# The University of Texas at Brownsville and <br> Texas Southmost College <br> 2007-2009 Graduate Catalog <br> Accreditation and Memberships 

The University of Texas at Brownsville and Texas Southmost College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award certificates and associate, baccalaureate, masters and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of The University of Texas at Brownsville and Texas Southmost College. In addition, the university holds membership in the following organizations:

Council of Graduate Schools<br>American Association of Colleges for Teacher Education<br>American Association of Collegiate Schools of Business<br>American Council on Education<br>Association of American Colleges<br>American Association of State Colleges and Universities<br>Association of Collegiate Business Schools and Programs<br>Texas Alternative Certification Association<br>Association of Texas Colleges and Universities<br>Hispanic Association of Colleges and Universities<br>National Association of Graduate Admissions Professionals<br>Association of Texas Graduate Schools<br>NAFSA: Association of International Educators

The School of Education is also approved to offer post baccalaureate certification programs by the Texas Education Agency.

This catalog is a general information publication only. It is not intended to nor does it contain all regulations that relate to students.

The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student or faculty member, Texas Southmost college and the University of Texas at Brownsville or the university of texas system.

The University of Texas at Brownsville and Texas Southmost College reserves the right to withdraw courses at any time, to change fees or tuition, calendar, curriculum, degree requirements, graduation procedures, and any other requirements affecting students. Changes will become effective whenever the proper authorities so determine and will apply to both prospective students and those already enrolled.

For updates to this catalog, go to blue.utb.edu/graduate.

## Statement of equal opportunity

To the extent provided by applicable law, no person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under, any program or activity sponsored or conducted by Texas Southmost College and the University of Texas System or any of its component institutions on the basis of race, color, national origin, religion, sex, age, veteran status, or disability.

## 2007-2009 Graduate Catalog

## Goals of the Graduate Program

The university is committed to providing graduate programs which will reflect the knowledge, skills, and attitudes its graduates need to become successful leaders in their chosen areas of study. The primary goal of the graduate program is to provide opportunities for graduate study. UTB/TSC graduate programs will provide:

- opportunities for students to acquire professional knowledge beyond that offered at the undergraduate level,
- programs of intellectual and personal growth,
- opportunities that will allow students to gain needed experience in selected areas of study, and
- programs which build upon the bilingual and bicultural attributes of the location and population.


## Purpose and Limitation of the Graduate Catalog

The purpose of the Graduate Catalog is to inform students of the policies that govern graduate programs. A limitation of the printed word is that it is fixed in time while conditions and programs change. Dates, fees, regulations, faculty, course offerings and programs are subject to change when conditions warrant or state regulations mandate. The webbased version of the catalog is available at http:// pubs.utb.edu.
This catalog is a general information publication only. It is not intended to nor does it contain all regulations that relate to students. The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student or faculty member and The University of Texas at Brownsville or The University of Texas System. The University of Texas at Brownsville reserves the right to withdraw courses at any time, to change fees or tuition, calendar, curriculum, degree requirements, graduation procedures, and any other requirements affecting students. Changes will become effective whenever the proper authorities so determine and will apply to both prospective students and those already enrolled.

## Program Organization \& Administration

The policies governing the graduate program are established by the Graduate Faculty and the Graduate Committee. The Graduate Committee sets standards for admission to graduate work, establishes policy, and recommends changes in programs and courses. The graduate program is administered by the Dean of Graduate Studies.
Faculty members are recommended for appointment to the graduate faculty by their departmental graduate committees and approved by the Graduate Committee. Recommendations for faculty status are based on rank, degree in the field (or training and experience) and the institutional need for the faculty member to hold graduate faculty status.

## The Graduate Committee

The Graduate Committee reviews and makes recommendations on university graduate academic policies related to curriculum, admissions, graduate academic standards, fellowships and assistantships, and other matters of importance to graduate education at the university.

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## The University of Texas

## at Brownsville

## Overview

## General Information

The University of Texas at Brownsville has been a member of The University of Texas System since 1991. In cooperation with Texas Southmost College, The University serves more than 12,000 students at its campus located in Brownsville, Texas. In Partnership with Texas Southmost College, The University offers a wide range of courses from Associate and Baccalaureate degrees to graduate classes and continuing education.

## The Mission

The mission of The University of Texas at Brownsville and Texas Southmost College (UTB/TSC) Partnership is to provide accessible, affordable, postsecondary education of high quality, to conduct research which expands knowledge and to present programs of workforce training and continuing education, public service, and cultural value. The partnership combines the strengths of the community college and those of a university by increasing student access and eliminating inter-institutional barriers while fulfilling the distinctive responsibilities of each type of institution.

The University of Texas at Brownsville and Texas Southmost College Partnership offers Certificates, and Associate, Baccalaureate, and Graduate degrees in liberal arts, the sciences, and professional programs designed to meet student demand as well as regional, national, and international needs.

UTB/TSC places excellence in learning and teaching at the core of its commitments. It seeks to help students at all levels develop the skills of critical
thinking, quantitative analysis, and effective communications which will sustain lifelong learning. It seeks to be a community university which respects the dignity of each learner and addresses the needs of the entire community.

UTB/TSC advances economic and social development, enhances the quality of life, fosters respect for the environment, provides for personal enrichment, and expands knowledge through programs of research, service, continuing education and training. It convenes the cultures of its community, fosters an appreciation of the unique heritage of the Lower Rio Grande Valley and encourages the development and application of bilingual abilities in its students. It provides academic leadership to the intellectual, cultural, social and economic life of the bi-national urban region it serves.

## The Philosophy

UTB/TSC is committed to excellence. It is dedicated to stewardship, service, openness, accessibility, efficiency, and citizenship. UTB/TSC is committed to students, participatory governance, liberal education, the expansion of the application of knowledge, human dignity, the convening of cultures and respect for the environment.

## Masters Degrees

College of Liberal Arts
Master of Arts
English
Spanish
History
Master of Arts in Interdisciplinary Studies
English
Government
History
Music
Sociology
Spanish
Master of Public Policy and Management
Master of Music in Music Education

College of Science, Mathematics \& Technology Master of Science

Biology
Mathematics
Physics
Master of Science in Interdisciplinary Studies
Biology
Computer Science

## School of Business

Master of Business Administration
Master of Business Administration (online)

School of Education
Master of Education
Bilingual Educaiton
Counseling \& Guidance
Curriculum and Instruction
Early Childhood Education
Educational Leadership
Educational Technology
English as a Second Language
Reading Specialist
Special Education
School of Health Sciences
Master of Science in Nursing

## Doctoral Degrees

School of Education
Ed. D. in Curriculum and Instruction

## Certificates and Diplomates

College of Liberal Arts
Diplomate in Hispanic Language and Culture
Diplomate in Translation Studies

## School of Health Sciences

Nursing Education Certificate
Nursing Administration Certificate

## The University of

 Texas System
## Board of Regents and

 System Officers
## Regent, Title, Hometown Term Expires

James R. Huffines, Chairman, Austin 2009
Rita C. Clements, Vice-Chairman, Dallas 2007
Cyndi Taylor Krier, Vice-Chairman, San Antonio 2007
Robert A. Estrada, Dallas 2005
Judith L. Craven, M.D., Houston 2007
Bryan J. Haley., Denton (Student Regent) 2007
John W. Barnhill, Brenham 2009
H. Scott Caven Jr., Houston 2009

Colleen McHugh, Corpus Christi 2011
Robert B. Rowling, Dallas 2011
Mark G. Yudof, Chancellor
Francie A. Frederick, Counsel and Secretary

## Texas Southmost College Board of Trustees



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Dr. José G. Martín, Provost

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Academic Affairs
Ms. Rosemary Martinez, Vice President for Business Affairs
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Dr. Antonio N. Zavaleta, Vice President for External Affairs
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Dr. Michael Oudshorn, Dean, College of Science, Mathematics and Technology
Dr. Eldon L. Nelson, Dean, School of Health Sciences
Dr. Hugh Martin Shane, Dean, School of Business
Dr. Gayle Brogdon, Interim Dean, School of Education

## Other Deans

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Dr. Charles Lackey, Dean, Graduate Studies Dr. Peter Gawenda, Dean, College of General Studies

Ms. Suzanne Acevedo, Associate Dean, Sponsored Programs

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Mr. Hector Castillo , Assistant VP, Academic Affairs
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Mr. Chet Lewis, Associate VPBA for Financial Services
Ms. Veronica Mendez, Assistant VP, Construction
Mr. Vince Solis, Assistant VP for Student Affairs
Ms. Angela Gonzalez, Assistant to the President
Dr. Steve Chen, Chief Information Officer

## Graduate Committee Members

Dr. Eloisa Tamez, School of Health Sciences
Dr. Gerald Hollier, School of Business
Dr. James Storbeck, College of Liberal Arts
Dr. Michael Sullivan, Chair, School of Education
Dr. Paul Hermann Zieschang, College of Science, Math \& Technology
Administration
Dr. Eldon Nelson, Dean, School of Health Sciences
Dr. Michael Oudshorn, Dean, College of Science, Math \& Technology
Mr. Douglas Ferrier, Dean of Instructional Support Dr. Charles Lackey, Dean, Graduate Studies

## Graduate Admissions Information

No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under, any program or activity sponsored or conducted by The University of Texas at Brownsville on the basis of race, color, age, national origin, sex, religion, disability, or veteran status. Any complaints should be directed to Office of Student Affairs or the Corporate Compliance Officer of the University.

Admission to the university does not imply admission to all programs of the university. The university does limit graduate admissions to those students who have shown a history of academic competency that suggests the ability to perform graduate work and indicates that graduate study will contribute significantly to the intellectual and professional development of the student.

Students who register for graduate courses inadvertently through administrative error, or who have not received official notification of admission to the graduate program, will be administratively withdrawn from graduate courses and have their tuition refunded.

## Admission Procedures

All applicants for graduate programs must complete an official graduate admission application which consists of the following:

1. A completed graduate program application form and a copy of the receipt for payment of the $\$ 30$ application fee.
2. Proof of a baccalaureate degree from a four-year institution which has regional accreditation. Official transcripts of all undergraduate and graduate study must be submitted. Applicants should request that the registrars of colleges previously attended send transcripts directly to the Registrar's Office. Questions of bachelor degree equivalency for students with degrees from foreign institutions will be handled on an individual basis.
3. Official copy of the Graduate Record Examination (GRE) or the Graduate Management Admissions Test (GMAT) score report. Applicants should request that the Educational Testing Service send score reports directly to the Testing Office. GRE and GMAT scores more than five years old will be accepted only by permission of the Dean of Graduate Studies.
4. Proof of Residency.

A copy of one of the following must be included with the application:

- Permanent Texas Driver's License/ID Card
- Lease Agreement
- Texas Voter Registration Card
- Utility Bill
- Texas High School or College Transcript
- Employer's Statement (indicating date of employment)
- Property Tax Statement or Receipt
- Canceled Check/Bank Statement

Note: All resident documents must include the student's name and address and must be dated at least 12 months prior to registration. This policy, also, applies to former students who have been out of UTB/TSC for more than a year.
5. Transcript of Test of English as a Foreign Language (TOEFL) scores for international students. TOEFL scores more than two years old will not be accepted.

## Admission Requirements

University graduate admission status does not automatically ensure admission to a college/school graduate degree program. Each college/school may have additional admission requirements for its graduate students. Once the individual's admission application file is complete and reviewed by the student's major department, the applicant will be notified in writing of his/her admission status.

To apply for Graduate Admission, you will need to show evidence of academic achievement and potential to pursue advanced study and research as evidenced by:

1. Bachelor's Degree: Proof of a baccalaureate degree from a 4-year college or university which has regional accreditation. Official transcripts of all undergraduate and graduate study must be submitted.
2. GPA of 3.0. An overall undergraduate gradepoint average (GPA) of 3.0 or better and a 3.0 GPA in any graduate work already completed. A minimum undergraduate GPA of 2.5 is required for conditional admission or non-degree.
3. Official GRE or GMAT Score: Satisfactory scores on the Graduate Record Examination (GRE) or Graduate Management Admission Test (GMAT) for Business majors. Examination score requirements vary by graduate degree program; see the specific admission requirements for the degree program for which you are applying. Scores more than five years old at the time of application will not be considered. If the GRE or GMAT is not taken prior to admission, it must be taken in the first semester of graduate study and you will not be permitted to register for the subsequent semester until satisfactory scores are received.
4. Application Essay: A satisfactory application essay stating your educational objectives and identifying positive indicators for admission (no more than 500 words).
5. Departmental Admission Requirements: There may be specific admission requirements established by the academic department for the masters degree program which need to be fulfilled. These may include letters of recommendation, interviews, personal background information, examination score, grade-point average, and undergraduate
coursework in the discipline. Note that admission to the university does not mean that one is admitted to any masters degree program. Approval of the graduate advisors for the degree program is required for admission to a masters degree program.

Admission with Conditions: An applicant who does not meet the grade point average, GRE/GMAT score, and other criteria stipulated for regular admission may be admitted with conditions. Students receiving conditional admission may have one or more conditions specified by the academic department. The graduate advisor may require you to remedy deficiencies in undergraduate preparation by taking specified additional courses. Students must maintain a 3.0 GPA or better while on conditional status and, normally, must satisfy conditions within the first twelve hours of graduate study.
In addition to the criteria stipulated, the University of Texas at Brownsville takes into consideration for admission counterbalancing factors such as the applicant's demonstrated commitment to his or her chosen field of study, socioeconomic background, multilingual proficiency, geographic region of residence, first generation of family to graduate from an undergraduate program, and involvement and level of responsibility in other matters including extracurricular activities, employment, community service, or family responsibility of raising children.

Non-Degree Admission: Non-degree or transient status may be granted to applicants who want to take a maximum of 12 semester credit hours of graduate courses. A non-degree student who later decides to become a candidate for a degree must meet all graduate admissions criteria. Only relevant courses with grades of ' B ' or better will be considered for application to the program of study for any graduate degree.

## Readmission of Former Students

Former graduate students of UTB/TSC are required to reapply for graduate admission if they were not enrolled during the previous academic year.
Former students must submit transcripts from all colleges attended since their last enrollment at this institution. Students who have earned less than
a 3.0 average ( $3.0=B$ on a 4.0 scale) over all work completed since attending UTB/TSC or who left their last institution on probation may be readmitted on probation.
A student who withdraws from the university to perform active military service (not including Texas National Guard training exercises) will not have to reapply for admission but will be readmitted upon a request made within one year of being released from active military services and may be eligible for the same financial assistance provided before the student's withdrawal. This right is granted under §51.9242 Texas Education Code.

## International Students

Students from other countries are valued members of our university community. They bring knowledge and experience from other cultures which greatly enrich graduate studies at UTB/TSC. In many cases, moving to another country to attend graduate school is very expensive and requires great personal and family commitment. It is important that international students enter graduate studies at UTB/TSC with a clear understanding of their obligations and responsibilities and of the university's commitment to them.
In addition to the admissions procedures outlined above, International Students applying for admission to the graduate program must comply with the following:

1. Foreign transcripts may be officially translated when necessary. Information on these services is available at the Office of Graduate Studies, 1 Champion Hall. International students from Mexico who have applied for the Título will be allowed to enroll for a 12 month period until the document is completely processed. Proof that the paperwork has been submitted for the Título must be provided to the Office of Graduate Studies.
2. . All international applicants must submit an official score for the Test of English as a Foreign Language (TOEFL) to be eligible for admission. The test score will not be accepted if it is more than two years old, less than 550 on the written version of the exam, or less than 213 on the computerized version. A waiver of the TOEFL requirement may be granted at the discretion of the Dean of Graduate

Studies if the applicant is from a country in which English is the primary language, or is a U.S. Citizen or permanent resident, or holds an undergraduate, masters, or doctoral degree from a U.S. college or university. All International students for whom English is not the mother tongue must take the Test of English as a Foreign Language (TOEFL).
3. . Students (except those from Mexico) who enter the country under the provisions of an I-20 must qualify for unconditional admission status to the University. Individuals who are required to obtain the legal status of international student must request the form I-20 A-B from the Admissions Office (only after being admitted unconditionally). To obtain the I-20 form, you must submit the following:
a. a tentative Program of Study from the academic department
b. an affidavit of financial support
c. proof of economic solvency (i.e. bank statement or bank letter)
4. . Obtain F-1 visa at the nearest U.S. Embassy or Consulate with an I-20 form and valid passport.
5. . Present immigration documents to the Admissions Office, Tandy Hall \#115, prior to registration.
Health Insurance for International Students All international students holding nonimmigrant visas will be automatically charged for comprehensive health insurance every semester at the time of registration. The cost of the insurance is in the amount of the premium approved for the U.T. System Student Health Insurance Plan. This charge may not be paid in installments. Mexican nationals are exempt from this requirement excluding those on J-1 visas.
A waiver from this fee may be obtained by providing proof of an acceptable alternate insurance to the Student Health Services Director. Proof of insurance with coverage of at least $\$ 100,000$ in medical benefits must include an identification card with insurer's name, policy coverage, and effective and expiration dates. It must be in English. If the required medical evacuation and repatriation coverage are not included, these may be purchased separately at the Business Office, Tandy Hall \#109 for \$35 (annual fee). For information contact the International Student Counselor, Tandy Hall \#205.
U.S. residents who wish to purchase health insurance
may contact Student Health Services at Cortez Hall. Residency Classifications: In accordance with statutes, and Texas Higher Education Coordinating Board rules and regulations, prospective graduate students are classified as residents of Texas, nonresidents, or foreign students.
Resident students are defined as persons or dependants of parents who were domiciled in Texas not less than 12 months before the census date of the academic semester in which the person enrolls in an institution, and maintained a residence continously in Texas for the 12 months immediately preceding the census date of hte academic semester in which the person enrolls in an institution. Also a person who (1) graduated from a Texas high school or received a GED, (2) continously resided in Texas for thirty-six months immediately before the date of graduation or receipt of the diploma equivalent; and (3) resided in Texas for the 12 months preceding the census date may be classified as a resident sutdent. - Individuals who are either U.S. citizens, national or permanent resident aliens or aliens who have been permitted by Congress to adopt the United States as their domicile while in the country and who have otherwise met the state requirements for establishing residency for tuition purposes may also be classified as a resident student.

- Nonresidents are citizens, national or permanent residents of the U.S. or aliens who have been permitted by Congress to adopt the United States as their domicile while in the country and who have not met the state's requirements 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.
- Foreign students are aliens who are not permanent residents of the U.S. or have not been permitted by Congress to adopt the U.S. as their domicile. An individual classified as a nonresident or foreign student may qualify, under certain exceptions specified in these rules, for resident tuition rates and other charges while continuing to be classified as a nonresident or a foreign student. Information on residency, reclassification, tuition exceptions and waivers is available at the Office of Graduate Studies and/or Office of Student Financial Assistance.


## Tuition and

 Fees Information
## Financial Responsibility

State universities and community colleges cannot extend financial credit. Students are expected to meet financial obligations within the designated time allowed. Registration fees are payable at the time of registration, and students are not entitled to enter class or laboratory until all their fees have been paid. (Exceptions: see "Payment by Installment" section.)
Prior to registering for a semester, returning students are required to pay or clear any outstanding financial balances with UTB/TSC by contacting the Business Office. These are some examples of outstanding financial balances that will prevent a student from registering for a semester.

- Balance on Installment Plan
- Balance on Emergency Loan
- Balance on Student Account
- Balance on Financial Aid Repayment
- Parking Citation
- Library Fine

All charges are due within 10 days after a bill is rendered, or according to the special payment instructions that may be printed on the bill. Failure to pay any amount owed within the allotted time can result in the withholding of registration privileges, official transcripts, grades, degrees, and other penalties and actions allowed by law. Students are expected to pay for tuition and fees within the specified payment period. Students are not entitled to enter classrooms or laboratories until payment for tuition and fees has been made or a payment option selected by the student. All tuition and fees must be paid at the Business Office before the payment deadline date.
Types of payments accepted at the Business Office:

- Cash, Personal Checks made payable to: The University of Texas at Brownsville or

UTB (include ID\#), Money Order (include ID\#), Credit Card Checks (include ID\#)

- VISA Master Card, or Sting Card

For your convenience, a check payment drop box is located next to the Business Office, Tandy Hall \#107. All payments must be received before the deadline and payment must be for the full amount of tuition and fees. The Student identification number should be included on checks. Check payments may be mailed and must be postmarked on or before payment deadline. Mail checks to:

## The University of Texas at Brownsville and Texas Southmost College Business Office

P.O. Box 3640

## Brownsville, TX 78520-3640

When a check is returned by the bank for whatever reason, a $\$ 25.00$ nonrefundable returned checks service charge is assessed. The student is given ten days from the date of notice to make full payment by cash, money order, or cashier's check. Once the student has had a returned check, UTB/TSC reserves the right not to accept personal checks from the student. Returned checks not paid will be submitted for collections. Students will be liable for any court costs and attorney fees.
For your convenience, VISA and Master Card payment information may be faxed to the Business Office at (956) 882-7981 and must be received before the payment deadline. It is the student's or cardholder's responsibility to verify that sufficient balance is available in the account to process payment. The following is the information required in order to process payment. Forms are available at the Business Office for this information.

- Student's name, Student's ID\#, Type of Credit Card, Credit Card \#, Expiration Date; Printed name of credit card holder, and signature of credit card holder.
Payment by Installment $\$ 54.007$ of the Texas Education Code provides for payment by installment of tuition and mandatory fees in the Fall and Spring semesters.
Mandatory fees are those fees required of all students enrolled (i.e., Tuition, Student Service Fee, General Use Fee, Instruction Fee and Laboratory Fee).
Eligibility: Students who do not receive any form
of financial aid, including scholarships, and are registered for a minimum of six semester credit hours, are eligible to pay by installment.
Options: Eligible students may elect one of two payment options during Fall and Spring registration.
- Full payment of all tuition and mandatory fees in advance of the beginning of the semester (at registration); or
- One-half payment of tuition and mandatory fees at registration and one quarter payment prior to the start of the sixth class week and the final quarter payment prior to the eleventh class week.
Once selected, an option may not be changed. However, advance payments will be accepted. Students dropping below the six mandatory hours must pay the balance in full.
Installment Payment Fee: A nonrefundable incidental charge of $\$ 7.50$ per installment will be collected at registration in a lump sum. Payment of the entire unpaid balance will preclude any further incidental charges.
Collection after Registration: $\$ 54.007$ of the Texas Education Code requires collection of the second and any subsequent installment before the class weeks indicated above.

Late Payment: Late installments will be accepted during the first three class days of the class week indicated above, but a nonrefundable late payment charge of $\$ 5.00$ will be assessed in addition to the installment amount.

Reinstatement: Late installments will be accepted after the first three class days of the class week intended above, but a nonreturnable reinstatement charge of $\$ 25.00$ will be assessed in addition to the installment amount.

Failure to Pay Installment Tuition: Students who fail to fully pay tuition and fees, including late fees assessed, when the payments are due, are subject to one or more of the following actions at the university's option:

- Bar against readmission at the institution;
- Withholding of grades, degrees and official transcripts; and
- All penalties and actions authorized by law.

Note: Payment by Installment Policy is subject to change without notice or obligation in keeping with
the policies and actions of the Board of Regents and in conforming with the laws of the State of Texas.

## Tuition and Required Fees



For example, a Graduate student who is a resident of Texas and who enrolls for nine semester credit hours in a Fall or Spring semester would pay $\$ 1422.56$ of required registration tuition and fees. The table does not include required laboratory fees or individual instruction fees which are listed with the individual course descriptions. Tuition and fees are subject to change without notice or obligation in keeping with the policies and actions of the Board of Regents and in conforming with the Laws of the State of Texas.
UT Telecampus Courses. Distance education courses offered via the University of Texas Telecampus will be billed to the student in accordance with the course tuition published by the UT Telecampus. Tuition for Telecampus courses is uniform across all University of Texas System components and is typically higher than tuition for oncampus courses at UTB/TSC.

## Other Fees and Deposits

Add/Drop Fee................................................................. $\$ 5.00$
Auditing Fee................................................................... $\$ 50.00$
If class auditing is permitted, this nonrefundable fee will be charged per class audited.

## Comprehensive Examination Fee \$50.00

Copy/Print Card Fee \$10.00
Fee for a copy/print card for $\$ 10$ for 250 copies/prints from any computer designated for student use; additional copies/prints at .05 cents

## Distance Learning Fee

Web-based Fee \$25.00 per semester credit hour
Interactive Video Fee. \$25.00 per semester credit hour

## UT Telecampus web-based fee:

$\qquad$ up to $\$ 80.00$ per sch.
This nonrefundable fee is charged to defray costs associated with distance learning infrastructure (hardware, software, network, and human services) costs of course content maintenance and courseware development.
Emergency Loan Late Payment Fee $\$ 15.00$
This fee is charged each month payment is late to defray collection costs.
Foreign Insurance Fee per semester \$422.00
(Fee subject to change without notice.)
General Deposit \$10.00
All Upper Division, UTB Undergraduate and Graduate students must make a General Deposit to help offset the cost of property loss or damage and any other amounts owed to the university. Applications for refunds will be processed at the Business Office. Money will remain on account until such time as the student graduates or officially withdraws from UTB/TSC. The General Property Deposit may not be paid in installments. Any deposit which remains unclaimed for four years from the date of last attendance will be forfeited.

Graduate Students Application Fee \$30.00
This fee is assessed to defray costs incurred in processing the Graduate application.
Graduation Fee \$25.00
This nonrefundable fee is charged for certificates and degrees to defray costs for processing applications for commencement, music, graduation speaker, postage, diplomas, and other expenses associated with graduation. All students participating in the commencement ceremony are required to purchase the proper graduation regalia from the UTB/TSC Bookstore. Students are not permitted to participate without proper regalia. Students wishing to transfer their application for graduation to another period will be required to pay an additional $\$ 5.00$ fee.
Identification Card Replacement Fee................ $\$ 10.00$ per card Installment Payment Fee \$22.50
Available ONLY during Fall and Spring
Laboratory Fee (Courses listed below) \$20.00
5170 Laboratory Topics in Biology
6303 Evolutionary Ecology
6306 Field Botany
Late Payment Charges . $\$ 5.00$
Late Registration Fee .................................................... \$30.00

## Library Fees

Overdue items - Fees vary according to time the item is overdue.
Lost items - Fees vary according to original or replacement costs of item plus a $\$ 25.00$ service fee.

Damaged items - Fees vary according to the extent of the damaged and cost of repair or replacement.
Reinstatement Charge ..... \$25.00
Returned Check Charge ..... \$25.00
This nonrefundable charge will be assessed to students for each returned check. UTB/TSC may refuse to accept checks from students who have previously had a check returned for insufficient funds or other reasons. NSF checks not paid will be submitted for collection. Student will be liable for any court cost and attorney fees.
School of Education-Foreign Field Experience ..... $\$ 550.00$
Fee for students that take EDEC 6310.65 and BILC 6322.65
Student Liability Insurance Fee per Academic year ..... \$18.13
(Fee subject to change without notice)
Testing Fees (are subject to change without notice) GRE ..... \$130.00
GMAT ..... \$225.00
TOEFL ..... \$140.00
Thesis Binding Fee \$16.00 per copy
Five copies of a Master's Thesis must be bound and presented to UTB/TSC. The exact cost depends on the length of the thesis.$\$ 5.00$
Vehicle Registration and Operation Permit ..... \$20.00
Students, whether full-time or part-time, who will operate a motor vehicle in the campus area must register the vehicle withthe Campus Police Office. This fee is nonrefundable after thefirst class day. A permit to be placed on the vehicle indicatingthe permit number will be provided. Fees will be assessed asfollows:
Parking Classifications:
Faculty, Staff, Students (annual fee) ..... $\$ 60.00$
Disabled ..... No charge*
Afternoon Students 1:00-4:30 ..... $\$ 6.00$
Replacement Permits:
Replacement Fee ..... $\$ 1.00$
Enforcement Fees:
General Parking Violations ..... \$10.00
No Permit ..... \$25.00
Fire lane, Disabled, Grass Area, etc. .....  $\$ 35.00$
Immobilizer Charge ..... \$10.00
Late Payment Charge ( 60 days) ..... \$25.00
*No parking permit fees are charged for permanently disabledpeople or disabled veterans as defined by Section 681.001 (2) and504.202, Texas Transportation Code.

## Refund Policy

Withdrawal from the University: Students who are enrolled and who officially withdraw or are dis-enrolled shall have their tuition and specified mandatory fees refunded according to the following schedule:

## Long Semester

Prior to the first class day of the semester ..... 100\%
During the (first) five class days of the semester ..... 80\%
During the (second) five class days of the semester ..... 70\%
During the (third) five class days of the semester ..... 50\%
During the (fourth) five class days of the semester ..... 25\%
After the fourth five class days ..... None
May Session
Prior to the first class day of the semester ..... 100\%
During the first, second or third class day of the semester ..... 80\%
During the fourth, fifth or sixth class day of the semester ..... 50\%
After the sixth class day of the semester ..... None
Summer Session
Prior to the first class day of the semester ..... 100\%
During the first, second or third class day of the semester ..... 80\%
During the fourth, fifth or sixth class day of the semester ..... 50\%
After the sixth class day of the semester ..... None
Dropping a Course/s: Students who reduce their semester credit hour loads by officially dropping a course or courses and remain enrolled at the institution will have tuition and specified mandatory fees refunded according to the following schedule:
Long Semester
During the first 12 class days of the semester ..... 100\%
After the 12th class day of the semester ..... None
May Session
During the first 2 days of the semester ..... 100\%
After the second class day of the semester ..... None
Summer Session
During the first four class days of the semester ..... 100\%
After the fourth class day of the semester ..... None

## Mini-Courses

Students who are enrolled for mini-courses and officially withdraw will have their tuition and specified mandatory fees refunded according to the length of the mini-course. Due to the variety of lengths of mini-courses offered at UTB/TSC, the Business Office must be consulted for the refund schedule.

## Student Services and Financial Aid

## Academic Advising

Graduate school advising is provided by graduate and/or other Faculty Advisors throughout the various university/college departments. These graduate advisors are available to assist students with graduate Program of Study requirements. See "Degrees and Majors" for a listing of program advisors.

## Counseling Center

Mary Rose Cardenas Hall North RM 103•882-8292
The Counseling Center provides a variety of Counseling services to all students pursuing academic or vocational/technical programs of study. The Center offers both group and individualized programs to help students deal with academic and personal concerns.

## Dean of Students' Office

Student Union 1.20 •882-5115
The goal of the Dean of Students' Office is to serve the needs and concerns of students and to be an advocate. Students are encouraged to have the most enriching college experience possible and to accomplish this a number of services and programs are offered. These services and programs include Student Activities, Student Publications, Student Health Services, Career Services and Placement, Conflict Resolution Center, and Student Discipline. Student input is an important element and is strongly encouraged.

## Career Services and Placement

Tandy Hall \#205 • 882-JOBS
The Career Services and Placement Office provides students assistance in choosing a major, planning a career, and meeting their college expenses and/
or gaining work experience in their chosen fields. Students are assisted with career decision-making and planning, career resource utilization and exploration, as well as evaluation of interests and preferences in occupations. For more information, call 882-8866.

## Disability Services

Lightner Student Center • 882-7374/800-735-2989 TTY
Students with disabilities may request assistance through Disability Services, and office of the Counseling Center. To request services, students must register with the Counselor/Coordinator of Disability Services. Proof of disability is required. (Documentation requirements vary depending on the disability.) Students bear the responsibility of making their abilities and limitations known to Disability Services. The Counselor, in consultation with the student, will decide on the appropriate accommodations and the student will be provided a form for notifying each professor. Student must request services each semester, as needed.
Disabled parking permits may be obtained at the Campus Police Department. Proof of disability is required.
TDD users who wish to contact the University by phone may call through Relay Texas at 1-800-7352989. This catalog is available in alternate formats upon request. For information, contact Disability Services.

## Student Financial Assistance

Tandy Hall \#206 • 882-8277
The Financial Aid Office must monitor the progress of the student toward the completion of a certificate or degree in order to meet federal and state guidelines governing the administration of student financial assistance. A student who fails to achieve minimum standards for completion of classes or grade point average, or falls behind in degree progression, may lose eligibility for all types of federal, state, and institutional aid administered by the Financial Aid Office.
The Graduate Satisfactory Academic Progress (SAP) Standards for Financial Aid (FA) include quantitative and qualitative measures and are applied to
financial aid recipients at the end of each Fall and Spring semester. Students applying for financial aid are also subject to the standards at point of financial aid application and/or prior to financial aid disbursement.
The standards used for measuring UG Satisfactory Academic Progress are:
--Quantitative: Completion Rate
--Quantitative: Maximum Attempted Credits
--Qualitative: Cumulative GPA
The evaluation includes all graduate credits attempted during any period of credit-hour enrollment offered at UTB/TSC, including mini sessions and summer terms, and all accepted transfer credits, even for courses taken during periods when the student was not receiving financial aid and periods of dual enrollment.
Courses with grades of $A, B, C, D, P, S$ and $C R$ are considered as attempted and earned credit hours. Courses with grades of F, U, W, WC, WF, WM, WP, NR, DF, DP, and DR are considered as credit hours attempted, but not earned. Incomplete courses (with grade of I) are considered as attempted hours until a final grade is posted. Students are required to request a re-evaluation by the Financial Aid Office, after successful completion of an incomplete course. Repeated course hours (designated as R) are included as attempted hours, but excluded from earned hours, regardless of course grade. Withdrawn courses are considered attempted credits, but are excluded from earned credits, regardless of reason for withdrawal.

Students failing either the quantitative or qualitative measures are placed on Financial Aid Probation or Suspension as appropriate.

## Quantitative Measure

Attempted and earned credit hours are used in the quantitative measure which includes two standards: completion rate and maximum attempted credits. Attempted hours are those credits for which a student is registered for on the official record date (according to the published Academic Calendar) for each semester, including mini sessions and summer terms. Earned hours are those credits for which a student receives a passing grade (according to Grade Standards published in the Graduate Catalog).

The completion rate standard for financial aid consideration is calculated by dividing the cumulative credit hours earned by the cumulative credit hours attempted. To remain in good standing, students are expected to successfully complete at least $90 \%$ of the course work attempted. Students falling below the minimum completion rate of $90 \%$ are placed on Financial Aid Probation or Suspension as appropriate.
For example, a student earning 6 of 9 attempted graduate credit hours would enter Financial Aid Probation. ( $6 / 9=67 \%$ ).
The standard for maximum attempted credits for financial aid consideration is measured by dividing the cumulative credit hours attempted by the hours required to complete the program of study. To remain in good standing, students may not exceed $150 \%$ of the credit hours required for the educational program. Students exceeding the maximum attempted credits immediately enter Financial Aid Suspension status.
For example, if a student is pursuing a graduate degree requiring 36 credit hours, no financial aid consideration would be available after attempting 54 credit hours, even if the student has not yet earned the graduate degree and meets all other satisfactory academic progress standards. ( 36 X $150 \%=54$ )
Students are required to notify the Financial Aid Office of changes in majors, degrees, or if pursuing a doctoral degree. The notification must include an approved degree plan, an analysis by the academic advisor indicating the impact to maximum attempted credits, and may also require a financial aid suspension appeal.

## Qualitative Measure

For financial aid consideration, students remain in good standing when they maintain a cumulative grade point average (GPA) of 3.0 or higher. Students falling below the minimum cumulative grade point average of 3.0 and the minimum last term GPA of 3.0 are placed on Financial Aid Probation or Suspension as appropriate.

