting field is physics, and consists of PHYS 2420, PHYS 2421, PHYS 3325, and either PHYS 3112 or PHYS 3122. Other 12 semester hour supporting fields may be biology, geology, or mathematics; in which case, PHYS 2420 and PHYS 2421 may be used as the additional science. The additional science requirement may be met by BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; or GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304).

BA in Chemistry

Students should refer to the College of Liberal Arts section of this catalog for the general requirements for the BA degree. Secondary Teaching Certification in Chemistry may also be obtained through these Colleges. A minor in the College of Liberal Arts requires nine semester hours of upper-division course work. The major may be selected from two concentrations:

General: The specific courses required are (33 semester hours including 25 semester hours of upper-division courses) CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 3310-CHEM 3110, CHEM 3321-CHEM 3221, CHEM 3322-CHEM 3222, CHEM 3351-CHEM 3151, CHEM 3352-CHEM 3152, plus 3 semester hours selected from CHEM 4211, CHEM 4212, CHEM 4328, CHEM 4330, CHEM 4332, CHEM 4362, CHEM 4365, CHEM 4176, CHEM 4376, or CHEM 4380.

Pre-Medical/Pre-Dental: The specific courses required are (31 semester hours including 23 semester hours of upper-division courses) CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CHEM 3310-CHEM 3110, CHEM 3324-CHEM 3124, CHEM 3325-CHEM 3125; plus 9 semester hours selected from CHEM 3351-CHEM 3151, CHEM 3352-CHEM 3152, CHEM 4211-CHEM 4212, CHEM 4328, CHEM 4330, CHEM 4332, CHEM 4362, CHEM 4365, CHEM 4176, CHEM 4376, or CHEM 4380.

Minor in Chemistry

A minor in Chemistry requires CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, and an additional minimum of 10 semester hours, including at least 8 (9 for a BA degree) upper-division hours. Majors in mathematics or physics may select from CHEM 2261-CHEM 2161, CHEM 3321-CHEM 3221, CHEM 3322-CHEM 3222, CHEM 3310-CHEM 3110, CHEM 3351-CHEM 3151, or CHEM 3352-CHEM 3152. Other majors may select from CHEM 3324-CHEM 3124, CHEM 3325-CHEM 3125, CHEM 4330, or CHEM 4332.

Five-Year BS-MS Program

The curriculum for the BS degree in Chemistry can be completed in three and one-half years. After admission to the Graduate School of the University, it is possible to obtain the MS degree at the end of the 5th year of study in chemistry. Qualified students should consult their academic advisor about the course of study and regarding various forms of financial assistance obtainable through this program.

BS Degree with Departmental Honors in Chemistry

A candidate for Departmental Honors in chemistry will have demonstrated ability in chemistry, will have maintained a GPA of 3.0 by the end of the junior year, and will maintain this average until graduation. The main requirement

for Departmental Honors will be the satisfactory completion of an Honors Thesis based on research in chemistry. Usually this research will be carried out under the direction of a member of the faculty of the Department of Chemistry or a suitable faculty member from another department of the University. The satisfactory completion of the Honors thesis will be judged by the thesis-research director in conjunction with the Departmental Honors Committee. Other faculty and outside referees may be consulted if it is deemed to be appropriate to do so.

The candidate for Departmental Honors must request approval of candidacy during the second semester of the junior year. The Department of Chemistry reserves the right to accept or not accept a qualified student taking into consideration the number of applicants, the number of available faculty, and the competence of an individual student. The accepted honors candidate will enroll in CHEM 4176 or CHEM 4376 during both semesters of the senior year and will have accumulated a total of 6 hours of CHEM 4176 and CHEM 4376 credit on completion of the honors program. Other regulations, procedures, and dates for use by honors candidates are available from the Chairperson, Department of Chemistry.

Advising/Placement

All Chemistry majors are required to consult with and have their enrollment approved by their department advisor before every enrollment.

All entering freshman students with at least one year of high school chemistry with an “A” or “B” in chemistry and an SAT score of at least 1000 may take an Achievement Examination given by the department. If a student scores 80 or above, he or she will be given the corresponding grade AND credit for CHEM 1305.

An entering freshman student with two years of high school chemistry with grades of “A” or “B” and an SAT score of at least 1000 may take Achievement Examinations given by the department over CHEM 1305 and 1306. If the score is 80 or above, the corresponding grade and credit for CHEM 1305 and 1306 will be given.

An entering freshman student with the above qualifications and with scores less than 80 on the Achievement Examination may at the discretion of the department be allowed to enter the next higher course without credit granted.

Chemistry (CHEM)

1106 Laboratory for Chemistry 1306 (0-3)
(CHEM 1112)
Prerequisite: CHEM 1306 if required in student’s degree plan. CHEM 1306 may be taken concurrently with CHEM 1106. Laboratory fee required.

1305 General Chemistry (2-2)
(CHEM 1311)
The basic laws and theories of chemistry: characterization of the elements and their most important compounds. For students who need a foundation for work in advanced chemistry and related sciences. *Prerequisites*: MATH 1410, MATH 1508, or an SAT Math score of at least 600; and, if required in student’s degree plan, CHEM 1105. MATH 1508 and/or CHEM 1105 may be taken concurrently with CHEM 1305.

1306 General Chemistry (3-0)
(♦ CHEM 1312)
A continuation of CHEM 1305. Includes substantial coverage of chemical kinetics and thermodynamics. *Prerequisites*: CHEM 1305, CHEM 1105, CHEM 1106, and MATH 1410 or MATH 1508, or an SAT Math score of at least 600. CHEM 1106 may be taken concurrently with CHEM 1306.

1407 Introductory Chemistry (3-3)
(♦ CHEM 1406)
Basic concepts relating to composition, structure, and transformation of matter. Satisfies the chemistry requirement for nursing. Students who need a foundation for work in advanced chemistry and related sciences or engineering fields should take CHEM 1305, CHEM 1105, CHEM 1306, and CHEM 1106. *Prerequisite*: MATH 0311 or an adequate score on a placement examination. MATH 0311 may be taken concurrently with CHEM 1407. Laboratory fee required.

1408 Introductory Chemistry (3-3)
(♦ CHEM 1408)
A continuation of CHEM 1407. Includes surveys of organic chemistry and biochemistry. *Prerequisites*: MATH 0311 (or an adequate score on a placement examination) and CHEM 1407. CHEM 1407 may be taken concurrently with CHEM 1408. Laboratory fee required.

2101 Molecular Modeling and Chemical Information (0-3)
Introduction to computational methods for molecular visualization, structure optimization, and modeling; includes strategies for chemical data analysis and obtaining chemical information from the Internet and conventional sources. *Prerequisites:* CHEM 1106, CHEM 1306, and department approval.

2161 Laboratory for CHEM 2261 (0-3)
Laboratory fee required.

2261 The Periodic Table (2-0)
A survey course that expounds the principles of periodicity in the descriptive chemistry of the elements. Among the areas covered will be the alkali and alkaline earth metals, the carbon/silicon/germanium/tin and lead group, the chemistry of nitrogen, phosphorus, and the halogens. Where possible, pertinent technical applications of the elements, and materials derived from them, will be presented, e.g., medicinal, inorganic polymer, and semi-conductor applications. *Prerequisites*: CHEM 1106 and CHEM 1306.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3110 Laboratory for Chemistry 3310 (0-4)
Prerequisite: CHEM 3310. CHEM 3310 may be taken concurrently with CHEM 3110. Laboratory fee required.

3124 Laboratory for Chemistry 3324 (0-3)
Prerequisite: CHEM 3324. CHEM 3324 may be taken concurrently with CHEM 3124. Laboratory fee required.

3125 Laboratory for Chemistry 3325 (0-3)
Prerequisite: CHEM 3325. CHEM 3325 may be taken concurrently with CHEM 3125. Laboratory fee required.

3151 Laboratory for Chemistry 3351 (0-4)
Prerequisite: CHEM 3351 if required in student's degree plan. CHEM 3351 may be taken concurrently with CHEM 3151. Laboratory fee required.

3152 Laboratory for Chemistry 3352 (0-4)
Prerequisite: CHEM 3352 if required in student's degree plan. CHEM 3352 may be taken concurrently with CHEM 3152. Laboratory fee required.

3221 Laboratory for Chemistry 3321 (0-6)
Prerequisite: CHEM 3321. CHEM 3321 may be taken concurrently with CHEM 3221. Laboratory fee required.

3222 Laboratory for Chemistry 3322 (0-6)
Prerequisite: CHEM 3322. CHEM 3322 may be taken concurrently with CHEM 3222. Laboratory fee required.

3310 Analytical Chemistry (3-0)
Quantitative measurements and calculations, chemical equilibrium as applied to analyses and separations. This course is designed for chemistry majors. *Prerequisites*: CHEM 3322, MATH 2313, and PHYS 2421. MATH 2313 may be taken concurrently with CHEM 3310.

3321 Organic Chemistry (3-0)
A study of chemical bonding and structure in organic molecules, functional group synthesis and reactions, reaction mechanisms, nomenclature, stereochemistry, and isomerism. Intended for chemistry majors and others requiring a comprehensive approach to organic chemistry. May not be counted in addition to CHEM 3324. *Prerequisites*: CHEM 1106, CHEM 1306, and CHEM 3221. CHEM 3221 may be taken concurrently with CHEM 3321.