## Status

Good Standing: The Good Standing status is awarded when a student is maintaining a cumulative

GPA of 3.0 or higher, and a cumulative completion rate of $90 \%$ or higher, and has not exceeded the maximum attempted credits for the declared program of study.
Probation: If at the end of the initial evaluation the student is not meeting the minimum completion rate (90\%) or cumulative grade point average (3.00), the student enters Financial Aid Probation status. During probation period(s), the student has the opportunity to continue to receive financial aid while attempting to regain financial aid satisfactory progress standards. The student may be referred to academic advisors for further guidance and evaluation.
Suspension: If at the end of the second evaluation the student is still not meeting the minimum completion rate (90\%) or cumulative grade point average (3.00), the student enters Financial Aid Suspension status. Financial aid will be suspended until the student successfully meets the completion rate and cumulative grade point average standards without exceeding the maximum attempted credits. The student is responsible for paying his/her own expenses, such as tuition, fees, books, supplies, etc. and will not be reimbursed for period(s) of financial aid suspension. The student may be referred to academic advisors for further guidance and evaluation.
Students in probation or suspension status who improve their academic performance to the required completion rate and cumulative GPA without exceeding maximum attempted credits will return to good standing and are eligible for financial aid consideration.

Students exceeding the maximum attempted credits immediately enter Financial Aid Suspension status and may no longer receive financial aid for the declared program of study. If a change in program of study is being considered, the student must submit a financial aid suspension appeal that includes an analysis by the academic advisor indicating the impact to maximum attempted credits.

## Financial Aid Suspension Appeals

To appeal suspension from financial aid, students must submit a written appeal with supporting documentation to the Financial Aid Office (where instructions and cover sheet are available).

The appeal must explain and documentation must support the unusual circumstances that prevented the student from meeting required academic standards. Unusual circumstances may include: death of a close family member, extended illness, personal injury, or other extraordinary circumstances. Supporting documentation may include: death certificate, physician's statement, police report, etc. During the appeal process the student must be prepared to pay his/her own expenses, such as tuition, fees, books, supplies, etc. without expectation of financial aid reimbursement. A decision by the Financial Aid Appeal Committee will be rendered within two weeks; the decision of the committee is final.

## How Your Enrollment Status Affects Your Student Financial Aid

The Financial Assistance Office recalculates financial aid eligibility for students changing enrollment status on or before the official census date (12th class day for Fall/Spring semesters, 4th class day for Summer sessions). Recalculations are processed for schedule changes initiated by the student (in the form of adds/drops) or by the university (in the form of cancelled courses and/or other administrative changes).
If you add and drop or withdraw from courses (after financial aid is disbursed) and this results in a decrease in total credit hours enrolled, you may owe financial aid funds back to the program or you may owe other charges to the institution. Check with an advisor in the Financial Assistance Office before making schedule changes!
Some awards, including Pell grants, are adjusted based on the number of hours enrolled at the end of the official census period. Other awards, including Federal student loans, may no longer be disbursed after a student drops below half-time status within the loan period. Students should also be aware that changes to enrollment status for a specific semester may also impact program participation and/or eligibility for future semesters.
If the financial aid eligibility is increased and a credit remains after the revised tuition and fees are determined, the available balance will be promptly mailed to the student by the Business Office. If the financial aid package is reduced and
an account balance remains after the Business Office recalculates tuition and fees, the student is responsible for promptly paying this amount in full. (Review the refund policy and the tuition and fees information published in this booklet).
In general, students dropping below half-time status, on or before the official census date, are ineligible for most forms of financial aid, and similar to students completely withdrawing from UTB/TSC, may be required to repay awards and/or tuition balances, as per the Title IV Returns policy.
Note: Students reducing enrollment status after the official census date should refer to the Federal Financial Aid Satisfactory Academic Progress Standards and students completely withdrawing from the institution, before or after the official census date, should also refer to the Procedures for Return of Title IV Funds.

## Return of Title IV Student Financial Aid Funds When a Student Withdraws

When federal Title IV grant or loan assistance is disbursed, but the recipient does not complete the enrollment period, withdraws, drops out, fails all classes or takes a leave of absence, the law requires that UTB/TSC calculate the amount that must be returned by the school and/or student to Title IV program accounts.
The Title IV programs that are covered by this law are: Federal Pell Grants, Stafford Loans, Plus Loans, Federal Supplemental Educational Opportunity Grants (FSEOG), Academic Competitiveness Grant (ACG), and the National Smart grant.

## Official Withdrawals

The date the student initiates the withdrawal is used for calculating the percentage used in the formula for Return of Title IV funds. The number of days from the 1st class day to the withdrawal date divided by the number of days in the payment period (semester) equals the percentage of Title IV funds earned. If the withdrawal date is after the $60 \%$ point of the semester, the student has earned $100 \%$ of the Title IV funds.

## Unofficial Withdrawals

If the student fails to earn a passing grade in at
least one class during the semester, the institution will assume the student withdrew unofficially and will calculate Return of Title IV Funds accordingly. If it is determined that the unofficial withdrawal date is earlier than the $60 \%$ point of the semester, the student may owe funds to the Title IV financial aid programs and/or the institution. For a student who withdraws without notifying the institution (unofficially withdraws or drops out), the withdrawal date is:

- the midpoint of the payment period or period of enrollment, as applicable
- at the institution's option, the student's last date of attendance at an academically-related activity; or
- if the institution determines that the student left without notification because of illness, accident, grievous personal loss, or other such circumstances beyond the student's control, the date that the institution determines is related to that circumstance.
Students have 10 days from the date the institution notifies them to clarify their enrollment status. Unless the student can provide acceptable documentation that shows the student was enrolled more than $60 \%$ of the semester, the student will be responsible for returning the unearned funds. Students have 45 days from the date the institution notifies them in writing to make payment arrangements. The student is responsible for payment of any institutional charges and/or Title IV funds resulting from delayed notification of the last date of instructional activity. Failure to make satisfactory payment arrangements on or before the 45th day may result in the following consequences:
- Notification to the federal government of your overpayment
- Notification to lenders, servicers and guarantors of the last date of attendance on at least a half-time basis
- Cancellation of future scheduled loan proceeds
- Cancellation of future scheduled restricted grant, scholarship or work program funds
- Cancellation of future scheduled Pell Grant awards, Academic Competitive Grant and National SMART Grant awards.
- Ineligibility for aid in the future, or until overpayment is settled.
Students should meet with a Financial Aid advisor
for a Withdrawal Evaluation before making a decision to withdraw or stop attending classes.


## Post-withdrawal Disbursement Process

If you did not receive all of the funds that you earned, you may be due a post-withdrawal disbursement. Post-withdrawal eligibility can be used to credit outstanding charges on a student's account. UTB/TSC has 30 days from the date that the University determined the student withdrew to offer any amount of post-withdrawal disbursement to the student. The student must respond within 14 days from the date that that University sends the notification to be eligible to receive the postwithdrawal disbursement. If the student does not respond to the University's notice, no portion of the withdrawal disbursement that is not credited to the students account may be disbursed. If the postwithdrawal disbursement includes loan funds, UTB/ TSC must get your permission before it can disburse them. You may choose to decline some or all of the loan funds so that you don't incur additional debt. UTB/TSC may automatically use all or a portion of your post-withdrawal disbursement (including loan funds, if you accept them) for tuition, fees, and room and board charges (as contracted with UTB/ TSC). For all other school charges, the UTB/TSC needs your permission to use the post-withdrawal disbursement. If you do not give your permission, you will be offered the funds. However, it may be in your best interest to allow UTB/TSC to keep the funds to reduce your debt at the school.

## Procedures for Return of Title IV Funds

If the total amount of Title IV grant and/or loan assistance that the student earned is less than the amount disbursed to or on behalf of the student, the difference between these amounts must be returned to the Title IV programs in the following order of priority (not to exceed the amount originally disbursed):

1. Unsubsidized FFEL Stafford Loans
2. Subsidized FFEL Stafford Loans
3. PLUS FFEL Loans
4. Federal Pell Grant
5. Academic Competitive Grant
6. National SMART Grant

## 7. Federal SEOG Grant

8. Other Title IV assistance (excluding FWS)

The school and the student share the responsibility for returning Title IV aid. The school returns "unearned"Title IV funds that have been paid to the school to cover the student's institutional charges received from Title IV grant and/or loan programs. The student is responsible to repay UTB/TSC for any unpaid institutional charges resulting from the Return of Title IV Funds calculation. The school must return Title IV funds due to the federal programs no later than 45 days after the date the school determines the student withdrew.

If the student owes funds back to the Title IV programs, the institution will advise the student within 30 days of determining that the student withdrew. The student has 45 days from the date of notification from the institution to take action on the overpayment. If the student's portion of unearned Title IV funds included a federal grant, the student has to pay no more than $50 \%$ of the initial amount that the student is responsible for returning. Immediate repayment of the unearned loan amount is not required because the student repays the loan to the lender according to the terms or conditions in the promissory note. The institution will advise the lender of the student's withdrawal within 45 days of determining the student withdrew.

No additional disbursements may be made to the student for the enrollment period. If the student does not repay the amount owed to the Title IV programs or does not make satisfactory payment arrangements with the U.S. Department of Education, UTB/TSC will report to the National Student Loan Data System (NSLDS) that the student received an overpayment. The student loses eligibility for further Title IV aid until resolved.

The requirements for Title IV program funds when you withdraw are separate from any refund policy that UTB/TSC may have. Therefore, you may still owe funds to the school to cover unpaid institutional charges. UTB/TSC may also charge you for any Title IV program funds that the school was required to return. If you don't already know what UTB/TSC's
refund policy is, you can ask for a copy. UTB/TSC can also provide you with the requirements and procedures for officially withdrawing from school.

If you have questions about your Title IV program funds, you can call the Federal Student Aid Information Center at 1-800-4-FEDAID (1-800-433-3243). TTY users may call 1-800-730-8913. Information is also available on Student Aid on the Web at www.studentaid.ed.gov.

## Withdrawing from School

Students who wish to withdraw from UTB/TSC may do so by logging into Scorpion Online, visiting the Office of the Registrar and completing a form, or by calling (956) 982-5800. Students completely withdrawing after the Official Record Date (ORD) should also refer to the Federal Financial Aid Satisfactory Academic Progress Standards.
Note: For additional information on withdrawals, Return of Title IV, and sample calculations, students should see a Financial Aid Advisor.

## Other Types of Financial Aid Available

Tuition Exemptions: The Texas Legislature has provided a tuition and fee exemption, excluding the general deposit and student services fees, provided under a54.201-a54.219 of the Texas Education Code. To obtain the exemption, an approved application must be on file with the Office of Student Financial Assistance six weeks prior to registration. Tuition and fee exemptions are granted for the following categories of students:

- Children of Texas veterans (Hazelwood) killed or disabled while in service
-Blind and deaf students
-Fosterchildren
- Children of prisoners of war or persons missing in action
-Texas ex-servicemen
- Educational aides
- Senior citizen

This information is provided in summary form. For more information, contact the Office of Student Financial Assistance at Tandy Hall \#206 and/or refer to the Texas Education Code, $\alpha 54.201$, et seq.

## Graduate Records Examinations Fee Reduction Program

Candidates receiving a GRE Fee Reduction voucher will be required to pay 50 percent of the test fee, rather than the total test fee. This fee is likely to be high enough to ensure that candidates will be seriously planning to test when the appointment is made, and it covers the expense associated with seat time and processing of the Fee Reduction request. Fee Waiver vouchers for ScoreltNow! Online Writing Practice will continue to be provided to all Fee Reduction candidates, free of charge.
In addition to implementing a Fee Reduction Program, we will also begin a more careful process to monitor the number of vouchers available for this program.

## Veteran's Benefits

Tandy Hall \#206 • 882-8980
U.S. veterans who are interested in applying for any educational benefits must contact the Veteran Affairs department located at the Office of Student Financial Aid Assistance in Tandy 206 at least two months before the first day of class. Students will be advised of their eligibility, requirements for application for benefits, and the documents needed for the application process.
Students must be eligible under one of the following programs:
Chapter 30 - Montgomery GI Bill-Active Duty
Chapter 31-Vocational Rehabilitation
Chapter 32 - Veterans Educational Assistance Program (VEAP)
Chapter 35 - Survivor's and Dependents'Educational Assistance Program
Chapter 1606- Montgomery GI Bill - Selected Reserve
Chapter 1607 - Reserve Educational Assistance Program (REAP)
If veterans apply for financial aid assistance, they are required to report expected benefits amount on their Free Application for Federal Student Aid.
Graduate students receiving VA educational benefits must maintain a cumulative 3.0 Grade Point Average to be making satisfactory progress.

## Hazelwood Act

Texas veterans who have no remaining Veterans Administration education benefits may be exempted from payment of tuition and fees excluding student service fees. To obtain the exemption of tuition under this act, an approved application must be on file with the Veterans Affairs Department of the Office of Student Financial Assistance three weeks prior to registration.
Also, the children of members of the armed forces who are or were killed in action, who die or died while in service, who are missing in action or whose death is documented to be directly caused by illness or injury connected with service in the armed forces of the U.S. may be entitled to an exemption, if they are residents of Texas.

## Student Official

 Policy StatementsAIDS, HIV and Hepatitis B Infection: UTB and TSC recognize 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. In furtherance to its commitment, UTB and TSC have 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 UTB and TSC 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 available in the Dean's office of each school, college and division, the library and most UTB/TSC departments. The policy is also available at the website: http://www.utbtsc.edu/hoop/files/ s3-2.pdf. This policy is applicable to all students of UTB and TSC as they pursue their academic and clinical endeavors. Several brochures are available to all students on request by calling Student Health Services at 882-8951.

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 each year. There is a treatment, but those who survive may develop severe health problems or disabilities. Symptoms include high fever, rash or purple patches on skin, light sensitivity, confusion and sleepiness, lethargy, severe headache, vomiting, stiff neck, nausea and 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 can I find more information?

Contact your own health care provider.
Contact your Student Health Center at (956) 8828951 or (956) 882-3896
Contact your local or regional Texas Department of Health office at 1-800-837-6768
Contact web site: www.cdc.gov/ncidod/dbmd/ diseaseinfo; www.acha.org; http://blue.utb.edu/ admissions/admis_meningitis.htm.

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 $\S 552.001$ et. seq., are respectively a federal and state law that provide for the review and disclosure of student educational records. In accordance with these laws the University has adopted the following policy. Individuals are informed of their rights under these laws through this policy which is included in the University Handbook of Operating Procedures and Catalog. The catalog will be made available for inspection through the Vice President of Student Affairs office and HOOPs are available in the Library and most administrative offices. The HOOP is also available on the web at http://unix.utb.edu/~TIF/hoop/frame2a. html.

UTB/TSC will not permit access to or the release of personally identifiable information contained in student education records without the written consent of the student to any party, excepts as follows:

1. To appropriate UTB/TSC officials who require access to educational records in order to perform their legitimate educational duties;
2. To officials of other schools in which the student seeks or intends to enroll, upon request of these officials;
3. To federal, state, or local officials or agencies authorized by law;
4. In connection with a student's application for, or receipt of, financial aid;
5. To the parents of a dependent student as defined in $\S 152$ of the Internal Revenue Code of 1954, provided a reasonable effort is made to notify the student in advance;
6. In compliance with a judicial order or subpoena;
7. In an emergency situation if the information is necessary to protect the health or safety of the students of other persons;
8. To an alleged victim of any crime of violence, the results of the alleged perpetrator's disciplinary proceeding may be released;
9. The final results of any disciplinary proceeding against a student who is an alleged perpetrator of any crime of violence or nonforcible sex offense 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; or
10. To a parent or legal guardian of a student, information regarding any violation of any law or university policy, governing the use or possession of alcohol or a controlled substance, 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.
The University will release information in student education records to appropriate University officials as indicated in (1) above when such records are needed by administrators, faculty or staff in furtherance of the educational or business purposes of the student or University.
A record of requests for disclosure and such disclosure of personally identifiable information from student education records shall be maintained by the Enrollment Office for each student and will also be made available for inspection pursuant to this policy. If the institution discovers that a third party who has received student records from the institution has released or failed to destroy such
records in violation of this policy, it will prohibit access to educational records for five years. Respective records no longer subject to audit nor presently under request for access may be purged according to regular schedules. Certain requests will not be recorded, such as releases to the student himself or herself; pursuant to the written consent of the student; to university officials with legitimate education 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. Directory Information: At its discretion, UTB/TSC may release directory information which shall include:
11. name, address, telephone number
12. date and place of birth
13. major field of study
14. participation in officially recognized activities and sports
15. dates of attendance
16. most recent previous educational institutions attended
17. classification
18. degrees and awards received
19. date of graduation
10.physical factors (height and weight) of athletes
20. e-mail addresses

Students may withhold directory information by notifying the Office of Enrollment in writing each semester during the first 12 days of class of a fall or spring semester, the first four class days of a summer semester, or the first three days of any quarter. Request for nondisclosure will be honored by the institution for only the current enrollment period; therefore, a request to withhold directory information must be filed each semester or term in the Office of Enrollment.

Access to Files: Upon written request, UTB/TSC shall provide a student with access to his/her educational records. The Vice President for Business Affairs at Tandy Hall has been designated by the institution to coordinate the inspection and review procedures for student education records, which include
admissions files, academic files, and financial files. Students wishing to review their education records must make written requests to the Vice President for Business Affairs listing the item or items of interest. Education records covered by the Act will be made available within 45 days of the request.
A list of education records and those officials responsible for the records shall be maintained at the Enrollment Office. They include:
Academic Records

- Enrollment Office (Admissions/ Registrar): Director of Enrollment
- Department and Faculty Offices

Student Service Records

- Counseling Office: Director of Counseling
- Student Activities Office: Director of Student Activities
- Student Affairs: Vice President for Student Affairs
- Testing: Director of Testing

Financial Records

- Business Office: Vice President of Business Affairs
- Office of Student Financial Assistance: Director of Financial Aid
A student may authorize the release of educational records to a third-party with a written consent that is signed and dated, and specifies the records to be disclosed, the party to whom the records are to be disclosed, and the purpose of the disclosure. Educational records do not include:

1. financial records of the student's parent or guardian;
2. confidential letters of recommendation which were placed in the educational records of a student prior to January 1, 1975;
3. records of instructional, administrative and educational personnel which are kept in the sole possession of the maker and are not accessible or revealed to any other individual except a temporary substitute for maker;
4. records of law enforcement units, including the university campus police;
5. employment records related exclusively to an individual's employment capacity;
6. medical and psychological records;
7. thesis or research papers; or
8. records that only contain information
about an individual after the individual is no longer a student at the institution.
Challenge to Record: Students may challenge the accuracy of their educational records. Students who believe that their education records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or other rights may discuss their problems informally with the V.P. for Student Affairs. If agreement is reached with respect to the student's request, the appropriate record will be amended. If not, the student will be notified within a reasonable period of time that the records will not be amended, and they will be informed by the V.P. for Student Affairs of their right to a formal hearing.
Student requests for a formal hearing must be made in writing to the Vice President for Student Affairs who, within a reasonable period of time after receiving such requests, will inform students of the date, place and the time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more persons of their choice, including attorneys, at the student's expense. The hearing officer that will adjudicate such challenges will be appointed by the V.P. for Student Affairs in nonacademic matters and by the V.P. for Academic Affairs in academic matters. The substantive judgement 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 educational records. Decisions of the hearing officer will be final, will be based solely on the evidence presented at the hearing, will consist of the written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned.
The education records will be corrected or amended in accordance with the decision of the hearing officer, if the decision is in favor of the student. If the decision is unsatisfactory to the student, the student may place with the education records statements commenting to the information in the records or statements setting forth any reasons for disagreeing with the decision of the hearing officer, or both.

The statements 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 in keeping with the provisions of the act may request in writing, assistance from the President of the institution.

Change of Address and Change of Name: Students are responsible for providing accurate and current mailing address information and legal name changes to the Graduate Office and the Enrollment Office. Complaints: Complaints regarding alleged failures to comply with the provisions of the FERPA may be submitted in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-4605.

Copies: 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 Open Records Act except that official transcripts will be $\$ 1.00$. Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at UTB/TSC.

Hazing Policy: Hazing in state educational institutions is prohibited by both state law ( $\$ 51.936$ and 37.151 et seq, Texas Education Code) and by the Regent's Rules and Regulations (Series 50101). 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.

## Individuals: A person commits an offense if the person:

1. engages in hazing;
2. solicits, encourages, directs, aids or attempts to aid another engaging in hazing;
3. recklessly permits hazing to occur; or
4. has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or has firsthand knowledge that a specific hazing incident has occurred, and knowingly fails to report that knowledge in writing to the Vice President for Student Affairs or other appropriate official of the institution.
Organizations: An organization commits an offense
if the organization condones or encourages hazing or if an officer of any combination of members, pledges, or alumni of the organization commits or assists in the commission of hazing.
Definition: The term "hazing" is broadly defined by statute to mean 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 of safety or a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in an organization. Hazing includes, but is not limited to:
a. Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;
b. 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 of harm or that adversely affects the mental or physical health or safety of the student;
c. any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or other substance which subjects the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student;
d. 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 subdivision; and
e. Any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code. The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosection.
Immunity: 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 Vice President for Student Affairs or other appropriate official of the institution and immunizes that person for participation in any judicial proceeding resulting from that report. Additionally, a doctor or other medical practitioner who treats a student who may have been subjected to hazing may make a good faith report of the suspected hazing activities to police or other law enforcement officials and is immune from civil or other liability that might otherwise be imposed or incurred as a result of the report. The penalty for failure to report is a fine of up to $\$ 1,000$, up to 180 days in jail, or both. Penalties for other hazing offenses vary according to the severity of the injury which results and include fines from $\$ 500$ to $\$ 10,000$ and/or confinement for up to two years.

Immunization Requirements: The following immunizations are required for all students enrolled in health related courses which will involve direct patient contact or who come in contact with human biological fluids or tissue. Students for whom these immunizations are not required by the institution are strongly urged to obtain these immunizations for their own protection.

- 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.
Certain exemptions are allowed from immunization requirement; students should contact the Office of the Vice President for Student Affairs for information. Inquiries concerning supplemental immunization requirements should be directed to Student Health Services.

Illicit Drug Use and Alcohol Abuse Program and Policy: In compliance with the Drug Free Schools and Communities Act Amendment of 1989, Series 50101 of the Regents' Rules and Regulations provides for disciplinary action against any student who engages in conduct that is prohibited by state, federal, or local law. This includes those laws prohibiting the use, possession, or distribution of drugs and alcohol.
UTB and TSC will impose at least a minimum disciplinary penalty of suspension for a specified period of time or suspension or rights and privileges, or both, for conduct related to the use, possession, or distribution of drugs that are prohibited by state, federal, or local law. Other penalties that may be imposed for conduct related to the unlawful use, possession, or distribution of drugs or alcohol include disciplinary probation, payment for damage to or misappropriation of property, suspension of rights and privileges, suspension for a specified period of time, expulsion, or such other penalty as may be deemed appropriate under the circumstances.

Information is distributed to each student annually concerning standards of conduct prohibiting unlawful possession, use, or distribution of illicit drugs and alcohol, health risks associated with their use and abuse, institutional penalties, state and federal criminal penalties, and counseling and rehabilitation programs available in the area. Additional information is also available in the Student Health Services Office.

Sexual Harassment Policy: UTB/TSC is committed to provide a professional working and learning environment free from sexual harassment. Sexual harassment has been declared a form of sex discrimination under Title VII of the Civil Rights Act of 1964, and Title IX of the Civil Rights Act of 1972 and the Texas Commission on Human Rights Act, Section 21.001 et.seq, Texas Labor Code, and it is illegal, and actionable under civil and criminal 1 law. In addition to violation of Title VII of the Civil Rights Act of 1964, 42 U.S.C. Sec. 2000e, and Title IX of the Educational Amendments of 1972, 20 U.S.C. Sec. 1681, the act of committing sexual harassment by a public servant is considered to be a criminal offense under Texas Penal Code Sec. 39.02, and it may constitute assault, sexual assault, public lewdness, or indecent
exposure under Chapter 21 and 22 of the Texas Penal Code.

## Definition: The unwelcome sexual advances, requests for sexual favors, verbal and written comments, or physical conduct of a sexual nature may constitute sexual harassment when such conduct:

- is made, either explicitly or implicitly, a term or condition of instruction, employment, participation in a university activity; or
- is used to be a basis for academic or employment decisions or evaluations; or
- has the purpose or effect of unreasonably interfering with an individual's academic or work performance; or of creating an intimidating, hostile, or offensive university environment.
In addition to the above definition, behaviors that may constitute sexual harassment may include, but are not limited to the following:
- Intentional touching;
- Explicit or implicit propositions to engage in sexual activity;
- Gratuitous comments of sexual nature such as explicit statements, questions, jokes or anecdotes;
- Remarks of a sexual nature about a person's clothing or body;
- Remarks about sexual activities or speculation about sexual experiences;
- Exposure to gratuitous sexually suggestive visual displays such as photographs, graffiti, posters, calendars or other materials;
- Deliberate physical interference with or restriction of an individual's movements;
- Persistent unwanted sexual/romantic attention;
- Subtle or overt pressure for sexual favors; or
- Deliberate, repeated humiliation or intimidation based upon the sex of an individual


## Sexual Misconduct

In addition to prohibiting sexual harassment as defined by law, the University also prohibits conduct of sexual nature that, although not so serious or pervasive that it rises to the level of sexual harassment, is unprofessional and/or inappropriate for worksites and teaching locations.

Behaviors that may constitute sexual misconduct include but are not limited to:

- Failure to observe the appropriate boundaries of the supervisor/subordinate or faculty/student relationship;
- Repeatedly engaging in sexually oriented conversations, comments or horseplay, including the use of language or the telling of jokes or anecdotes of a sexual nature in the workplace, office or classroom, even if such conduct is not objected by those present; and
- Gratuitous use of sexually oriented materials not directly related to the subject matter of a class, course or meeting, even if not objected to by those present.
Sexual harassment is not limited by gender of either party, nor by superior-subordinate relationships. This policy is applicable to all employees, faculty and students of UTB/TSC.
It is considered a violation of university and college sexual harassment policy if there is failure to investigate allegations of sexual harassment or failure to take timely corrective action. General procedures for reporting and complaint resolution are found in HOOP 3.3 pages 3 to 9 .


## Review

This policy shall be reviewed annually by the Vice President for Business Affairs/EEO/AA.

Excused absences: UTB/TSC will allow a student who is absent from classes for the observance of a religious holy day or a non-religious "excused absence" day to take an examination or complete an assisgnment scheduled for that day within a reasonable time after the absence, if, not later than the 15th day of the semester, the student notifies the instructor of each class that the student will be absent that day for a religious holy day or non-religious "escused absence." The student's notification must be in writing and must be delivered by the student personally to the instructor of each class, with receipt of hte notification acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor of the class. A religious holy day means a holy day observed by a religion whose place of worship are exempt from property taxation under Section 11.20, Tax Code. A non-religious
"excused absence" means absence for a day and for a reason that is mutually agreed to in advance by the instructor and student. (Each instructor has her/his right to determine what is an "excused absence" and is not bound by the decision/s of other instructors.) Under certain circumstances, a student who is reqauired to participate in active military service is excused from scheduled classes or other required activities and will be allowed to complete an assignment or exam within a reasonable time after the absence. The excused absence is permitted only if the student will not miss more than $25 \%$ of the total number of class meetings or the contact hour equivalent (not included the final examination period) for the specific course or courses in which the student is enrolled at the beginning of the period of military service.

Solicitation Policy: Campus facilities are not open for general public use. Series 80103 of the Regents' Rules and Regulations states that no solicitation shall be conducted on the grounds, sidewalks, or streets of the UTB/TSC campus, except by the agents, servants, or employees of this institution acting in the course and scope of their employment, or by the Student Government Association, or by a registered student, faculty, or staff organization of UTB/TSC. Such solicitation must adhere to the following rules:

- Academic or institutional programs being carried on in the buildings shall not be disturbed or interfered with.
- The free and unimpeded flow of pedestrian or vehicular traffic on sidewalks and streets and at places of ingress and egress to and from campus buildings shall not be interrupted.
- The person(s) being solicited shall not be harassed, embarrassed or intimidated.
Non-University groups, individuals or associations are not permitted to solicit, distribute, or circulate any petition, handbill, or other literature in University buildings or on the grounds.
Newspaper vending is permitted only in the areas designated in advance by the President or his delegate. Any request for other newspapers or additional distribution areas should be directed in writing to the Vice President for Business Affairs. Prior authorization to conduct solicitations or distribution of materials on campus by registered
student organizations or by registered faculty or staff organizations must be obtained through the Office of the Vice President for Student Affairs (student organizations) or through the Office of the Vice President for Business Affairs (faculty or staff organizations). Persons desiring to conduct solicitations or to distribute materials strictly for student organizations or by registered faculty or staff organizations must be obtained through the Office of the Vice President for Student Affairs (student organizations) or through the Office of the Vice President for Business Affairs (faculty or staff organizations). Persons desiring to conduct solicitations or to distribute materials strictly for personal reasons or for personal profit or gain will under no circumstances be granted permission to do so.
Any violation of the above policy should be reported to the Office of the Vice President for Business Affairs.


## Student Right-to-Know Act and Campus Security

Act: In compliance with the Student Right-to-Know and Campus Security Act (the Act) 20 U.S.C. Sections 1092 (a), (e) and (f), as amended, the university 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 results of campus student disciplinary proceedings concerning the alleged perpetrators.

The university will make timely reports to the campus community on crimes considered to be a threat to students and employees and those reported to campus police or local police agencies. Every September, UTB/TSC will publish and distribute an annual report of campus security policies and crime statistics to all current students and employes; provide copies of the report to applicants for enrollment or employment upon request; and submit a copy of the report to the Secretary of Education upon request. This report will reference crimes which occur on property owned or controlled by the university and may be supplemented by listing crimes which occur off of campus in buildings or on property owned or controlled by student organizations that are registered by the institution when such statistics are available from local police departments.

The university will annually calculate and disclose institutional completion or graduation rates for undergraduate students to all prospective and current students.

UTB/TSC will also publish the annual security report which includes its policy regarding sex-related offenses, sexual assault prevention programs, education programs to promote awareness of sex offenses, administrative disciplinary procedures and sanctions for offenders, and counseling and student affairs for victims. Prior to the offer of athleticallyrelated student aid to a potential student athlete, the university will provide certain information on graduation rates specified by the Act to the prospective student and to the student's parents, guidance counselor, and coach.

Graduate and prospective graduate students are expected to make themselves thoroughly familiar with the university graduate program regulations, their departmental requirements and the requirements for degrees. The ultimate responsibility for successful completion of an advanced degree or other program falls upon the student. The graduate student is solely responsible for knowing the academic requirements for graduate studies and should immediately seek answers to any questions regarding policy and procedures. The Office of Graduate Studies, moreover, disclaims responsibility for problems stemming from the student's failure to follow its regulations. No waiver or exception to policy will be extended to a student who pleads ignorance of catalog statements. All students are responsible for providing accurate and current name, mailing address and phone information.

## Academic Probation and Suspension

In order for a degree-seeking graduate student to remain in good academic standing, the student must maintain a cumulative grade point average of 3.0 ( $3.0=$ B on a 4.0 scale). A student whose overall GPA falls below a 3.0 in a given semester or who receives a grade of F during any one semester or summer session is automatically placed on academic probation the following semester. Academic probation constitutes a warning of insufficient level of progress. Within the following nine semester credit hours, the overall GPA must return to 3.0 or above or the student will be suspended for a minimum of one semester. Students may be readmitted only after presenting a written petition to the Office of Graduate Studies and to the chair of the major department. Written approval to register for graduate coursework must come from both the
appropriate Department Chair and the Office of Graduate Studies .

## Admission to Degree Candidacy

Admission to a graduate program does not designate a student as a candidate for the graduate degree. Candidacy may be achieved only when students have completed a planned Program of Study, have met academic standards of the graduate program and the major department and have satisfied financial obligations to the university. Degrees are not awarded automatically upon completion of scholastic requirements. To be considered as a candidate for a degree, a student must file the appropriate application with the Registrar's Office. (See "Graduation Requirements" for further information.)

## Auditing Policy

With the written permission of the department chair, instructor and the dean of the school or college in which the course is taught, an individual who has been admitted as a regular degree seeking student or as a Non-Degree student may sit in a class as an auditor without receiving college credit. The auditor's name will not be entered on the class roll, and the instructor will not accept any papers, tests or examinations or require oral recitations from the auditor. Auditors pay a fee, which is published in the Course Schedule. A person 65 years of age or older may enroll as an auditor without credit and without payment of an audit fee. Audit fees are nonrefundable.
Audit enrollment is on a space available basis for courses that have been designated as suitable for audit by the Dean of the college or school. Not all courses are available for audit. Audit students do not receive credit. An audit intention cannot be changed to credit nor can credit courses be changed to audit. Audit work can not be used toward diploma or degree requirements.
Auditors who wish to have library privileges may receive them by filling out a University Scholars Library application at the circulation desk at the UTB/TSC Library and paying a nonrefundable fee. There are limits on the services offered to University Scholars Library cardholders; further details are available from the circulation desk. Auditors who
want parking privileges should go to the Campus Police Office with their validated Request to Audit form. Audit enrollment does not entitle the student to instruction in applied music, the use of laboratory equipment and supplies, admission to the university-sponsored fine arts and athletic events, or health and health center benefits.

## Catalog Applicability and Time Limits

A student will be governed by the Graduate Catalog in effect at the time of official notification of admission to graduate studies or may choose to graduate following the requirements of the most current catalog. Should a graduate student fail to enroll for a full calendar year, the catalog requirements in effect at the time of readmission will apply. State of Texas regulations with regards to certification programs taken as part of a graduate program do not supersede university graduate degree program requirements.
Students must complete all graduate work for a degree within seven years of the time of their first graduate course registration. Graduate courses more than seven years old will not be accepted for credit toward a degree program. Students who have compelling reasons for interruption of their graduate programs may petition the Dean of Graduate Studies for an extension of the time limit.

## Comprehensive Examinations

Some programs require a comprehensive examination. The purpose of the comprehensive exam is to evaluate the student's mastery of the field(s) of study. The method and procedure for examination must be specified on the student's program of study. The comprehensive exam may not be scheduled prior to the student's final semester of coursework. The application for the comprehensive exam must be submitted by the student through the Registrar's Office by the published due date.
The academic department prepares and grades the comprehensive exam. The Office of Graduate Studies notifies students, administers the exam, forwards the completed exams to the academic department for evaluation and grading, and informs exam takers of the results.
The result of the comprehensive examination will be
one of the following:
PASS with a recommendation that the candidate be cleared to receive the degree.
FAIL stipulating the conditions that must be met before the candidate is eligible to take the exam the second time. The comprehensive exam may not be taken more than two times. A review period of not less than ninety (90) days nor more than one (1) year after the student is notified of the results of the first examination is required before a second exam may be completed. Conditions for a second exam may be imposed by the Faculty Advisor or Department Chair. FAIL with a recommendation that the candidate be dismissed from the program.

## Classification of Students

Graduate students have received their bachelor's degrees and are working on their master's degrees. Students enrolling in graduate courses will follow the Graduate Tuition and Fees scale. Graduate courses have a " 5 ", " 6 ", or " "7" as the first digit of the course number (Example: ENGL 6301).

## Course Load

The demands of graduate study require that the maximum allowed semester-credit-hour load be lower than that of the undergraduate. Students employed full-time or with other ongoing demands upon their time should consult with their faculty advisors or the Office of Graduate Studies realistically to assess the feasibility of their proposed course load.
Nine semester hours constitute full-time graduate enrollment during each regular (Fall and Spring) semester, and five semester hours constitute halftime enrollment. Five semester hours constitute full-time and seven semester hours is the maximum credit load allowed for each Summer session. Three semester hours constitute half-time enrollment during a Summer session. The maximum graduate student load for both Summer sessions is 12 semester hours including any mini-term enrollment. Registration will not be allowed for students attempting to register for hours in excess of these limits. Mini-term courses offered in May are counted as part of the first Summer session load. Any request
for exception to the credit load policy must be approved by the Dean of Graduate Studies. A written request including a rationale for the exception must be received by the Office of Graduate Studies two weeks prior to late registration day.

## Course Numbers

Courses are numbered to show both the collegiate level at which they are offered and the semester hour value of the course. The first digit shows the level and the second digit gives the credit hours. The last two digits are departmental designations. Courses at the 5000 level and above are graduate courses and are limited to graduate students. Courses at the 7000 level are for thesis and professional areas.

## Fresh Start

A graduate applicant who has earned a Baccalaureate degree under the "academic fresh start" statute, Texas Education Code, §51.931, will be evaluated on only the grade point average of the course of work completed for that baccalaureate degree and the other criteria stated herein.

## Grade Changes

If an error in computation, evaluation or recording warrants a grade change, the instructor of record (IOR) may initiate a grade change form through the Department Chair, School or College Dean, and Dean of Graduate Studies. In the event that the IOR is no longer employed by the university, the academic dean will make a good faith effort to contact him or her before deciding whether to change the grade or not.

## Grading System

A student receives a grade for each registered course. Grades are indicated by letters and assigned quality points as shown below. Credit toward a degree program will be granted only for courses in which a grade of "C" or better is earned.

## Grade Definition

A Excellent
B Good

Grade Points
C Average
2.00
D Below Average
1.00
(Course must be repeated. Course will not count towards degree program.)
F Failure 0.00

I Incomplete - work must be finished the next semester; otherwise, the grade automatically becomes an $F$ unless an extension of time is requested in writing to the Office of Graduate Studies by the instructor.
AU Audit - no academic credit awarded, and no transcript notation.
W Withdrawal - not used in calculation of GPA.
P Pass-carries credit but no grade points. Not used in computing GPA.*
U Unsatisfactory - appears on transcript, no grade points. Not used in GPA.*
*Only used with courses specified as Pass/Unsatisfactory in course description.
The student's grade point average (GPA) is determined by dividing the total number of grade points earned by the total letter-graded graduate hours attempted (not the number of graduate hours passed) at UTB/TSC.

## Graduate Credit for Seniors

A student who has not yet completed all requirements for the Bachelor's degree may be eligible for graduate study as a senior. Such students must complete their undergraduate work and be eligible to obtain the Bachelor's degree during the first semester of graduate work. The student must have an overall GPA of at least 3.0 and must be within nine semester hours of completing the total number of hours required for the bachelor's degree. The combined load of the graduate and the undergraduate courses for a full-time student must not exceed 12 semester hours. To take graduate courses under this provision, students must complete the graduate application process and secure the written permission of the chair of the department in which credit is sought, as well as the Graduate Dean. Seniors at other universities who have nine or fewer credits to complete for the Bachelor's degree may also qualify. They must supply transcripts, complete the application process and provide letters from their home institutions indicating they are within 9 hours of graduation.

## Graduation Requirements

A student must complete all university and program requirements to receive a graduate degree. Grades in courses offered for the Master's degree must average $B$ (3.00) overall. Prospective graduates must have the required 3.0 cumulative GPA ( $3.0=$ B on a 4.0 scale) and all grades of " 1 " must be reported. Students must complete an Application for Graduation before the application deadline. Students are required to speak with their Graduate Advisors before submitting the required applications. Once the appropriate paperwork has been submitted to the Office of Graduate Studies, students will be notified in writing regarding their eligibility. Applications are available at the Office of Graduate Studies located in Champion Hall, 1st floor.

## Grievances - Grade Appeals

Course grade grievances must be initiated by contacting the instructor or individual with whom the grievance arose within 30 days of the grade report. An effort to resolve the matter informally should be made. If the student is not satisfied with the decision, the student may appeal in writing within 21 days to the chair of the department from which the grade was issued. Disputes not satisfactorily resolved within 21 days may be appealed in writing to the school or college dean, who will render the final decision.

## Grievances - Other than Grade Appeals

In attempting to resolve any student grievance, it is the obligation of the student first to make a serious effort to resolve the matter with the individual with whom the grievance originated. Grievances involving matters other than grades are appealed to the Department Chair or office director, the Dean if appropriate, then to the Vice President for Student Affairs, Vice President for Business Affairs, or Vice President for Academic Affairs. If the matter remains unresolved at this level, the student may make a final appeal to the President. Appeals must be submitted in writing.

## On-line and Distance Education Degree Programs

Specific graduate degrees may also be awarded under On-line or Distance Education degree plans offered by UTB/TSC in cooperation with other University of Texas System components. Courses taken On-line or by Distance Education and degrees awarded under On-line or Distance Education degree programs shall be so designated on the student's official transcript and diploma. Courses taken on-line from other UT System Components that are required for a degree completion by the consortium, shall be transcripted with a letter grade. For confirmation on how a course will be transcripted, consult with your faculty advisor.

## Program of Study

Graduate degrees are awarded on the basis of scholarship, reasoning and investigative abilities, and evidence of proficiency in the student's area of emphasis. Upon admission to the graduate program, the appropriate Departmental Chair will assign a Faculty Advisor to assist in developing the formal, typed Program of Study designed to meet proficiency levels, certification, and professional needs of the student.
A Program of Study must be approved by the Faculty Advisor, Graduate Coordinator or Program Director, the Chairperson of the major department, and the Dean of Graduate Studies. After signatures are secured, copies will be distributed by the Office of Graduate Studies to the student, the Faculty Advisor, and the Chairperson of the major department. The Office of Graduate Studies will retain the original Program of Study in the student's file.
The Program of Study should be developed in consultation with the Faculty Advisor during the first semester of graduate work and must contain the following elements:

1. A brief narrative statement giving the overall objectives of the program and special certification desired.
2. Methods for achieving these objectives, i.e., courses listed in the degree plan, experiences, thesis and tentative research problems.
3. The proposed method and anticipated date of the final evaluation.

The design of each individual program is very important. Those individuals holding a graduate degree are seen by society as having an advanced state of general knowledge, as well as specific knowledge in their fields of study. Thus, it is incumbent upon the institution, the graduate faculty, and the students to ensure that those upon whom the degree is conferred are knowledgeable in their fields.
Although the minimum number of hours required for degrees is determined in accordance with the program as listed in the catalog, this should not be construed to indicate a maximum number of hours for any particular student. Each individual Program of Study may vary as to the total number of hours necessary to receive the degree. The official Program of Study may be revised upon written request of the Faculty Advisor to the Dean of Graduate Studies.

## Repetition of Courses

A graduate student may repeat any course. All grades earned (including those for repeated courses) will be used to compute the grade-point average. All attempts become a part of the permanent academic record.

## Residence Requirement

A residence of one academic year or the equivalent in summer sessions is required. In graduate programs that require a thesis, at least 18 semester hours of course credit plus six semester hours of thesis credit shall be earned in residence at UTB/ TSC. For programs that require 36 semester hours of credit but do not require a thesis, at least 24 semester hours must be earned in residence at UTB/ TSC. In all cases the last 12 hours earned for the degree must be earned as resident UTB/TSC credit. Students seeking certification with the Master of Education degree should consult the School of Education section of the catalog.
In the case of Distance Education or On-line Degree programs offered by UTB/TSC, courses offered by other accredited component institutions of the University of Texas System as part of systemwide consortial degree programs may be counted towards the residence requirement. This provision shall apply only to Distance Education or On-line
courses from other institutions.

## Second Master's Degree

A maximum of nine semester hours taken for one master's degree may be counted toward a second master's degree with the approval of the department in which the second master's degree is sought. Courses more than seven years old will not be accepted for credit toward a degree program.

## Semester Credit Hour

University credit is measured in semester hours. Ordinarily, a class that meets one 50-minute period per week for a semester will carry a credit of one semester hour. Since the majority of classes normally meet for the equivalent of three periods, each week, these classes carry three semester hours of credit. Two or three laboratory clock hours per week are usually required for one semester hour of laboratory credit.

## Student Discipline

UTB/TSC considers cultivation of self-discipline of its students to be of great importance in the development of responsible citizens. Therefore, UTB/ TSC expects its students to maintain standards of personal discipline that are in harmony with the educational goals and purpose of UTB/TSC.
Although UTB/TSC is committed to the full support of the constitutional rights of its students, including due process, it also has an equal obligation to protect its educational purpose and the interest of the students body. UTB/TSC must therefore be concerned with the actions of individuals or groups that are in conflict with the welfare and integrity of the institutions or in disregard of the rights of other students or faculty.
Attendance in a tax-supported educational institution of higher learning is optional and voluntary. By such voluntary entrance into the academic community of UTB/TSC, students voluntarily assume the obligations of performance and behavior imposed by the University relevant to its lawful missions, procedures, and functions.
When students enter UTB/TSC, it is assumed that they have a serious purpose and sincere interest in
their own social and intellectual development. They are expected to learn to cope with problems with intelligence, reasonableness, and consideration for the rights of others; to obey laws and ordinances of the nation, state and community of which they, as well as UTB/TSC, are a part. As students prize rights and freedoms for themselves, they are expected to respect the rights and freedoms of others.
Any academic or administrative official, faculty member, or student may file a complaint against any student for misconduct. A student may be penalized herein even though he/she is also punished by state and federal authorities for the same act.
Students are subject to federal, state, and local laws as well as UTB/TSC rules and regulations. Students are subject to reasonable disciplinary action, including suspension and expulsion in appropriate cases, for breach of federal, state or local laws or UTB/TSC rules and regulations. This principle extends to conduct off-campus
Students are expected to be above reproach in all scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from UTB/TSC. "Scholastic 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, any act designed to give unfair advantage to a student or the attempt to commit such acts." Regents' Rules and Regulations, Series 50101, section 2.2. Since scholastic dishonesty harms the individual, all students, and the integrity of UTB/ TSC, policies on scholastic dishonesty will be strictly enforced.
When students violate the prescribed codes of behaviors, disciplinary action may be initiated through the Office of the Dean of Students. The Student Handbook can be found on-line at http:// pubs.utb.edu/student_handbook/index.htm.

## Student Travel Policy

Pursuant to Texas Education Code, Section 51.950, the University has adopted a student travel policy. UTB's student travel policy and forms is located at the Student Affairs Website.

## Student Work and Class Attendance

Graduate students are expected to attend classes regularly and meet all requirements of their courses in order to receive grades. The typical out-of-class work requirement for the master's level is three hours of out-of-class work per week for each semester hour of credit. The responsibility for meeting the requirements for a course, degree and/or certification rests with the student. Final examinations are scheduled during the examination period at the end of the semester and are not given in advance.
Papers submitted to meet graduate course requirements are expected to be the student's own work. Information and opinions drawn from whatever source are to be cited specifically as to their respective sources, and students should use the approved form of citation. A student who engages in scholastic dishonesty will be subject to disciplinary action. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributed in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Examples of scholastic dishonesty include: using the services of a term paper company, submitting work that is not the student's work, and failing to provide clear citation to original sources. A student may not submit the same paper in substance in two or more graduate classes without prior written permission of the instructors involved.

## Thesis

Some UTB/TSC master's degree programs allow for a thesis as part of the program of study. In consultation with the Faculty Advisor, students should carefully consider their career goals in deciding between a thesis and a Non-Thesis degree. Some academic institutions regard a Non-Thesis master's degree as a terminal degree program. Students who intend to pursue the doctoral degree should seriously consider undertaking a thesis.
Students in programs that require a thesis must complete the six required hours of thesis credit. Thesis courses may be repeated and are counted in determining course load limits for a semester or

Summer session, although credit for these courses is given only once. Students who register for the thesis course must continue to register each succeeding semester or summer session until the thesis is completed.
The student shall choose in consultation with their faculty advisor a thesis committee consisting of three graduate faculty members including the student's faculty advisor (who chairs the committee). The committee will be approved by the student's advisor, the Graduate Coordinator or Program Director, the Department Chair, and the Graduate Dean. The thesis topic and written prospectus must be approved in writing by the Faculty Advisor, the thesis committee and the Dean of Graduate Studies prior to the student's undertaking the research problem. All research involving human subjects must also be approved by the Human Subjects Research Review Committee (HSRRC) prior to collection of any data. Similarly, all research involving live vertebrate animals must also be approved by the Institutional Animal Care and Use Committee (IACUC) prior to collection of any data. Instructions for the preparation of the thesis and information on the HSRRC and the IACUC can be obtained from the academic department or Office of Graduate Studies.
The thesis committee will judge the research competence of the student during the thesis defense meeting. A graduate faculty member from outside of the School/College appointed by the Dean of Graduate Studies shall represent the Office of Graduate Studies on the thesis committee during the defense meeting. The Graduate Program representative will be provided a copy of the thesis one week prior to the defense. Thesis defense meetings are announced in advance and open to the university community.
Students are responsible for adhering to all due dates regarding the thesis defense, submission of copies of the thesis to the Office of Graduate Studies, and binding (see university class schedule for dates, fees and deposits). The student must complete all course work for the degree within seven years of the time of the first graduate course registration. Courses older than seven years will not apply towards the degree. Students who have compelling reasons for interruption of their graduate degree may petition the Office of Graduate Studies for an extension of time.

## Transfer of Credit Policy

Subject to the approval of the major department, a maximum of 12 graduate semester hours taken at an accredited university may be transferred for degree credit. Transferred credit will not be counted in computing the grade point average on courses completed in the graduate program. Credit may not be transferred for:

- Courses which would not receive graduate credit at UTB/TSC.
- Courses with a grade lower than a "B".
- Correspondence and extension courses.
- Credit for life experience or prior learning.
- Courses which are more than seven years old. Courses less than seven years old may not be accepted if in the professional judgment of departmental faculty the content is outdated or obsolete.
Transfer credit used to fulfill program requirements will be approved by the Faculty Advisor, Chairperson of the Department and the Office of Graduate Studies when the official Program of Study is approved for the student. The Faculty Advisor has the initial responsibility to insure that the proposed transfer work is relevant and appropriate to the degree sought. The Office of Graduate Studies will validate the student's transcript when necessary. Additionally for the School of Education, transfer credit for certification purposes must also be approved by the Graduate Advisor, Coordinator of Teacher Education and the School of Education Dean (see "School of Education" for further information). For confirmation on how a course will be transcripted, consult with your faculty advisor.


## Withdrawing From Classes

After the official census date, students may withdraw from classes and receive a "W" on their permanent records. The last date to withdraw is specified in the Course Schedule published three times a year.
Note: Refer to "Treatment of Title IV Student Financial Aid Funds When a Student Withdraws" section for specific information on complete withdrawals for Title IV Financial Aid recipients.

# College of Liberal Arts 

Ethel Cantu, Interim Dean<br>Mary Rose Cardenas Hall South 246<br>882-8253<br>ethel.cantu@utb.edu

The College of Liberal Arts serves multiple purposes, including the provision of quality instruction in general education that is the academic foundation for all disciplines. The College is therefore dedicated to the development of many of the basic skills associated with success in the university environment.

The College consists of very traditional academic disciplines, such as English, the Social and Behavioral Sciences, the Fine Arts, and the Modern Languages, as well as Criminal Justice. As such, the college prepares students for careers in academic disciplines in a wide range of work environments.

The College provides a wide range of opportunities for students seeking advanced degrees to support work-related and career advancements and to pursue master's degrees in the traditional disciplines.

The College proposes to accomplish its stated purpose by providing a faculty, curriculum and degree programs that reflect the body of knowledge in the fields and that provide for the essential higher education needs of the student population.

## Graduate Programs

M.A.I.S. in Sociology<br>M.A. in English<br>M.A.I.S. in English<br>M.P.P.M.<br>M.A.I.S. in Government<br>M.A. in History<br>M.A.I.S. in History<br>M.M. in Music Education<br>M.A.I.S. in Music<br>M.A. in Spanish<br>M.A.I.S. in Spanish<br>Diplomate in Hispanic Language and Culture<br>Diplomate in Translation Studies

## Behavioral Sciences

Dr. Virginia V. Wood, Chair<br>Mary Rose Cardenas Hall South \#226<br>882-8225<br>virginia.v.wood@utb.edu

Graduate Faculty
Ethel Cantú, Associate Professor
William Davis, Associate Professor
Diamantina Freeberg, Associate Professor
Matthew C. Johnson, Associate Professor
Sherry McCullough, Associate Professor
David Pearson, Associate Professor
Scott A. Reid, Associate Professor
Luis Rodriguez-Abad, Associate Professor
Virginia Voltaggio Wood, Professor
William Yaworsky, Assistant Professor
Antonio N. Zavaleta, Professor

## Master of Arts in Interdisciplinary Studies (M.A.I.S.) in Sociology

## 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.

For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required
for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Interdisciplinary Studies in Sociology are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 4.0
- 2 Satisfactory letters of recommendation (one must be a former undergraduate teacher)
- A satisfactory essay of approximately 600 words, addressing why the student feels that he or she should be admitted into the program, and any additional information the faculty should consider regarding admission into the program.
Submission of official GRE score report is required prior to admission.
Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by:
June 1st - Fall
November 1st - Spring
April 1st - Summer
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.


## Degree Requirements:

Required Courses: 36 hours

Areas of Concentration: Credit Hours

English, Government, History, Music,

Sociology or Spanish.
12-18

Two or more supporting fields ............................. 18-24
Total graduate hours for degree .36
Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach Interdisciplinary Studies. Together the student and
committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses in mutually supporting fields. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval.

## Supporting Fields

Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professionals
schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of
the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

# Graduate Courses Descriptions 

## Sociology

## SOCI 6313 American Minorities

A study of the principal minority groups in American society and their sociological significance; problems of intergroup relations, social movements, and related social changes occurring on the contemporary American scene. A research project and supporting specialized readings will be emphasized. Lec 3, Cr 3.

## SOCI 6323 The Mexican-American Presence

 Mexican-American and Anglo contacts and relations in the United States from Colonial times to the present, with special emphasis on the Southwestern U.S. Social, economic and cultural differences are emphasized. Special attention is given to changes occurring among Mexican-Americans in the last few years and how this change is affecting Mexican-American-Anglo relationships. Students will have to do a research project using primary resources as part of the course requirements. Lec 3, Cr 3.SOCI 6324 Problems of U.S. Health Care Systems A seminar course that allows student investigation into the nature and functioning of the health care institutions of modern industrial societies, with special emphasis on current problems in providing health care to the complex social populations of the U.S., especially to the poor and to racial and ethnic minorities. Lec 3, Cr 3.

SOCI 6325 Contemporary Issues in Sociology A survey and review of recent developments in sociological research and theory. Topics may vary and it may be taken twice for credit. Lec 3, Cr 3.

SOCI 6333 Pro-Seminar on Sociological Theory An intensive analysis of the current state of sociological theory with consideration of the historical influences on contemporary thought. Major theoretical issues in the discipline and within the social/behavioral sciences are considered. The relationships between theory and research are emphasized. (Required of MAIS students
with concentration in sociology.) Lec 3, Cr 3 .
SOCI 6353 Sociology of Deviance
An examination of the nature, types, causes, and social control of deviant behavior with focus on the macro and micro levels of analysis. Emphasis is placed on discriminate fluency of diverse deviance imageries and subsequent research protocols. Lec 3, Cr. 3.

SOCI 6363 Gender
The course will study and analyze the social construction of gender in United States society today.

SOCI 6373 Problems of Aging in U.S. and World Societies
A seminar analysis of the demographic, economic, social, political, and health care problems created by the "aging" of the population of industrial societies. Special attention is paid to the problems of the elderly poverty and minority populations of the Rio Grande Valley. Lec 3, Cr 3


William Harris, Chair Mary Rose Cardenas Hall South 202 882-8843 william.harris@utb.edu

Graduate Faculty

Alan P. Church, Associate Professor
Charles Dameron, Professor
Eduardo R. del Rio, Associate Professor
Diana Dominguez, Assistant Professor
M. Therese Gallegos, Associate Professor

Juliet V. García, Professor
José Marcelo Garza, Associate Professor
Farhat Iftekharuddin, Professor
Noor Islam, Associate Professor
Lawrence M. Lewis, Professor
Javier A. Martinez, Assistant Professor
Teresa Murden, Assistant Professor
John Newman, Assistant Professor
Aum Sinha, Associate Professor
Lyon Rathbun, Assistant Professor
Mimosa Stephenson, Professor
Yong-Kang Wei, Assistant Professor
John Cook, Associate Professor
Louis Falk, Associate Professor
William Strong, Professor
Ben Wasike, Assistant Professor

## Master of Arts (M.A.) - English

 36-Hour Thesis/Non-Thesis ProgramThe Master of Arts degree in English, offered by the College of Liberal Arts through the Department of English and Speech, guides students in the study of language, composition, and literature. Educational objectives include refining research, bibliographic, and composition skills; studying the nature and uses of language; acquiring theoretical perspectives
on the writing process; studying selected authors in depth; and examining literary periods, styles, or movements in detail. A master's degree in English prepares students for more advanced study in English, for teaching English at the secondary or college level, and for many professions that require proficiency in written communication. This degree gives students the option of a thesis or Non-Thesis program.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in English are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 500
- GRE Analytical score of 500/4.0
- A 3.0 GPA in 9 hrs of upper division English Literature, 3 of which must be ENGL 3302 Literary Analysis or its equivalent.
Submission of official GRE score report is required prior to admission.
Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by June 1st-Fall, November 1st-Spring, April 1stSummer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

The Master of Arts degree without a thesis consists of 36 hours and may include a minor of nine hours in a related field. The Master of Arts degree with thesis consists of 30 hours of coursework with six additional hours awarded for the thesis. With proper
planning and with the approval of their graduate committees, students may take six of the 30 required hours in a field that is outside of English but that is directly relevant to the students' Program of Study. The courses in English for both plans must satisfy the following distribution requirements:

- at least two courses must be in English literature, one of which must be in a pre-19th century writer or period, and
- at least two courses must be in American literature, one of which must be in a pre-20th century writer or period.
English 6300, Introduction to Graduate Studies and English 6341 Literacy Criticism, are also required and must be completed during the first year of graduate studies. In accordance with university policy, graduate credit from another university will be accepted from transfer students.


## Comprehensive Examination

Each candidate for the Non-Thesis Master of Arts degree in English must pass a comprehensive written examination prepared by the English graduate faculty and administered by the Graduate Office.

## Thesis

As part of their graduate program in English, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate English faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis-Non-Thesis option under "Academic Information".) Students must pass an oral defense of the completed thesis.

## Master of Arts in Interdisciplinary Studies (M.A.I.S.) in English 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester
hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration. For course descriptions and other information related to graduate studies studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Interdisciplinary Studies in English are:

- A 3.0 GPA in 9 hrs of upper division English Literature, 3 of which must be ENGL 3302 Literary Analysis or its equivalent.
- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Analytical score of $400 / 4.0$


## Submission of official GRE score report is required prior to admission.

- ENGL 6300 Introduction to Graduate Studies, is required concurrently or prior to enrollment in 1st graduate English course.
Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by:
June 1st - Fall
November 1st-Spring
April 1st - Summer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available
through the Office of Graduate Studies.

## Degree Requirements

$$
\begin{aligned}
& \text { Required Courses: } 36 \text { hours } \\
& \text { Areas of Concentration: Credit Hours } \\
& \text { English, Government, History, Music, } \\
& \text { Sociology or Spanish...................................... } \\
& \text { 12-18 } \\
& \text { Two or more supporting fields ........ }
\end{aligned} 18-24
$$

Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach in Interdisciplinary Studies. Together the student and the committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses in mutually supporting fields. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval.

## Supporting Fields

Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professionals schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they
will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the
topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

## Graduate Courses Descriptions

## English

ENGL 6199 Special Topics in The Composing Process This course will link research theory and practice in teaching components of the writing process. It may be repeated for credit as topics vary. (May be repeated up to $3 x)$. Lec 1, Cr 1

ENGL 6300 Introduction to Graduate Studies Principles and procedures in scholarly research. Introduction to the problems, techniques, and tools of graduate-level study and research in English. Lec 3, Cr 3

ENGL 6301 Shakespeare
A study of the comedies, histories, tragedies, and romances of Shakespeare, emphasizing wide reading of the playwright. Lec 3, Cr 3

ENGL 6303 The Bible as Literature
A study of the Bible as literature, emphasizing the genres and literary techniques employed by the writers. The course treats the Bible as a major source for English and American literature. Lec 3, Cr 3

ENGL 6305 The Romantic Period A study of early 19th-century English romantic writers with emphasis on the poets Wordsworth, Coleridge, Shelley, Keats, and Byron. Lec 3, Cr 3

ENGL 6308 History of the English Language A history of the English language from the Anglo-Saxon period to the present. Lec 3, Cr 3

ENGL 6310 20th-Century English and American Poetry A study of major English and American poets of the 20th
century. Lec 3, Cr 3
ENGL 6312 Milton
A study of the major poems and selected prose of John Milton. Lec 3, Cr 3

ENGL 6321 Rhetorical Theory
This course focuses on major historical and theoretical developments in the study of rhetoric and the application of rhetorical concepts in the analysis of discourse. Lec 3, Cr 3

ENGL 6341 Literary Criticism
Selected works in literary criticism. Important modern and traditional critical positions and their application to literature. Lec 3, Cr 3

ENGL 6354 Linguistics and Reading
A study of current models of reading with an introduction to linguistics and examination of linguistic contributions to the understanding of the reading process. Includes issues of literacy and acquisition of reading. Lec 3, Cr 3

ENGL 6355 Second Language Acquisition
Examination of studies and models of the acquisition of a second language. Includes linguistic, sociolinguistic, and cultural aspects. Lec 3, Cr 3

ENGL 6362 The Victorian Period
A study of the late 19th-century literature in England. Lec 3, Cr 3

ENGL 6363 20th-Century English Novel
A study of the major novelists of England in the 20th century. Lec 3, Cr 3

ENGL 6364 Restoration and 18th-Century British Literature
This course explores selected Restoration and 18th century British writers and their works, themes, and literary developments, including fiction, poetry, drama and non-fiction. Prerequisite: Graduate student in good standing. Lec 3, Cr 3

ENGL 6371 20th-Century American Novel A study of the major novelists in the United States in the 20th century. Lec 3, Cr 3

ENGL 6372 Hawthorne and Melville
A study of the major novels and short stories of Nathaniel

ENGL 6373 Topics in Nineteenth Century American Literature
This course explores different approaches to and topics in nineteenth-century American literature, exclusive of Hawthorne and Melville. Subject matter varies depending on instructor and semester but may includee such topics as American Revolution, Transcendentalism, Realism, Frontier Humor, Regionalism and Naturalism, as they are expressed in the work of major and minor authors of the time, including women and minority writers. May be repeated for credit with permission as topics vary. Lec 3, Cr. 3

## ENGL 6391 The Short Story

A study of the origin, development, theory, and craft of the short story. Lec 3, Cr 3

ENGL 6398 Special Topics in Literature
This course will cover topics in literature, including such possibilities as single authors or works, or a critical application. The course may be repeated once as topics vary. Lec 3, Cr 3

ENGL 6399 Special Topics in the Composing Process This course will cover topics in the composing process, including such possibilities as heuristic methods, analysis of style, or the works of a central figure in the discipline. The course may be repeated once as topics vary. Lec $3, \mathrm{Cr}$ 3

ENGL 7300 Thesis
Pass/Fail Grade. Prerequisite: Approval of graduate advisor

ENGL 7301 Thesis
Pass/Fail Grade. Prerequisite: Approval of graduate advisor


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Graduate Faculty

Andrew Bosworth, Assistant Professor
Charles Chapman, Associate Professor
Alexander Dawoody, Assistant Professor
Terrence Garrett, Associate Professor
John Robey, Professor
Angelika Soldan, Associate Professor
James Storbeck, Professor

## Masters of Public Policy and Management-(M.P.P.M.)

## 36-Hour Program

The Master of Public Policy and Management (MPPM) is designed to provide accessible, affordable, high-quality graduate education to prepare students or advance students in careers of leadership and management in public service. The MPPM has a dual-purpose mission: (1) to train students in areas of public policy formulation, implementation and evaluation, and (2) to train students in the use of current tools and techniques of public management. Additionally, graduates will be encouraged to gain valuable policy analysis/public management skills through exposure to public sector applications in a number of cognate areas, such as Community and Economic Development, Health Care Policy, Environmental Policy, Criminal Justice Policy, Non Profit Management and International Policy and Developmental Policy .

The Master of Public Policy and Management is composed of 30-33 credit hours in core and elective (policy, management, and cognate) courses. In addition, students must complete a thesis ( 6 hours) or a professional report (3 hours) to gain credit for this 36 hour program. Graduation from
this program is contingent on the completion of required core courses, elective (policy analysis/public management, related cognate area) courses, and professional report or thesis courses.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Public Policy are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 550
- GRE Analytical score of 4.0
- Satisfactory letters of recommendation: 2, one of which should be academic
- Satisfactory essay: 750 words briefly analyzing a public policy issue of their choice and discussing what insights into that issue they expect to gain in the pursuit of the MPPM.
- Resume

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

Degree Requirements:Required Courses: 18 hours PPAM 6301 Principles of Public Administration
PPAM 6302 Public Policy and Economics
PPAM 6303 Public Budgeting, Finance \& Program Evaluation
PPAM 6305 Leadership and Ethics
PPAM 6306 Public Human Resource Management
PPAM 6307 Research Methods and Information Technology

Electives: Policy analysis, Public management, and cognate area elective courses: (Professional Report option, 15 elective credits required; Thesis option, 12 elective hours)

## PPAM

PPAM 6308 International \& Comparative Policy \& Management
PPAM 6310 Seminar in Community \& Economic Development
PPAM 6312 Intergovernmental Relations
PPAM 6340 Seminar in International and Development Policy and Management
PPAM 6380 Current Issues in Public Policy and Management
PPAM 6311 Urban Policy, Planning and Management
PPAM 6341 Cases in Public Policy \& Management
PPAM 6363 Financial \& Strategic Planning Issues for Non Profits
PPAM 7311 \& 7312 Internship (3 hours)

## PPAM-Non-Profit

PPAM 6360 Non Profit Policy \& Management
PPAM 6369 Legal Issues of Non Profit
PPAM 6371 Non Profit Governance

## PPAM-Environmental <br> PPAM 6320 Environmental Policy and Management

Other Electives (not listed) are available, as approved by the MPPM advisor, including courses for cognate disciplines offering studies in concentration areas such as Government, Health Care Policy and Management, International and Development Policy and Management, Community and Economic Development, and Criminal Justice Policy and Management.

Professional Report/Thesis: Minimum 3-6 credits: PPAM 7303 Professional Report (3 hours) or

PPAM 7301 \& 7302 Thesis (6 hours)
Concentration courses prescribed: Minimum of 12 credits within a specialization. Courses with a plus symbol (+) are required for that specialization.

## Master of Arts in Interdisciplinary

 Studies (M.A.I.S.) in Government
## 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.
For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Interdisciplinary Studies in Government are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Analytical score of 400/4.0
- A satisfactory personal statement of at least 1,000 words
- The Government Department additionally requires 6 undergraduate hours in Government at the junior and senior level.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by: June 1st - Fall
November 1st - Spring

April 1st-Summer.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

## Required Courses: 36 hours

Areas of Concentration: Credit Hours English,
Government, History, Music,
Sociology or Spanish ............................................ 12-18
Two or more supporting fields ........ $\quad 18-24$
Total graduate hours for degree ................. 36

Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach in Interdisciplinary Studies. Together the student and the committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses in mutually supporting fields. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval.
Supporting Fields
Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professional schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of

## Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

## Graduate Courses Descriptions

## Public Policy and Management

PPAM6301 Principles of Public Administration This course is an introduction to Public Administration and an overview of the field. It examines the historical background and contemporary issues in the subject area. Emphasis is placed on organizational theory and behavior. Lec. 3, Cr. 3

PPAM 6302 Public Policy and Economics This course examines public policy and program formulation implementation and evaluation including the politics and history of fiscal and monetary policy. Some emphasis is placed on the theories and approaches used in public policy analysis. Lec. 3, Cr. 3

PPAM 6303 Public Budgeting, Finance and Program Evaluation
This course provides an introduction to the use of financial information in organizational decision making. A review of the budgetary process is included as well as an introduction to accounting practices in the public sector. Lec. 3, Cr. 3

## PPAM 6304 Professional Ethics

This course examines both the legal and the philosophical foundations of ethics. Special emphasis is placed on the application and enforcement of ethical standards for public service. Lec. 3, Cr. 3

PPAM 6305 Leadership and Ethics This course examines the historical, theoretical,
behavioral, political and administrative perspective of leadership and its impact on decision making, and problem solving with special emphasis on the application and enforcement of ethical standards for public servants. Lec. 3, Cr. 3

PPAM 6306 Public Human resource Management This course is an examination of the history, theory, and practice of human resource management in public organizations. Some attention is given to cultural, ethnic, and gender differences in the workplace. Lec 3, Cr 3

PPAM 6307 Research Methods and Information Technology
This course covers the quantitative aspects of analysis and decision making and the role and application of technology and information systems in data management. research design, the use of statistics and computer applications will be covered. Lec 3, Cr 3

PPAM 6308 International and Comparative Policy and Management
This course studies the similarities and differences in the organization, management and public policy making among countries. It examines paradigms, theories and models along with practical application techniques to provide information for real management and policy problems. Lec 3, Cr 3

PPAM 6310 Seminar in Community and Economic Development
This course is an overview of and introduction to the study of community economic development. It encompasses zoning, transportation, comprehensive planning, and the relationship of education and infrastructure to economic development. Lec. 3, Cr. 3

PPAM 6311 Urban Policy, Planning and Management This course covers the administrative and political effects of the division of authority among the various units of urban government involved in policy, planning and management. The development of urban planning techniques is covered. Lec 3, Cr 3

PPAM 6312 Intergovernmental Relations This course covers the administrative and political effects of the division of authority among the coordinate units of government. Federal-state, state-local, local-federal, state-state, local-local, and governmental relations are examined. Lec 3, Cr 3

PPAM 6320 Environmental Policy and Management This course is an introduction and overview of
environmental policy and management at the local, state , national and international level. It is designed to help students develop a working knowledge of the basic concepts of environmental policy and management. This includes its history, theories, methods, institutions, and issues and the guidelines and rules that establish goals and standards regarding the use and preservation of the physical environment, including soil, water, air, wildlife and vegetation. Lec 3, Cr 3
Prerequisite: PPAM 6301, PPAM 6302 or advisor permission

PPAM 6340 Seminar in International and Development Policy and Management
Focuses on the changing roles and functions of different public and private international organizations and the services they provide. Provides an understanding of the way intergovernmental organizations work and specific responsibilities of the various bodies and organizations such as the U.N., Security Council, General Assembly, ECOSOC, and regional economic commissions. Lec 3, Cr. 3 Prerequisite: PPAM 6301, PPAM 6302, PPAM 6308 or advisor permission

PPAM 6341 Cases in Public Policy and Management Based on the theoretical foundations built in the concentration graduate seminars, this course focuses on applying that knowledge on cases addressing public policies and management in a selected field of concentration in public policy and management. This course can be repeated for up to 9 credit hours as long as the set of cases varies. Sets of cases are selected from international development, environmental, nonprofit, economic development, health care policy and management cases. Lec 3, Cr 3
Prerequisite: PPAM 6301, PPAM 6302, PPAM 6308, seminar depending on concentration from among PPAM 6320 or 6340 or PPAM 6360 or 6370 or advisor permission.