3322 Organic Chemistry (3-0)
A continuation of CHEM 3321. Intended for chemistry majors and others requiring a comprehensive approach to organic chemistry. May not be counted in addition to CHEM 3325. *Prerequisites*: CHEM 3221, CHEM 3321, and CHEM 3222. CHEM 3222 may be taken concurrently with CHEM 3322.

3324 Organic Chemistry (3-0)
A study of the fundamental types of carbon compounds. Intended for students not requiring the detailed comprehensive courses specified for the BS degree in Chemistry. May not be counted in addition to CHEM 3321. *Prerequisites*: CHEM 1306-1106 and CHEM 3124. CHEM 3124 may be taken concurrently with CHEM 3324.

3325 Organic Chemistry (3-0)
A continuation of CHEM 3324 with emphasis on organic compounds and their reactions in living systems. May not be counted in addition to CHEM 3322. *Prerequisites*: CHEM 3125 and CHEM 3324. CHEM 3125 may be taken concurrently with CHEM 3325.

3351 Physical Chemistry (3-0)
Chemical thermodynamics. *Prerequisites*: CHEM 1106 and CHEM 1306, CHEM 3151, MATH 2313, and PHYS 2421. CHEM 3151 and MATH 2313 may be taken concurrently with CHEM 3351.

3352 Physical Chemistry (3-0)
Properties of substances in gaseous, liquid and solid states; solutions, thermodynamics, kinetics and other advanced topics. *Prerequisites*: CHEM 1106, CHEM 1306, CHEM 3152, PHYS 2421, and MATH 2313. MATH 2313 and CHEM 3152 may be taken concurrently with CHEM 3352.

4165 Laboratory for Inorganic Chemistry (0-4)
Provides laboratory practical exposure for students taking Inorganic Chemistry 4365. Prerequisite: CHEM 4365. CHEM 4365 may be taken concurrently with CHEM 4165. Laboratory fee required.

4176 Introduction to Research (0-0-3)
4376 Introduction to Research (0-0-9)
Credit will be granted only upon completion of research in the senior year on the recommendation of the head of the Chemistry Department. May be repeated for credit up to a total of 6 credit hours of CHEM 4176 and CHEM 4376. All credit accrued will be counted as elective hours only. *Prerequisite*: Department approval. Fees required.

4211 Instrumental Methods of Analytical Chemistry (2-0)
A study of the more important optical and electrical methods of chemical analysis. *Prerequisites*: CHEM 3322, CHEM 3352, and CHEM 4212. CHEM 4212 may be taken concurrently with CHEM 4211.

4212 Laboratory for Chemistry 4211 (0-6)
Prerequisite: CHEM 4211. CHEM 4211 may be taken concurrently with CHEM 4212. Laboratory fee required.

4328 Advanced Topics in Organic Chemistry (3-0)
Selected topics at the undergraduate level which are not usually covered in introductory courses in organic chemistry. Course may be repeated for credit when topics vary. *Prerequisite*: CHEM 3322 or CHEM 3325.

4330 Biochemistry: Structure and Function (3-0)
A study of the major classes of biomolecules, including amino acids, proteins, nucleic acids, carbohydrates and lipids with introductions to biochemical techniques and enzyme kinetics. *Prerequisite*: CHEM 3322 or CHEM 3325.

4332 Biochemistry: Dynamics and Information (3-0)
Investigation of enzyme function, bioenergetics, metabolism, and the molecular aspects of replication, transcription, and translation. *Prerequisite*: CHEM 3322 or CHEM 3325. CHEM 4330 is recommended but not required as a prerequisite.

4362 Structure of Matter (3-0)
Introduction to quantum theory; atomic and molecular structure; atomic and molecular spectra; chemical bonding. *Prerequisites*: (1) PHYS 2421 and CHEM 3352 or (2) department approval.

4365 Inorganic Chemistry (3-0)
Principles of molecular structure and chemical reactivity of inorganic compounds; coordination chemistry and introduction to ligand field theory; kinetics and mechanisms of inorganic reactions; organometallic compounds; chemistry of nonmetals and physical methods in inorganic chemistry. *Prerequisites*: CHEM 3322 and CHEM 3352.

4380 Polymer Chemistry (3-0)
A survey of high polymers, including synthesis, characterization, and structure-property relationships. Considers step and chain polymerization, stereochemistry, and copolymerization. Also, thermally stable polymers, conducting and photoactive polymers. *Prerequisite*: CHEM 3322 or CHEM 3325.

See the *Graduate Catalog* for graduate programs and courses.

Geological Sciences

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CHAIRPERSON: Diane Doser
PROFESSORS EMERITUS: Kenneth F. Clark, Jerry M. Hoffer, Robert F. Roy, Robert H. Schmidt
PROFESSORS: Doser, Keller, LeMone, Miller, Pingitore
ASSOCIATE PROFESSORS: Anthony, Cornell, Goodell, Langford, Velasco
ASSISTANT PROFESSORS: Andronicos, Hurtado, Schulze-Makuch

The department of Geological Sciences offers both the BA and BS degrees in Geological Sciences and the BS in Geophysics and Earth Science. The BS in Earth Science degree includes the opportunity to obtain a concentration in Secondary Teacher Certification.

BS in Geological Sciences

The requirement to obtain the BS in Geological Sciences consists of the general College of Science requirements plus the following specific requirements:

Major (a minimum of 42 semester hours including 26 semester hours of upper-division course work): GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411, GEOL 2412, GEOL 3315, GEOL 3420, GEOL 3423, GEOL 3425, and GEOL 4665 plus 6 to 8 additional semester hours in geology or geophysics at the senior level. Only 3 of these 6 to 8 units may be from Senior Thesis or Directed Study.

Minor: Acceptable minors are Anthropology, Biology, Chemistry, Computer Science, Distributed minor, Mathematics, and Physics.

Other: CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106, CS 1401 or CS 1420; MATH 1312, PHYS 2420 and PHYS 2421, and PHYS 2230 are required.

Environmental Geoscience

The department offers a group of courses designed for Geological Sciences or Geophysics majors planning careers in the environmental field. When used to fulfill the elective requirements in geological sciences called for in these majors, these courses will provide the graduate with a strong contemporary background in those areas most critical to environmental investigations and problem solving. These courses include GEOL 4316 (Geochemistry), GEOL 4380 (Environmental Geology and Geophysics), GEOP 4334 (Exploration Geophysics: Non-seismic Methods), and GEOL 4399 (Senior Thesis).

BS in Geophysics

The requirement to obtain the BS in Geophysics consists of the general College of Science requirements plus the following specific requirements:

Major (a minimum of 40 semester hours including 30 semester hours of upper-division course work): GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411, GEOL 3315, GEOL 3423, GEOL 3425, GEOL 4665, GEOP 4332, GEOP 4334, plus 8 semester hours of upper-division course work in computer science, engineering, geological sciences, mathematics, physics.

Minor (19 semester hours including nine semester hours of upper-division course work): A Physics minor is required, consisting of PHYS 2420 and PHYS 2421, PHYS 2230, PHYS 3351, PHYS 4328, and PHYS 4341.

Other: CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; CS 1401 or CS 1420; MATH 1312, MATH 2313, MATH 2326, and MATH 4336 are required.

BS in Earth Science

This degree is designed primarily for students seeking Secondary Teacher Certification, not those wishing to be professional geologists or planning to continue their education in the field. The requirement to obtain the BS in Earth Science consists of the general College of Science requirements plus the following specific requirements:

Major (a minimum of 36 semester hours, including 21 semester hours of upper-division course work): GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304); GEOL 2411 or GEOL 3405; GEOL 3420 (or GEOL 3380); GEOL 3355; GEOG 3306, ASTR 1307-ASTR 1107, and upper-division courses in geological sciences as needed to meet the 36-hour major requirement.

Minor: Secondary Education is the recommended minor. Other minors may be selected with consultation with the undergraduate advisor from Biology, Chemistry, Mathematics, or Physics.

Other: CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106 are required. If chemistry is the minor, BIOL 1305-BIOL 1107 and BIOL 1306-BIOL 1108; or PHYS 1403-PHYS 1404 (or PHYS 2420-PHYS 2421) may be used as the additional science.

Secondary Education Concentration: This concentration requires a minor in Secondary Education. Biology or Chemistry is recommended as the 12-semester hour supporting field. If chemistry is not the supporting field, the required CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106 may be used as the second science. Otherwise, (1) BIOL 1305- BIOL 1107 and BIOL 1306-BIOL 1108; or (2) PHYS 1403-PHYS 1404 (or PHYS 2420-PHYS 2421) may be used as the additional science.

BA in Geological Sciences

Students should refer to the College of Liberal Arts section of this catalog for the general requirements for the BA degree. The specific courses required for the major are (a minimum of 30 semester hours including 20 semester hours of upper-division course work) GEOL 1301-GEOL 1101 (or GEOL 1303), GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2412, GEOL 3405 (or GEOL 2411 and GEOL 3315), GEOL 3380 (or GEOL 3420), GEOL 3355 (or GEOL 3423), GEOL 3425, plus a minimum of 6 hours of additional upper-division GEOL courses. MATH 1508 is required and other science courses must include two of the following: CHEM 1305-CHEM 1105, PHYS 1403 (or PHYS 2420), BIOL 1305-BIOL 1107.