PPAM 6360 Nonprofit Policy and Management This course is an overview of nonprofit policy and management sector on a national and international scope. It covers the historical, descriptive, theoretical, and ethical issues relevant to the sector. It also covers the application of managerial concepts and techniques to the management, problems and concerns of nonprofit institutions and enterprises. Lec 3, Cr. 3
Prerequisite: PPAM 6301; PPAM 6303; PPAM 6306 or advisor permission

PPAM 6371 Nonprofit Governance
This course provides an overview of the characteristics and leadership of boards in nonprofit organizations.

The course will cover the structure, functions, and composition of boards; the relation of boards to management; the board's role in strategic planning; and improving boards performance and accountability. Prerequisite: PPAM 6360 or Advisor permission. Lec. 3, Cr. 3

PPAM 6370 Seminar in Health Care Policy and Management
This course provides a comprehensive overview of healthcare and policies in the United States. Students will make use of case studies to understand the major stakeholders involved in healthcare and introduce them to current public health issues, healthcare delivery systems, and factors that determine health policy, and managerial practice. Lec 3, Cr 3
Prerequisite: PPAM 6301, PPAM 6302 or advisor permission

## PPAM 6380 Current Problems in Public Policy and Management

This course focuses on current issues in public policy and management. This course can be repeated for up to 9 credit hours as long as the topic varies. Current problems are selected from international development, environmental, nonprofit, economic development, health care, criminal justice policy and management issues. Lec 3, Cr. 3
Prerequisite: PPAM 6301, PPAM 6302, or advisor permission.

## PPAM 7301 Thesis

This course required a student to work on/complete a thesis under the direction of a thesis committee. The thesis will be defended publicly and approved by a majority of the committee.
Prerequisite: Approval of graduate advisor. Lec 3, Cr 3

## PPAM 7302 Thesis

This course required a student to work on/complete a thesis under the direction of a thesis committee. The thesis will be defended publicly and approved by a majority of the committee.
Prerequisite: Approval of graduate advisor. Lec 3, Cr 3

## PPAM 7303 Professional Report

This course requires the student to develop an applied project and professional report that focuses on the practice of public administration or public policy making or on related management/planning practices in a government, non-profit or private agency serving the public interest. May be repeated until successful professional report defense. Prerequisite: PPAM 6301,

6302, 6307, seminar in specialization and/or approval of the advisor.

PPAM 7311 Internship
This course is a practical public management experience through an arranged internship in a governmental, non-profit or private agency serving the public interest. Periodic seminars, supervision and a final administrative report are required. Lec 3, Cr 3
Prerequisite: Approval of graduate advisor/department chair. Pass/Fail Grade

PPAM 7312 Internship
This course is a practical public management experience through an arranged internship in a governmental, non-profit or private agency serving the public interest. Periodic seminars, supervision and a final administrative report are required. Lec 3, Cr 3
Prerequisite: Approval of graduate advisor/department chair. Pass/Fail Grade

## Government

GOVT 6310 Seminar and Problems in Political Science A survey and critique of the bibliography and problems in various fields of political science. Course may be repeated for credit as topics vary. (May be repeated up to 3X)_Lec $3, \mathrm{Cr} 3$

GOVT 6360 American Executive Process and Policy Outputs
Advanced study of the development of the power and influence of the president and other American executives; procedures and policies of the executive process; executive policy outputs; the relation of the executive to the other elements of the political system. Lec 3, Cr 3

## GOVT 6367 American Judicial Process

Advanced study of the structure, functions and procedures of the national, state and local judicial systems, the interrelationship between the American judiciary and other components of the political system; the impact of judicial decision-making on public policy. Lec 3, Cr 3

## GOVT 6368 Public Law

Advanced study of American Public Law, which will include an examination of the structures, functions, and procedures of the national and state legal systems, based on constitutional government, as well as the impact of public law on policy development and implementation and the management of American public organizations, institutions, and agencies. Special emphasis will be
placed on the role of employment discrimination law in the public organization milieu. Lec 3, Cr. 3 Prerequisites: PPAM 6301, PPAM 6302, or advisor permission.

GOVT 6376 United States-Mexico, Central America \& Caribbean Relations
Study of the formulation, conduct and consequences of U.S. foreign policy in Mexico, Central America and the Caribbean. The roles of the President, Congress, interest groups, the military and intelligence agencies, and public opinion will be examined. Specific cases of major foreign policy decisions will be examined. Lec 3, Cr 3

## GOVT 6386 Politics of South America

A survey of governmental structures and politics in South America. Examines the political processes and their relationship to existing social and economic structures of South America. Lec 3, Cr 3

## GOVT 6388 Major Political Ideologies

Advanced study of critical political philosophers who have influenced the political experience. Lec 3, Cr 3

## History

Dr. Helmut Langerbein, Chair Mary Rose Cardenas Hall South \#314 882-8260<br>helmut.langerbein@utb.edu

## Graduate Faculty

William L. Adams, Professor
Thomas Britten, Assistant Professor
David Fisher, Assistant Professor
Carol Hammond, Assistant Professor
Harriett D. Joseph, Professor
Milo Kearney, Professor Emeritus
Philip W. Kendall, Professor
Anthony K. Knopp, Professor Emeritus
Helmut Langerbein, Assistant Professor
Manuel F. Medrano, Professor
Robin Robinson, Assistant Professor
James B. Sullivan, Professor

## Master of Arts (M.A.) - History

The MA degree requires a total of 36 semester hours of graduate credit. The program offers a thesis or non-thesis degree option and encompasses a broad education in major fields of history, underlying methods and concepts, as well as a unique opportunity to examine the particular confluence of various strains of history that occur along the U.S. Mexican border. For course descriptions and other information related to graduate studies, visit our website a http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in History are:

Undergraduate GPA of 3.0
GRE Verbal Score of 400
GRE Analytical Score of 400/4.0
A Personal Statement of at least 1,000 words 6 undergraduate upper-division hours

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Submission of official GRE score report is required prior to admission.

A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by:
June 1 - Fall
November 1 - Spring
April 1 - Summer.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the History department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## 36-Hour Thesis/Non-Thesis Program

Each student in the MA degree program will be assigned a Faculty Advisor. Together the student and the advisor will choose courses in history and a supporting field. Efforts are made to relate the material studied in the supporting field to the History discipline. A formal Program of Study as described in the Graduate Catalog will be prepared and submitted for approval by the Office of Graduate Studies.

## Supporting Fields:

All areas of concentration and the supporting fields within the existing MAIS program: Biology, Business Administration, Criminal Justice, Communication, Education, English, Fine Arts, Geography, Government, Interpreting, Music, Psychology, Spanish, Sociology.

## Thesis Option:

Fields in History: Credit
TheHistorical
Discipline.................................... 6
United States............................... 6
Latin America/Borderlands......... ...... 6
European/World Hstory................ 6
Electives from any field of History........... 6
Supporting Field............................... 6

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive 6 hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. Students must pass an oral defense of the completed thesis. Students selecting this option will register for HIS 7300 and HIS 7301.

## Non-Thesis Option

| Fields in History: | Credit Hours |
| :---: | :---: |
| TheHistorical |  |
| Discipline.. | 6 |
| United States. | 6 |
| Latin America/Borderlands......... | 6 |
| European/World Hstory........... | 6 |
| Electives from any field of History.. | ... 6 |
| Supporting Field.. | 6 |

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in History degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Studies.

## Financial Aid/Scholarships/Graduate <br> Assistantships:

The award of financial aid, scholarships, and graduate assistantships is based on need, academic achievement, and availability. For more information, please inquire at the Office of Financial Aid,
the Office of Graduate Studies, and the History Department.

## Master of Arts in Interdisciplinary Studies (M.A.I.S.) in History

## 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.

For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Interdisciplinary Studies in History are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Analytical score of 400/4.0
- A satisfactory personal statement of at least 1,000 words
-The History Department additionally requires 6 undergraduate hours in History at the junior or senior level Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by June 1st - Fall, November 1st - Spring and April 1st -

Summer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

Required Courses: 36 hours
Areas of Concentration: Credit Hours
English, Government, History, Music,
Sociology or Spanish 12-18
Two or more supporting fields
Total graduate hours for degree 36

Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach Interdisciplinary Studies. Together the student and committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses in mutually supporting fields. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval.

## Supporting Fields

Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professional
schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Written Examination

in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

# Graduate Course Descriptions 

## History

HIST 6300 Historiography and Methods The course offers an overview of historiophraphy and an introduction to the research and writing methods utilized and debated by historians. The course covers topics of importance to professional historians in all fields, including basic and advanced research tools, the development of historical thinking, and recent developments in historical research. Prerequisite: Admission to the MA or MAIS program. Lec. 3 Cr 3

HIST 6301 Topics in American History to 1860 A survey and critique of the bibliography and problems of various eras in American history before the Civil War. May be repeated for credit when topic varies. Lec 3, Cr 3

HIST 6303 Topics in American History since 1860 A survey and critique of the bibliography and problems of various eras in American history since 1860. May be repeated for credit when topic varies. Lec 3, Cr 3

HIST 6305 History of the American West
The course analyzes the history of the American West and Frontier from the Appalachian Range to the Pacific Ocean with a special emphasis on the West as a distinctive
region in the United States. Prerequisite: Admission to the MA or MAIS program. Lec. 3, Cr. 3

HIST 6307 Colonial America
This course is a reading and research seminar designed to familiarized students with important trends in Colonial American history and historiography. Prerequisite: Admission to the MA or MAIS program. Lec. 3, Cr. 3

HIST 6309 Wars in American History
This course analyzes the wars the United States
has engaged in since independence. It focuses on topics such as causes, aims, and consequences of American warfare, mobilization, the contributions of different ethnic groups on the front and at home, and contemporary issues related to American warfare.

## HIST 6312 Colonial Latin America

This course introduces students to selected major issues and themes in Colonial Latin American history with an emphasis on the development of colonial society, slavery and race. Prerequisite: Admission to MA or MAIS program. Lec. 3, Cr. 3

## HIST 6313 Modern Latin America

This course introduces students to selected major issues and themes in Modern Latin American history with an emphasis on the development of society, culture, and politics. Prerequisite: Admission to the MA or MAIS Program.
Lec. 3, Cr. 3

HIST 6314 US/Mexican Border Twin Cities This course introduces students to major themes and topics in the history and historiography of border twin cities such as Brownsville/Matamoros, Tijuana/San Diego, El Paso/Juarez. Prerequisite: Admission to the MA or MAIS Program. Lec 3, Cr 3

## HIST 6315 Borderlands History

This course introduces students to major themes and topics of the history and historiography of the MexicanAmerican borderlands. Emphasis will be put on the economy, immigration, culture and society. Prerequisite: Admission to the MA or MAIS program. Lec. 3, Cr. 3

HIST 6316 Studies in Mexican and American Heritages An intensive investigation of selected historical problems in the Mexican-American and Anglo-American cultural heritages and the fusion and clash of these cultures. May
be repeated for credit when topic varies. Lec 3, Cr 3
HIST 6330 Seminar and Studies in European/World History
An investigation of significant issues and themes in European or World History. May be repeated for credit when topic varies. Lec 3, Cr 3

HIST 6334 Modern European History
The course analyzes European history from 1789 to the present. Its major focus will be on topics such as industrialization and the emergence of the modern economic world system, the development of the nationstate, imperialism, the World Wards, genocide, rebuiliding, and the changing role of Europe in the 21st Century. Prerequiste: Admission to MA or MAIS program. Lec. 3, Cr. 3

## HIST 6335 The Atlantic World

This course connects the separate histories of Europe, Africa, North America, and the Carribean since the 15th Century. The course emphasizes political, economic, and cultural relations among Africans, Americans and Europeans. Prerequisite: Admission to MA or MAIS program. Lec 3, Cr 3

## HIST 6336 Modern China

This course introduces students to major themes and topics of the history and historiography of China since 1900. Prerequisite: Admission to MA or MAIS program. Lec 3, Cr 3

## HIST 6337 World Revolutions

This course introduces students to major themes and topics of the history Prerequisite: Admission to MA or MAIS program. Lec 3, Cr 3

## HIST 6337 World Revolutions

This course introduces students to major themes and topics of the history Prerequisite: Admission to MA or MAIS program. Lec 3, Cr 3

## HIST 6338 The World Wars

This course introduces students to the history and historiography of the world wars with an emphasis on the wars causes, conduct and consequences. Prerequisite: Admission to MA or MAIS program. Lec. 3, Cr. 3

HIST 6390 Research Seminar
This seminar trains students in identifying bodies of primary sources, familiarizes them with issues of analysis and historiography, and enables them to sustain a primary research project and to present their research
findings in a paper. Prerequisite: Admission to the MA program. Completion of HIST 6300 and at least one graduate course in the area of the course being taught. Lec. 3, Cr. 3

HIST 7300 Thesis Research and Writing Independent thesis research and writing. May be repeated for credit. Prerequisite: Completed HIST 6390 and at least 15 credit hours in the history graduate program. Lec. 3, Cr. 3


Dr. Sue Zanne Urbis, Chair Eidman108
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## Graduate Faculty

James Arthur Brownlow, Associate Professor
Carlos Gomez, Professor
Carol S. McNabb, Assistant Professor
Thomas Nevill, Assistant Professor
Kenneth Saxon, Assistant Professor
Michael O. Quantz, Assistant Professor
Nancy Sclight, Professor
Richard Urbis, Assistant Professor
Sue Zanne Williamson-Urbis, Assistant Professor

## Master of Music in Music Education (M.M.)

## 36-Hour Program

The Master of Music in Music Education is designed to prepare master teachers and musicians who are leaders in the field of music education. It will provide the many music educators already employed in the Rio Grande Valley with an opportunity to continue the development of their knowledge and skills and offer the growing number of music majors graduating from UTB/TSC with the means to continue their education. It also makes advanced training in music education available to music teachers from Mexico. For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Music Education are:

- GRE Verbal score of 400
- GRE Analytical score of 4.0
- Completion of at least four undergraduate semesters of music theory and three of music history and literature
-The prospective candidate should also score a minimum of $80 \%$ on the Fine Arts Department Graduate Music Diagnostic.
- Copy of valid teaching certificate

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by June 1st - Fall,
November 1st - Spring
May 1st - Summer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Project

As part of their graduate program, each student will complete a Master's Project. This is a capstone project completed to demonstrate each student's mastery in the field of music education. The project will be completed under the guidance of a graduate advisor. At the completion of all coursework, students will register for MUSI 6390 as they are completing their project.

## Degree Requirements

## Required Courses: 18 hours

| MUSI | 5301 | Research in Music Education | 3 |
| :--- | :--- | :--- | :--- |
| MUSI | 6306 | Foundations of Music Education | 3 |
| MUSI | 6307 | Survey of Music History of the |  |
|  |  | Common Practice Period | 3 |

MUSI 6306 Foundations of Music Education 3
MUSI 6307 Survey of Music History of the Common Practice Period

| MUSI | 6310 | Hispanic Art Music | 3 |
| :---: | :---: | :---: | :---: |
| MUSI | 6312 | Theory and Form of Music from |  |
|  |  | The Common Practice Period | 3 |
| MUSI | 6390 | Master's Project | 3 |
| Prescribed Electives |  |  |  |
| MUSI | 6304 | Advanced Studies |  |
|  |  | in Music Methodology | 3 |
| MUSI | 6308 | Advanced Studies in |  |
|  |  | Music Literature | 3 |
| MUSI | 6311 | Topics in Music Theory | 3 |
| MUSI | 6389 | Advanced Studies in |  |
|  |  | Performance Practice | 3 |
| EDCI | 6334 | Curriculum Development - |  |
|  |  | Problems and Processes | 3 |
| EDCI | 6336 | Problems in Education | 3 |
| Each student in the M.M. in Music Education degree program will be assigned a Faculty Advisor. Together the student and advisor will plan the student's program of study. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval. |  |  |  |

## Master of Arts in Interdisciplinary Studies (M.A.I.S.) in Music <br> 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.
For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree
seeking students in Interdisciplinary Studies in Music are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Analytical score of 4.0
- Complete at least four undergraduate semesters of music theory and two of music history and literature
- The prospective candidate should also score a minimum of $80 \%$ on the Fine Arts Department Graduate Music Diagnostic.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by June 1st - Fall, November 1st - Spring and May 1st Summer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

Required Courses: 36 hours
Areas of Concentration: Credit Hours
English, Government, History, Music,
Sociology or Spanish 12-18
Two or more supporting fields
Total graduate hours for degree 36

Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach Interdisciplinary Studies. Together the student and committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses
in mutually supporting fields. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval.

## Supporting Fields

Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professional schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

## Graduate Course Descriptions

## Music

MUSI 5301 Research in Music Education This is a bibliography course concerned with the techniques and resources available for effective research in music and music education. Prerequisite: Graduate
standing in music or departmental approval. Lec. 3, Cr. 3

MUSI 6304 Advanced Studies in Music Methodology Intensive study of the principles and methods of music pedagogy. May be repeated for credit when the topic varies. Topics include: Orff Levels I, III, III; Kodaly Methodology; Advanced Single Reeds and Flute Technique; Advanced Double Reeds Techniques; Advanced Brass Techniques; Advanced Percussion Techniques; Advanced Strings Techniques; Advanced Vocal Techniques; Computer Applications in Music. Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

## MUSI 6306 Foundations of Music Education

 This course examines the history and philosophy of music education in the public schools, with emphasis on the basic concepts needed for effective teaching in the field of music, curriculum development and evaluation of the music program.Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

## MUSI 6307 Survey of Music History from the Common Practice Period

Survey of Music from the Common Practice Period is a survey of musical styles, genres, composers and literature from the Western art music tradition from the Baroque period through the early Twentieth-Century. Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

MUSI 6308 Advanced Studies in Music Literature Analytical and historical studies of a particular repertoire. May be repeated for credit when the topic varies. Topics include: Symphonic Literature, Wind Ensemble Literature, Choral Literature, Operatic Literature. Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

MUSI 6309 Topics in Music History
Historical studies of a particular period, school or musical tradition.
Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

MUSI 6310 Hispanic Art Music
This course is designed to explore the central features and major figures in the area of Hispanic Art music since 1950. Prerequisite: Graduate standing in music or
departmental approval. Lec. 3, Cr. 3
MUSI 6311 Topics in Music Theory
Analytical studies of various styles of music. May be repeated twice for credit when the topics vary. Topics include: Twentieth-Century Analytical Techniques (19001950) and Twentieth-Century Analytical Techniques (1950-present). Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

MUSI 6312 Theory and Form of Music from the Common Practice Period
The course examines music theory topics in diatonic and chromatic harmony, and continues with analysis of form. Students will analyze large scale works, such as fugue and sonata form. The course includes an aural skills component consisting of sight singing in moveable DO solfege, rhythm performance, aural recognition. Prerequisite: Graduate standing in music or departmental approval. Lec. 3, Cr. 3.

MUSI 6389 Advanced Studies in Performance Practice Practical studies of ensemble and applied performance. May be repeated when the topic varies. Topics include: Advanced Instrumental Conducting, Advanced Choral Conducting, Applied Music Primary, Applied Music Secondary. Prerequisite: Graduate Standing in music or departmental approval. Lec. 3, Cr. 3

## MUSI 6390 Master's Project

This is a capstone project to demonstrate a student's mastery in the field of music education. The project will take the form of a paper and a presentation. The project will be completed under the guidance of a graduate advisor. Prerequisite: Satisfactory completion of course work for the Master of Music in Music Education degree. Lec. 3, Cr. 3


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Lucy García Willis, Professor
Suzanne Laconde, Lecturer
Diego Ponce, Assistant Professor

## Master of Arts (M.A.) - Spanish

36-Hour Thesis/Non-Thesis Program
The Master of Arts Degree in Spanish is offered by the College of Liberal Arts and gives students the option of a thesis or Non-Thesis program. The educational objectives of the program are to refine writing skills, develop research and bibliographic skills, study the nature and uses of language, study selected Spanish literature in depth and examine literary periods, styles, or movements in detail.

For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate or the department's website at http://spanishmasters.info.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Spanish are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Analytical score of 400/4.0
- Letter from a Spanish program professor strongly recommending admission
- Writing a satisfactory essay in Spanish.
- Completed twelve undergraduate hours in Spanish at the junior or senior level, nine of which must be in Hispanic Literature.
- Entry Interview.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

The Master of Arts degree with thesis option consists of 30 hours of coursework, all with a SPAN prefix or its equivalent, with six additional hours awarded for the thesis for a total of 36 semester hours. The Master of Arts degree in Spanish without a thesis option consists of 36 hours of coursework and may include a minor of 6 hours in a related field. At least 24 hours must be in courses with a SPAN prefix or its equivalent. The courses for both plans must satisfy the following distribution requirements:

- Three courses in Spanish Literature: SPAN 6370,6371,6341
- Three courses in Latin American Literature, including two of the following: SPAN 6373, 6374, 6375.
- One course in Spanish Literature, culture and linguistics: either SPAN 6313 or 6380 (with a linguistic topic)
- Spanish 6300: Theory of Literary Analysis, Bibliographic Search Techniques, and Literary Writing Methods is also required and must be completed during the first year of graduate studies.


## Comprehensive Examination

Each candidate for the Master of Arts degree is required to pass a comprehensive written examination prepared by the Spanish graduate
faculty and administered by the Graduate Office.

## Thesis

A student who chooses the thesis option will write a thesis for six hours of graduate credit. He/ She will choose a thesis committee composed of a committee chairperson and two other members of the Spanish graduate faculty, who will approve the thesis topic and assist in preparing the thesis. A written thesis prospectus must be formally approved by the thesis committee before the writing of the thesis begins. Thesis track students must pass a separate oral defense of the completed thesis.

## Master of Arts in Interdisciplinary Studies (M.A.I.S.) in Spanish 36-Hour Thesis/Non-thesis Program

The M.A.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper-level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.

For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate or the department's website at http://spanishmasters.info.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Interdisciplinary Studies in Spanish are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 4.0
- One letter from a Spanish program professor
strongly recommending admission
- A written essay in Spanish
-Twelve undergraduate hours in Spanish at the junior or senior level, nine of which must be in Hispanic Literature
- An entry interview

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

A complete application packet, including a graduate admission application and all supporting documents required by the department, must be submitted by:
June 1st - Fall
November 1st - Spring
April 1st - Summer.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

Required Courses: 36 hours
Areas of Concentration: Credit Hours
English, Government, History, Music, Sociology or Spanish 12-18
Two or more supporting fields ..... 18-24
Total graduate hours for degree ..... 36

Each student in the M.A.I.S. degree program will be assigned a Faculty Advisor and two additional faculty committee members who teach Interdisciplinary Studies. Together the student and committee will choose courses in the concentration area and will select two or more supporting fields. Efforts are made to relate the material studied in one discipline to that studied in another and to encourage students to select courses in mutually supporting fields. A formal Program of

Study as described elsewhere in this catalog will be prepared and submitted for approval.

## Supporting Fields

Biology, Business Administration*, Communication, Criminal Justice, Education*, Fine Arts, Geography, Interpreting, Psychology and Public Policy \& Management *. All areas of concentration may also be support fields for each other.
*No more than 12 semester hours may be taken from the professionals
schools. Each candidate for the M.A.I.S. degree must pass a comprehensive examination over the area of concentration and supporting fields.

## Comprehensive Examination

Each candidate for the non-thesis Master of Arts in Interdisciplinary Studies degree must pass a comprehensive written examination prepared by the graduate faculty and administered by the Office of Graduate Office.

## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis/nonthesis option under "Academic Information".) Students must pass an oral defense of the completed thesis. Students selecting this option will register for INDS 7300 and 7301 after they have completed their coursework.

## Diplomate in Hispanic Language and Culture

The Diplomate in Hispanic Language and Culture is designed to enhance the development of analytical skills, cultural and literary knowledge, and written language competencies required of elementary bilingual teachers and middle and high school instructors who teach Advanced Placement Spanish courses or who teach dual credit, collegelevel Spanish courses in high school. Students
successfully completing the program may decide to pursue either the Master of Arts degree in Spanish or the Master of Arts in Interdisciplinary Studies (MAIS) with a concentration in Spanish.

## Required Courses: 15 hours

The Diplomate in Hispanic Language and Culture required the completion of 15 graduate hours in Spanish. Students enroll three times in Spanish 6380, as the topic varies, for a total of nine hours. They also take Spanish 6339 twice for a total of six hours. Students may substitute Spanish 6363 for one of the two 6339 topics.
SPAN 6380 Special Topics in Hispanic Language and Culture ( 9 hrs )
SPAN 6339 Special Studies in Spanish American Literature (3-6 hrs)
SPAN 6363 Literatura Infantil (3 hrs)

Prerequisites:
Students applying for the Diplomate in Hispanic Language and Culture Program must have a Bachelor's degree, which includes a minimum of 12 advanced hours in Spanish (3000/4000).

## Diplomate in Translation Studies

## 15 hour Program

The Diplomate in Translation Studies responds to the increasing demand of applied language courses among past, current and future graduate students in the M.A. Spanish program and the MAIS program with a concentration in Spanish.
The program will offer training in a set of professional skills devised to provide support in other professional studies programs with significant community impact, like nursing criminal justice, business management and media communication among others.
The Diplomate will encourage students who complete courses in the certificate program with a GPA of 3.5 or higher to continue their graduate studies by pursuing the Master of Arts in Spanish or
the MAIS with a concentration in Spanish or English.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Admission requirements for the Diplomate in Translation Studies are:

- Entry interview
- Letter of recommendation from the student's undergraduate faculty advisor
- Satisfactory performance on the Spanish essay.
- Satisfactory performance essay on the translation of a document from English to Spanish and from Spanish to English.
Notification of decision on graduate admissions is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.


## Required Courses: 15 hours

The Diplomate in Translation Studies requires the completion of 15 graduate hours in Translation courses under one or more rubrics (SPAN/TRSP) with a minimum GPA minimum GPA of 3.0.

Core Course (9hrs)
TRSP/SPAN 6320 Translation Workshop:
English - Spanish or
TRSP/SPAN 6322 Translation Workshop:
Spanish - English
TRSP/SPAN 6330 Translation Theory
TRSP/SPAN 6335 Translation Topics

Electives (6hrs)
TRSP/SPAN 6320 Translation Workshop: English - Spanish
TRSP/SPAN 6322 Translation Workshop: Spanish - English
TRSP/SPAN 6335 Translation Topics
TRSP/SPAN 6325 Specialized Translation

INTG 6376 Consecutive Interpreting
INTG 6377
INTG 6378
INTG 6379 Simultaneous Interpreting Court Interpreting Interpreting Practicum

## Prerequisites

Students taking Translation courses for Spanish (SPAN) credit must have a Bachelor's degree with, at least 12 upper-division hours in Spanish.

## Graduate Courses Descriptions

## Spanish

SPAN 6300 Theory of Literary Analysis, Bibliographic Search Techniques, \& Literary Writing Methods Basic orientation in the theory and practice of literary analysis with reference to Hispanic tradition. Research and bibliographic methods, as well as the organization, drafting, and editing of critical literary articles. Taught in Spanish. All readings, papers, and examinations in Spanish.
Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6313 History of the Spanish Language A detailed study of the growth of the Spanish language from beginning to present. Taught in Spanish. All readings, papers, and examinations in Spanish. Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6320 Translation Workshop: English-Spanish Intensive review of translation techniques and practice of translation from English into Spanish covering a variety of text typologies, including but not limited to general informative texts, literary texts, and technical texts. Taught in Spanish. All papers, and examinations in Spanish.
Prerequisites: SPAN/TRSP 3332 or SPAN/TRSP 3333 or instructor's approval.

SPAN 6322 Translation Worksho: Spanish-English Intensive review of translation techniques and intensive practice of translation from Spanish into English coverin a variety of text typologies, including but not limited to general informative texts, literary texts, and technical
texts. Taught in Spanish and English. Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or instuctor's approval.

## SPAN 6325 Specialized Translation

Intensive review of translation practices of specialized texts and intensive practice of translation from English into Spanish and vice-versa, covering a variety specialized text typologies, including but not limited to legal, business and economics, medical and scientific texts. Taught in Spanish and English.
Prerequisite: TRSP/SPAN 6320 or TRSP/SPAN 6322.

## SPAN 6330 Translation Theory

A survey of classic and contemporary translation theories.
Taught in Spanish. All papers and examinations in Spanish.
Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or TRSP/SPAN 6320 or TRSP/SPAN 6322.

SPAN 6335 Topics in Translation Studies
Several topics from the field of Translation STudies including but not limited to Literary Translation, Semiotics, Computer Assisted Translation, Textual Analysis and Linguistics Applied to Translation. This course may be taken three times as topic varies. Taught in Spanish. All papers and examinations in Spanish.
Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or TRSP/SPAN 6320 or TRSP/SPAN 6322.

SPAN 6339 Special Studies in Spanish American Literature
Special topics from the field of Spanish American Literature. Course may be taken three times as the topic varies. Taught in Spanish. All readings, papers, and examinations in Spanish.
Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6341 Special Studies in Spanish Literature Special topics from the field of Spanish literature. This course may be taken three times as the topic varies. Taught in Spanish. All readings, papers, and examinations in Spanish.
Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6363 Literatura Infantil
The focus of this course is to develop an appreciation of poems, short stories, theatre and novels for children, written originally in Spanish by authors from divers
regions of the Spanish speaking world. Students will be required to analyze and Interpret texts form a literary perspective. Students will examine various strategies to incorporate children's literature Into the curriculum as well as assess the ethical and aesthetic value of texts. All lectures, reading, papers, presentations and examination are in Spanish.
Prerequisite: BILC 6362 and concurrent enrollment in BILC 6364 Lec 3, Cr 3

SPAN 6370 The Literature of Medieval Spain Critical study of the major works of Spanish literature from its origins down to the end of the 15th century. Taught in Spanish. All readings, papers, and examinations in Spanish.
Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6371 The Literature of the Golden Age of Spain Critical study of major works of the Spanish Renaissance and Baroque Periods. Taught in Spanish. All readings, papers, and examinations in Spanish.
Prerequisite: Graduate standing and 12 hours of advanced Spanish, nine of which must be literature. Lec 3, Cr 3

SPAN 6373 Colonial Spanish American Literature Critical study of major works of the Colonial Spanish America period. Taught in Spanish. All papers and exams in Spanish. Lec 3, Cr 3

SPAN 6374 19th Century Spanish American Literature Critical study of major works of the Spanish American 19th Century period. Taught in Spanish. All papers and exams in Spanish. Lec 3, Cr 3

SPAN 6375 20th Century Spanish American Literatures Critical study of major works of the Spanish American 20th century period. Taught in Spanish. All papers and exams in Spanish. Lec 3, Cr 3

SPAN 6380 Special Topics in Hispanic Language and Culture
Special topics in Hispanic language and culture, including but not limited to Translation, Interpreting, Grammar, Creative Writing, Chicano Literature, Folklore, and Journalism. This course may be taken three times as the topic varies. Taught in Spanish. All readings, papers, and
examination in Spanish.
Lec 3, Cr. 3

SPAN 7300 Thesis
Pass/Fail Grade. Prerequisite: Approval of graduate advisor.

SPAN 7301 ThesPass/Fail Grade. Prerequisite: Approval of graduate advisor.

## Translation

TRSP 6320 Translation Workshop: English-Spanish Intensive review of translation techniques and practice of translation from English into Spanish covering a variety of text typologies, including but not limited to general informative texts, literary texts, and technical texts. Taught in Spanish. All papers, and examinations in Spanish.
Prerequisites: SPAN/TRSP 3332 or SPAN/TRSP 3333 or instructor's Approval.

TRSP 6322 Translation Worksho: Spanish-English Intensive review of translation techniques and intensive practice of translation from Spanish into English coverin a variety of text typologies, including but not limited to general informative texts, literary texts, and technical texts. Taught in Spanish and English. Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or instuctor's approval.

## TRSP 6325 Specialized Translation

Intensive review of translation practices of specialized texts and intensive practice of translation from English into Spanish and vice-versa, covering a variety specialized text typologies, including but not limited to legal, business and economics, medical and scientific texts. Taught in Spanish and English. Prerequisite:TRSP/SPAN 6320 or TRSP/SPAN 6322.

## TRSP 6330 Translation Theory

A survey of classic and contemporary translation theories. Taught in Spanish. All papers and examinations in Spanish.
Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or TRSP/SPAN 6320 or TRSP/SPAN 6322.

TRSP 6335 Topics in Translation Studies
Several topics from the field of Translation STudies including but not limited to Literary Translation, Semiotics, Computer Assisted Translation, Textual Analysis and Linguistics Applied to Translation. This course may be taken three times as topic varies. Taught in Spanish.

All papers and examinations in Spanish.
Prerequisite: SPAN/TRSP 3332 or SPAN/TRSP 3333 or TRSP/SPAN 6320 or TRSP/SPAN 6322.

## Interpreting

INTG 6376 Consecutive Interpreting Intensive practice in consecutive interpreting with close reference to actual usages among professional interpreters in the United States. Prerequisites: INTG/TRSP 4366 and INTG/TRSP 4367 Lec 3, Cr 3

INTG 6377 Simultaneous Interpreting Intensive practice in simultaneous interpreting with close reference to actual usages among professional interpreters in the United States. Prerequisites: INTG/TRSP 4366 and INTG/TRSP 4367 Lec 3, Cr 3

## INTG 6378 Court Interpreting

 Intensive study and practice of sight translation, consecutive and simultaneous interpreting with reference to judiciary application. Prerequisites: INTG/TRSP 4366 and INTG/TRSP 4367 Lec 3, Cr 3
## INTG 6379 Interpreting Practicum

Intensive study and practice of sight translation, consecutive and simultaneous interpreting with close reference to terminology, documentation, ethics, and other professional issues. May be taken together with INTG 6378. Prerequisites: INTG 6376 or INTG 6377 or INTG

6378 or instructor's approval.

## Additional Courses in Liberal Arts

## Arts

ARTS 6300 Graduate Studio Problems in Drawing Arts This course is the study of technical, formal and conceptional aspects of drawing on a graduate level. This course may be repeated for credit up to 12 hours when content varies. Prerequisites: Students must hold a Bachelor's degree that included 6 hours of advanced undergraduate Drawing. Candidates must submit a portfolio of their artwork and be interviewed by the graduate art faculty or graduate advisor before registering for this course. Lec. 2, Lab 4, Cr. 3

ARTS 6310 Graduate Studio Problems in Painting This course is the study of technical, formal and conceptional aspects of painting on a graduate level. This course may be repeated for credit up to 12 hours when content varies. The content of this course is subject to instructor approval.
Prerequisites: Students must hold a Bachelor's degree that included 6 hours of advanced undergraduate drawing and painting. Candidates must submit a portfolio of their artwork and be interviewed by the graduate art faculty or graduate advisor before registering for this course. Lec. 2, Lab 4, Cr. 3

ARTS 6311 Graduate Studio Problems in Ceramics This course is the study of a variety of pottery and sculpture techniques, and of the development of individual expression through the use of volume, form, space and mass at the graduate level. This course may be repeated for credit up to 12 hours when the content varies. The content of this course is subject to instructor approval.
Prerequisites: Students must hold a Bachelor's degree that included 6 hours of advanced undergraduate ceramics. Candidates must submit a portfolio of their artwork and be interviewed by the graduate art faculty before registering for this course. Lec. 2, Lab 4, Cr. 3

ARTS 6330 Advanced Studies in Art History and Criticism
This course is an analysis at the graduate level of selected areas of art history and criticism from established periods and styles of art. This course may be repeated for up to 12 hours when the subject content varies. Admission to this course is subject to instructor approval.
Prerequisites: Students must hold a Bachelor's degree that included 6 hours of advanced undergraduate art
history. Candidates must submit a portfolio of their artwork and be interviewed by the graduate art faculty before registering for this course. Lec. 3, Cr. 3

## Communication

COMM 6301 Communication and Consumer Behavior Introduction and overview of the theories and practice involved in understanding behaviors of audiences in response to persuasive communication messages. Lec. 3, Cr. 3

## COMM 6302 Critical Approaches to Mass Communication and Society

This course introduces students to a variety of methods for the purpose of understanding the role of mass communication in contemporary society. Lec. 3, Cr. 3

COMM 6303 Special Topics in Communication Course offered covers a variety of communication topics related to the study of human communication, among those topics would be intercultural communication, interpersonal communicatin and applied statistics for behavioral research in communication. Course may be repeated 2 times for credit when topic varies. Lec. 3, Cr. 3

## COMM 6312 Organizational Communication and Change

This graduate seminar will provide an in-depth application of general systems theory to organizational effectiveness with a focus on creating learning organizations. Lec. 3, Cr. 3

## COMM 6330 Seminar in New Mass Communication

 TechnologiesThis course examines current and anticipated communication technologies and how these technologies influence communication within peer groups, organizations, and among consumers. LEc. 3, Cr. 3

## Criminal Justice

CRIJ 6301 Criminal Justice System
This course is designed to give students a current, thorough, and comprehensive overview of all facets of the criminal justice system in the United States, its functions, current controversial issues and future trends. The philosophy, history, and development of criminal justice agencies will be examined. Lec 3, Cr 3

CRIJ 6302 Crime, Criminal Behavior, and Criminology Major theoretical approaches to the study of crime and
criminology, including biological, economic, political, psychological, and sociological views on crime and criminal behavior will be examined. Lec 3, Cr 3

## CRIJ 6303 Criminal Justice Policy Analysis

An analysis of the development, implementation, and evaluation of criminal justice policy. Several policies will be studied and analyzed regarding their development and implementation. Lec 3, Cr 3

CRIJ 6304 Law, Courts, and Criminal Procedure Advanced study of the legal system of the United States. Discussion of the sociology of law as related to the application and operation of the judicial system and police procedure. Analysis of current research and literature related to the United States legal system. Lec 3, Cr 3

CRIJ 6305 Criminal Justice Organizational Theory and Behavior
Advanced examination and evaluation of management, organization, and administration of criminal justice agencies. Lec 3, Cr 3

CRIJ 6306 Statistical Methods in Criminal Justice Advanced statistical methods used in criminal justice research, including multivariate analysis and application of computerized statistical programs in analyzing criminal justice data will be examined. Lec 3, Cr 3

CRIJ 6307 Criminal Justice Research Methods Examination of theory, techniques, methods, and applications of quantitative analysis in criminal justice, with emphasis upon experimental design and collection, tabulation, and analysis of in-field data.
Prerequisite: CRIJ 6306 or consent of instructor. Lec 3, Cr 3

## CRIJ 6308 Juvenile Justice System

An overview of the juvenile justice system in the United States. The administration of juvenile institutions and agencies, the juvenile court system, theories of juvenile delinquency and innovative strategies for treatment. Current research and trends in juvenile justice will be examined. Lec 3, Cr 3

## CRIJ 6309 Issues in Corrections

Examination of correctional philosophy, contemporary correctional issues, administration and management of correctional institutions. The role of probation and parole and analysis of community-based corrections and related
topics in corrections. Lec 3, Cr 3

## CRIJ 6310 Issues in Policing

Examination and discussion of current trends and issues related to policing in the United States. Evaluation of current strategies of policing and their application in police agencies. Lec 3, Cr 3

## CRIJ 6311 Special Topics in Criminal Justice

 This course gives graduate students an opportunity to study contemporary issues in crime and criminal justice. This course will also focus attention on international criminal justice issues and topics. May be repeated once as the topics vary. Lec 3, Cr 3CRIJ 6312 Independent Research and Study Independent study designed to provide an opportunity for students to pursue research and/or participate with graduate faculty in research for publication or professional presentation. Students may also opt under this course to study in-depth theoretical/empirical readings in a substantive area not normally covered in standard courses. Prerequisite: prior approval of Graduate Program Director and consent of instructor. Can be taken twice for credit. Lec 3, Cr 3

## CRIJ 7301-7302 Thesis

The student is required to complete an individual research project under the direction and supervision of a graduate thesis committee. The thesis will be defended publicly and approved by a majority of the thesis committee. Prerequisite: Approval of Graduate Program Director. Lec 3, Cr 3

## CRIJ 7303-7304 Applied Research Project

The student is required to complete a problem-oriented applied research project under the supervision of a graduate project committee. The project must be approved by a majority of the project committee. Prerequisite: Approval of Graduate Program Director. Lec 3, Cr 3

## Interdisciplinary Studies

INDS 7300 Thesis Cr 3

INDS 7301 Thesis Cr 3

## Psychology

PSYC 5306 Methods of Conflict Resolution
An analysis of the nature of conflict and the methods to resolve conflict with an emphasis on collaborative problem solving and meditation. A research project and
supporting specialized reading will be required.
Lec 3, Cr 3
PSYC 5321 Contemporary Topics in Psychology
A survey and review of recent developments in psychological research and practice. Topics may vary. May be taken twice for credit. Lec 3, Cr 3

PSYC 5333 Theories of Personality
A study of the development, structure, and assessment of personality with a consideration of the major theoretical attempts to account for the psychological nature and the behavior of man. A research project and supporting specialized readings will be emphasized. Lec 3, Cr 3

PSYC 6302 Research Methods
This course provides advanced training in research design with an emphasis in quantitative data analysis. Empirical examples in psychology are used to illustrate various research designs and statistical methods to ensure that students become intelligent producers and consumers of research. Lec 3, Cr. 3
Prerequisite: PSYC 2317 or comparable undergraduate statistics course, PSYC 3301 or comparable undergraduate research course, Admission to graduate program.

PSYC 6307 Adolescent Psychology
This course will provide an overview of selected developmental theories and issues in adolescent psychology beginning with the early Greeks and concluding with modern feminists and multicultural theories. Contemporary topics of adolescents in society will also be addressed. Lec. 3, Cr. 3
Prerequisite: Admission to graduate program.
PSYC 6313 Abnormal Psychology
Analysis, etiology, and incidence of neurosis and psychosis, mental hygiene problems, and adjustive behavior. A research project and supporting specialized readings will be emphasized. Students may not receive credit for both PSYC 4313 and PSYC 5313. Lec 3, Cr 3

PSYC 6318 Learning, Memory and Cognition
This course approaches learning from a modern cognitive perspective. Emphasis is placed on higher-order cognitive processes such as knowledge representation, conceptual structure, concept learning, memory processes, and $m$ emory distortion. Lec 3, Cr 3

# College of Science, Mathematics and Technology 

Dr. Michael Oudshorn, Dean<br>Science, Engineering \&<br>Technology Building \#2.342<br>882-6701<br>michael.oudshorn@utb.edu

The College of Science, Mathematics and Technology offers the Master of Science degree with concentrations in Biology, Mathematics and Physis and a Master of Science in Interdisciplinary Studies (M.S.I.S.) degree with concentrations in Biology and Computer Science.

At The University of Texas at Brownsville and Texas Southmost College_(UTB/TSC), the principal role of the College of Science, Mathematics, and Technology is to provide students with the opportunity to develop scientific knowledge, job skills, and work ethics that will prepare them for entry into the real world. Our academic programs in the sciences, math, and technology provide both theory and practical training. Emphasis is placed on individual initiative, self-discipline, and the pursuit of excellence. Additionally, our academic programs stimulate analytical thinking and establish a foundation for further education and learning. In order to help students grow with a rapidly evolving world, our academic programs are consistently updated to reflect current technology and industry needs. Finally, the College of Science, Mathematics, and Technology prides itself on offering academic programs that accommodate our unique geographical location by meeting the needs and opportunities of both the southern Texas and northern Mexico regions.

## Graduate Programs

M.S. in Biology<br>M.S.I.S. in Biology<br>M.S.I.S. in Computer Science<br>M.S. in Mathematics<br>M.S. in Physics

## Biological Sciences

Dr. Luis V. Colom, Chair

LHSB \#2.816
882-5048
luis.colom@utb.edu

Graduate Faculty

James Beale, Assistant Professor
Luis Colom, Professor
Emilio Garrido, Assistant Professor
David Hicks, Assistant Professor
Masoka Isokawa, Associate Professor
Alexander Kazansky, Associate Professor
Michael Lehker, Associate Professor
Genaro López, Professor
Saraswathy Nair, Assistant Professor
Gerson Peltz, Associate Professor
Eli Eric Peña, Associate Professor
Heather Poethke, Assistant Professor
Daniele Provenzano, Associate Professor
Andrea Schwarzbach, Associate Professor
Masoud Zarei, Assistant Professor

## Master of Science in Biology (M.S.) Biology

## 36-Hour Thesis/Non Thesis Program

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Biology are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 500
- GRE Quantitative score of 500
-Two letters of reference from faculty members or
supervisors attesting to the applicant's potential to successfully complete graduate work
- A personal statement from the applicant explaining why he/she wishes to pursue graduate study in biology including professional and personal goals, this letter
should include the area of interest, and a short list of preferred faculty research supervisors
- Undergraduate studies in biology including completion of a set of core biology and support courses essentially the same as those required by UTB/TSC for the Bachelor Science in Biology. Promising applicants must be accepted if lacking some of this preparation but will be required to complete it within the first academic year following acceptance in order to continue in the MS program.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

Master of Science without Thesis: The Masters degree program for non-thesis students will require a total of 36 semester credit hours (SCH). Foundation Courses: Non-thesis graduate students may be required to take up to 30 SCH of undergraduate coursework in biology or support areas, not applied to the degree program, to make up deficiencies in undergraduate preparation. Courses required of all non-thesis MS students: Ten credit hours of core courses will be taken by all non-thesis MS students in the program. The following core courses are required:

## Degree Requirements

BIOL 6101 Graduate Seminar. 1 SCH (repeated for 2 SCH)
BIOL 6102 Final Research Seminar.
SCH
BIOL 5455 Biostatistics.

4 SCH
BIOL 6365 Graduate Biological Research Problems. 3 SCH

Elective courses prescribed for non-thesis MS: Nonthesis MS students must choose three (9 SCH) of the following advanced biology courses:
$\begin{array}{ll}\text { BIOL } 5370 \text { Topics in Biology. } & 3 \text { SCH } \\ \text { BIOL } 6303 \text { Evolutionary Ecology. } & 3 \mathrm{SCH}\end{array}$
BIOL 6312 Advanced Cell \& Molecular Biology3 SCH BIOL 6400 Neuroscience.

4 SCH

Courses freely elected by non-thesis MS students: The following courses are considered as free electives for non-thesis students and will be chosen by the GAC with input from the graduate student (minimum of 17 SCH ).

| BIOL 5301 Evolution. | 3 SCH |
| :--- | ---: |
| BIOL 5402 Marine Zoology. | 4 SCH |
| BIOL 5414 Plant Taxonomy. | 4 SCH |
| BIOL 6301 Molecular Tech. And Lab. |  |
| Instrumentation. |  |
| BIOL 6330 Molecular and Cellular Evolution. 3 SCH |  |
| BIOL 6385 Special Graduate Research. | 3 SCH |
| BIOL 6390 Biology Internship. | 3 SCH |
| BIOL 6405 Insect Ecology. | 4 SCH |

Master of Science with Thesis: The thesis MS
program track will require a total of 36 semester credit hours (SCH). Students may be required to take up to 30 credits of undergraduate coursework in biology or support areas, not applied to the degree program, to make up deficiencies in undergraduate preparation. Fourteen credit hours of core courses will be taken by all students in the program. The remaining 22 hours will be considered electives and will be chosen by the GAC with input from the student. The following courses are required by all thesis students:

BIOL 6101 Graduate Seminar.
1SCH
(repeated for 2 SCH )
BIOL 6102 Final Research Seminar.

BIOL 5170 Laboratory Topics in Biology. 1 SCH
BIOL 5455 Biostatistics.
4 SCH
BIOL 7300 Thesis.
3 SCH
BIOL 7301 Thesis.
3 SCH
Elective courses prescribed for all MS with Thesis students: There are no prescribed elective courses. Courses freely elected by MS with Thesis students: Students may choose to specialize in (1) cellularmolecular biology including biotechnology; (2) organismal biology including zoology, marine biology or botany; (3) environmental biology including ecology, evolution, (4) Microbiology and Infectious Disease, (5) Neuroscience and Neurochemistry, or (6) Clinical Medicine including oncology and nutrition by appropriate course selection (below) as guided by the GAC (minimum of 22 SCH).

| BIOL 5301 Evolution. | 3 SCH |
| :--- | :--- |
| BIOL 5370 Topics in Biology. | 3 SCH |
| BIOL 5402 Marine Zoology. | 4 SCH |
| BIOL 5414 Plant Taxonomy. | 4 SCH |
| BIOL 6301 Molecular Tech. And Lab. |  |
| Instrumentation. |  |
| BIOL 6303 Evolutionary Ecology. | 3 SCH |
| BIOL 6312 Advanced Cell \& Molecular Biology3 SCH |  |
| BIOL 6330 Molecular and Cellular Evolution. 3 SCH |  |
| BIOL 6385 Special Graduate Research. | 3 SCH |
| BIOL 6390 Biology Internship. | 3 SCH |
| BIOL 6400 Neuroscience. | 4 SCH |
| BIOL 6405 Insect Ecology. | 4 SCH |

## Thesis

A research project as described under BIOL 7300 and 7301. The thesis topic and accompanying thesis research prospective must be approved in writing by the Faculty Advisor and GAC, Department Chair, and the Dean of Graduate Studies prior to the onset of thesis research projects. All research involving vertebrate subjects must also be approved by the Institutional Animal Care and Use Committee prior to commencing experiments. All research using human subjects must be approved by the Human Subjects Research Review Committee prior to collection of any data. Seminar Presentation:
open to all students, faculty and the population at large. Oral Defense: An oral examination over the thesis research as well as broad aspects of biology administered by the three members of the Student's GAC.

## MS without Thesis

Professional paper: Non-thesis students are required to write a professional paper based on work done in BIOL 6365-Graduate Biological Research Problems. The paper will be on a topic approved by the student's graduate committee and will demonstrate the student's ability in organization, data collecting and scientific writing.

## Comprehensive Exam

Non-thesis students must take a comprehensive written examination covering the student's understanding of advanced biological concepts. The comprehensive exam will be administered by the student's GAC and its content will be contingent on prescribed coursework. The comprehensive exam will not be scheduled prior to the student's final semester of coursework.

## Master of Science in Interdisciplinary Studies (M.S.I.S.) in Biology

 36-Hour Thesis/Non-Thesis ProgramThe M.S.I.S. degree requires a total of 36 semester hours of graduate credit. An area of concentration must have at least 12 and no more than 18 semester hours in the subject area. At least six hours in the area of concentration must be in upper level (6000) graduate work. In addition, 18-24 hours must be taken in two or more supporting fields outside the area of concentration.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking
students in Biology are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 500
- GRE Quantitative score of 500
- Two letters of reference from faculty members or supervisors attesting to the applicant's potential to successfully complete graduate work
- A personal statement from the applicant explaining why he/she wishes to pursue graduate study in biology including professional and personal goals, this letter should include the area of interest, and a short list of preferred faculty research supervisors
- Undergraduate studies in biology including completion of a set of core biology and support courses essentially the same as those required by UTB/TSC for the Bachelor Science in Biology. Promising applicants may be accepted if lacking some of this preparation but will be required to complete it thin the first academic year following acceptance in order to continue in the MS program.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

| Area of Concentration | Credit Hours |
| :--- | :--- |
| Biology | $12-18$ |
| (Must include BIOL 6101 and for Non-Thesis |  | students; BIOL 6365, BIOL 6101 must be taken for a total of three credits)

Two or more supporting fields-which must include ISCI 7300 and ISCI 7301 for thesis students

18-24
Total graduate hours for degree
Each student in the M.S.I.S. degree program will be assigned by the department chairperson, a Faculty Advisor and two additional faculty committee members who teach in Interdisciplinary Studies. The choice of courses in the concentration area and the selection of supporting fields will be determined
through consultation between the student, the Faculty Advisor and the committee members. A formal Program of Study as described elsewhere in this catalog will be prepared and submitted for approval. Each candidate for the M.S.I.S. must pass a comprehensive examination over the area of concentration and supporting fields.

## Supporting Fields

Arts, Business Administration*, Computer Science, Criminal Justice, Education*, English, Government, History, Interdisciplinary Science, Interpreting, Mathematics, Physics, Psychology, Sociology, and Spanish

* No more than 12 semester hours total may be taken from the professional schools.


## Thesis

As part of their graduate program, students may choose the option of writing a thesis, for which they will receive six hours of graduate credit. Those who take this option must select a thesis committee, composed of a committee chairperson and two other members of the graduate faculty, to approve the topic and to assist in the preparation of the thesis. (See thesis-Non-Thesis option under "Academic Information.") Students must pass an oral defense of the completed thesis. Students selecting this option will register for ISCI 7300 and 7301 after they have completed their coursework.

## Graduate Course Descriptions

## Biology

BIOL 5127 Texas Coastal Ecology Laboratory This course is a series of laboratory and field investigations emphasizing identification, biology and ecology of local marine organisms. Lec. 3, Cr. 3 Prerequisite: Graduate standing or consent of the instructor and concurrent enrollment in BIO 5327.

BIOL 5170 Laboratory Topics in Biology Specialized laboratory content and/or field experiences not available in other courses. May be repeated for credit as laboratory content and/or field experiences change. Prerequisite: Graduate standing or consent of instructor.

Lec 0, Lab 3, Cr 1
BIOL 5300 Graduate Biology for Educators
This course covers integrated biological principals from molecules through the biosphere, with a focus on specific contributions that knowledge of those principles has made to the physical, intellectual, and esthetic welfare of humanity. The course will include lectures, readings of scholarly and popular literature, discussion, and a scholarly and popular literature, discussion and a scholarly paper based on individual investigation of literature. Does not count toward a graduate degree in Biology. Prerequisite: Graduate Standing, eight semester credit hours in undergraduate BIOL, enrollment for a graduate degree outside of BIOL. Lec. 3, Cr. 3

## BIOL 5301 Evolution

This course involves the study of organic evolution with an emphasis on mechanics, especially genetics and modern theories. This course will provide a common foundation of understanding of the fundamental principles that underpin and explain all of biology for all students. Prerequisite: Graduate standing. BIOL 3403 or equivalent, BIOL 3409 or equivalent. Lec. 3, Cr. 3

BIOL 5315 Biological Basis of Emerging Diseases Students will learn the principles that underlie epidemics and emergence of new disease ranging from SARS and HIV to obesity and diabetes with particular emphasis on health threats that affect the US/Mexico border. Factors ranging from human microbial genetics, molecular epidemiology, economics, culture, climate and major social disruptions, such as warfare and migration, will all be explored. Lec. 3, Cr. 3

## BIOL 5327 Texas Coastal Ecology

This course examines the major nearshore habitats and communities of the western Gulf of Mexico including: beaches, sand dunes, estuaries, salt marshes, mud flats, sea grass meadows, and rocky shores. Emphasis is placed on directed, field-oriented, individual research projects. Lec. 3, Cr. 3 Prerequisite: Graduate standing and one course in general ecology (BIOL 3309) or zoology (BIOL 3314 or BIOL 4302) or consent of the instructor.

## BIOL 5350 Bioenergetics

The use of quantitative analysis of energy resource partitioning to study the evolution of adaptational strategy at the biochemical, cellular, individual, population and ecosystem levels, includeing quantitative analysis of physiological processes and the life history adaptations in terms of energetic efficiency. Lec.3, Cr. 3 Prerequisite: Graduate standing and one course in
general physiology (BIOL 3301 or equivalent) or consent of the instructor.

## BIOL 5370 Topics in Biology

Specialized lecture content topics not available in other courses. May be repeated for credit as content changes. Prerequisite: Graduate standing or consent of instructor. Lec 3, Lab 0, Cr. 3

## BIOL 5402 Marine Zoology

A study of the common marine animals, especially invertebrates in coastal water. Cannot be taken for credit by students with credit for BIOL 4402. Graduate students must complete an independent project. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

BIOL 5404 Ichthyology
Classification, evolution, ecology, and biology of fishes. The lab emphasizes field surveys, taxonomy, and the identification of marine fishes. Graduate students are required to complete an independent project. Credit will not be given for both BIOL 4404 and BIOL 5404. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 5414 Plant Taxonomy

Principles of classification, identification of vascular plants with emphasis on native flowering plants. Credit will not be given for both BIOL 4414 and BIOL 5414. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 5422 Conservation Biology

Focus on the controlled use and systematic protection of natural resources such as forests, soils, and water systems. Conservation integrates concepts of geography, climatology, geology, geomorphology, chemistry, and biology into one applied science. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 5425 Plant Physiology

An analysis of cell biology, biochemistry, metabolism, ecophysiology and development of plants. Topics include water relations, respiration, photosynthesis, nitrogen fixation, mineral nutrition, plant hormones, plant molecular biology, genetic engineering and the role of environment signals in plant development. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 5430 Animal Behavior

This course examines the biological basis of animal behavior from an evolutionary perspective. Topics include instincts and learning, behavioral genetics, development of behavior, neural and endocrine mechanisms, adaptive significance of behavior, and social behavior. Prerequisite:

Graduate standing, four semester hours of upper-division biology. Lec. 3, Lab 3, Cr. 4

## BIOL 5444 Plant Genetics

This course studies plant heredity and variation and the connectedness among the four levels at which life is studied: molecules, cells, individuals and populations. Topics include: selection leading to evolution and adaptation among plants, mating systems and population genetic structure, transgenic plant technology and DNA-based markers. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 5455 Biostatistics

This course introduces methods for the collection and statistical analysis of biological data. Topics include descriptive statistics, probability, sampling, confidence intervals, hypothesis testing, analysis of variance, correlation, regression and non para-metric methods. Students will practice data analysis using statistical software and sample data from various fields such as ecology, systematics, and biomedical sciences. Prerequisite: Graduate standing, completion of four upper-level semester hours in biology and completion of college algebra (MATH 1314) or any mathematics course for which college algebra is a prerequisite. Lec. 3, Lab 3, Cr. 4

BIOL 6101 Biology Graduate Seminar Independent scholarly review of topics of current research interest, reporting and discussing with faculty and other students. May be repeated for credit. Prerequisite: Graduate standing or consent of instructor. Lec 1, Lab 0, Cr 1

BIOL 6102 Final Research Seminar Presentation of the student's Thesis or Graduate Biological Research Problem to the assembled Graduate Faculty, students and guests. Prerequisite: Graduate standing, final semester of enrollment, approval of Student's Committee. Lec. 1, Cr. 1

BIOL 6301 Molecular Techniques and Laboratory Instrumentation
This course studies the theory and application of laboratory techniques, with an emphasis on molecular techniques. The course may be team taught by various members of the Graduate Faculty as expertise dictates. Prerequisite: Graduate Standing. Lec. 2, Lab 3, Cr. 3

BIOL 6303 Evolutionary Ecology
The role of genetics and evolution at the individual, population, and community levels. Prerequisite: Graduate

BIOL 6312 Advanced Cellular and Molecular Biology An in-depth study of the physical and molecular activity at the cellular level. Topics to be emphasized include: nucleic acid structure and organization, gene expression and its regulation, protein structure and recombinant DNA techniques. Prerequisite: Graduate standing, BIOL 3412 or equivalent, CHEM 3303 or equivalent. Lec. 3, Cr. 3

BIOL 6330 Molecular and Cellular Evolution This course involves the study of the appearance of life on earth and its subsequent evolution at the molecular and cellular levels. Prerequisite: Graduate standing. Lec. 3, Cr. 3

BIOL 6365 Graduate Biological Research Problems Supervised research involving identification and definition of a problem, preparation of a proposal, collection and analysis of data, writing and submission for faculty approval of a report in standard scientific form. Prerequisite: Consent of instructor and advisor. Lec 0, Lab 8, Cr 3

BIOL 6385 Special Graduate Research
Research problems supervised by a faculty member. Offered for students who desire research experience prior to beginning BIOL 6365 or Thesis. May include library and laboratory work, or library work only. The final research product may vary, but will always include a written report of the results. Prerequisite: Graduate standing, and instructor's permission. Lec. 0, Lab 6, Cr. 3

BIOL 6400 Neuroscience
This course studies the integrative functions of the animal nervous system from molecules to behavior. Prerequisite: Graduate standing. Lec. 3, Lab. 3, Cr. 4

BIOL 6404 Fish Ecology
Interactions of fishes especially teleosts, with their physical and biotic environment. The lab emphasizes fieldwork and includes an individual student project. Prerequisite: Graduate standing. Lec 3, Lab 3, Cr. 4

BIOL 6405 Insect Ecology
A course dealing with the general concepts of ecology as related to insects. Emphasis is on studying insects in nature and concepts of ecology that can be used to understand them. Evolution, interactions between plants and insects, and population dynamics are important parts of this course. The laboratory emphasizes fieldwork and individual investigations. Prerequisite: Graduate Standing,

Lec. 3, Lab 3, Cr. 4
BIOL 6406 Field Botany
A set of field investigative projects, which will focus on the quantitative analysis of local vegetation. Students will be required to collect, analyze and interpret data. Oral presentations and written reports will also be required. Prerequisite: Graduate standing. Lec. 3, Lab 3, Cr. 4

## BIOL 7300 Thesis

Supervised research. Will include design of an original research problem with a written proposal, collection and analysis of original data, and writing of a scientific report in acceptable publication format. Prerequisite: Instructor's permission. Cr. 3

BIOL 7301 Thesis
Continuation of BIOL 7300 Prerequisite: Instructor's permission, Cr. 3

## Computer Science/ <br> Computer Information Systems

Dr. Juan Raymundo Iglesias<br>SETB 1.550A<br>882-6616<br>juan.iglesias@utb.edu<br>Graduate Faculty<br>Lei Hansheng, Assistant Professor<br>Fitratullah Khan, Professor<br>Juan R. Iglesias, Assistant Professor<br>Lappoon Rupert Tang, Assistant Professor<br>Mahmoud K. Quweider, Associate Professor<br>Amjad Zaim, Assistant Professor

## Master of Science in Interdisciplinary Studies (M.S.I.S.) in Computer Sciences

## 36-Hour Thesis/Non-thesis

The Master of Science in Interdisciplinary Studies (MSIS) with concentration in Computer Science (CS) requires a total of 36 semester hours of graduate credit. A total of 18 graduate semester credit hours must be taken in CS. Additional 18 hours, including ISCI 7300 and ISCI 7301, must be taken in two or more supporting fields outside CS.

## Admission Requirements

Applicants must satisfy the admission requirements outlined by the Graduate Office at UTB. Specific criteria for Unconditional Admission for Master's degree seeking students in Computer Science are:

- Undergraduate GPA of 3.0
- GRE Verbal Score of 400 and Quantitative Score of 500
- Personal statement from the applicant explaining why he/she wishes to pursue graduate study in CS including professional and personal goals. This letter should include the area of interest, and a short list of preferred faculty research supervisors.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified
are also encouraged to apply as all completed applications are considered for admisison.

Entering graduate students will take a diagnostic evaluation conducted by the Computer Science Graduate Coordinator. The evaluation will serve to identify areas that must be strengthened by the student with remedial courses and to identify the possible tracks of specialization that may be of interested to the student.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements: 36 hours

Area of Concentration $\qquad$ Credit Hours

Computer Science 18
Two or more supporting fields. 18
(must include ISCI 7300 and ISCI 7301)
Total Graduate Hours for degree 36

## Thesis

Students must take ISCI 7300 and ISCI 7301 leading to the completion of their thesis. At the appropriate time in their graduate study, students will select a thesis committee in order to approve a topic and to assist in the preparation of the thesis. The thesis committee will be composed of at least three graduate faculty, one of them will be appointed as the chairperson. Co-chairs are possible in case of cosupervision of an interdisciplinary project. Students must pass an oral defense of the completed thesis. The thesis needs not consist solely of a written research paper; software, analytical, practical performance, or other appropriate projects may also be considered. It is expected that the student will choose a topic that appropriately integrates aspects of the discipline of Computer Science and the supporting fields.

## Supporting Fields

Arts, Business Administration*, Biology, Criminal Justice, Education*, English, Government, History, Interdisciplinary Science, Interpreting, Mathematics, Physics, Psychology, Sociology, and Spanish. A total of 18 graduate semester credit hours including ISCI 7300 and ISCI 7301 must be taken from two or more supporting fields outside Computer Science. Selection of supporting fields must be determined through consultation with the Faculty Advisor. Mathematics as supporting area is strongly encouraged but not required.
No more than 12 semester hours total may be taken from the professional schools.

## Curriculum of Study

Graduate Computer Science Courses
Students are required to take 18 hours of graduate course in
COSC (above 5000) that may be chosen from the following:
COSC 5300 Compiler Construction
COSC 5313 Computer Networks
COSC 5315 Advanced Computer Networks
COSC 5330 Computer Graphics
COSC 5332 Human Compute Intefaces
COSC 5333 Digital Image Processing
COSC 5335 Computer Vision
COSC 5342 Database Management Systems
COSC 5343 Data Mining
COSC 5349 Computer Architecture
COSC 5350 Artificial Intelligence
COSC 5355 Expert Systems
COSC 5360 Numerical Methods
Tracks of Specialization
M.S.I.S. in Computer Science - Computer Networking

COSC 5313 Computer Networks
COSC 5315 Advanced Computer Networks
COSC 5349 Computer Architecture
COSC 5342 Database Management Systems
M.S.I.S. in Computer Science - Intelligent Systems COSC 5333 Digital Image Processing

COSC 5342 Database Management Systems
COSC 5335 Computer Vision
COSC 5343 Data Mining
COSC 5350 Artificial Intelligence COSC 5355 Expert Systems
M.S.I.S. in Computer Science - Applied Computing

COSC 5300 Compiler Construction COSC 5360 Numerical Methods COSC 5330 Computer Graphics COSC 5349 Computer Architecture
M.S.I.S. in Computer Science - Information Systems COSC 5321 E-Commerce COSC 5313 Computer Networks COSC 5315 Advanced Computer Networks COSC 5332 Human Computer Interfaces COSC 5342 Database Management Systems COSC 5343 Data Mining

## Graduate Course Descriptions

## Computer Science

COSC 5300 Compiler Construction
Different phases of compiler construction are studied: lexical, syntax, semantics and code generation. Projects leading to the complete construction of a compiler for a mini-set of a language are given.

COSC 5313 Computer Networks Computer networks are presented via seven distinct layers: physical, data link, network, transport, session, presentation, and application layer. Hardware and protocols used at different layers and in different networks are studied in detail. Different existing networks are studied as examples in every layer. Prerequisite: COSC 3330 or departmental consent. Lec 3 Cr. 3

COSC 5315 Advanced Computer Networks The design of networks and their performance will be covered in this course. Modern Networks such as ATM and Gigabit Ethernet network will also be studied. Other topics that will be studied are cryptology, network programming, and secure channels. Prerequisite: COSC

3330, COSCU 2317. Lec. 3, Cr. 3

## COSC 5321 E-Commerce

This course introduces the technologies used in building e-commerce applications including e-commerce scalable architecture design, Internet infrastructure, administration, electronic payment systems, e-business relationships, mobile commerce ( mCommerce ), and business-to-business (B2B) marketplace design, strategies and models.

## COSC 5330 Computer Graphics

The student is familiarized with structured graphical objects. The algorithms for transforming, clipping, and projecting objects are put into practice through several projects. Hidden line/surface removal, shading/lighting models, and the problem of aliasing are studied. Prerequisite: COSC 3345 or consent of instructor.

COSC 5332 Human Computer Interfaces Simple and compound classes, page and page selector classes, animation and pop up classes, configuration and deriving of new objects, application interface, overall design, and machine dependencies are studied. Application-oriented graphical user interfaces are built. Prerequisite: COSC 2336 or consent of the instructor.

## COSC 5333 Digital Imaging Processing

 This course covers the basic techniques used in acquiring, processing, and displaying of digital images and video. Topics include image acquisition, spatial and frequency domain representation, image filtering, image compression, image analysis, morphological image processing and image understanding. Efficient implementation of image processing algorithms in a structured computer language is emphasized. Lec. 3, Cr. 3 Prerequisite: MATH 2314 and COSC 2336 or departmental consent.
## COSC 5335 Computer Vision

This course covers the fundamental and advanced ideas of developing computerized procedures to extract numeric and symbolic information from images. Key ideas include image formation, acquisition, calibration, object recognition, video understanding, stereo imaging, optical flow and classification methods. System implementation and applications in communications, medicine, robotics and manufacturing are introduced. Prerequisite: COSC 4333; MATH 2313. Lec. 3, Cr. 3

COSC 5342 Database Management Systems Data abstraction and models, entity-relationship model, relational model, formal and commercial query
languages, network and hierarchical data models, relational database design, file and system structure; indexing and hashing, query processing, and concurrency control are studied. Lec. 3 Cr. 3
Prerequisite: At least a C in both COSC 3345 and COSC 3330.

## COSC 5343 Data mining

This course gives the fundamentals of applying artificial intelligence techniques for analysis, learning and prediction of information using data extracted form databases. Topics include data mining system architecture, data preprocessing, pattern recognition, attribute relevance analysis, class discrimination, rule association, correlation analysis, classification, prediction, cluster analysis and query languages. Prerequisite: At least a C in the following courses COSC 3330, MATH 2342 and MATH 3373. Lec. 3, Cr. 3

COSC 5349 Computer Architecture Classical and modern computer architectures will be studied in this course. Techniques such as microprogramming and counter-decorder methods will be included. Other topics that will be studied include parallel computing architectures, their performance and programming. Prerequisite: COSC 3325. Lec. 3, Cr. 3

## COSC 5350 Artificial Intelligence

This course discussed the theoretical and practical foundations of artificial intelligence. Principles in reasoning, perception, deduction, planning, learning, knowledge representation and problem resolution are some of the areas covered. Lec. 3, Cr. 3
Prerequisite: At least a C in COSC 3345.