Minor in Geology

A minor in Geology requires GEOL 1301-GEOL 1101 (or GEOL 1303), and GEOL 1302-GEOL 1102 (or GEOL 1304), GEOL 2411 or GEOL 2412, and an additional minimum of 6 to 8 upper-division semester hours selected from GEOL 3315, GEOL 3420, GEOL 3423, GEOL 3425, GEOP 4332, GEOP 4334, or other 4000-level organized class.

Minor in Earth Science

A minor in Earth Science requires GEOL 1301-1101 (or GEOL 1303) and GEOL 1302-1102 (or GEOL 1304), GEOL 2412 (recommended), and upper division courses chosen from the following list: GEOL 3311, GEOL 3330, GEOL 3340, GEOL 3345, GEOL 3350, GEOL 3355, GEOL 3359, GEOL 3360, GEOL 3405, GEOL 3420, GEOL 3425, or 4000-level organized classes in Geology or Geophysics. A total of 18 semester hours, including at least 9 semester hours of upper-division classes, is required. This minor is intended for students whose majors do not require the chemistry, mathematics, and physics classes required in BS degree plans.

Distributed Minor

A distributed minor is available for Bachelor of Science in Geological Science majors only. It requires the following courses: CHEM 1305-1105 and CHEM 1306-1106, MATH 1312, PHYS 2420, PHYS 2421, and PHYS 2230, and at least 6 semester hours of upper-division classes in one of the following disciplines: Anthropology, Biological Sciences, Chemistry, Computer Science, Environmental Science, Mathematics, Physics, or Statistics.

"C" Rule

Students must earn a grade of "C" or better in all courses taken within the Department of Geological Sciences that are used to satisfy the above Geology and Geophysics degree requirements. Continuation in sequence courses (such as GEOL 3315) after receiving a "D" in one of these courses is permitted with permission of the instructor. A student receiving a grade of "D" in a required course must repeat the course at its earliest offering. Students receiving consecutive grades of "D" will not be allowed to continue sequence courses until grades of "C" or better have been earned in the appropriate courses. A minimum GPA of 2.0 must be achieved in required science courses taken outside the Geological Sciences department.

Departmental Research

All undergraduate students are encouraged to complete a research experience. The preferred option is completion of a Senior Thesis (GEOL 4399). However, an appropriate Directed Study (GEOL 4166-GEOL 4366 or GEOP 4167-GEOP 4367) or Undergraduate Research (GEOL 4189-GEOL 4389) course also fulfills this requirement.

Departmental Honors in Geology or Geophysics

The main requirements for Departmental Honors in Geology or Geophysics will be the satisfactory completion of a Senior Thesis based upon research in geology or geophysics, maintenance of a 3.25 GPA or better until graduation, and the presentation of a seminar on the thesis topic. The research will be carried out under the direction of a member of the faculty of the Department of Geological Sciences. The satisfactory completion of the Senior Thesis will be judged by the thesis-research director and the Departmental Honors Committee. Policies and procedures of the Honors degree will be administered by the Departmental Honors Committee. Departmental Honors may be awarded with or without other University honors.

Geography (GEOG)

1106 Laboratory for Geography 1306 (0-2)
Required for minors in Geography and students who select the Geography option to fulfill the natural science component of the University Core Curriculum. It is optional to all other students. GEOL 1106 may be taken concurrently with GEOG 1306. Laboratory fee required.

1306 Physical Geography (3-0)
(♞ GEOG 1301)
Introduction to features and processes of the atmosphere, hydrosphere, biosphere, and lithosphere, with emphasis on spatial (distribution) patterns, and interactions between the four earth realms and human activities. The course culminates in a discussion of global environmental regions. Required of all minors in Geography. Minors should take GEOG 1106 concurrently.

1310 Cultural Geography (3-0)
(♞ GEOG 1302)
Introduction to cultural elements, their spatial distribution, and their interrelationship to the physical environment. This course is identical to ANTH 1310.

General Prerequisite: Junior standing for all upper-division courses.

3306 Weather and Climate (3-0)
Study of the components of weather, weather processes, and measurement, climate elements and control factors; geographic classification of climates and natural vegetation on the earth's surface. *Prerequisite*: GEOG 1306, GEOL 1303, GEOL 1301, or instructor approval.

Geology (GEOL)

1101 Laboratory for Geology 1301 (0-2)
(♞ GEOL 1103)
Concurrent enrollment in GEOL 1301 suggested. Laboratory fee required.

1102 Laboratory for Geology 1302 (0-3)
(♞ GEOL 1104)
Prerequisite: GEOL 1101. Concurrent enrollment in GEOL 1302 suggested. Laboratory fee required.

1301 Introduction to Physical Geology (3-0)
(GEOL 1303)
An introductory study of the earth's composition, structure, and internal and external processes. Concurrent enrollment in laboratory (GEOL 1101) suggested but not required. A student may not receive credit for both GEOL 1301 and GEOL 1303.

1302 Introduction to Historical Geology (3-0)
(GEOL 1304)
An integrated study of the geologic history of the earth with a consideration of the history of life as documented by the fossil record. Concurrent enrollment in laboratory (GEOL 1102) suggested but not required. A student may not receive credit for both GEOL 1302 and GEOL 1304. *Prerequisite*: GEOL 1301.

1303 Principles of Earth Sciences (2-2)
(GEOL 1301)
Study of the earth as a planet. A survey of the physical processes operating in the atmosphere, lithosphere, and biosphere. Includes an introduction to meteorology, physical geology, soils, and vegetation. Concurrent laboratory enrollment is required. A student may not receive credit for both GEOL 1303 and GEOL 1301. Laboratory fee required.

1304 Principles of Earth Sciences (2-2)
(GEOL 1302)
Study of the earth as a planet. A survey of earth history as interpreted from and exhibited by plants, animals, rocks, and minerals; a study of the earth in space; a survey of the physical processes operating in the hydrosphere. Includes an introduction to historical geology, astronomy, physiography, and oceanography. Concurrent laboratory enrollment is required. A student may not receive credit for both GEOL 1304 and GEOL 1302. *Prerequisite:* GEOL 1303. Laboratory fee required.

2411 Mineralogy and Petrology (3-3)
(GEOL 2409)
Study of the crystallography, physical properties, classification, and identification of rock-forming minerals and ores. *Prerequisite*: CHEM 1305 with a grade of "C" or better. Laboratory fee required.

2412 Geoscience Processes (3-3)
Field-oriented, problem-solving studies emphasizing field identification of rocks; study of landforms and processes that create them and the use of maps, aerial photographs, and satellite imagery. Emphasis on developing observational and analytical skills and the use of multiple working hypotheses. *Prerequisites*: (1) GEOL 1301, GEOL 1101, GEOL 1302, GEOL 1102 or (2) GEOL 1303 and 1304.

General Prerequisite: Junior standing for all upper-division courses. All required lower-division courses in the major should be completed with a "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; consult the *Graduate Catalog* for the listing of these courses.

3311 Geology of El Paso (2-3)
An introduction to the stratigraphy, tectonic history, paleontology, and geomorphology and geoscience-related environmental issues of the

El Paso area. Lectures will stress use of basic geologic principles to develop understanding of the geologic processes which have shaped the area. Laboratory will consist of a series of field trips during the semester. Students whose degree plans require GEOL 4665 may use this course for elective credit only. *Prerequisites*: (1) GEOL 1303 and GEOL 1304 or (2) GEOL 1301 and GEOL 1302. Laboratory fee required.

3315 Igneous and Metamorphic Petrology (2-3)
Petrogenesis of igneous and metamorphic rocks, including the thermodynamics and physical properties of minerals and metals and the petrography of samples in thin-section. *Prerequisites*: GEOL 2411 and CHEM 1305. MATH 1411 recommended. Laboratory fee required.

3321 Geology for Engineers (2-3)
The principles of physical geology and their practical applications to civil engineering. This course cannot be counted as a required upper-level course in Geology. *Prerequisite*: Junior standing in engineering or instructor approval. Laboratory fee required.

3330 Applied Geomorphology (2-3)
An introduction to the genesis of landforms and the processes that shape the earth's surface. Geomorphic data are applied to solving environmental problems. Topics include earth surface processes, internal forces, climate and climatic change, weathering, mass movement and erosion, channels and stream channel evolution, drainage basins, fluvial landforms, coastal landforms, arid landforms, and glacial landforms. *Prerequisite*: GEOL 2412. Laboratory fee required.

3340 Vulcanology (3-0)
A study of the origin, eruption patterns, and products of volcanoes. Discussion of thermal energy resources. Students whose degree plans require GEOL 4665 may use this course for elective credit only. *Prerequisite*: GEOL 1301, GEOL 1303, or GEOL 3321.

3350 Oceanography (3-0)
Introduction to submarine geology, physical and chemical oceanography, marine organisms, marine resources, shore processes, and methods of marine technology. Students whose degree plans require GEOL 4665 may use this course for elective credit only. *Prerequisite*: GEOL 1301, or GEOL 1304, or GEOL 3321.