## COSC 5355 Expert Systems

This course covers the theoretical and practical principles of modern expert systems construction. Topics include logic and reasoning, knowledge representation, rulebased reasoning, inexact reasoning, ontologies, and knowledge acquisition. Lec 3, Cr 3
Prerequisite: At least a C in COSC 5350
COSC 5360 Numerical Methods
The topics include root finding, interpolation and numerical differentiation, polynomial interpolation, estimating derivates, numerical integration, systems of linear equations, approximation by spline functions, and smoothing of data.
Prerequisite: COSC 2336 and MATH 2414 or consent of the instructor.
Mathematics
Dr. Jerzy Mogilski, Chair
SETB \#2.454
882-6628
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Graduate faculty
Roger Contreras, Associate Professor
Olivia Garcia, Associate Professor
Anthony Lerma, Associate Professor
Jerzy K. Mogilski, Assistant Professor
Jorge E. Navarro, Assistant Professor
Vesselin Vatchev, Assistant Professor
Taeil Yi, Assistant Professor

## Master of Science in Mathematics (M.S.)

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking
students in Math are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 600
- Two letters of recommendation from college or university professors indicating the applicant's potential in Mathematics
- A letter from the applicant indicating reasons for wanting to pursue graduate studies in Mathematics including professional and personal goals; in this letter, the applicant should indicate his/her field of interest in Mathematics as well as his/her preference for an advisor
- The applicant must take the GRE in Mathematics before being admitted to the program. The student's score as well as the undergraduate transcripts
will help the departmental graduate committee determine if the student has the appropriate background to be enrolled in the program
- Undergraduate transcript including completion of a set of Mathematics courses determined by the departmental graduate committee (an applicant lacking some of these courses may be accepted to the program but will be required to complete them during the first academic year in order to continue in the program. An undergraduate course may be taken concurrently with graduate course work.)

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

The M.S. program requires 36 semester credit hours (SCH). Graduate students may be required to take undergraduate courses in Mathematics to make up for deficiencies in preparation as determined by their temporary Admission and/or Advising Committee. These courses will not be applied to the degree program.

## M.S. in Pure Mathematics

Courses required: 36 SCH
MATH 5321 Higher Algebra
3 SCH
MATH 5323 Group Theory 3 SCH
MATH 5331 Higher Geometry 3 SCH

MATH 5339 Topology 3 SCH
MATH 5341 Higher Analysis 3 SCH
MATH 5367 Numerical Analysis 3 SCH

Also, the student is required to take three courses out of the following collection: 9 SCH

MATH 5304 Foundations of Mathematics 3 SCH

| MATH 5327 | Lie Algebras | 3 SCH |
| :---: | :---: | :---: |
| MATH 5329 | Number Theory | 3 SCH |
| MATH 5342 | Measure and Integral Theory 3 SCH |  |
| MATH 5346 | Functional Analysis | 3 SCH |
| MATH 5348 | Differential Equations | 3 SCH |
| MATH 5362 | Graph Theory | 3 SCH |
| MATH 5375 | Measure and Probability | 3 SCH |
| MATH 5391 | Special Topics in |  |
| Ma | matics (Pure) 3 S | 3 SCH |
| In addition, the student must take a free elective course.$3 \mathrm{SCH}$ |  |  |
|  |  |  |
| M.S. in Pure Mathematics with Thesis |  |  |
| MATH 5397 | hesis. | 6 SCH |
| M.S. in Pure Mathematics without Thesis |  |  |
| MATH 5395 | esearch Seminar. | 6 SCH |
| The two seminars must be in two different areas ${ }^{1}$ in Mathematics. |  |  |
| M.S. in Industrial Mathematics |  |  |
| Courses required: 36 SCH |  |  |
| MATH 5321 Higher Algebra |  | 3 SCH |
| MATH 5323 Group Theory |  | 3 SCH |
| MATH 5331 Higher Geometry |  | 3 SCH |
| MATH 5341 Higher Analysis |  | 3 SCH |
| MATH 5367 Numerical Analysis |  | 3 SCH |
| MATH 5379 Stochastic Analysis |  | 3 SCH |

Also, the student is required to take three courses out of the following collection: 9 SCH
MATH 5309 Integrating Technology into Mathematics $\quad 3$ SCH
MATH 5337 Dynamical Systems 3 SCH
MATH 5348 Differential Equations 3 SCH
MATH 5361 Mathematical Modeling $\quad 3$ SCH
MATH 5362 Graph Theory 3 SCH
MATH 5363 Operations Research 3 SCH

[^0]MATH 5331 Higher Geometry
MATH 5339 Topology
MATH 5341 Higher Analysis
MATH 5381 Mathematical Statistics

## Mathematics Elective Course

One course selected from the Graduate Mathematics Inventory

Mathematics Technology Course
MATH 5309 Integrating Technology into Mathematics

Required Educational Technology Course
EDTC 6355 Designing Instruction for the Online Course

EDTC 6356 Media Enhancement for the Online Course

EDTC 6357 Using Open Source Courseware for Online Course Development
EDTC 6332 Practicum

## M.S. in Mathematics with Emphasis in Teaching Mathematics

This M.S. program requires 36 semester credit hours (SCH) including 24 sch in Mathematics and 12 sch in Education/Mathematics Education

Required Mathematics courses
MATH 5321 Higher Algebra
MATH 5323 Group Theory
MATH 5331 Higher Geometry
MATH 5339 Topology
MATH 5341 Higher Analysis
MATH 5381 Mathematical Statistics

Mathematics elective courses
Two courses selected from the Graduate
Mathematics Inventory. It may also include graduate level Mathematics courses designed for teachers (6 sch)

Required Education/Mathematics Education courses

Four courses in Education/Mathematics Education from the list below.

EDCI 6341 Teaching Algebraic Concepts<br>EDCI 6343 Teaching Geometric Concepts<br>EDCI 6349 Current Issues and Research in Mathematics Education

EDCI 6302 Field-research Methodology

## Graduate Course Descriptions

## Mathematics

MATH 5304 Foundations of Mathematics This course studies elements of mathematical logic, set theory, number theory and selected topics from discrete mathematics like combinatorial analysis and graph theory. Mathematical proofs are emphasized. Prerequisite: 6 semester hours of 4000-level math. Lec 3, Cr 3

MATH 5309 Integrating Technology to Mathematics This is an introductory course related to the latest technological computer programs, especially in mathematics. It covers some of the following educational computer softwares: graphing calculator, dynamic geometry, computer algebra systems, publishing softwares and some multimedia and internet related softwares.
Prerequisite: 6 semester hours of 4000-level math. Lec 3, Cr 3

MATH 5321 Higher Algebra
The purpose of this course is to provide the necessary algebraic background for all branches of modern mathematics that use algebraic language and methods. Topics include basic ring theory (polynomial rings over fields (perhaps Nullstellensatz), unique factorization domains, Dedekind rings), field extensions, and basic Galois theory with the usual applications to classical problems in geometry. Prerequisite: 6 semester hours of 4000-level math. Lec 3, Cr. 3

MATH 5323 Group Theory
This course is an introduction to group theory, one of the central areas in modern algebra. Topics will include the theorems of Jordan-Hoelder, Sylow, and SchurZassenhaus, the treatment of the generalized Fitting subgroup, a first approach to solvable as well as simple groups (including the theorems of Ph. Hal and Burnside). Prerequisite: MATH 5321 or consent of the instructor.

## MATH 5327 Lie Algebras

This course is an introduction to the theory of Lie Algebras. Topics include root systems, the Weyl group, nilpotent and solvable Lie Algebras, the theorems of Lie and Engel, Cartan subalgebras, Cartans criterion for semisimplicity, Chevalley groups and groups of Lie type. Prerequisite: MATH 5321 or consent of the instructor Lec 3,Cr. 3

## MATH 5329 Number Theory

This course is an introduction to number theory, one of the major branches of modern mathematics. Topics include arithmetic functions (Moebius, Euler, Dirichlet), Dirichlet series (convergence, uniqueness, multiplicative property) distribution of primes (Dirichlet, Tchebycheff, Hadamard resp. de la Vallee Poussin), Riemann's zeta function. Prerequisite: MATH 5321 or consent of the instructor. Lec 3,Cr. 3

## MATH 5331 Higher Geometry

This course is on projective, Euclidean or convex geometry. Projective geometry includes basic incidence geometry, group actions on geometries, ternary rings and coordinates in projective and affine geometries, and the fundamental theorem of projective geometry. Prerequisite: 6 semester hours of 4000 -level math. Lec 3, Cr 3

MATH 5337 Dynamical Systems
This is an introductory course in dynamical systems. Topics covered include: Linear control systems with linear algebra and nonlinear control systems with differential geometry and Lie algebras.
Prerequisite: MATH 5331 and at least three other 5000 level courses or consent of the instructor. Lec 3, Cr. 3

## MATH 5339 Topology

This course treats both the general and algebraic aspects of topology. It covers topological spaces, continuous mappings, connectedness and compactness, the fundamental group covering spaces, the Jordan Curve Theorem and a classification of surfaces.
Prerequisite: MATH 5431. Lec 3, Cr 3

MATH 5341 Higher Analysis
This course presents the system of the real numbers and the system of the complex numbers, sequences and series of real numbers, continuity and differentiability of real functions, the Riemann-Stieltjes integral, convergence of sequences and series of functions, and aspects of functions in several variables and topology. Prerequisite: 6 semester hours of 4000-level math. Lec 3,

Cr 3

MATH 5342 Measure and Integral Theory
The course presents Lebesque Theory, abstract Integration, positive Borel measures, Lebesque spaces, integration of differential forms.
Prerequisite: MATH 5341. Lec 3, Cr 3

## MATH 5346 Functional Analysis

This course is an introduction to topological vector spaces. It presents the theory of Hilbert spaces, Banach space techniques and their applications, and basic facts on operator theory and spectral theory.
Prerequisite: Math 5342. Lec. 3, Cr 3

## MATH 5348 Diferential Equations

This course covers first order and higher order ordinary differential equations, systems of solutions of linear differential equations, the Laplace transform, and several basic concepts of partial differential equations.
Prerequisites: 6 semester credit hours of 4000-level Math or 3 semester hours of 5000-level Math Lec 3, Cr 3

## MATH 5361 Mathematical Modeling

The contents of this course are widely open. It may include modeling with difference and differential equations, and stochastic processes. The course may be project-oriented. Prerequisite: 6 semester hours of 4000level math. Lec 3, Cr 3

MATH 5362 Graph TheoryThis course provides the student with the basic ideas of Graph Theory. It contains Ramsey Theory, spanning trees, decision trees, matching theory, graph coloring, traveling salesman problems, networks, min-max theorems, flow, Ford-Fulkerson. Prerequisite: 6 semester credit hours of 4000-level Math Lec 3, Cr 3

## MATH 5363 Operations Research

This course emphasizes fundamental concepts and principles as well as algorithms in Operations Research. Topics include linear, integral, non-linear, and dynamic programming, networks, queuing, inventory, decision, and game theories. Students will be required to participate in projects. Prerequisite: 6 semester credit hours of 4000-level Math, Lec 3, Cr 3

## MATH 5365 Discrete Mathematics

This course is on the borderline between mathematics and computer science. It contains basic graph theory (flows, min-max, Ford Fulkerson), generating functions, (Convoluions, Dirichlet's generating function, Riemann's zeta function), design theory, basic facts on coding theory
(Reed-Solomon Codes), combinatorial optimization, elements of asymptotics (O-notation), and complexity of algorithms. Prerequisite: 6 semester credit hours of 4000level Math. Lec 3, Cr 3

MATH 5367 Numerical Analysis
This course deals with solutions of equations, interpolation and approximation, numerical differentiation and integration, numerical aspects of linear algebra, and solutions of ordinary differential equations. Prerequisite: Math 5341. Lec 3, Cr 3

MATH 5368 Codes, Cyphers, and Security in Communications
This course addresses two related problems in communication theory. The first deals with errors that occur in the transmission of information: how they can be detected and how they can be corrected. The second is concerned with security of the transmitted information. Prerequisite: Math 5321 or consent of Instructor Lec 3, Cr 3

MATH 5375 Measure and Probability
This course is an introduction to measure-theoretic probability. Topics covered include: monotone sequences, algebras, sigma algebras, probability spaces, Borel sets, and Lebesgue measure; measurable functions and random variables, Borel-Cantelli lemma, and Kolmogorov's zero-one law; Lebesgue Integral, different types of convergence, laws of large numbers, and the central limit theorem. Prerequisite: MATH 5341. Lec 3, Cr 3

MATH 5379 Stochastic Analysis
The main objective of this course is to study discrete stochastic processes and their applications. Topics include Markov process and Markov chains convergence theorems, stopping times, martingales, and applications in trading and marketing.. Lec 3, Cr 3
Prerequisite: MATH 5341

MATH 5381 Mathematical Statistics
This is a course in inferential statistics. Topics covered include random sampling, distribution of means and the central limit theorem, estimation problems, tests of hypotheses, linear regression, correlation, and analysis of variance.
Prerequisite: MATH 4374 or consent of instructor
Lec 3, Cr 3
MATH 5385 Time Series and Engineering Systems The contents of this course include the treatment of normal sequences and white noise stationary time series,
characteristic analysis of time series, the analysis of stationary time series in the time domain, linear modeling of dynamic data, linear prediction of time series, multivariate dynamic data models.
Prerequisite: Math 4374 or consent of instructor Lec 3, Cr 3

MATH 5391 Special Topics in Mathematics
The contents of this graduate course come from different areas of pure and applied mathematics not available in other courses. This course may be repeated for credit provided that the topics are different. Prerequisite: 6 sch in 4000 level Mathematics courses and at least 3 sch in 5000 level Mathematics courses or consent of instructor. Lec. 3, Cr. 3

MATH 5395 Research Seminar
This is a course to study the current thought and practice within several subject areas in mathematics. Topics include identifying valid research activities, review of literature and written or oral communication of a research paper. This course may be repeated as topics vary. Prerequisite: consent of the instructor Lec 3, Cr 3

## MATH 5397 Thesis

Participants will define and research some supervisory problems in their specific areas of interest. Participants will be directed in their study by a graduate faculty member. A formal research paper dealing with a specific supervisory problem will be required. This course may be repeated by the approval of the graduate advisor. Prerequisite: Approval of graduate advisor required for enrollment Lec3, Cr 3

# Physics and Astronomy 

Dr. Natalia Guevara, Chair<br>SETB \#1.214A<br>882-6752<br>natalia.guevara@utb.edu<br>Graduate Faculty<br>Mario Diaz, Associate Professor<br>Manuela Campanelli, Visiting Professor<br>Phillip Dukes, Assistant Professor<br>Natalia Guevara, Associate Professor<br>Andreas Hanke, Assistant Professor<br>Fredrick Jenet, Assistant Professor<br>Soumya Mohanty, Assistant Professor<br>Soma Mukherjee, Assistant Professor<br>Richard Price, Professor<br>Joseph Romano, Associate Professor

## Master of Science in Physics (M.S.)

## 34-Hour Thesis/40-Hour Non Thesis Program

Two routes are available for the Master of Science in Physics. Plan 1 requires 34 semester hours of credit: 28 hours of course work plus a 6-hour thesis (PHYS 6398 and PHYS 6399). Plan 2 requires the favorable recommendation of the Physics Department Graduate Studies Committee and 40 hours of course work including the successful completion of a research problem (PHYS 6386) with a written report submitted to the Department. In addition to all other grade requirements of the Graduate School, the Department requires that degree recipients earn $a^{\prime} B^{\prime}$ average in core courses.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking
students in Physics are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 650
- GRE Quantitative score of 650
- Applicants must also score a 650 in the Physics specific GRE test
- Applicants that do not meet the above criteria can be admitted conditionally by the graduate committee of the department. The graduate committee will determine a set of conditions that the student will need to satisfy by the end of the second semester in order to acquire regular standing in the program. These conditions will be determined upon careful examination of the circumstances that would justify conditional admission.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

Core Courses (16 credit hours)
PHYS 5421 - Classical Mechanics
PHYS 5461 - Quantum Mechanics
PHYS 5425 - Mathematical Physics
PHYS 5441 - Electrodynamics
Other Required Courses (12 credit hours)
The following courses (twelve credit hours)have to be taken in addition to the core courses listed above and the electives (six credits total) to complete the 34 credit hours required for the thesis option.
PHYS 6386 - Research Problems in Physics (required for the non-thesis track)
PHYS 6396 - Graduate Research in Physics I
PHYS 6397 - Graduate Research in Physics II
PHYS 6398 - Thesis I (required for the thesis track)
PHYS 6399 - Thesis II (required for the thesis track)

Elective Courses (6 credit hours)
Any of the following classes can be taken to fulfill the requirement for elective classes (six credit hours for the thesis option, eighteen credit hours for the nonthesis option).
PHYS 5195 Graduate Seminar
PHYS 5196 Problem Solving in Graduate Physics
PHYS 5296 Introduction to Research
PHYS 5364 Statistical Mechanics
PHYS 5365 Advanced Statistical Mechanics
PHYS 5371 Solid State Physics
PHYS 5375 Structure and Function of Biological Molecules
PHYS 5387 Special Topics in Physics
PHYS 5391 Quantum Mechanics in Chemistry
PHYS 5393 Introduction to General Relativity and Gravitation
PHYS 5394 Statistical Theory of Signal Detection
PHYS 5426 Mathematical Physics II
PHYS 6341 Electrodynamics
PHYS 6371 Thermodynamics and Kinetics of Biological Systems
PHYS 6373 Statistical Physics of Molecular Cell Biology
PHYS 6381 Introduction to Astrophysics
PHYS 6390 Computational Physics

## Thesis

A student who chooses to follow Plan 1 (thesis option) will be required to write a thesis, for which the student will receive six hours of graduate credit. The student will select a thesis committee composed of a committee chairperson (normally the thesis advisor) and two other members of the Physics and Astronomy graduate faculty, who will approve the thesis topic and assist in preparing the thesis. A written thesis prospectus must be formally approved by the thesis committee before the writing of the thesis begins. Thesis track students must pass an oral defense of the completed thesis. These students will register for PHYS 6398 and 6399 after they have completed their coursework.

## Graduate Course Descriptions

## Physics

PHYS 5195 Graduate Seminar
This is a seminar course in which student presents research based on current literature. It may be repeated three times for credit.
Lec. 1, Cr. 1
PHYS 5296 Introduction to Research This is a two-credit course in which students practice elements of communication of research science. Prerequisite: Approval of Graduate Advisor Lec 2, Cr. 2

## PHYS 5325 Mathematical Physics

This graduate course will introduce the student to linear systems, special functions, complex variables, tensor problems in Physcis, partial differential equations, boundary value problems, and special functions.
Lec. 3, Cr. 3
PHYS 5364 Statistical Mechanics
This graduate course will introduce the student to entropy, Legendre transformations, phase transitions, critical phenomena; microcanical, canonical, and grand canonical ensembles, Ising model, random walks, quantum fluids, density matrix, transport properties, master equations, Langevin equation.
Lec. 3, Cr. 3

## PHYS 5365 Advanced Statistical Mechanics

 This graduate course will introduce the student to classical and quantum statistics of systems in equilibrium, treatment of fluctuations, transport phenomena, and to many-body problems. (Note: this class is required to graduate under the non-thesis option)Lec. 3, Cr. 3
PHYS 5371 Solid State Physics
This graduate course will introduce the student of electromagnetic, elastic, and particle waves in periodic lattices as applied to the electrical, magnetic, and thermal properties of solids. Prerequisite: PHYS 5361 Quantum Mechanics. Lec. 3, Cr. 3

PHYS 5375 Structure and Function of Biological Molecules
This course will provide in-depth assessment of structure of biological molecules, with emphasis on structurefunction relationship. Physical principles underlying
formation of secondary and tertiary structure of proteins, structural dynamics of DNA and DNA-protein interactions will be reviewed. Prerequisite: Consent of instructor. Mastery of differential equations and mathematical methods at an undergraduate level is expected.
Lec. 3, Cr. 3

## PHYS 5387 Special Topics in Physics

This graduate course will introduce students to different topics. This topics will be announced. May be repeated for credit. Prerequisitie: Instructor approval. Lec. 3, Cr. 3

## PHYS 5391 Quantum Mechanics in Chemistry

This graduate course will introduce the student to the use of quantum mechanics in chemistry. Topics to be covered inclusde the basic models of quantum theory, perturbation theory, ab initio and density functional methods, group theory, and computational applications. Prerequisiste: PHYS 5361. Lec. 3, Cr. 3

## PHYS 5393 Introduction to General Relativity and

 GravitationThis graduate course introduces Einstein's theory of relativity and other topics in the field of gravitation. Topics covered are the Principle of Equivalence, Introduction to Differential geometry and tensor analysis. Also studied are physics on curved manifolds, Einstein's equations of General Relativity, exact solutions of Einstein's equations, the Schwarzschild and Kerr solutions, black Hole Physics and Cosmology, gravitational radiation and its detection. Prerequisite: PHYS 3310, PHYS 3390, PHYS 3400, PHYS 4330 Lec 3, Cr 3

PHYS 5394 Statistical Theory of Signal Detection This graduate course will introduce the student to the classical theory of signal detection. It will present the theoretical background needed to understand the data analysis techniques and algorithms used to search for signals in noisy data. Explicate examples will be taken from the field of gravitational wave data analysis - a sub-field of gravitational physics opened by construction and operation of a number of large scale interferometric gravitational wave detectors. MATH 2342 recommended prior to taking this course. Prerequisite: PHYS 3310, PHYS 3390, PHYS 4330 Lec 3, Cr 3

## PHYS 5421 Classical Mechanics

This graduate course will introduce the student to Lagrange's equations, non-holonomic constraints, Hamilton's principle, two-body central force, rigid body dynamics, Lagrangian relativistic mechanics, Hamilton and Hamilton-Jacobi equations, and canonical
transformations. Lec. 4, Cr. 4

## PHYS 5425 Mathematical Physics

This graduate course will include vector analysis and calculus, general curvilinear coordinates, tensor analysis, linear and matrix algebra, group theory, infinite series, functions of a complex variable, contour integration and the residue theorem. Lec 4, Cr. 4

## PHYS 5441 Electrodynamics

This graduate course will cover electrostatic boundary value problems, multipole potentials, dielectric and magnetic materials, magnetostatics, time-varying field and Maxwell's equations, energy and momentum of the field, Lienard-Wiechert potentials, electromagnetic radiation, polarization, refraction and reflection at plane interfaces. Lec 4, Cr. 4

## PHYS 5461 Quantum Mechanics

This graduate course will cover the Dirac formalism, wave functions in position and momentum space; quantum dynamics, time evoluation and the Schrodinger equation, Heisenberg picture; Simple harmonic oscillator and the H-atom; angular momentum, rotations, spin $1 / 2$ systems and finate rotations, eigenvalues and eigenstates; orbital angular momentum and addition of angular momenta.
Lec. 4, Cr. 4

## PHYS 5475 Gravitational Wave Astronomy

This course provides a basic and broad description of the astrophysical related to sources of gravitational radiation, gravitational wave detectors, numerical relativity, and data analysis. Lec. 4, Cr. 4
Prerequisite: Major in Physics or related field or consent of instructor.

## PHYS 6341 Electrodynamics

This course will introduce the student to waveguides, radiation, detailed discussion of special relativity, including, for example, space-time diagrams, covariance and invariance, twin paradox, uniform acceleration, motion of a charged particle, stress-energy tensors, radiation by moving charges, bremsstrahlung, multipole fields and radiation damping.
Prerequisite: PHYS 5441
Lec. 3, Cr. 3

## PHYS 6361 Quantum Mechanics II

This course will introduce the student to rotation, symmetries, representation theory, addition of angular momentum, quantum particles in electromagnetic fields, hydrogen-like atoms and ions, time-dependent perturbation theory, scattering, identical particles,
density matrix, relativistic quantum mechanics.
Prerequisite: PHYS 5361
Lec. 3 Cr. 3

PHYS 6371 Thermodynamics and Kinetics of Biological Systems
This course provides students with fundamentals of statistical thermodynamics, electrochemistry, enzyme kinetics and molecular driving forces.
Prerequisite: Consent of instructor
Lec. 3, Cr. 3
PHYS 6373 Statistical Physics of Molecular Cell Biology
This course introduces students to the basic physical laws governing the life of cells and its material and explains the latest research regarding physical aspects of molecular cell biology, and discusses physical methods used in today's laboratories.
Prerequisite: Consent of the instructor
Lec. 3, Cr. 3
PHYS 6381 Introduction of Astrophysics
This graduate course will introduce students to a range of observational Astronomy: Stars, stellar evolution, neutron, stars, black holes, galactic dynamics, galaxies, large scale structure in the Universe \& Cosmology. Prerequisite: PHYS 5341 \& PHYS 5321. Lec. 3, Cr. 3

## PHYS 6386 Research Problems in Physics

This graduate course is required for the 36 -hour nonthesis option. To pass the course students have to present a typewritten report. May be repeated for credit; maximum credit allowed is six hours. May not be counted as thesis research but may be taken one time as apreparatory investigation course prior to the beginning of thesis research.
Prerequisite: Submittion of the Petition of Candidacy and department approval. Lec. 3, Cr. 3

## PHYS 6390 Computational Physics

The course will be a survey of two different aspects of computational problem solving: computational languages and tools (libraries, visualization methods) and the numerical methods used in computational modeling. Prerequisite: Consent of the instructor Lec. 3, Cr. 3

## PHYS 6396 Graduate Research in Physics

This graduate course is a research in physics course in
preparation for thesis work (Research I).
Prerequisite: Graduate Advisor approval. Lec. 3, Cr. 3
PHYS 6397 Graduate Research in Physics II
This course is a second semester of research for preparing thesis work (Research II).Prerequisite: Advisor approval \& PHYS 6396 Lec 3, Cr. 3

PHYS 6398 Thesis I
This graduate course initiates students in their thesis work.Prerequisite: Graduate Advisor approval. Lec. 3, Cr. 3

PHYS 6399 Thesis II
This course is required while work on thesis continues.
Prerequisite: Graduate Advisor approval. Lec. 3, Cr. 3

## Additional Courses in Science, Mathematics and Technology

## Chemistry

CHEM 5301 Topics in Chemistry
The contents of this course are derived from different areas of pure and applied chemistry not available in other courses. Topics could be chosen from: reaction dynamics, molecular spectroscopy, ionic equilibrium, design and control of intermediate metabolism, prebiotic chemical syntheses, asymmetric synthesis of natural products and spectroscopic characterization of natural products. This course may be repeated for credit provided that the topics are different.
Prerequisite: Graduate Standing and consent of instructor. Lec 3 Cr .3

## CHEM 5303 Advanced Biochemistry

This course is a study of contemporary biochemical topics which include: protein structure and function, enzyme mechanism and kinetics, membrane molecular architecture, nucleic acid biochemistry, gene structure and expression, control of gene expression, cell signaling and motility, molecular immunology and tools of biochemistry. It is recommended that the student complete CHEM 3304 prior to enrolling in this course. Prerequisite: CHEM 3301, 3314 or instructor's permission.

CHEM 5306 Environmental Chemistry This course covers environmental issues and the chemistry associated with these issues. Key areas include energy use and production, the atmosphere, the hydrosphere. Specific topics to be discussed include fossil
ozone chemistry, air and water pollution, water resources, nitrogen and food production, and agrochemicals.
Prerequisite: CHEM 1311, 1312, 2323; BIOL 1306 (or 1308), 1307 (or 1309); PHYS 1301. Lec. 3, Cr. 3

## Engineering Technology

ELET 5302 Circuits and Systems
A review of linear circuit and network theory, supported by introduction of circuit simulation programs with some emphasis on high frequency circuit operation. Then transmission line theory and operation will be explored.
The course will culminate with a study of system response to stimulation using hjgh speed system stimulation programs. Lec 3, Cr. 3
Prerequisite: PHYS 1302 or PHYS 1402 or PHYS 2326, MATH 2414 or departmental consent

ELET 5310 Analog and Digital Communication I Introductory course based upon the principle to provide a thorough treatment of the principles of communications at the physical layer suitable for graduate studies. This is accomplished by providing fundamentals in telecommunications including analysis of modulation, transmission media, noise in modulation systems, modulation and demodulation techniques, binary data transmission, modern communications models and standards and information theory and coding. Lec. 3, Cr. 3 Prerequisite: ENGT 3303 or departmental consent.

## ELET 5312 Electromagnetic Propagation I

 Electromagnetic wave propagation in different material, transmission, terrain evaluation, and antenna characteristics will be covered. Lec 3, Cr.3. Prerequisite: PHYS 1302, PHYS 1402 or PHYS 2326. ENGT 3303 or departmental consent
## ELET 5361 Electromagnetic Applications

 It will introduce the aspect related to high frequency technology. It will prove useful to technical personnel working in the field of microwaves. In order to provide a comprehensive course at the technology level, emphasis is given to application rather than theory. Sufficient theoretical background is included where this appears to be helpful. The course also covers the principles of operation and constructional features of a wide range of microwave hardware. This course will provide student with advanced capabilities and skills in engineering problem solving related to microwave technology. Lec. 3, Cr. 3. Prerequisite: ELET 5310ELET 5370 Technological Changes in Business Technological changes in a variety of industries will be
covered. Impact of such technological changes on cost and competitiveness will be reviewed. Lec 3, Cr. 3

## Geography

GEOG 5320 Cultural Geography for Educators The study of the interaction between humans and the natural environment. Major emphasis in the course is given to human cultural diversity. Topics discussed include population distribution and demography, agriculture practices and regions, patterns and processes of religions and their spatial distributions, ethnicity and nations, urban geography and the development of cities, and natural resources and their management. Prerequisite: Graduate Standing. Lec. 3, Cr. 3

## GEOG 5333 Geography of Latin America

 A regional study of the geography of Mexico, the Caribbean, Central and South America. This course will include an investigation of the physical, cultural and economic factors of various regions and how these affect present day conditions. Prerequisite: Graduate Standing. Lec. 3, Cr. 3
## GEOG 5334 Conservation of Natural Resources

 A survey of the distribution of world resources, with special emphasis on new and novel solutions to problems of resource scarcity. Topics include food, scenic and recreational resources, and other selected components of the biosphere and lithosphere. Cultural, economic, demographic, and political behaviors of human societies are considered as they affect the world's physical resources. Prerequisite: Graduate Standing. Lec. 3, Cr. 3GEOG 5440 Geographic Information Systems This course covers the basics of Geographic Information Systems (GIS) concepts and software such as ArcView and ArcGIS. Special attention will be given to data acquisition, processing, data management and the generation of base maps. Lec 3, Lab 3, Cr. 4

GEOG 5441 Principles of Remote Sensing This course will emphasize the application of remote sensing and image analysis in the earth sciences; qualitative and quantitative satellite image and air photo interpretation. Additional emphasis will be placed on the use of computer processing packages. Lec 3, Lab 2, Cr. 4

## Geology

GEOL 5310 Earth Science for Educators I This is the first part of a graduate level, hands-on Earth Science course designed for education majors enrolled in the EC-8 program. The course will provide the students
with basic theoretical background in Earth Science with hands-on workshops to enable the student to understand the Earth Science processes at present on the Earth's surface. Prerequisite: GEOL 1403 and 1404. Lec. 3, Cr. 3

GEOL 5320 Earth Science for Educators II This is the second part of a graduate level, hands-on Earth Science course designed for education majors enrolled in the EC-8 program. This course will provide the students with a basic theoretical background in Earth Science with hands-on workshops to enable the student to understand the Earth Science processes at present on the Earth's surface. Prerequisite: GEOL 5310. Lec. 3, Cr. 3

GEOL 5440 Geographic Information Systems This course covers the basics of Geographic Information Systems (GIS) concepts and software such as ArcView and ArcGIS. Special attention will be given to data acquisition, processing, data management and the generation of base maps. Lec 3, Lab 3, Cr. 4

## GEOL 5441 Principles of Remote Sensing

 This course will emphasize the application of remote sensing and image analysis in the earth sciences; qualitative and quantitative satellite image and air photo interpretation. Additional emphasis will be placed on the use of computer processing packages. Lec 3, Lab 2, Cr. 4
## Interdisciplinary Science

## ISCI 6390 Science Internship

This course is an applied experience in an industrial, educational, private agency, or government facility supported by an acceptable scholarly written report and a seminar. Prerequisite: Graduate standing, permission of the instructor and the department chair. Lab 8, Cr. 3

## ISCI 7300 Thesis

Thesis. Prerequisite: Approval of graduate advisor or faculty advisor. Cr 3

## ISCI 7301 Thesis

Thesis. Prerequisite: Approval of graduate advisor or faculty advisor. Cr 3

## Manufacturing

MFET 5301 Design for Manufacture
This course deals with the factors influencing product design and manufacturability. Topics include component design and analysis, design for manufacturability, design for manual and automated assembly and concurrent engineering. Students learn how to reduce material and part costs, assembly time, and number of parts in a
product.Prerequisite: Bachelor of Engineering Technology or Engineering or departmental approval. Lec 3, Cr 3

## Physical Sciences

PSCI 5310 Physical Science for Teachers
This graduate level course is designed for in-service elementary and middle school teachers who will be implementing hands-on science learning in their classrooms. Students in the Master of Education in Curriculum and Instruction with emphasis in Science Education can use the credit for this course to fulfill the requirements for science content. The course will provide the teachers with necessary theoretical background in classical physics, will develop skills in physical experimentation using FOSS modules and other available lab equipment and will enable the students to apply the basic laws of physics. Prerequisite: Graduate standing or departmental approval. Lec 3, Cr 3

PSCI 5320 Physical Science for Teachers II
This is the second semester course of Physical Science for Teachers. This course will provide teachers with necessary theoretical background in classical physics, will develop skills in physical experimentation, and will enable students to apply the basic laws and principles of physics to experimental observations. Lec 3, Cr 3

PSCI 5330 Physical Science for High School Teachers I This course provides high school teachers a deeper understanding of classical physics. Laws of motion, applications of Newton's Laws, and work-energy relations are the major parts of this graduate level physical science course. This course will provide teachers with an abundant theoretical background in physics and current research practice with practical experience in related physics labs. Lec 3, Cr. 3.Prerequisite: Graduate standing with a BS or BA degree in a science discipline or department approval.

PSCI 5340 Physical Science for High School Teachers II This course is the continuation of Physical Science for High School Teachers I. Thermodynamics, electrostatistics, electricity and magnetism, waves, light and optics, and quantum physics are the major parts of this graduate level physical science course. This course will provide teachers with an abundant theoretical background in physics and current research practice with practical experience in related labs.Prerequisite: PSCl 5330 with a grade of B or better. Lec 3, Cr. 3

## School of Business

Dr. Martin Shane, Dean<br>EDBC 2.504D 882-5800<br>hugh.m.shane@utb.edu

The School of Business at the University of Texas at Brownsville and Texas Southmost College! We offer graduate studies in business, primarily to serve the needs of working professionals. In addition to on-campus programs, the School creates distance instruction and provides access to distance education programs of the University of Texas System.

Our faculty pursues continuous improvement in teaching and learning, engages in scholarship in their respective disciplines and provides many hours of service to the University and their professions.

# Graduate Programs 

Master of Business Administration
Master of Business Administration Online

## Business Administration

Dr. Rafael Otero, Chair<br>EDBC 2.542D<br>882-5809<br>rafael.otero@utb.edu

## Graduate Faculty

Dennis Ortiz, Associate Master Technical Instructor Mary Jane Sauceda, Associate Professor Gaurango Banerjee, Associate Professor

Thomas Blakemore, Lecturer
Yeong Nain Chi, Assistant Professor
Anthony J. Daboub, Lecturer
Nont Dhiensiri, Assistant Professor Edith Galy, Associate Professor
Gautam Hazarika, Assistant Professor
Gerald Hollier, Associate Professor
Kalidas Jana, Assistant Professor
Marco Lara-Gracia, Assistant Professor
Charles Lackey, Associate Professor
Steven R. Lovett, Associate Professor
Mostafa Malki, Assistant Professor
Rafael Otero, Associate Professor
Pablo Rhi-Perez, Associate Professor

## Master of Business Administration

## (M.B.A.)

The graduate programs of the School of Business offer learning opportunities to enhance the development of competent, responsible professionals in business and not-for-profit administration.

## On-Campus M.B.A. Degree Program

The on-campus M.B.A. Degree is designed primarily for working professionals who wish to pursue advanced studies in business to expand their business management knowledge and enhance their employment opportunities. An M.B.A. degree candidate is expected to be able to understand and apply a variety of organizational, managerial, and analytical skills. Additionally, candidates are expected to be knowledgeable in current business literature and trends. Depending on a student's prior
academic background, the program will take 3051 semester credit hours to complete. On-campus M.B.A. classes typically meet in the evenings or on weekends to accommodate the needs of working professionals.

## M.B.A. On-Line Degree Program

The M.B.A. Online Degree Program is offered in cooperation with seven other schools of the University of Texas System. Students in the M.B.A. OnLine Program complete all coursework via the Internet. Course discussion or forums and student work is delivered entirely by electronic means. Taught by leading faculty at the participating institutions, this innovative program is designed to meet the needs of students whose work, geographic location, or other commitments prevent them from participating fully in conventional on-campus courses.
Curriculum for the M.B.A. OnLine Degree program consists of 16 courses, for a total of 48 credit hours. Eighteen credit hours are taken in six "core" courses, which provide the student with the foundation of general business knowledge. Thirty credit hours are taken in ten courses of a General Management M.B.A. curriculum. This Program of Study is not the same as the On-Campus M.B.A. Program. Students should consult the M.B.A. Program Director or the UT Telecampus web site (http://www.telecampus. utsystem.edu/) for further information.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Business Administration are:

- Undergraduate GPA of 3.0
- GMAT score of 400 or
- GRE score of 400 on Verbal, 400 on Quantitative, and 4.0 on the Analytical
- GPA of 3.0 in the Foundation Courses

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

A student must meet the University's general requirements for admission to graduate status. Students planning to pursue an MBA will apply as Pre-MBA Status. These students may take the 7 foundation courses without meeting further admissions requirements. Students must then meet the requirements listed below for admission to the MBA program

Unconditional Admission. Unconditional admission status will usually be granted to students who have minimum overall GPA of 3.0 in the Foundation courses and 3.0 undergraduate GPA and a minimum GMAT of 400 or a minimum GRE score of 400 on Verbal, 400 on Quantitative, and 4.0 on the Analytical section. Unconditional Admission Status is required for students wishing to enroll in the M.B.A OnLine Degree Program.

Conditional Admission. Conditional admission status may be granted to students who do not meet regular admission requirements, but show promise for successful graduate study. Conditions may be placed on students receiving conditional admission (e.g., achieving a grade of 3.0 in each course attempted, or taking additional undergraduate or graduate semester hours, etc.), and subsequent registration will be prohibited if such conditions are not met. Normally a student must satisfy conditions within the first 12 hours of graduate study. Failure to satisfy conditions within 12 hours will result in a student's inability to register for further coursework. A student in Conditional Admission may not hold an assistantship.

Non-Degree Students. Students who already have a master's degree, or have completed a four-year undergraduate degree, and are interested in taking graduate courses for professional improvement or are pursuing the Executive Management Certificate/ Diplomado (but not in pursuing the M.B.A. degree)
may enroll in graduate-level business courses as a non-degree-seeking student. (See "Categories of Admission"). Prospective students should consult with the M.B.A. Program Director for suggested enrollment status and course prerequisites.

International Students. International students must meet all requirements for admission in addition they must meet International Student requirements.(Refer to "International Students" section for additional information.)

## Degree and Graduation Requirements

Students with Unconditional Admission status in the M.B.A. program should develop a formal Program of Study in consultation with the M.B.A. advisor during the first 12 hours of graduate work. The Program of Study should contain the following elements:

1. Specific information regarding where and how prerequisite competencies in computer literacy, college-level algebra, and statistics have been obtained. These competencies should be obtained prior to enrollment in the program. Students lacking a competency may be allowed to enroll in the M.B.A. with concurrent enrollment in coursework covering that competency area.
2. M.B.A. Foundation courses ( 21 semester hours) are designed to provide students with basic knowledge and tools in the major areas of business administration in preparation for advanced study. Students who have completed an undergraduate degree with a business administration major or minor may waive certain Foundation courses through successful completion of recent substantially similar coursework no more than seven (7) years prior to their admission to the M.B.A. program.
3. M.B.A. Core courses ( 30 semester hours) offer students advanced and integrated knowledge and tools for successful business analysis and implementation. Specific areas of study include business research methods, strategic utilization of information technology, production and operations management, advanced management and marketing and administrative policy, together with other required elective courses. All students must complete the Core courses. If a substantially similar graduate-
level course has been successfully completed at an accredited institution recognized by the University of Texas System prior to enrollment in the M.B.A. program, the student may be allowed to substitute that course in place of a required business elective.
The M.B.A. Director will make initial determination on course waivers and substitutions. Course waivers will not be granted on the basis of experiential or life-experience learning.
Specific information concerning admission, course registration, tuition and fees, and courses for the M.B.A. OnLine Degree program can be obtained from the School of Business, the M.B.A. Program Director, or the UT TeleCampus web site: http://www. telecampus.utsystem.edu/.

## M.B.A. Prerequisite Competencies

The following prerequisite competencies are required of students applying to the M.B.A. program:

## Computer Literacy:

Equivalent to COSC 1305, or three (3) credit hours of BMIS courses

College Algebra:
Equivalent to MATH 1314 or MATH 1324

## Statistics:

Equivalent to BUSI 3341 or BUSIU 2441 (BUSIU 2441 includes a required 1-hr computer lab)

Knowledge in these areas can be demonstrated by the specified UTB/TSC courses, equivalent coursework at an accredited university, or CLEP exam. In the case of computer literacy, the M.B.A. Director may consider substantial work experience in making the determination of a course waiver.

The M.B.A. Program Director will make all waiver determination under the authority of the Dean of the School of Business and in accordance with the academic policies established by the Graduate Faculty of the School of Business. Students who are determined to not have the prerequisite competencies will be required to take foundation courses to develop or meet these competencies.

## M.B.A. Foundation Courses

M.B.A. Foundation knowledge includes up to 21 hours of coursework. Any or all of these courses and credit hours may be waived if equivalent knowledge has been mastered in substantially similar, coursework within the seven-year limit on transfer credits at an accredited institution, with a grade of "B" or better.

| Course | Title Credit Hours |
| :--- | :--- |
| ACCT 6301 | Accounting for Managers |
| BLAW 6301 | Legal Environment of Business |
| BMIS 6301 | Quantitative Analysis for Business |
|  | Decisions |
| ECON 6301 | Business Economics |
| FINA 6301 | Financial Management |
| MANA 6301 | Management Theory |
| MARK 6301 | Marketing |

Questions of applicability of coursework and waivers from other institutions will be evaluated by the M.B.A. Program Director under the direction of the Dean of the School of Business.

## M.B.A. Core Courses

M.B.A. core courses ( 30 semester hours) offer students advanced and integrated knowledge and tools for successful business analysis and implementation. Specific areas of study include business research methods, strategic utilization of information technology, and administrative policy, along with other required and elective courses. All students must complete the Core courses.
Course waivers are not usually granted for Core courses. However, if a substantially similar course has been successfully completed (e.g., with a grade of " $A$ " or " $B$ ") from an accredited institution recognized by the University of Texas at Brownsville within seven years of the planned graduation date, a course substitution or transfer credit may be considered.
Questions of applicability of coursework and course substitutions or transfer credits will be evaluated by the M.B.A Program Director under the direction of the Dean of the School of Business.

## M.B.A. Core Courses

CourseTitle Credit Hours
ACCT 6315 Accounting \& Financial Analysis
BUSI 6310 Business Research
BUSI 6380 International Business
MANA 6320 Advanced Management
BMIS 6350 Information Technology for Managers
MANA 6360 Production \& Operations
Management
MARK 6330 Marketing Management
BUSI 6390 Administrative Policy and Strategy
(Capstone Course - taken after substantially
all other required courses have been completed)
$\begin{array}{ll}\text { Elective } & \text { M.B.A. Elective } \\ \text { Elective } & \text { M.B.A. Elective }\end{array}$
Total Core Hours Required
30 hours

## M.B.A. Elective Courses

Two M.B.A. business elective courses are required for completion of this MBA Program. They cover a variety of topics and give students an opportunity to gain more in-depth knowledge of certain business topics.
CourseTitle Credit Hours
ACCT 5323 Contemporary Accounting Theory
ACCT 5325 Tax Treatment of Capital Assets
ACCT 5329 Corporate and Partnership Tax
ACCT 5331 Estate and Gift Taxation
ACCT 5351 Fraud Examination
ACCT 5380 International Accounting
ACCT 6321 Strategic Cost Management
ACCT 6323 Accounting Seminar (specific topics may change)
ACCT 6330 Seminar in Auditing
BLAW 6303 Business Law II
BLAW 6305 Comparative Business Law
ECON 6351 Economics Seminar (specific topics may change)
FINA 6341 Finance Seminar (specific topics may change)

BUSI 6399 Management Practicum
MANA 6331 Human Resources Administration \& Industrial Relations
MANA 6332 Management Seminar (specific topics may change)
MARK 6371 Marketing Seminar (specific topics may change)
MARK 6372 Marketing Strategy

## Graduate Courses Descriptions

## Accounting

ACCT 5323 Contemporary Accounting Theory Contemporary advanced accounting and auditing theory, including controversial issues, with emphasis on income determination and asset valuation; special attention will be given to researching standard setting pronouncements from FASB, GASB, and other standardsetting bodies. There will also be a major research paper on an approved topic required as part of this course.
Prerequisite: ACCT 3322 (Intermediate II) with a grade of "C" or better. Lec 3, Cr 3

## ACCT 5325 Tax Treatment of Capital Assets

This course will address tax treatment of active and passive business losses, determination of basis, recognition of gains and losses, treatment of capital and Section 1231 assets, recapture of depreciation, alternative minimum tax and tax credits. Prerequisite: ACCT 3323 (Income Tax Procedure) with a grade of " B " or better.

ACCT 5329 Corporate and Partnership Tax
This course addresses federal taxation of C corporations, S corporations, partnerships and limited liability companies. Consideration is given to formation, income, expenses, dividends, alternative minimum tax, mergers, partial liquidation \& complete liquidation, allocation of income and basis. Prerequisite: ACCT 5325 (Tax Treatment of Capital Assets) with a grade of "B" or better. Lec. 3, Cr. 3

## ACCT 5331 Estate and Gift Taxation

This course examines the computation of estate taxes, credits against tax, the gross estate valuation of the estate, deductions from the estate, generation skipping tax, use of trusts, insurance, and partnerships to minimize estate tax, computation of decedent's final income tax, the gift tax, present and future interest, charitable and giving to minimize estate tax. Prerequisite: ACCT 3323 (Income Tax Procedure) with a grade of " B " or better. Lec. 3, Cr. 3

## ACCT 5351 Fraud Examination

An examination of various aspects of fraud prevention and detection including: elements of fraud, types of fraud involving accounting information, costs of fraud, use of controls to prevent fraud, and fraud examination and detection methods. Emphasis on case analysis and expert witness presentations. Prerequisite: ACCT 4324.

ACCT 6301 Accounting for Managers
An intensive examination of financial and managerial
accounting theory and procedures and their application in the generation of data for integrated financial and managerial accounting information systems. Includes an overview of the accounting cycle, analysis of financial statements, income determination and inventory valuation, cost allocation, and interpretations of financial information for managerial decision making. Lec 3, Cr 3

ACCT 6315 Accounting \& Financial Analysis This is an in-depth study of topics including analysis of financial statements, strategic investment and financing decisions, working capital management, financial instruments and multinational financial management. Prerequisite: ACCT 6301 (Accounting for Managers) or equivalent, with a grade of "B" or better. Lec. 3, Cr. 3

ACCT 6321 Strategic Cost Management This course will focus on planning aspects of the corporate finance function and developing critical thinking skills. Specific topics include allocations, financial modeling and decision-making, budgeting, customer profitability analysis, and performance measurement. Prerequisite: Completion of ACCT 2402 with a grade of "B or better, or ACCT 6301 with a grade of "B" or better, or consent of instructor. Lec 3, Cr 3

## ACCT 6323 Accounting Seminar

A study of current and special topics concerning accounting. Emphasis on literature from professional public accounting societies and governmental agencies. May be repeated for credit as topics vary. Prerequisite:
ACCT 6301 or consent of instructor. Lec 3, Cr 3

## ACCT 6330 Seminar in Auditing

Examination of auditing philosophy and contemporary issues. Study of auditing research including the behavioral aspects of auditing. Prerequisite: ACCT 4324, ACCT 6301, or consent of instructor. Lec 3, Cr 3

## Business Law

BLAW 6301 Legal Environment of Business This course is an intensive study of the legal environment of business. The course begins with an overview of the court system, constitutional law and torts. It progresses into areas of law directly applicable to the business environment. Business topics will include contracts, sales, agency, partnerships, corporations, property, bankruptcy, and international law. Lec 3, Cr 3

BLAW 6302 Business Law for Educators Business and education law, to include discussion of contracts, administrative law, agency, Americans with Disabilities Act, EEOC, environmental law, Open Meeting

Act, Open Records Act, vouchers, and other current topics. Lec 3, Cr 3

## BLAW 6303 Business Law II

This course is a study of the rules of business law including corporation, partnership and limited liability corporation law, employment law, antitrust discrimination law, bankruptcy, consumer law, secured transactions, financial instruments, Uniform Commercial Code, contracts for purchase and sale of goods and regulation of business. Prerequisite: MBA Foundation courses completed. Lec. 3, Cr. 3

BLAW 6305 Comparative Business Law Various areas of business law in the U.S. and Mexico will be compared. Issues include: contracting for international sale of goods, forms of business organizations, maquiladora laws, foreign trade zones, and NAFTA. MBA Foundation courses completed. Lec 3, Cr 3

## Business Management

## Information Systems

BMIS 6301 Quantitative Analysis for Business Decisions
This course will review statistical techniques and multivariate statistics. It will also be an introduction to managerial decision analysis using quantitative tools. Topics to include a general framework for decision analysis, decision tables and trees, simulation, linear programming, classical optimization, forecasting and other probabilistic and statistical techniques. Prerequisite: BUSI 3341 (Statistics) or BUSIU 2241 (Statistics) with a grade of "B" or better.

## Business

## BUSI 6101 Environments of Business

A broad exposure to the many environments and factors in the field of business administration. Introduction to a variety of managerial issues such as: shareholder equity, globalization, information explosion, quality systems, the case method, business media, ethics, and business research sources. Designed to be taken during or before the M.B.A. student's first semester. Lec 1, Cr 1

BUSI 6105 Current Issues in Business
Current issues in business, topics varied. Exploration of specific topics related to the business disciplines. Examples include: Leadership, Ethics, Effective Communication, Quality Systems, Negotiation/ Arbitration, etc. Course may be repeated up to two times
for credit, as topics vary. Lec 1, Cr 1

## BUSI 6310 Business Research

Business research techniques \& methodologies. Topics include identifying valid research activities, review of literature, data sources \& collection, research design \& methodology, computer statistical analysis, and written/ oral communication of the research paper. Prerequisites: FINA 6301, MANA 6301, MARK 6301, or consent of instructor. Lec 3, Cr 3

## BUSI 6380 International Business

Readings and cases in international business. Emphasizes the impact of comparative differences in the domestic and international business environments and operations, including the impact of historical, economic, cultural, and political foundations on operations. Special international business topics of unique contemporary importance are also studied. Prerequisite: Completion of M.B.A. Foundations requirements, or consent of instructor. Lec 3, Cr 3

## BUSI 6390 Administrative Policy and Strategy

 A study of management problems under dynamic conditions. Comprehensive, integrative cases will be studied and analyzed. This course should be taken during the last or next-to-last semester of the students program. Prerequisite: Completion of M.B.A. Foundations requirements plus at least 15 hours of M.B.A. Breadth requirements, or consent of instructor or M.B.A. Director. Lec 3, Cr 3
## BUSI 6399 Management Practicum

A directed, applied consulting project for small business or not-for-profit organizations. Instruction includes consultation methods, presentation and written skills, contact with clients, etc. Students may work alone or in small teams to define and solve problems of these organizations. Prerequisite: Completion of M.B.A. Foundations requirements and permission of instructor and M.B.A. Director. Lec 3, Cr 3

## Economics

## ECON 6301 Business Economics

The relationship among basic economic concepts and methods. The competitive market system, problems in resource allocation and economic efficiency, government regulations and the public sector, money and banking, unemployment and inflation in economic policy making. Lec 3, Cr 3

ECON 6351 Economics Seminar
Readings and discussion of selected topics in economics.

May be repeated for credit as topics vary. Prerequisites: M.B.A. Foundations requirements or permission of instructor. Lec 3, Cr 3

## Finance

## FINA 6301 Financial Management

The financial function of the firm and the specific responsibilities of the firm's financial manager. Emphasis is on financial decisions using managerial information systems as an integrating force to deliver planned results. This includes, but is not limited to, decisions affecting the internal management of the firm and the acquisition of new assets. Prerequisites: ACCT 6301 and ECON 6301. Lec 3, Cr 3

## FINA 6341 Finance Seminar

Readings, reports and discussion of selected topics in finance. May be repeated for credit as topics vary. Prerequisite: M.B.A. Foundations requirements or permission of instructor. Lec 3, Cr 3

## Management

MANA 6301 Management Theory
Analysis of formal organizational theory in organizations. Study is made of the organization as a system of authority, status, leadership, direction, communication and influence. Lec 3, Cr 3

## MANA 6320 Advanced Management

This course seeks to understand advanced management theory and practice and includes an examination of how people behave in organizations. This course addresses multiple issues including motivation, leadership, communication at various levels throughout the organization, decision-making, organizational culture and structure, politics and organizational effectiveness. Prerequisite:.MBA foundation courses completed. Lec. 3, Cr. 3

MANA 6331 Human Resources Administration and Industrial Relations
An analysis of the functions of human resources administration and the relationship between the personnel-industrial relations system and the total organization system. Contemporary industrial relations, philosophies and practices.
Prerequisite: MBA foundation courses completed. Lec 3, Cr 3

MANA 6332 Management Seminar
The development of management thought and practice with emphasis on current trends and problems in
management. May be repeated for credit as topics vary. Prerequisite:MBA foundation courses completed. Lec 3, Cr 3

MANA 6350 Information Technology for Managers Alternative approaches to managing the resources (computers, networks, software, data, people) that organizations utilize in applying information technology. The role of the user/manager in identifying opportunities, obtaining computer applications, and creatively using information technology to improve personal and organizational performance. Prerequisite: 9 hours of M.B.A. Foundations requirements or permission of instructor. Lec 3, Cr 3

MANA 6360 Production \& Operations Management Focus on the role of the production function in the business system and study of production system operations. Emphasis is placed on production system design, integration of system inputs, outputs, and transformations, and computer applications to decision processes utilized in managing operations and achieving optimal production.
Prerequisite: MBA foundation courses completed. Lec 3, Cr 3

MANA 6380 Business Ethics
The course attempts to develop our students' ability to recognize moral issues in business situations and the ability to make a judgement as to which action is morally correct. To accomplish this goal, the course reviews the basic moral principles that can be used to resolve moral dilemmas. It then asks students to analyze business cases to discover the ethical issues involved in the case, and to propose a solution that is consistent with ethical principles and business values.
Lec. 3, Cr. 3

## Marketing

MARK 6301 Marketing
Managing the creation, pricing, promotion, and distribution of goods and services, including special attention to the consumer's needs while maintaining profitability. Theory and case-style application. Issues include: target markets, product positioning, environmental effects on the firm's marketing decision making. Lec 3, Cr 3

MARK 6330 Marketing Management This course is an advanced study of marketing management and marketing strategy. It investigates how marketing affects overall corporate and business
decisions and gives students an opportunity to look at high-level strategic marketing decisions in product planning, promotion pricing and distribution.l Prerequisites: MBA foundation courses completed._Lec. 3, Cr. 3

MARK 6371 Marketing Seminar
A study of current thought and practice within a specific subject area in the discipline of marketing. May be repeated as topics vary. Prerequisite: M.B.A. Foundations requirements or permission of instructor. Lec $3, \mathrm{Cr} 3$

MARK 6372 Marketing Strategy
A study of the formulation of marketing strategy, its relationship to corporate and business strategy, and the strategic aspects of marketing decisions in product planning, promotion, pricing, and distribution.
Prerequisite: M.B.A. Foundations requirements or permission of instructor. Lec 3, Cr 3

# School of Education 

Dr. Gayle Brogdon, Interim Dean<br>EDBC 2.306<br>882-7219<br>gayle.brogdon@utb.edu

The graduate programs in the School of Education have as their purpose to promote continuing professional development of students who have made a commitment to teaching, counseling or administration. Graduate offerings also include courses that help students meet state requirements for certification as school principals, counselors, bilingual/bicultural education teachers, educational diagnosticians, special education and ESL teachers, and reading specialists, and master reading teachers. The School of Education also has a program for the Superintendent Certificate and Licensed Texas Professional Counselor.

While the programs in education are intended primarily for personnel in public schools, the knowledge and skills inherent in the courses are applicable to other agencies (social, community, nursing, city, state, federal, etc.). Students not seeking certification do not have to follow the curriculum requirements of those seeking educational certification but will plan a program with their advisor, within the parameters of the approved degree programs, which will be beneficial to them in their specific fields of interest. Students who plan to use their degree coursework towards meeting certification requirements may complete an M.Ed. degree at UTB/TSC without meeting all the specific state certification requirements in the degree area.

## Graduate Programs

M.Ed. in Curriculum \& Instruction<br>M.Ed. in Bilingual Education<br>M.Ed. in Early Childhood<br>M.Ed. in Educational Technology<br>M.Ed. in English as a Second Language<br>M.Ed. in Reading Specialist<br>Ed.D. in Curriculum and Instruction<br>M.Ed. in Counseling \& Guidance<br>M.Ed. inSpecial Education<br>M.Ed. in Educational Leadership

## Degree Requirements

In addition to general graduate program degree requirements and policies, the following requirements apply to education degrees:

1. Satisfactory completion of an oral interview conducted by the advisor and one additional faculty member required in the Counseling and Guidance and Educational Administration programs.
2. A minimum of 36 semester hours of graduate work.
3. Satisfactory completion of a written comprehensive examination and/or successful defense of the thesis for those students choosing the thesis option.
Students must keep in mind that master's degree requirements may not always lead to Texas certification, endorsement, or licensure in a major area. Certification, endorsement, or licensure in an area may require additional coursework, professionally approved experience, passing score on ExCET/TEXES or state licensing exams, or other requirements. Students seeking a certificate or endorsement should see the Assistant Dean in the School of Education.

## Comprehensive Examination

During the final semester of coursework, and upon the recommendation of the faculty advisor, the student may request his/her final comprehensive examination. The purpose of the comprehensive examination is to evaluate: (1) the knowledge of the salient theories and literature that are a part of the major program of study; (2) ability to synthesize knowledge and to apply it in analyzing and solving related problems; and (3) the ability to communicate effectively in writing at a professional level. The form of the examination will have been specified in the Program of Study and may include one or both of the following:

1. An examination prepared by the graduate faculty under the guidance of the Faculty Advisor and scheduled by the Graduate Office. The examination will be evaluated by the Faculty Advisor and two graduate faculty members.
2. Thesis defense and appraisal of research competence by the student's graduate
research committee, chaired by the Faculty Advisor. See thesis/Non-Thesis section.
Application for the comprehensive exam is submitted at the same time as the application for graduation.

## Program of Study

Students must complete their program of study (POS) prior to completing 12 semester hours of graduate work. Registration may be denied to students without an approved POS after completing 12 hours. It is the student's responsibility to meet with their advisor and secure their approval and signatures.

## Requirements for Certification

## Professional Certificate

A. Requirements for the Professional Certificate

1. Completion of a master's degree in the certification or specialization area
2. A valid provisional certificate, if applicable
3. Years of public school teaching experience required by the state for the certificate desired a. School counselor -2 years
b. Educational Diagnostician - 3 years
c. Reading Specialist - 3 years
d. Principal Administrator - 2 years
4. Acceptable scores on all required ExCET/TExES examinations
B. How to Obtain a Professional Certificate

Submit the following to the Certification Officer:

1. Completed online application form prescribed by the State Board for Educator Certification (www.sbec.state.tx.us/sbec online).
2. A service record showing the candidate's years of teaching experience. This has to be completed by the School District Personnel Officer.
3. Required fee payable to the State Board for Educator Certification (SBEC).
4. Transcript which indicates the degree has been granted and all work required for the certificate has been completed.
5. Acceptable scores on ExCET/TExES exams required for certificate.
Students must apply for certification upon
completion of certification requirements.

## Curriculum and Instruction

Dr. Reynaldo Ramirez, Chair
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Reynaldo.ramirez@utb.edu

Graduate Faculty

Javier Ayaala, Associate Professor
Kathy Bussert-Webb, Assistant Professor
Rene Corbeil, Lecturer
Georgianna Duarte, Professor
David Freeman, Professor
Yvonne Freeman, Associate Professor
Jaime Garcia, Associate Professor
Richard Gomez, Associate Professor
Bobbette M. Morgan, Associate Professor
Julio Noboa, Associate Professor
Paula Parson, Professor
Cheng-Chang Pan, Associate Professor
Sylvia C. Peña, Professor
Elva C. Pérez, Associate Professor
Reynaldo Ramirez, Assistant Professor
Graciela P. Rosenberg, Professor
Renee Rubin, Assistant Professor
Patrick Smith, Associate Professor
John Sutterby, Associate Professor
Michael Sullivan, Associate Professor
John Sutterby, Associate Professor
James Telese, Associate Professor

## M.Ed. - Curriculum \& Instruction 36-Hour Thesis/Non-Thesis Program

The major in Curriculum and Instruction is designed to prepare master teachers and graduates with instructional leadership skills. It has three major objectives:

- to provide knowledge, skills, attitudes, and applicable research skills in curriculum and pedagogy;
- to develop master teachers to serve as teacher educators, mentors, clinical teaching faculty, and peer coaches;
- to provide experience in educational research related to effective educational practice in fieldsettings.
The major in Curriculum and Instruction is designed to serve the many educators who desire a program with an emphasis on instructional leadership and effective teaching. This major is responsive to the needs of the South Texas educational community and to state and national priorities for restructuring and delivering teacher education programs. A comprehensive examination is required. Students choosing the thesis option will take EDCI 7300 and 7301 in lieu of six hours of electives.


## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the
academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

## Required Courses: 15 hours

EDCI 6300 Introduction to Research
EDCI 6334 Curriculum Development
EDTC 6320 Instructional Technology
Elementary Level
EDCI 6330 Curriculum in the Elementary School EDCI 6322 The Bilingual Child

## Secondary Level

EDCI 6331 Curriculum in the Secondary School
EDCI 6353 Teaching the Culturally Different Secondary Learner

## Electives: $\mathbf{1 2}$ hours

EDCI 6302 Field Research Methodology
EDCI 6303 Peer Coaching
EDCI 6304 Learning and Cognition
EDCI 6312 Educational Measurement
EDCI 6336 Problems in Education
EDCI 6341 Teaching and Learning Algebraic Concepts
EDCI 6342 Topics in Science Education
EDCI 6343 Teaching Geometric Concepts
EDCI 6344 Current Issues and Research in Science Education
EDCI 6346 Environmental Education Methods
EDCI 6348 Science Education Project
EDCI 6349 Current Issues and Research in Mathematics Education

## Specialization: 9 hours

Courses to be selected from another area in education or an academic discipline with approval of the Graduate Advisor. With careful selection of specialization courses, students can meet course requirements for a temporary certificate in administration or a permit in supervision.

## M.Ed. - Curriculum and Instruction

## 36-Hour Non-Thesis Program

## Emphasis in Mathematics Education

The options are designed for mathematics teachers who desire to improve their knowledge of pedagogy and content. The program is designed to emphasize instructional leadership and effective teaching in mathematics and has been approved by some area school districts for additional stipends.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the
academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

## Elementary Option

Curriculum and Instruction Core: 15 hours
EDCI 6300 Introduction to Research
EDCI 6330 Curriculum in the Elementary School
EDCI 6334 Curriculum Development
EDCI 6304 Learning and Cognition
EDCI 6302 Field Research Methodology
Mathematics Education Core: 12 hours
EDCI 6341 Teaching Algebraic Concepts
EDCI 6343 Teaching Geometric Concepts
EDCI 6349 Current Issues and Research in Mathematics Education
Mathematics Content: 9 hours
MATH 5331 Higher Geometry
MATH 5361 Mathematical Modeling
MATH 5304 Foundations of Mathematics
MATH 5321 Higher Algebra
MATH 5341 Higher Analysis
Secondary Option
Curriculum and Instruction Core: $\mathbf{1 5}$ hours
EDCI 6300
EDCI

6331 Introduction to Research $\quad$ Curriculum in the Secondary School $\quad$| EDCI | 6334 | Curriculum Development |
| :--- | :--- | :--- |
| EDCI | 6304 | Learning and Cognition |

Curriculum and Instruction Core: 15 hours
EDCI 6300 Introduction to Research
EDCI 6331 Curriculum in the Secondary School
EDCI 6334 Curriculum Development
EDCI 6304 Learning and Cognition

| Mathematics Education Core: 9 hours |  |  |
| :--- | :--- | :--- |
| EDCI | 6341 | Teaching Algebraic Concepts |
| EDCI | 6343 | Teaching Geometric Concepts |
| EDCI | 6349 | Current Issues and Research in |
|  |  | Mathematics Education |

## Specialization: 15 hrs

Required Graduate Mathematics Courses: 9 hrs
MATH 5321 Higher Algebra
MATH 5331 Higher Geometry
MATH 6341 Higher Analysis
Graduate Mathematics Electives: 6 hrs
MATH 5304 Foundations of Mathematics
MATH 5329 Number Theory
MATH 5309 Integrating Technology into Mathematics
MATH 5381 Mathematical Statistics
MATH 5361 Mathematical Modeling

## M.Ed. - Curriculum and Instruction

36-Hour Non-Thesis Program

## Emphasis in Science Education

The options are designed for science teachers who desire to improve their knowledge of pedagogy and content. The program is designed to emphasize instructional leadership and effective teaching in science and has been approved by some area school districts for additional stipends.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the
academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

## Elementary Option

Curriculum and Instruction Core: 15 hours
EDCI 6300 Introduction to Research
EDCI 6330 Curriculum in the Elementary School
EDCI 6334 Curriculum Development
EDCI 6304 Learning and Cognition
EDCI 6302 Field Research Methodology
Science Education Core: 12 hours
EDCI 6342 Topics in Science Education
EDCI 6344 Current Issues and Research in Science Education
EDCI 6346 Environmental Education Methods
EDCI 6348 Science Education Project

## Science Content: 9 hours

May be chosen from approved graduate science courses. See Graduate Course Offerings in the College of Science, Mathematics and Technology.

## Secondary Option

## Curriculum and Instruction Core: 15 hours

EDCI 6300 Introduction to Research
EDCI 6331 Curriculum in the Secondary School
EDCI 6334 Curriculum Development
EDCI 6304 Learning and Cognition
EDCI 6302 Field Research Methodology

## Science Education Core: 9 hours

EDCI 6342 Topics in Science Education
EDCI 6344 Current Issues and Research in Science Education
EDCI 6346 Environmental Education Methods
EDCI 6348 Science Education Project

## Science Content: $\mathbf{1 2}$ hours

May be chosen from approved graduate science courses. See Graduate Course Offerings in the School of Science, Mathematics and Technology.

## M.Ed. - Curriculum and Instruction 36-Hour Thesis/Non-Thesis Program

## Emphasis in Elementary Mathematics and Science Education

The options are designed for elementary teachers who desire to improve their teaching and understanding of mathematics and science. The program blends the mathematics education and the science education courses into the mathematics/ science education emphasis for elementary teachers.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

Curriculum and Instruction Component: 6 hours
EDCI 6300 Introduction to Research
EDCI 6330 Curriculum in the Elementary School
Emphasis Component
Math Education Core: 9 hours
EDCI 6341 Teaching Algebraic Concepts
EDCI 6343 Teaching Geometric Concepts
EDCI 6349 Current Issues \& Research in Mathematics Education
Science Education Core: 6 hours
EDCI 6344 Current Issues and Research in Science Education
EDCI 6346 Environmental Education Methods

Mathematics and Science Content: 9 hours
MATH 5373 Foundations of Mathematics (can be substituted with another graduate mathematics course with the approval of advisor)
BIOL 5370 Topics in Biology
PSCI 5310 Physical Science for Teachers I

## Electives: 6 hours

EDCI 6301 Instructional Technology in Teaching
EDCI 6302 Field Research Methodology
EDCI 6304 Learning and Cognition
EDCI 6312 Educational Measurement
EDCI 6334 Curriculum Development
EDCI 6336 Special Topics
EDCI 6342 Topics in Science Education
EDCI 6367 Statistical Methods
EPSY 6304 Human Growth and Development
READ 5323 Teaching Reading to Elementary Students
For students in the thesis option, EDCI 7300 and 7301 will be taken in lieu of six hours of electives.

## M.Ed. - Curriculum \& Instruction

## 36-Hour Thesis/Non-thesis Program

## Emphasis in English Language Arts

The options are designed for to meet the new Texas state requirements for middle school and high school teachers. The state now requires teachers to be certified in both English and Reading to teach either topic at the secondary level. The TExES tests teachers in both these areas. For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least
2.5 and/or GRE scores lower than those specified
are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

Required Courses: 36 hours
Required: (15 hrs)

| EDCI | 6300 | Introduction to Research |
| :--- | :--- | :--- |
| EDCI | 6301 | Instructional Technology |
| EDCI | 6331 | Curr. In Secondary School |
| EDCI | 6334 | Curriculum Development |
| EDCI | 6353 | Teaching the Culturally Different Sec. |
|  | Learner |  |

## Electives: (15 hrs)

ENGL 6321 Composition Theory
ENGL 6354 Linguistics \& Reading
9 hrs of master's level English classes in Literature (at least 1 American \& 1 British)

Resource: ( 6 hrs ., select two of the following)
EDLI 6320 Adolescent Literacy Instruction
EDLI 6340 Child/Adolescent Lit.
EDLI 6350 Language Arts
For students in the thesis option, EDCI 7300 and 7301 will be taken in lieu of six hours of electives.