3355 Structure of the Earth (2-3)
An introduction to geological and geophysical methods employed to study the structure of the earth. Structures at all scales will be studied. The emphasis will be on how plate tectonics operates to form the structures we see at the surface and how we delineate deep structures. Students whose degree plans require GEOL 4665 may use this course for elective credit only. *Prerequisite*: GEOL 1301, or GEOL 1303, or GEOL 3321. Laboratory fee required.

3359 Minerals, Economics and the Environment (3-0)
Geological characteristics and classification of metallic, non-metallic, and fuel resources. Economic factors and problems related to development. Students whose degree plans require GEOL 4665 may use this course for elective credit only. *Prerequisites*: (1) GEOL 1301 and GEOL 1101 (or GEOL 1303), or (2) GEOL 3405, or (3) GEOL 3321.

3360 Geology and the Environment (3-0)
A study of the applications of the science of geology to the problems of urban development and environmental control. For non-majors. *Prerequisite*: GEOL 1301, or GEOL 1303, or GEOL 3321, or instructor approval.

3405 Rocks and Minerals (2-6)
Hand specimen, microscopic, and field study of the common rock-forming minerals; and of igneous, metamorphic, and sedimentary rocks. *Prerequisites*: (1) GEOL 1303, or (2) GEOL 1301 and GEOL 1101, or (3) instructor approval. Laboratory fee required.

3420 Invertebrate Paleontology (3-3)
A survey of the classification, paleoecology, and stratigraphic distribution of fossil invertebrates. *Prerequisites*: (1) GEOL 1302 and GEOL 1102, or (2) GEOL 1304, or (3) GEOL 3405, or (4) instructor approval. Laboratory fee required.

3423 Structural Geology (3-6)
An introduction to the recognition, description, and analysis of deformed rocks, spanning the spectrum from microscopic structures to mountain belts and plate tectonics. Geometric and stereographic analysis of map-scale structures. Introduction to stress, strain, and constitutive laws for rocks. Processes of rock deformation including folding, fracturing, and grain-scale processes. Correlation of structural styles with tectonic environments. *Prerequisites*: (1) GEOL 1301-1101 and GEOL 1302-1102, and GEOL 2412, or (2) GEOL 1303 and GEOL 1304, and GEOL 2412, or (3) instructor approval. PHYS 2420 recommended. Fees required.

3425 Sedimentology and Stratigraphy (3-3)
Study of sedimentary processes, environments, and deposits, including fundamental concepts of stratigraphy and sequence stratigraphy. Ancient deposits and modern analogs are examined in the field. Laboratory will be divided between field trips and in-lab activity to introduce techniques for the study of sediments and sedimentary rock sequences. *Prerequisites:* GEOL 2411 and GEOL 2412, or instructor approval. Transportation fee required.

4155 Vertebrate Paleontology Techniques (0-3)
Collection, preservation, identification, and curation of vertebrate fossils. This course is identical to ZOOL 4155. *Prerequisite*: GEOL 4354. GEOL 4354 may be taken concurrently with GEOL 4155. Laboratory fee required.

4166 Directed Study, Geology (0-0-1)
4266 Directed Study, Geology (0-0-2)
4366 Directed Study, Geology (0-0-3)
Directed study problems in geology; hours and subjects to be arranged with each student; for undergraduate students who wish to do special work on a special problem. No student may receive credit for more than six hours of directed study work. Application of a directed study towards required upper division elective hours in the major is subject to prior approval by the departmental undergraduate studies committee. *Prerequisite*: Instructor approval.

4189 Research in Geological Sciences (0-0-1)
4289 Research in Geological Sciences (0-0-2)
4389 Research in Geological Sciences (0-0-3)
This course provides undergraduates with a research experience working with a faculty mentor. It cannot be used to satisfy minimum degree requirements. Grade of S or U. Requires advising from an instructor.

4315 Topics in Geological Sciences (3-0)
Study of topics in fields such as structural geology, environmental geosciences, economic geology, paleontology, petrology, and geochemistry. May be repeated when topics vary. *Prerequisite*: Instructor approval.

4354 Paleozoic and Mesozoic Vertebrate Paleontology (3-0)
Study of evolution, biologic history, biostratigraphy, and classification of Paleozoic and Mesozoic vertebrates with emphasis on the lower vertebrates with an introduction to early mammalian development. This course is identical to ZOOL 4354. *Prerequisites*: (1) GEOL 1302 and GEOL 1102 (or GEOL 1304), or (2) ZOOL 2406 (or BIOL 1306 and BIOL 1108), or (3) department approval; GEOL 4155. GEOL 4155 may be taken concurrently with GEOL 4354.

4373 Groundwater Contamination and Reclamation (3-0)
Contamination fate and transport in the ground water. Includes the application of remediation methods for various types of contaminants and the discussion of reclamation methods.

4380 Environmental Geology and Geophysics (2-4)
Geology and geophysics applied to environmental studies with emphasis on site characterization. Subjects include surficial processes, tectonic processes, general hydrology, soils data collection and analysis. *Prerequisite*: GEOL 3423, or GEOL 3321, or instructor approval. Laboratory fee required.

4384 Nuclear Waste Disposal (3-0)
Examination of the problems involved in the control of nuclear waste. Characterization, treatment, shipping, and permanent disposal of the nuclear waste will be discussed. The problems of decontamination, decommissioning, and site restoration, as well as quality assurance and control of nuclear waste, will be examined. *Prerequisite*: Upper-division standing in the College of Science or the College of Engineering or instructor approval.

4385 Introduction to Geographic Information Systems (2-3)
Introduction to the principles and applications of Geographic Information Systems (GIS). Topics include the importance of validated databases, GIS design, data structures, producing map products, and spatial analysis. The laboratory will focus on the application of a common GIS software package to science and engineering projects. *Prerequisites*: GEOL 1301-1101, or GEOL 1303, or GEOG 1306-1106.

4399 Senior's Thesis (0-0-3)
Guided program of research culminating in the writing of a senior thesis.

4665 Field Geology (Summer Field Course) (0-0-32)
A six-week summer course in field geology. The work will include preparation of topographic and geologic maps, cross-sections, columnar sections, and detailed structural studies of areas embracing both sedimentary and igneous rocks; plane table and aerial photo mapping techniques will be used. A report will be required of each student. Thirty-two hours of field work per week. *Prerequisites*: GEOL 3315, GEOL 3420, and GEOL 3423. Transportation fee varies.

See the *Graduate Catalog* for graduate programs and courses.

Geophysics (GEOP)

General Prerequisite: Junior standing for all upper-division courses. All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; consult the *Graduate Catalog* for the listing of these courses.

4167 Directed Study, Geophysics (0-0-1)
4267 Directed Study, Geophysics (0-0-2)
4367 Directed Study, Geophysics (0-0-3)
Directed study problems in geophysics; hours and subjects to be arranged with each student; for undergraduate students who wish to work on a special problem. No student may receive credit for more than six hours of directed study work. Application of a directed study towards required upper division elective hours in the major is subject to prior approval by the departmental undergraduate studies committee. *Prerequisite*: Instructor approval.

4332 Exploration Geophysics: Seismic Methods (2-3)
A detailed treatment of seismic prospecting for oil and minerals, includes principles and current practices in seismic refraction and reflection prospecting, as well as related aspects of acoustic logging and other subsurface techniques. *Prerequisites*: (1) GEOL 1301-GEOL 1101 or GEOL 1303, or (2) GEOL 3321, and MATH 1312, PHYS 2420, and PHYS 2421, or (3) instructor approval. Laboratory fee required.

4334 Exploration Geophysics: Non-Seismic Methods (2-3)
A quantitative treatment of gravity and magnetic fields of the earth as applied to exploration for oil and minerals. Some coverage of nuclear and electrical methods of prospecting. *Prerequisites*: (1) GEOL 1301-GEOL 1101 or GEOL 1303, or (2) GEOL 3321, and MATH 1312, PHYS 2420, and PHYS 2421, or (3) instructor approval. Laboratory fee required.

4336 Introduction to Remote Sensing (2-3)
An introduction to acquisition, processing, and interpretation of remote sensing data acquired from both satellites and aircraft. Applications in earth and environmental sciences are stressed as is understanding how to obtain and employ the many types of data that are available. Topics include basic mapping concepts, how sensors work, the structure of remote sensing data and analysis, thermal and radar techniques, data processing, and classification schemes. Laboratory work is primarily computerized exercises. *Corequisite:* PHYS 1404 or PHYS 2421. *Prerequisites:* GEOL 1301 or GEOL 1303, and GEOL 1302 or GEOL 1304.

See the *Graduate Catalog* for graduate programs and courses.

Mathematical Sciences

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CHAIRPERSON: Helmut Knaust
PROFESSORS EMERITI: Delmar Lee Boyer, William Joseph Leahey, James Nymann, Eugene Francis Schuster
PROFESSORS: Guthrie, Kaigh, Khamsi, Moschopoulos, Sewell, Srinivasan, Staniswalis
ASSOCIATE PROFESSORS EMERITI: Carl Eldridge Hall
ASSOCIATE PROFESSORS: Duval, Foged, Gray, Gregory, Knaust, Liguori, Marcus, Narvarte, Valdez-Sanchez, Wojciechowski
ASSISTANT PROFESSORS: Argaez, Dogan-Dunlap, Mendez, Schwab, Sha, Velazquez

The department of Mathematical Sciences offers both a BA degree and a BS degree in Mathematics and the BS in Applied Mathematics. The BA in Mathematics allows for a concentration in Teacher Certification. The BS in Mathematics allows for concentrations in Actuarial Sciences, Secondary Education, and Statistics.

Registration for each course in Mathematical Sciences (with a MATH or STAT prefix) requires a minimum grade of "C" in all prerequisite courses.

BS in Mathematics

The requirement to obtain the BS in Mathematics consists of the general College of Science requirements plus the following specific requirements:

Major (40 semester hours including 24 semester hours of upper-division course work): MATH 1411, MATH 1312, MATH 2313, MATH 2325 or 2300, MATH 3326 or 2326, MATH 3325, MATH 3341, MATH 4326, MATH 4341, STAT 3330, and 9 additional semester hours of upper-division courses in Mathematical Science.

Minor: A minimum of 18 semester hours including 6 semester hours of upper-division courses in any approved minor in the College of Business Administration, College of Science, or the Department of Computer Science. The minor discipline and specific courses must be approved by the departmental undergraduate advisor. Secondary certification requires a minor in Secondary Education in addition to one of the above minors. Students seeking secondary certification may also obtain the BA in Mathematics, where only the minor required is the College of Liberal Arts Secondary Education minor. See the College of Liberal Arts for the general education requirements of that college.

Other: CS 1401 or CS 1420, and PHYS 2420-PHYS 2421 are required. If Physics is the minor, the additional science requirement may be satisfied by BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; or CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; or GEOL 1301-GEOL 1101, GEOL 1302-GEOL 1102.

Additional Science: The required physics sequence above may be used to satisfy this requirement or toward a Physics minor, but not both.

Actuarial Sciences Concentration—This concentration requires the following changes:

Allowed Substitutions: MATH 3323 for MATH 4326; 6 semester hours in the College of Science (not in the major or minor) for the required physics sequence.

Required Replacements: MATH 2320 for MATH 4341; MATH 3320, MATH 4329, and STAT 4380 for the required 9 additional semester hours of upper-division courses in Mathematical Sciences.

Additional Requirements: CS 1420; and as electives, MATH 4199 (2 times), CS 1401 or CIS 2335, ECON 2303 and 2304, COMM 1302; and two courses from ACCT 2301 or 3309, FIN 3310, 4316, BLAW 3301, MKT 3300, MGMT 3303 or POM 3321, ECON 3302, ECON 3303, and ECON 3372.

Secondary Education Concentration—This concentration requires a second minor in Secondary Education. In addition:

Allowed Substitutions: MATH 3323 for MATH 4326; one of the courses MATH 3319, MATH 3327, MATH 3328 (not geometry), MATH 4325, or MATH 4329 for MATH 4341.

Required Replacements: MATH 3300, MATH 3328 (geometry), and STAT 4380 for the required 9 additional semester hours of upper-division courses in Mathematical Sciences.

Additional Requirements: The first minor must be selected from Biology, Chemistry, Computer Science, Geology, or Physics. A minor in Physics is strongly recommended, in which case the required physics sequence (College of Science additional science requirement) must be replaced by one of the following: BIOL 1305-BIOL 1107 and either BOT 2410 or ZOOL 2406; CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106; or GEOL 1301-GEOL 1101 and GEOL 1302-GEOL 1102.

Statistics Concentration—This concentration requires the following changes:

Allowed Substitutions: MATH 3323 for MATH 4326; Computer Science courses may be used to fulfill the 9 additional hours of upper-division Mathematical Sciences requirement.

Required Replacements: MATH 4329, STAT 3381, and STAT 4380 for MATH 2326 or 3326, MATH 3325, and MATH 4341.

BS in Applied Mathematics

The requirement to obtain the BS in Applied Mathematics consists of the general College of Science requirements plus the following specific requirements:

Major (40 semester hours including 24 semester hours of upper-division course work): MATH 1411, MATH 1312, MATH 2300, MATH 2313, MATH 2326 or 3326, MATH 3323 or MATH 4326, MATH 3335, MATH 4329, MATH 4336, MATH 4399 (as a senior project), STAT 3330 and STAT 4380, and 3 additional semester hours of upper-division courses in Mathematical Sciences.

Minor: A minimum of 18 semester hours including 6 semester hours of upper-division courses in any approved minor in the College of Business Administration, College of Science, or the Department of Computer Science. The minor discipline and specific courses must be approved by the departmental undergraduate advisor.

Other: CS 1401 or CS 1420, and PHYS 2420-PHYS 2421 are required. If physics is the minor, the additional science requirement may be satisfied by BIOL 1305-BIOL 1107, BIOL 1306-BIOL 1108; or CHEM 1305-CHEM 1105, CHEM 1306-CHEM 1106; or GEOL 1301-GEOL 1101, GEOL 1302-GEOL 1102.

BA in Mathematics

Students should refer to the College of Liberal Arts section of this catalog for the general requirements for the BA degree. The specific courses required for this major are (31 semester hours including 18 semester hours of upper-division course work): MATH 1411, MATH 1312, MATH 2313, MATH 2325 or 2300, MATH 3323 or MATH 4326, MATH 3325, MATH 3341, and 9 additional semester hours of upper-division courses in Mathematical Science. A BA with Secondary Teaching Certification is also available through the College of Liberal Arts. A minor in this College requires 9 semester hours of upper-division course work.

Minor in Mathematics

A minor in Mathematics requires MATH 1411, MATH 1312, and an additional minimum of 4 courses, at least 2 (3 for the BA) of which must be upper-division courses. Approved courses include MATH 2300, MATH 2313, MATH 2320, MATH 2326 or 3326, MATH 3319, MATH 3320, MATH 3323 or MATH 4326, MATH 3325, MATH 3327, MATH 3328, MATH 3335, MATH 3341, MATH 4325, MATH 4329, MATH 4336, MATH 4341, STAT 3330, STAT 3381, and STAT 4380.

Minor in Statistics

Students may minor in Statistics by taking 18 hours (six advanced) as follows: CS 1420 or equivalent, MATH 2301 or 1411, plus 12 hours from STAT 2380, 2381, 3330, 3381, 4380, and MATH 3320. Students who plan to pursue graduate studies in statistics-related areas are urged to take STAT 4380.

Advising

All undergraduate mathematics majors are required to consult with and have their enrollment approved by their undergraduate advisor before every enrollment.

Placement

Students who intend to register in MATH 1320, MATH 1508, or MATH 1411 must present an official document at registration showing that they have either an adequate placement examination score or received a grade of “C” or better in the prerequisite course.

GPA

Mathematics majors must maintain a 2.0 GPA in all MATH and STAT courses (students should refer to the Standards of Academic Performance section of this catalog).

Prerequisites

All mathematics (MATH) or statistics (STAT) courses that have MATH or STAT prerequisites require a grade of “C” or better in the prerequisite course.

Mathematics (MATH)

0310 Introductory Algebra (3-0) (Non-credit course)
The course begins with a review of signed numbers, rational numbers, and exponents. Major topics include variables, linear equations and inequalities, word problems, and operations with polynomials. This course is designed as an introduction to MATH 0311. Credit hours received for MATH 0310 may count toward removal of provisional status, but may not be used to satisfy any institutional degree requirements. *Prerequisite*: MATH 0309 with a grade of "C" or better or placement by examination.

0311 Intermediate Algebra (3-0) (Non-credit course)
The course begins with a review of polynomials. Major topics include rational expressions and equations, radical expressions, rational exponents, complex numbers, quadratic equations, graphing lines, and geometry. The course is designed as an introduction to MATH 1508 or 1320. Credit hours received for MATH 0311 may count toward removal of provisional status, but may not be used to satisfy any institutional degree requirements. *Prerequisite*: MATH 0310 or placement by examination.

1312 Calculus II (3-0)
(MATH 2314)
Continuation of MATH 1411. Topics include special methods of integration and applications; infinite series. *Prerequisite*: MATH 1411.

1320 Mathematics for Social Sciences I (3-0)
(MATH 1324)
Topics of college algebra and geometry including the algebra of sets; linear, quadratic, exponential, and logarithmic functions; systems of linear equations and inequalities; matrix algebra; probability and the mathematics of finance. *Prerequisite*: An adequate score on a placement examination, MATH 0311.

1411 Calculus I (4-0)
(MATH 2413)
Topics include limits, continuity, differentiation, and integration of functions of a single variable. *Prerequisites*: Four years of high school mathematics including trigonometry and analytic geometry and an adequate score on a placement examination, or MATH 1508.

1508 Precalculus (5-0)
(MATH 2412)
Topics include the algebra of real functions, graphs of functions, analytic geometry of first and second degree curves, rational functions, exponential and logarithmic functions, and polynomial equations, sequences, series, and mathematical induction. *Prerequisite*: An adequate score on a placement examination or MATH 0311.

2300 Discrete Mathematics (3-0)
(MATH 2305)
Topics in discrete mathematics including induction, recursion and recurrence relations, sets and relations, combinatorics, and graph theory. *Prerequisite*: MATH 1411.

2301 Mathematics for Social Sciences II (3-0)
(MATH 1325)
Topics include linear programming and an introduction to differential and integral calculus with applications to business and the social sciences. *Prerequisite*: MATH 1320, or MATH 1508 or TCCN MATH 1314.

2303 Properties of the Real Numbers I (3-0)
(MATH 1350)
A study of the arithmetic structure of the real numbers from an advanced point of view. Relations with concepts from set theory, groups, rings, and fields will be included. *Prerequisite*: MATH 1320 or MATH 1508 or TCCN MATH 1314, or an acceptable score on a placement examination.

2313 Calculus III (3-0)
(MATH 2315)
Continuation of MATH 1312. Topics include solid analytic geometry, partial differentiation, and multiple integrals. *Prerequisite*: MATH 1312.

2320 Mathematics of Interest (3-0)
Mathematical foundations; a calculus based development of the theory of interest with applications including annuities, bonds, depreciation, sinking funds, amortization schedules, insurance and yield rates. *Prerequisite*: MATH 2301 or MATH 1312.

2325 Introduction to Higher Mathematics (3-0)
An introduction to mathematical problem solving, experimentation, and proof writing, and the relationships among all three. The course will be built around a series of in-depth problems from a variety of areas of higher mathematics, especially those not encountered in pre-calculus and calculus courses. *Corequisite*: MATH 1411.

2326 Differential Equations (3-0)
(MATH 2320)
An analytical, graphical, and numerical study of first order equations and system of equations, modeling, bifurcations, linearization, and Laplace transforms. *Prerequisite*: MATH 1312.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3300 History of Mathematics (3-0)
One of two periods will be addressed: (1) Pre-17th century history: Mathematical contributions for various cultures and eras from Babylonia to 16th century Europe are reviewed with special focus on Greek mathematics. (2) Early modern history: A historical account of the genesis of trigonometry, logarithms, analytic geometry, calculus, and the study of functions, with an emphasis on the period of the European scientific revolution (1600-1750). Original works by noted mathematicians will be examined in order to understand the evolution of our current mathematics curriculum. May be repeated for credit when the periods differ. *Prerequisite*: MATH 1411 or instructor approval.

3303 Properties of the Real Numbers II (3-0)
Additional topics in the structure of the real numbers. Basic number theory including divisibility and congruences. Topics in finite mathematics. *Prerequisite*: MATH 1508.

3304 Fundamentals of Geometry from an Advanced Standpoint (3-0)
An axiomatic treatment of Euclidean geometry including some historical perspectives. Informal treatment of other geometries such as distance and hyperbolic geometry. *Prerequisite*: MATH 1508.

3305 Conceptual Mathematics From Multiple Perspectives I (3-0)
An inquiry-based course emphasizing connections between elementary and advanced mathematics, and across the fields of mathematics. Topics include a conceptual analysis of integer arithmetic and algorithms, geometry and measurement, and applications to data analysis. Multiple representations of mathematical concepts will be stressed, along with mathematical reasoning and perspectives. *Prerequisite*: MATH 2303 with a grade of "C" or better.

3308 Conceptual Algebra From Multiple Perspectives (3-0)
An inquiry-based course focusing on ration, proportion, functions, algebra, and geometry with an emphasis on reasoning and conceptual mathematical thinking. Appropriate technology and mathematical perspectives will be integrated with the content. *Prerequisite*: MATH 2303 with a grade of "C" or better.

3309 Conceptual Mathematics From Multiple Perspectives II (3-0)
An inquiry-based course emphasizing connections between elementary and advanced mathematics, and across the fields of mathematics. Topics include a conceptual analysis of rational arithmetic and algorithms, multiplicative thinking, geometry and measurement, patterns and functions, discrete mathematical structures, and applications to data analysis. Multiple representations of mathematical concepts will be stressed, along with mathematical reasoning and perspectives. *Prerequisite*: MATH 3308 with a grade of "C" or better.

3319 Elementary Number Theory (3-0)
An introduction to some of the classical topics in number theory including divisibility, congruences, and quadratic reciprocity. Diophantine equations and the distribution of primes. *Prerequisite*: MATH 1312.

3320 Actuarial Mathematics (3-0)
Individual and collective risk models. Survival distributions and life contingency tables. Models for life insurance and multiple life functions. *Prerequisite*: STAT 3330.

3323 Matrix Algebra (3-0)
Systems of linear equations, matrices, determinants, eigenvalues and eigenvectors, diagonalization, vector spaces, and linear transformations. *Prerequisite*: MATH 1312.

3325 Principles of Mathematics (3-0)
Logic and proofs, elements of set theory, relations and functions: application of these ideas. Cardinality, groups and their quotients, and the field of real numbers. *Prerequisite*: MATH 1312.

3328 Foundations of Mathematics (3-0)
Study of principles of mathematical thinking and of common objects of mathematical thought. Emphasis on *one* of these aspects: Logic; Set Theory; Geometry; Topology. May be repeated for credit if subjects differ. *Prerequisite*: MATH 1312.

3335 Applied Analysis I (3-0)
Line and surface integrals, change of variable in multiple integrals, vector analysis, and an introduction to complex variables. *Prerequisite*: MATH 2313.

3341 Introduction to Analysis (3-0)
A theoretical study of the foundations of the calculus of functions of one variable. Includes the real number system, convergence, continuity, differentiability, and elementary integration theory. *Prerequisite*: MATH 3325 or MATH 1312 each with a grade of "C" or better and consent of the instructor.

4199 Individual Studies in Mathematics (0-0-1)
4399 Individual Studies in Mathematics (0-0-3)
Studies of topics not included in or going beyond the regular course offerings. May be repeated for credit. *Prerequisite*: Department approval.

4325 Modern Algebra (3-0)
Groups, rings, integral domains, and fields. *Prerequisite*: MATH 3325 with a grade of "C" or better.

4326 Linear Algebra (3-0)
Vector spaces, linear transformations and matrix representations, canonical forms, eigenvalues, invariant subspaces, orthogonal and unitary transformations, and bilinear and quadratic forms. *Prerequisite*: MATH 3325.

4329 Numerical Analysis (3-0)
The course covers numerical algorithms for approximation of functions, quadrature, solution of ordinary differential equations, solution of nonlinear equations, solution of linear systems of equations, computing eigenvalues and eigenvectors. Many computer applications will be required. *Prerequisites*: MATH 3323 and a working knowledge of a high level programming language.

4336 Applied Analysis II (3-0)
Series solutions of differential equations. Fourier series and Fourier integrals. Bessel's equation and Bessel functions. Legendre's equation and Legendre polynomials, the Sturm-Liouville problem and eigenfunction expansions, and an introduction to partial differential equations. *Prerequisite*: MATH 2326 or MATH 3326.

4341 Real Analysis (3-0)
Convergence of series of constant terms; convergence of sequences and series of functions; and analysis of functions of several variables to include the differential approximation theorem, the inverse function theorem, and the implicit function theorem. *Prerequisite*: MATH 3341.

4370 Topics Seminar (3-0)
Organized lectures in mathematics on topics not represented among the other course offerings. *Prerequisite*: Junior standing; additional prerequisites may be announced as required by the topics. May be repeated for credit.

See the *Graduate Catalog* for graduate programs and courses.

Statistics (STAT)

1380 Basics of Descriptive and Inferential Statistics (3-0)
A course in statistical literacy. Emphasis will be on standard descriptive measures of location, spread, and association. Regression, probability and sampling, and binomial distribution. Interpretation of data which occur in daily life (polls, weather forecasting, surveys, quality control, etc.) will be stressed. *Prerequisite*: MATH 1320, or MATH 1508, or equivalent or TCCN MATH 1314.

2182 Computing Laboratory for Statistics 2380 (0-2)
Practical exercises in the handling of statistical data and experimental sampling as related to the course work in STAT 2380. Includes an introduction to data processing. *Corequisite*: STAT 2380.

2380 Statistical Methods I (3-0)
(MATH 1342; MATH 1351)
An elementary introduction to statistical concepts and methods. Descriptive statistics, elementary probability, binomial distribution, normal distribution, estimation and hypothesis testing for one- and two-sample problems, simple linear regression, and correlation. *Corequisite*: STAT 2182. *Prerequisite*: MATH 1320, or MATH 1508, or equivalent, or TCCN MATH 1314.

2381 Statistical Methods II (3-0)
A continuation of Statistics 2380 with treatment of more advanced statistical methods. Chi-square goodness-of-fit and contingency table analysis, analysis of variance and multiple comparisons, multiple linear regression and correlation and analysis. *Prerequisites*: STAT 2380-STAT 2182.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3330 Probability (3-0)
Theory and applications of probability models. Sample space, combinatorics, conditional probability, random variables, discrete and continuous probability distributions, expectation, moment generating functions, law of large numbers, and central limit theorem. *Prerequisite*: MATH 2313.

4380 Statistics I (3-0)
A calculus-based development of statistical concepts and methods. Distribution theory, point and interval estimation and hypothesis testing in parametric statistical models, chi-square goodness-of-fit and contingency table analysis, simple linear regression analysis, and introduction to analysis of variance. *Prerequisite*: STAT 3330.

Physics

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CHAIRPERSON: J. A. López
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PROFESSORS: J. A. López
ASSOCIATE PROFESSORS EMERITI: Michael H. Blue, Clarence H. Cooper
ASSOCIATE PROFESSORS: Fitzgerald, Hagedorn, Ravelo, Smith
ASSISTANT PROFESSORS: Hamed, Slusher, Suskavcevic

The Department offers both a BS and a BA degree in Physics. The BS includes the opportunity to obtain concentrations in Applied Physics or Secondary Teaching Certification.

BS in Physics

The requirements to obtain the BS in Physics consist of the general College of Science requirements plus the following specific requirements:

Major (43 semester hours including 33 semester hours of upper-division course work): PHYS 2420, PHYS 2421, PHYS 2230, PHYS 3323, PHYS 3325, PHYS 3243 (taken 3 times), PHYS 3331, PHYS 3351, PHYS 3352, PHYS 4341, PHYS 4342, PHYS 4355, and PHYS 4356 or PHYS 4357.

Minor: Mathematics is the required minor except for the Secondary Education Concentration, where the minor is Secondary Education. The Mathematics minor consists of MATH 1411, MATH 1312, MATH 2313, MATH 2326 or 3326, MATH 3335, and 2 courses selected from MATH 3323, MATH 4329, or MATH 4336.

Additional Science: CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106 are required.

Other: CS 1401 or CS 1420 is required.

The following concentrations require approval of course substitutions. The approval is to be obtained from the departmental Concentration Committee.

Applied Physics Concentration

Nine semester hours of approved upper-division courses may be substituted for PHYS 3352, PHYS 4342, and PHYS 4356 or PHYS 4357 in this concentration. This concentration must be requested by the student in a timely fashion and accompanied by a list of substituted courses submitted to the departmental Concentration Committee for approval.

Secondary Education Concentration

This concentration requires the following:

Major (a minimum of 36 semester hours including 21 semester hours of upper-division course work): ASTR 1307-ASTR 1107, ASTR 1308, PHYS 2420 PHYS 2421, PHYS 2230, PHYS 3325, PHYS 3243 (taken 3 times), plus a minimum of 12 semester hours of approved upper-division course work in physics.

Minor: Secondary Education is the required minor.

Other: Also required are MATH 1411, MATH 1312, MATH 2313, MATH 2326 or 3326, and MATH 3335; and CHEM 1305-CHEM 1105 and CHEM 1306-CHEM 1106. The mathematics courses satisfy the 12-semester hour supporting field and the chemistry courses satisfy the additional science requirements.

BA in Physics

Students should consult the College of Liberal Arts section of this catalog for the general requirements for the BA degree. The specific courses required for this major are (28 semester hours including 18 semester hours of upper-division course work) PHYS 2420, PHYS 2421, PHYS 2230, PHYS 3325, PHYS 3243 (taken 3 times), PHYS 3351, PHYS 4341, and PHYS 4355. Mathematics is the required minor. (A minor in the College of Liberal Arts requires 9 semester hours of upper-division course work.)

Minor in Physics

A minor in Physics requires PHYS 2420, PHYS 2421, PHYS 2230, PHYS 3325, and an additional 5 (6 for the BA) semester hours selected from PHYS 3323, PHYS 3243, PHYS 3331, PHYS 3351, PHYS 4341, PHYS 4342, or PHYS 4355.

Physics Honors Program

The Physics Honors Program is designed to recognize and enhance the development of talented physics students. The program consists of departmental awards for outstanding achievement and special courses, seminars, and research laboratories for honors students. In addition, Physics Honors Students are also eligible to earn the BS degree with Departmental Honors and to participate in the five-year BS/MS Program.

Incoming freshmen or students with fewer than 30 semester hours of credit are eligible to be Physics Honors students if they graduated in the top 20% of their high school graduating class and their combined SAT score is 1000 or more with at least 600 on the SAT Math (or equivalent for other examinations). Students with 30 or more semester hours of credit must have a minimum 3.2 GPA (with at least 3.2 GPA in all physics and mathematics courses) to be eligible.

BS Degree with Physics Department Honors

Physics Honors students who satisfactorily complete an undergraduate Honors Thesis based on research in Physics are eligible to receive the BS degree with Departmental Honors in Physics. Usually the research will be carried out under the direction of a member of the faculty of the Department of Physics. The satisfactory completion of the Honors Thesis will be judged by the Thesis research director in conjunction with the Physics Department's Honors Committee. The candidate for Department Honors must request approval of candidacy prior to the beginning of the senior year. Upon acceptance by the department, the candidate shall enroll in PHYS 4177, PHYS 4277, and PHYS 4377 for successive semesters and must have accumulated a total of 6 semester hours of PHYS 1477, PHYS 2477, and PHYS 3477 credit on completion of the Honors Thesis Program.

Five Year BS-MS Program

The Department of Physics provides an opportunity for qualified students to participate in a five-year Bachelor/Master of Science Degree Program. The program is limited to students who maintain at least a 3.0 GPA. Freshmen honors students should consult with the departmental undergraduate advisor about the details of this program including course selection and admission to the Graduate School.

Astronomy (ASTR)

1107 Astronomy Laboratory I (0-2)
(♞ PHYS 1111)
Basic laboratory exercises in solar system astronomy. An introduction to the concepts and methods employed by astronomers in studying the solar system. *Prerequisites*: ASTR 1307 and MATH 0310, or placement into MATH 0311 or higher level mathematics course. ASTR 1307 may be taken concurrently with ASTR 1107. Fees required.

1108 Astronomy Laboratory II (0-2)
(♞ PHYS 1112)
Basic laboratory exercises in stellar and galatic astronomy. *Prerequisites*: ASTR 1107 and ASTR 1308. ASTR 1107 and ASTR 1308 may be taken concurrently with ASTR 1108. Fees required.

1307 Elementary Astronomy of the Solar System (3-0)
(♞ PHYS 1311)
A survey of the solar system. Topics include astronomical history and instruments, the planets and their moons, comets, and meteors. May not be counted toward a major or minor in Physics. Students seeking four credit hours are encouraged to take ASTR 1107 concurrently.

1308 Elementary Astronomy of Stars and Galaxies (3-0)
(♞ PHYS 1312)
Topics include stellar properties, galaxies, and cosmology. May not be counted toward a major or minor in Physics. Students seeking four credit hours are encouraged to take ASTR 1108 concurrently. *Prerequisite*: ASTR 1307.

Physical Science (PSCI)

2303 Physical Science I (2-2)
(♞ PHYS 1315)
An introduction to the physical sciences. Selected topics from chemistry and physics. Course taught in a laboratory setting using hands-on approach. *Prerequisite*: MATH 1320, MATH 1409, or MATH 1508. MATH 1320, MATH 1409, or MATH 1508 may be taken concurrently with PHYS 2303. Laboratory fee required.

3304 Physical Science II (2-2)
A continuation of PSCI 2303, treating different topics. *Prerequisites*: PSCI 2303. Laboratory fee required.

Physics (PHYS)

1403 General Physics I (3-2)
(♞ PHYS 1401)
A non-calculus treatment of mechanics and heat. Laboratory experience is an essential component of this course. May not be counted toward a major or minor in Physics. *Prerequisite*: MATH 1409, MATH 1508, or MATH 1320. Fees required.

1404 General Physics II (3-2)
(PHYS 1402)
A continuation of PHYS 1403, treating topics in electricity, magnetism, sound, and light. May not be counted toward a major or minor in Physics. *Prerequisite*: PHYS 1403. Fees required.

2230 Thermal and Fluid Physics (2-0)
An introduction to thermal physics and introductory fluid dynamics. The properties of gases, temperature, internal energy, heat, and the first and second laws of thermodynamics. Buoyancy and Archimedes principle, simple hydrodynamics of compressible and incompressible flow, Bernoulli's equation, and convection. *Prerequisite*: PHYS 2420 with a grade of "C" or better.

2420 Introductory Mechanics (3-3)
(PHYS 2425)
Dynamics of particles and rigid bodies using vectors and calculus, Newton's laws, conservation of energy and momentum, rotational motion and universal gravitation. *Prerequisite*: MATH 1411. MATH 1411 may be taken concurrently with PHYS 2420. Laboratory fee required.

2421 Fields and Waves (3-3)
(PHYS 2426)
Electric field and potential; current and magnetism; time varying fields and electromagnetic waves, interference and diffraction. *Prerequisite*: MATH 1312. MATH 1312 may be taken concurrently with PHYS 2421. Laboratory fee required.

General Prerequisite: All required lower-division courses in the major should be completed with a grade of "C" or better in order to enroll in upper-division courses in the major. Some upper-division courses may be applied toward graduate degrees; students should consult the *Graduate Catalog* for the listing of these courses.

3243 Advanced Laboratory Practice (0-6)
Topics in and practices of experimental physics. May be repeated three times for credit. *Prerequisite*: PHYS 2411. Fees required.

3323 Physical Optics (3-0)
Wave propagation, interference, diffraction, absorption, scattering, and polarization. The theory and operation of lasers and optical resonant cavities are introduced. *Prerequisites*: PHYS 2421, and MATH 2326 or MATH 3326.

3325 Survey of Modern Physics (3-0)
Survey of special relativity theory and quantum physics applied to atoms, molecules, nuclei, and the solid state. *Prerequisite*: PHYS 2421.

3331 Thermal Physics (3-0)
Introduction to statistical mechanics and thermodynamics. *Prerequisites*: PHYS 2411 and MATH 2313.

3351 Analytical Mechanics I (3-0)
Newtonian mechanics of particles and rigid bodies. *Prerequisites*: PHYS 2421, and MATH 2326 or MATH 3326. MATH 2326 may be taken concurrently with PHYS 3351.

3352 Analytical Mechanics II (3-0)
Topics in mechanics such as mechanics of deformable bodies and application of Lagrangian and Hamiltonian formulations. *Prerequisite*: PHYS 3351.

4177 Undergraduate Research Problems in Physics (0-0-1)
4277 Undergraduate Research Problems in Physics (0-0-2)
4377 Undergraduate Research Problems in Physics (0-0-3)
Supervised individual research. May be repeated for credit. *Prerequisites*: Senior standing with a 3.2 grade point average or better and permission of the research advisor.

4341 Electromagnetics I (3-0)
Electromagnetic theory via Maxwell's equations. *Prerequisites*: PHYS 2421 and MATH 3335.

4342 Electromagnetics II (3-0)
Advanced topics in electrodynamic theory such as electrodynamic waves and radiation and relativistic electrodynamics. *Prerequisite*: PHYS 4341.

4348 Fundamentals of Acoustics (3-0)
The principles underlying the generation, transmission, and reception of acoustic waves. Mathematical analysis of the various types of vibration of solid bodies. Propagation of plane and spherical sound waves through fluids, transmission and absorption phenomena, resonators and filters. *Prerequisites*: PHYS 2421, and MATH 2326 or MATH 3326.

4355 Introductory Quantum Mechanics (3-0)
Wave mechanics fundamentals, one-dimensional eigenvalue problems, angular momentum and spin, the hydrogen atom, and quantum statistics. *Prerequisites*: PHYS 3325, and MATH 2326 or MATH 3326.

4356 Atoms, Molecules, and Solids (3-0)
Multielectron atoms and molecules. Structure of solids, band theory of conduction, and other quantum properties of solids. *Prerequisite*: PHYS 4355.

4357 Relativity, Nuclei and Particles (3-0)
Special relativity, nuclear models, nuclear decay and reactions, and an introduction to elementary particles. *Prerequisite*: PHYS 4355.

4370 Health Physics I (3-0)
The physics of ionizing radiation; charged particle, neutron, and high-energy photon interactions; natural and man-made sources of radioactivity, their production, and detection. *Prerequisites*: PHYS 3325, and MATH 2326 or MATH 3326.

See the *Graduate Catalog* for graduate programs and courses.

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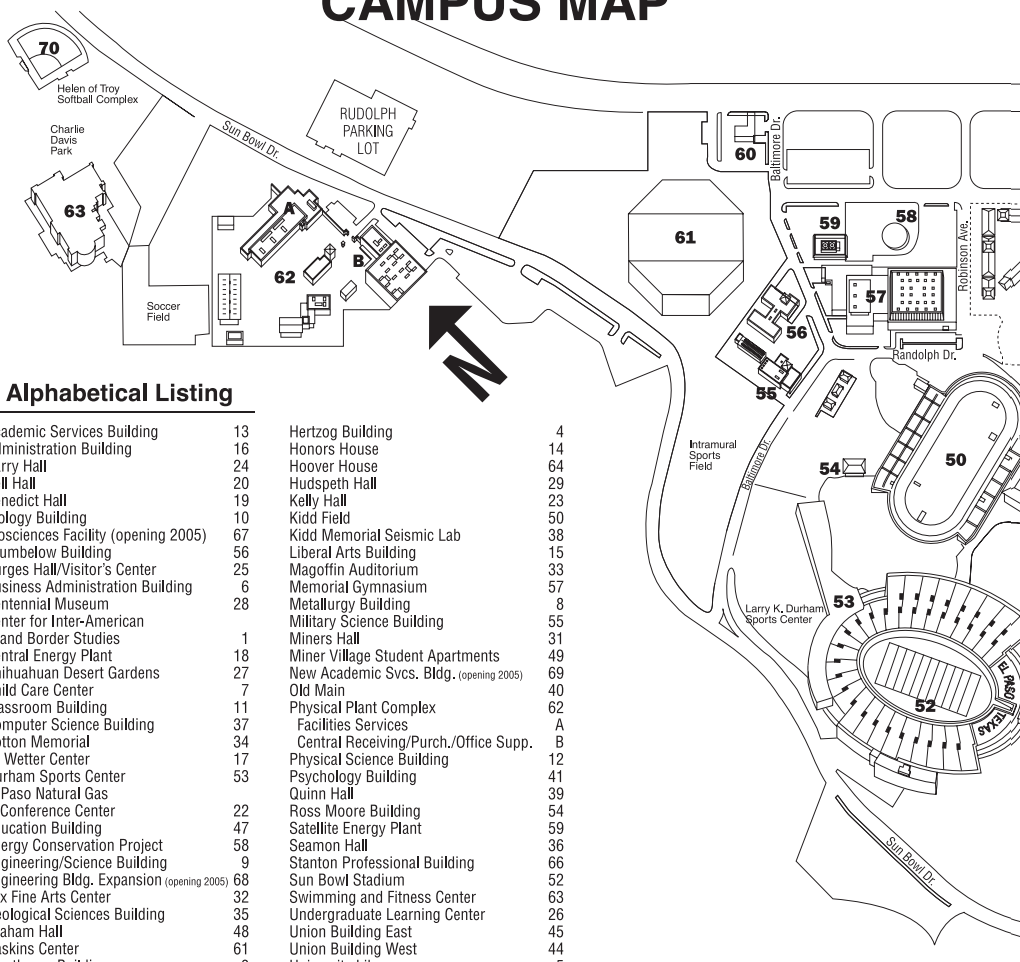

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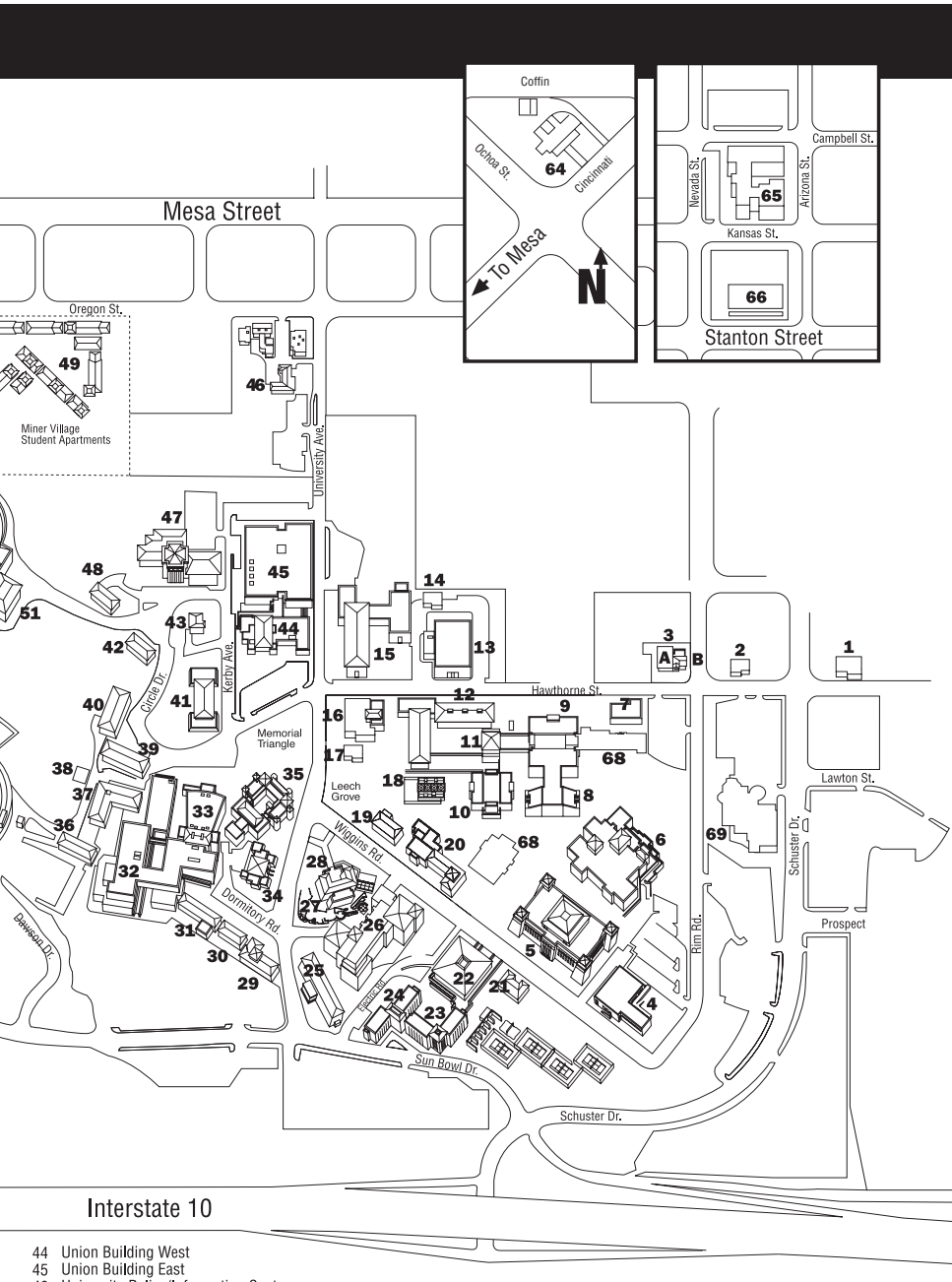

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