## M.Ed. - Curriculum \& Instruction

## Emphasis in Reading

36-Hour Thesis/Non-thesis Program
The options are designed for to meet the new Texas state requirements for middle school and high school teachers. The state now requires teachers to be certified in both English and Reading to teach either topic at the secondary level. The TExES tests teachers in both these areas. For course descriptions and other information related to graduate studies visit our website at http://blue.utb.edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least
2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the
academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

Required Courses: 36 hours
Required: (15 hrs)
EDCI 6300 Introduction to Research
EDCI 6301 Instructional Technology in Teaching
EDCI 6334 Curriculum Development
Elementary:
EDCI 6322 The Bilingual Child
EDCI 6330 Curriculum in the Elementary School Or Secondary:
EDCI 6331 Curriculum In Secondary School
EDCI 6353 Teaching the Culturally Different Sec. Learner

## Electives: (select 12 hrs)

| EDLI | 6301 | Foundations of Lang/Literature <br> Instruction |
| :--- | :--- | :--- |
| EDLI | 6310 | Beginning \& Developing Literacy |
| EDLI | 6320 | Adolescent Literacy Instruction |
| EDLI | 6330 | Literacy Issues \& Instruction for Spec. <br>  <br> EDLI <br> 6340 |
| Pop. | Child/Adolescent Lit. |  |
| EDLI | 6350 | Language Arts |
| EDLI | 6360 | Assess. Issues/Practices in Literacy |

Resource: (select 9 hrs)
ENGL 6321 Composition Theory
ENGL 6354 Linguistics \& Reading
EDCI 6303 Peer Coaching
EDCI 6304 Learning and Cognition
EDCI 6324 Second Language Teaching
EDCI 7303 Models of Teaching

## M.Ed. - Curriculum \& Instruction <br> Emphasis in Reading/ESL

36-Hour Non-thesis Program
There are several trends and needs in education today. A national trend is to use interdisciplinary teaching. The most important needs are: one, to teach the English language to speakers of other languages and two, to teach reading in order to fulfill the requirement of No Child Left Behind.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.

Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the
academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements <br> Required: ( 9 hrs )

EDCI 6300 Introduction to Research

EDCI 6301 Instructional Technology in Teaching
EDCI 6388 Socio-Cultural Foundations
Choose 6 hrs from the following:
EDCI 6303 Peer Coaching
EDCI 6304 Learning \& Cognition
EDCI 6334 Curriculum Development
EDCI 7303 Models of Teaching
Required: 12 hrs
EDLI 6301 Foundations of Lang/Liter. Instruction
EDLI 6360 Assess. Issues/Practices in Literacy
EDCI 6324 Second Language Teaching
EDCI 6327 ESLTechniques in the Content Area
Choose 6 hrs. from the following:
EDLI 6320 Adolescent Literacy Instruction
EDLI 6330 Literacy Issues \& Instruction for Special Populations
EDLI 6340 Language Arts
EDLI 6350 Child/Adolescent Literature
ENGL 6321 Composition Theory
EDLI 6310 Beginning \& Developing Literacy
Choose 3 hrs. from the following:
EDCI 6325 ESL for Intlernationaland Intercultural Settings
EDCI 6326 Current Practices in Adult ESL Settings
EDCI 6328 Problems in Teaching ESL

Department of Kinesiology
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Mark Bailey, Assistant Professor
Phillip Conaster, Assistant Professor
Susan Hart, Assistant Professor
Zelma D. Mata, Associate Professor
David Wittenberg, Associate Professor

## M.Ed. - Curriculum \& Instruction

Emphasis in Health and Human Performance Studies
36-Hour Non-thesis Program
The major in Curriculum and Instruction is designed to prepare master teachers and graduates with instructional leadership skills. It has three major objectives:
to provide knowledge, skills, attitudes and
applicable research skills in curriculum and pedagogy;
to develop master teachers to serve as teacher educators, mentors, clinical teaching faculty and peer coaches;
to provide experience in educational research related to effective educational practice in fieldsettings.

The major in Curriculum and Instruction is designed to serve the many educators who desire a program with an emphasis on instructional leadership and effective teaching. This major is responsive to the needs of the South Texas educational community and to state and national priorities for restructuring and delivering teacher education programs. A comprehensive examination is required. Students choosing the thesis option will take EDCI 7300 and 7301 in lieu of six hours of electives. For course descriptions and other information related to graduate studies visit our website at http://blue.utb. edu/graduate.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Curriculum and Instruction are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Additional requirements:

- Background in the health, physical education, or human performance fields
- At least 24 hours of undergraduate work in health, physical education, or exercise science areas, 21 of which must be upper level courses.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the
admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements <br> Thesis Track <br> EDCI Core Curriculum: (18 hrs)

$\begin{array}{lll}\text { EDCI } & 6300 & \text { Introduction to Research } \\ \text { EDCI } & 6301 & \text { Instructional Technology in Teaching }\end{array}$ or
EDCI 6336 Problems in Education
EDCI 6304 Learning and Cognition
EDCI 6312 Educational Measurement or
EDCI 6367 Statistical Methods
EDCI 6330 Curriculum in the Elementary School or
EDCI 6331 Curriculum in the Secondary School
EDCI 6334 Curriculum Development

## Thesis: (6 hrs) <br> EDCI 7300 Thesis <br> EDCI 7301 Thesis

## HHPS Core Curriculum: (12 hrs)

HHPS 5355 Lifespan Fitness and Human Performance
HHPS 6315 Nutrition and Human Performance
HHPS 6320 Applied Exercise Physiology
HHPS 6330 Action Research in Health and Human Performance

| Non-Thesis Track |  |  |
| :--- | :--- | :--- |
| EDCI Core Curriculum: (18 hrs) |  |  |
| EDCI | 6300 | Introduction to Research |
| EDCI | 6301 | Instructional Technology in Teaching |
|  |  | or |
| EDCI | 6336 | Problems in Education |
| EDCI | 6304 | Learning and Cognition |
| EDCI | 6312 | Educational Measurement or |
| EDCI | 6367 | Statistical Methods |
| EDCI | 6330 | Curriculum in the Elementary School |
|  |  | or |
| EDCI | 6331 | Curriculum in the Secondary School |
| EDCI | 6334 | Curriculum Development |

## HHPS Core Curriculum: (12 hrs)

HHPS 5355 Lifespan Fitness and Human Performance
HHPS 6315 Nutrition and Human Performance

| HHPS 6320 | Applied Exercise Physiology |
| :---: | :--- |
| HHPS 6330 | Action Research in Health and Human |
|  | Performance |

## HHPS Education Option: ( 6 hrs)

| HHPS 5301 | Special Topics in Health and Human <br> Performance |
| :--- | :--- |

HHPS 5365 Cultural and Social Aspects of Health
HHPS 5375 Supervision and Administration in Health and Human Performance
HHPS 6301 Activity and Exercise Prescription for Children with Special Needs
HHPS 6305 Program Development for the Health and Physical Activity Fields

## Graduate Course Descriptions

## Curriculum and Instruction

EDCI 5340 Teaching Mathematics for Understanding This course covers learning theory related to mathematics teaching at all levels. Topics include best practices based on research, and the development of materials that support the learning of mathematics through the use of technology and other "tools." Students will be introduces into the pedagogical strategies that have the best chance to foster mathematics understanding. Prerequisite: May be taken by post-baccalaureate or graduate student in education. Lec. 3, Cr. 3

EDCI 5341 Strategies for Teaching History This course covers pedagogy and learning theory related to teaching history. Topics include best practices, research-based instructional strategies, performance assessment, technology and the development of materials and activities to support critical thinking related to the learning of history. Prerequisite: May be taken by post-baccalaureate or graduate education students. Lec. 3, Cr. 3

EDCI 5342 Tests and Measurement for the Secondary Classroom Teacher
This course emphasizes the role of the teacher in selecting and administering standardized achievement and diagnostic tests and in interpreting and using test results to direct learning in the classroom. Lec 3, Cr 3

## EDCI 6136 Topics in Education

This course emphasizes current innovations and best practices in education. Credit may be applied toward professional development credit or the graduate
programs in education when appropriate. May be repeated for credit as topics change for a maximum of six semester credit hours towards the graduate degree. Lec 1, Cr 1

## EDCI 6300 Introduction to Research

 Introduction to research techniques; identification of problems, research designs and data gathering procedures. The planning and design of research proposals and projects are emphasized. The course must be completed or in progress before the student applies for the oral interview. Lec 3, Cr 3EDCI 6301 Instructional Technology in Teaching An advanced course designed to provide students the opportunity to acquire skills, insight and practice in selecting, using, producing and managing teaching tools. The course is helpful to teachers and other who want to direct instructional media centers in public schools. Lec 3, Cr 3

## EDCI 6302 Field-Research Methodology

This course is an introduction to field-based research methodologies with an emphasis on the teacher as a researcher and on reflective teaching and teaching as decision-making. This is a field-based course. Lec 3, Cr 3

## EDCI 6303 Peer Coaching

This course, focused on improvement of instruction and the attainment of school improvement goals, recognizes the role of peers as a component of planning, discussion, classroom observation, support, and sharing of ideas and materials. This is a field-based course. Lec 3, Cr 3

## EDCI 6304 Learning and Cognition

This critical course focuses on topics, theories, and models of cognitive research and their implications for instructional practice and curriculum restructuring and design. This is a field-based course. Lec 3, Cr 3

EDCI 6312 Educational Measurement
The content of this course includes scaling, variance, item analysis, reliability and true score theories, and validity. These topics will be related to constructing and interpreting norm and criterion referenced measures, teacher made tests, and systematic observational scales. Lec 3, Cr 3

## EDCI 6319 Practicum in Bilingual Education

 Supervised practical experience in a bilingual/bicultural elementary classroom in which several of the essential components of a bilingual/bicultural education program will be analyzed and implemented by each participantwith the cooperation of local school districts. Actual laboratory responsibility will be based on theoretical concerns, as field experiences will complement the principles governing community involvement, curriculum and instruction, instruction materials, staff development and assessment.

EDCI 6320 Practicum in Teaching English as a Second Language
This course provides field-based supervised practical experiences in an ESL classroom or other instructional settings. This course will be assigned a grade of pass or fail. Prerequisite: EDCI 6328 Lec 3, Cr 3

EDCI 6322 The Bilingual Child
This course studies the problems and strengths of bilingual children, with emphasis on the educational programs of multicultural, multi-ethnic elementary schools. Lec 3, Cr 3

EDCI 6324 Second Language Teaching: Theory and Methodology
A study of the acquisition of languages by bilingual children, focusing on the role of the child, the community and the school through various stages of language development, and the relationship of linguistic, cultural and conceptual processes within a bilingual/bicultural environment. Evaluating methods and materials for language teaching as these relate to social context and the principles of communication is stressed. Lec 3, Cr 3

EDCI 6325 ESL for International and Intercultural Settings
This course will emphasize comparative international and intercultural teaching practices, stressing second language instruction in an international setting. Lec 3, Cr 3

EDCI 6326 Current Practices in Adult ESL Settings This course will provide students with practices for assessment, instructional planning, curriculum development, and evaluation in an adult ESL setting. Lec $3, \mathrm{Cr} 3$

EDCI 6327 ESL Techniques in the Content Areas This course will emphasize specific techniques of teaching content areas (Science, Mathematics, and Social Studies) to non-English speaking students using ESL techniques. Lec 3, Cr 3

EDCI 6328 Problems in Teaching English as a Second Language
Investigation and analysis of current problems, trends,
research practices and policies related to ESL teaching and learning in bilingual settings. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

EDCI 6330 The Curriculum in the Elementary School This course focuses on the theory and factors that shape the elementary school curriculum. The course will also examine the organization and content of curriculum subjects and the trends, issues and new developments in the field. Lec 3, Cr 3

EDCI 6331 The Curriculum in the Secondary School This course examines the theory and the background of the curriculum in the senior high and middle schools in the U.S. It includes an examination of curriculum in the disciplines and curriculum organization and an analysis of trends, issues, and innovations in the field. Lec $3, \mathrm{Cr} 3$

EDCI 6334 Curriculum Development - Problems and Processes
This course examines approaches in developing, implementing, and evaluating elementary and secondary school curricula. Principles and practices in the use and production of curriculum frameworks, guides, textbooks and other curriculum materials will be included.
Prerequisite: EDCI 6330, 6331 or equivalent. Lec $3, \mathrm{Cr} 3$
EDCI 6336 Problems in Education (Topics Course) This course's major emphasis is on current innovations in education. Students will conduct research related to selected problems. This research may include conducting action research, working with educational determinants, and new education programs, and/or working with classroom teachers and other people in the community to improve the education program. Credit may be applied toward the graduate programs in education when the student chooses an appropriate problem. Course may be repeated once for credit. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

EDCI 6341 Teaching and Learning Algebraic Concepts This course covers learning theories related to school algebra, as well as strategies for teaching algebraic concepts. Topics include best practices based on research, and development of materials that support the learning of foundational algebraic concepts. Students will utilize technology and other "tools'. Prerequisite: May be taken by post-baccalaureate or graduate student in education. Lec 3, Cr 3

## EDCI 6342 Topics in Science Education

Special topics in science education related to science pedagogy, inquiry models of science instruction,
integration of content areas, coordinated-thematic science teaching, authentic assessment methods in science education, fostering science process skills and critical thinking skills, and laboratory methods. May require fieldwork. May be repeated for credit when the topics vary. Lec $3, \mathrm{Cr} 3$

## EDCI 6343 Teaching and Learning Geometric Concepts

This course covers learning theories related to learning geometry, as well as strategies for teaching geometric concepts. Topics include best practices based on research, and the development of materials that support the learning of geometric concepts through the use of technology and other "tools". Prerequisite: May be taken by post-baccalaureate or graduate students in education. Lec 3, Cr 3

## EDCI 6344 Current Issues and Research in Science Education

This course will include selected studies of current issues and problems related to science instruction and curriculum development. Topics include multicultural science education, inclusive science education, gender and ethnic issues regarding science, the analysis of learning in the science classroom, using Internet and Tenet to teach science, and a review of recent research in science education and science education reform efforts. Lec 3, Cr 3

## EDCI 6346 Environmental Education Methods

This course is an interdisciplinary course for integrating environmental education throughout the K -12 curriculum. It includes content and strategies for developing and implementing environmental education lessons and programs. Methods for teaching K -12 students about the environment using effective educational methodology are emphasized. Lec 3, Cr 3

## EDCI 6348 Science Education Foundation

Supervised project in science education that will include design of an original project and the writing of a formal report in an acceptable publication format. This course is usually taken during the last semester of study and is taken only by Non-Thesis students. Lec 3, Cr 3

EDCI 6349 Current Issues and Research in Mathematics Education
Current Issues will include studies of prominent issues and problems related to mathematics education and curriculum development. Topics include multicultural mathematics education, gender and ethnicity issues regarding mathematics, analysis of learning in the
mathematics classroom, using the Internet to enrich the teaching of Math and review of recent research in mathematics education. Lec 3, Cr 3

EDCI 6353 Teaching the Culturally Different Secondary Learner
The course examines alternative approaches used in teaching culturally different secondary school students. Educational programs, approaches and techniques that are successful with Mexican-American student populations will be emphasized. Lec $3, \mathrm{Cr} 3$

EDCI 6367 Statistical Methods
Content of this course includes central tendency; variance; normal, T , chi square, and F distributions; bivariate correlation and regression analysis, $T$ test between means, goodness of fit and test of independence chi square; one-way and factorial ANOVA. Emphasis is on hypothesis testing; Type I and II errors; and understanding statistical significance. Lec 3, Cr 3

EDCI 6388 Socio-Cultural Foundations of Education Identifying and analyzing of cultural forces which shape the direction of American education with emphasis on the purposes of education in their social and cultural contexts. The multicultural factors in society which affect public schools and influence learning and acquiring skills important to survival and self-fulfillment will be emphasized. Particular emphasis will be placed upon understanding the culture of Mexican-American children. Lec 3, Cr 3

EDCI 6390 Research Methods in Education This course will provide graduate students with opportunities to increase their competence as educational researchers through an in-depth dialogue and instruction of research paradigms and methodologies in education. Lec. 3, Cr. 3
Prerequisite: EDCI 6300

## EDCI 7300 Thesis

Pass/Fail Grade. Prerequisite: Approval of graduate advisor Lec 3, Cr 3

## EDCI 7301 Thesis

Pass/Fail Grade. Prerequisite: Approval of graduate advisor Lec 3, Cr 3

## EDCI 7303 Models of Teaching

Social, information processing, personal, and the behavioral systems models will be examined, synthesized and applied. Research in teacher effectiveness and demonstration of models is required. Prerequisite:

Admission to graduate studies. Lec. 3, Cr. 3

## Health and Human Performance

## HHPS 5301 Special Topics in Health and Human Performance

This course will cover contemporary issues in the health and human performance fields. Topics will vary based upon faculty expertise and current trends in the field. May be repeated once for credit when topic varies. Lec. 3., Cr. 3

HHPS 5355 Lifespan Fitness and Human Performance A comprehensive understanding of health and human performance requires knowledge related to the dynamics of the developing and aging human body. This course will address the developmental factors that influence health, fitness and motor performance from prenatal growth through the geriatric years. Lec. 3., Cr. 3

HHPS 5365 Cultural and Social Theory of Health This course will provide students with an overview of social and cultural theories and models that are pertinent to the development and application of health education programs. Problem etiology and change strategy theories are investigated through applicationto specific health behavior topics among culturally distinct and marginalized groups. Lec. 3., Cr. 3

HHPS 5375 Supervision and Administration of Health and Human Performance Programs
This course covers the study of the principles, practices and policies in the organization, supervision and administration of health, human performance, athletic and other non-teaching related programs in the public schools and in diverse physical activity settings. Lec. 3., Cr. 3

HHPS 6301 Activity and Exercise Prescription for Children with Special Needs
This course examines the etiology and pathology of selected high-occurence congenital disabilities in the pediatric population. Current medical research and curriculum interventions will be investigated. Lec. 3., Cr. 3

HHPS 6305 Program Development for the Health and Physical Activity Fields
This course is an in-depth examination of program development in the health and physical activity fields. Current research and readings on program and curriculum development will be addressed. Prerequisite:

EDCI 6330 or EDCI 6331. Lec. 3., Cr. 3
HHPS 6315 Nutrition and Human Performance This course provides an in-depth research-based examination of human nutrition and the role it plays on physical performance from the recreational enthusiast to the elite athlete. Topics ranging from caloric balance to dietary supplements will be investigated. Prerequisite: KINE 5355. Lec. 3., Cr. 3

## HHPS 6320 Applied Exercise Physiology

 This course is designed to provide in-depth insight into the science of sports conditioning. Current research on training the adolescent and post-adolescent athlete is given content priority. Laboratory experiences are included in this course. Prerequisite: KINE 6315. Lec. 3., Cr. 3HHPS 6330 Action Research in Health and Human Performance
This course is designed to provide students with knowledge and practical experience for conducting action research in the health and human performance fields. These experiences will culminate in student research projects. This course serves as a capstone course and is to be enrolledin the semester prior to graduation. Prerequisite: Six hours of graduate level kinesiology courses and EDCI 6312 or EDCI 6367. Lec. 3

## M.Ed. - Bilingual Education Emphasis in Dual Language Education 39-Hour Thesis/Non-Thesis Program

Master of Education in Bilingual Education with an emphasis in Dual Language Education prepares qualified Bilingual Teachers who are:

- Prepared in the practice of advocating the implementation of education policies and effective biliterate/bicultural instructional practices.
- Skillful in bilingual schooling issues such as language development, second language learning, and alternative assessment.
- Agents of change in implementing best practices and policies for a student-centered educational system.
- Scholars in the field of bilingual education
- Current in research and professional development in educational settings
The following are areas in which students may
choose to minor:
Early Childhood, Special Education, Reading, Counseling and Guidance, Educational Administration, Educational Technology, Math and Science Education.
Project Culminating Experience consists of a Seminar in Bilingual Education.
Each candidate for the nonthesis Master of Education in Bilingual Education must pass a comprehensive written examination prepared by the Education graduate faculty and administered by the Graduate Office. Students who choose the option of writing a thesis must select a thesis committee, composed of a committee chairperson and two other members of the graduate education faculty, to approve the topic and assist in the preparation of the thesis. Students must pass an oral defense of the completed thesis.


## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Bilingual Education are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements:

## Required Courses: 15 hours

EDCI 6300 Introduction to Research
EDCI 6388 Socio-Cultural Foundations of

Education
EDCI 6301 Instructional Technology in Teaching or equivalent
EDEC 6303 First and Second Language Acquisition
BILC 6361 Issues in Dual Language Education

## Specialization: 18 hours

| BILC | 6362 | Principles of Curriculum Development <br> In Dual Language Programs |
| :--- | :--- | :--- |
| BILC | 6364 | Foundations of Literacy Instruction In <br> Spanish |
| BILC | 6363 | Literatura Infantil (cross-listed with <br> SPAN 6339) |
| EDCI 6327 | ESL Techniques In the Content Areas |  |
| EDAD 7393 | Administration of Programs for Special <br> Populations |  |
| BILC | 6365 | Action Research In Dual Language <br> Education |

## Electives: $\mathbf{6}$ hours, $\mathbf{3}$ of which must be outside of department

## In Department

EDEC 6301 Major Theories in Early Childhood Education
EDEC 6310 Problems in Early Childhood Education
READ 6301 Foundations of Literacy Instruction

## Outside of Department

SOCI 6313 American Minorities
SPED 6303 The Bilingual Child with Special Education Needs
SPAN 6380 Special Topics in Spanish Linguistics
EDGE 6301 Educating the Gifted and Talented
EDAD 6381 Problems in Organization and Administration of Public Schools
EDAD 6384 Introduction to Education Administration
Students who desire to complete the thesis will substitute EDCI 7300 and EDCI 7301 in lieu of six semester hours of electives.

## Graduate Courses Descriptions

## Bilingual Education

[^1]and innovations in the field. Readings will provide opportunities to reflect on the current and future status of bilingual education. This course is taught in Spanish. Prerequisite: Admission to Graduate School and EDEC 6303 Lec 3, Cr 3

## BILC 6362 Principles of Curriculum Development in Dual Language Programs

This course will examine the current research and best practices that shape bilingual education curricula. Students will discuss factors influencing cognitive, linguistic, and social development and apply this knowledge to instructional contexts across the curriculum. In addition, the complexities in assessing a bilingual child will be discussed. This course is taught in Spanish and English. Prerequisite: BILC 6361 Lec 3, Cr 3

## BILC 6363 Literatura Infantil

The focus of this course is to develop an appreciation of poems, short stories, theatre and novels for children, written originally in Spanish by authors from diverse regions of the Spanish speaking world. Students will be required to analyze and interpret texts from a literary perspective. Students will examine various strategies to incorporate children's literature into the curriculum as well as assess the ethical and aesthetic value of texts. All lectures, reading, papers, presentations and examination are in Spanish. Prerequisite: BILC 6362 and Concurrent Enrollment in BILC 6364 Lec 3, Cr 3

## BILC 6364 Foundations of Literacy Instruction in Spanish

Models of reading instruction and the components of a Spanish reading program for native speakers will be investigated from multiple perspectives. Students will examine practical classroom applications, the historical development of literacy, and the processes that affect acquisition and development of literacy in the home and school. This course is taught in Spanish. Prerequisite: BILC 6362 and Concurrent Enrollment in BILC 6363 Lec 3, Cr 3

## BILC 6365 Seminar in Dual Language Education

 The focus of this course is for students to integrate research, pedagogy, and critical thinking in the development and implementation of dual language education programs. Students will conduct readings on critical issues in the field of bilingual education and engage in classroom debates and presentations. Students will be required to complete and action research project involving technology as well as an integrated review ofthe literature in bilingual education.
Prerequisite: BILC 6363 and BILC 6364 Lec 3, Cr 3

## M.Ed. - Early Childhood Education 36 Hour Thesis/Non-Thesis Program

The major in Early Childhood Education is aimed at accomplishing two primary goals:

- to develop knowledge and skills in curriculum (what to teach) and instruction (how to teach) in early childhood education; and
- to provide experience in educational research related to the education of the young child.
A comprehensive written examination is required.


## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Early Childhood Education are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0
- Must have a valid EC-4 teacher certificate or its equivalent in a related area.
Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.


## Degree Requirements

## Required Courses: 30 hours

EDCI 6300 Introduction to Research
EPSY 6304 Human Growth and Development
EDEC 6301 Major Theories in Early Childhood Education
EDEC 6302 Instructional Planning \& Curriculum Development for the Early Childhood Classroom

| EDEC 6303 | First \& Second Language Acquisition |  |
| :--- | :--- | :--- |
| EDEC 6304 | Children's Literature |  |
| EDEC 6307 | Emergent Literacy in Early Childhood |  |
|  |  | Education |
| EDEC 6308 | Graduate Internship in Early <br> Childhood Education |  |
| EDEC 6310 | Problems in Early Childhood <br> EDCI 6388 | Education <br> Socio-Cultural Foundations of <br> Education |

## Electives: 6 hours

Six hours of courses in bilingual education or six hours of thesis. An elementary certified teacher can add an early childhood endorsement by completing 15 hours of specific courses within this program and one year of teaching in an early childhood classroom. Contact Graduate Advisor for information. EDEC 6310 may be taken twice if the topic is different.

# Graduate Course Descriptions Early Childhood 

EDEC 6301 Major Theories in Early Childhood Education
The course traces the historical, philosophical and sociological basis for the development of early childhood education and establishes a foundation for a discussion of contemporary issues in early childhood education. The contributions of past theorists and current researchers will be explored. Lec 3, Cr 3

EDEC 6302 Instructional Planning and Curriculum Development for the Early Childhood Classroom
This course presents the major principles of curriculum planning and organization, including the development of a scope and sequence and the identification of appropriate learning materials and resources. Special emphasis will be given to research on developmentally appropriate early childhood education environments. A major portion of this course will include field-based experiences. Lec 3, Cr 3

EDEC 6303 First and Second Language Acquisition The focus of this course will be on early childhood bilingualism. The theoretical principles of native and second language acquisition will be explored. Students will have an opportunity to develop models
of linguistically appropriate early childhood learning environments (pre-kindergarten through the primary grades) based on students'levels of proficiency in both the native and second languages. Strategies for native language development and for the teaching of the second language will also be explored. Lec 3, Cr 3

## EDEC 6304 Children's Literature

This course will provide the learner with the knowledge and skill needed to analyze various literary genres. Special emphasis will be given to create an appreciation for the contributions of other cultures through an understanding of literary works for children. Students will identify appropriate criteria to select and recommend multicultural children's literature Lec 3, Cr 3

## EDEC 6307 Emergent Literacy in Early Childhood Education

This course will emphasize an integrated "whole language" approach to pre-literacy and literacy development for pre-primary aged children. Students will learn how to guide and interrelate the acquisition of the language arts skills - listening, speaking, reading and writing - by organizing rich language environments for ESL students. Related research will be reviewed. Lec 3, Cr 3

## EDEC 6308 Graduate Internship in Early Childhood Education

This on-site internship will enable the student to focus on the holistic development of the young child by arranging and organizing a developmentally appropriate learning environment. It will also involve the study of theory and current research to implement practice in early childhood education. The course will be assigned a grade of pass or fail
Prerequisite: EDEC 6301, 6302, 6303 \& 6304 Lec 3, Cr 3
EDEC 6310 Problems in Early Childhood Education Topics will include analysis of theory, research, policy and practice of topics such as the following: Topic 1-Children's Play and Play Environment; Topic 2-Peer Relationships: Personality and Social Development; Topic 3-Parent and Community Involvement for the Early Childhood Classroom; and Topic 4-Early Childhood Education for the Exceptional Child. May be repeated for credit when topic varies. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

## M.Ed. - Educational Technology 36-Hour Thesis/Non-Thesis Program

The major in Educational Technology is designed to prepare teachers and other educators to:

- use instructional technology (computers, telecommunications and related technology) as resources for and deliverers of instruction,
- serve as facilitators or directors of instructional technology in educational settings, and/or
- be developers of instructional programs and materials for the new technologies.

The program will focus on the theory, research and applications related to the field of educational technology. A comprehensive examination is required. Revisions to the current degree requirements are being considered. Please check the program web site for the most current requirements. The web site is available at http://edtech.utb.edu and periodically updated with any changes in courses and degree requirements.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Educational Technology are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements <br> Required Courses: 24 hours

EDCI 6300 Introduction to Research
EDCI 6304 Learning and Cognition

EDTC
EDTC
EDTC 6323
EDTC 6325
EDTC 6329

Instructional Technology Instructional Design
Multimedia/Hypermedia
Educational Telecommunications
Selected Topics in Educational Technology
EDTC 6332 Practicum in Educational Technology Electives: 12 hours
Students will select 12 hours of electives based upon their professional needs and academic interests. These electives should come from either education courses, specific content area courses (such as mathematics, reading, etc), or technology-related courses.
Students selecting the thesis option will take EDCI 7300 and EDCI 7301 in lieu of six hours of coursework (electives) and substitute EDCI 6390 for EDTC 6332 with approval of the graduate advisor.

## Graduate Course Descriptions

## Educational Technology

## EDTC 6105 Technology Applications for StudentCentered Learning

This shows classroom teachers how to use technology to move from a teacher-driven instructional model to a student-centered instructional model. Emphasis will be given to developing student learning activities that integrate technology across the curriculum to improve student learning. Lec. 1, Cr. 1

## EDTC 6311 Multimedia Development for Instruction

 in the ClassroomThis course introduces classroom teachers to the design and development of instructional multimedia. Emphasis will be given to developing student learning activities that integrate multimedia across the curriculum to improve student learning. Lec. 3, Cr. 3

EDTC 6312 Web Development for Instruction in the Classroom
This course introduces classroom teachers to the design and development of Web-Based Instruction. Emphasis will be given to developing student learning activities that integrate Web-based instruction across the
curriculum to improve student learning. Lec. 3, Cr. 3
EDTC 6313 Video Development for Instruction in the Classroom
This course introduces classroom teachers to the design and development of instructional video. Emphasis will be given to developing student learning activities that integrate instructional video across the curriculum to improve student learning. Lec. 3, Cr. 3

## EDTC 6320 Instructional Technology

This course requires an examination of instructional applications of microcomputers and telecommunications in classroom settings. Emphasis will be given to the design and development of student learning activities that integrate technology across the curriculum to improve student learning. Lec 3, Cr 3

## EDTC 6321 Instructional Design

The design of instructional and management systems is examined through field experience and research reports. Focus is on the components, design, and utilization of local/area distributed networks in the school setting. Lec 3, Cr 3

EDTC 6323 Multimedia/Hypermedia
This course includes the study of the use of hypermedia, hypertest, and multimedia in education. Basic study of topics on hardware and software capabilities, selection and implementation. It also includes customizing and creating information, integrating text, graphics, video, music, voice, and animation. Lec $3, \mathrm{Cr} 3$

## EDTC 6325 Educational Telecommunications

 This course addresses the development of educational telecommunications systems, teleconferencing, digitized video, and compressed video; available computer networks (local, state, national, and international) and their role in the instructional process are emphasized. Lec $3, \mathrm{Cr} 3$
## EDTC 6329 Selected Topics in Educational Technology

This course addresses the study of significant topics related to utilization of technology in educational settings. With approval by advisor, course may be repeated when topic varies.
Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

EDTC 6332 Practicum in Educational Technology This is the capstone course for the degree in educational technology. Students are expected to apply both skills and conceptual knowledge to diagnose and devise a
solution to an Instructional problem. This course will be assigned a grade of pass or fail.
Prerequisite: Must be within 6 hours of completion of program. Approval of Graduate Advisor
Lec 3, Cr 3

EDTC 6340 Application of Advanced Technologies In the PK-12 Classroom
Course emphasizes the skills required of the Master Teacher of Technology certification including applications of: multimedia, web-based materials, desktop publishing, streaming media, and media currently used In scientifically based research of instructional technology application In PK-12 classrooms.
Prerequisite: Approval of Graduate Advisor
Lec 3, Cr 3

EDTC 6341 Student-Centered Learning Using Technology
The course provides opportunities to develop a School Technology and Readiness (STAR) chart for a K-12 campus, select a critical instructional problem, and develop a multiple format solution that focuses upon student-centered learning.
Prerequisite: Approval of Graduate Advisor
Lec 3, Cr 3

EDTC 6342 Technology Leadership
Techniques, strategies, resources, and tools for designing, developing, Implementing and evaluating critical aspects of leadership in instructional technology Issues In K-12 schools anc classrooms will be addressed.
Prerequisite: Completion of EDTC 6340 or EDTC 6341
Lec 3, Cr 3
EDTC 6343 Master teacher of Technology Practicum This is the capstone experience for the Master Teacher of Technology certification. Students will combine skills and concepts to generate a comprehensive solution to a campus wide, or district wide instruction issue whose solution centers upon exemplary uses of Instructional technologies.
Prerequisite: Must be within 6 hours of MTT certification . Lec 3, Cr 3

## EDTC 6350 The Instructional Technology Consultant

This course introduces students to the IT consulting framework, a vital component in the proper practice of Instructional Systems Design. The course will focus specifically on the consulting/interpersonal relations of
the ISD process in Educational Technology. Lec. 3, Cr. 3

EDTC 6351 Web-Based Multimedia in Instruction This course examines the cognitive domains of learning and the corresponding research in web-based multimedia. It provides a theoretical construct by which distance educators can infuse learner-centered principles and examine the possibilites for streaming media in online education. Lec. 3, Cr. 3

EDTC 6352 Planning and Designing Interactive Web-Based Instruction
This course provides a framework and tools for designing strategies and tactics to facilitate interactivity in webbased instruction. The framework encompasses five interaction attributes including: (1) interaction with content, (2) collaboration, (3) conversation, (4) intrapersonal interaction, and (5) performance support. Lec. 3, Cr. 3

EDTC 6353 The Master Electronic Portfolio This course will guide students in developing an electronic portfolio. The e-portfolio is a purposeful collection of work that exhibits a student's effort, progress, and achievements in digital form.
Lec. 3, Cr. 3

EDTC 6355 Designing Instruction for an Online Course
This course will introduce students to the field of the instructional design with an emphasis upon distance education environments and learner. Lec. 3, Cr. 3

EDTC 6356 Media Enhancement of the Online Course

This course will show the student how to select and evaluate a media mix to maximize interaction in the distance education (DE) classroom. Lec. 3, Cr. 3 Prerequisite: Completion of EDTC 6355 with a grade of " B " or better

EDTC 6357 Using Open Source Courseware for Online Development
This course will show the student how to select an appropriate open source solution for delivery of an online course, and acquaint the student with the various issues involved in using open source solutions for course deployment. Lec 3, Cr 3
Prerequisite: Completion of both EDTC 6355 and EDTC 6356 with a grade of "B" or better
M.Ed. - English as a Second Language 36-Hour Thesis/Non-Thesis Program
The major in English as a Second Language (ESL) will prepare students in the advanced study of theory and research in the teaching of ESL and in the application of that theory and research to improve policy and practice in the ESL field. A comprehensive examination is required.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in English as a Second Language are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department.
Information related to application procedures and deadlines is available at the Office of Graduate Studies.

## Degree Requirements

## Required Courses: 27 hours

| EDCI | 6300 | Introduction to Research |
| :--- | :--- | :--- |
| EDCI | 6324 | Second Language Teaching: Theory |
|  |  | and Methodology |
| ENGL | 6355 | Second Language Acquisition |
| EDCI | 6388 | Socio-Cultural Foundations of |
|  |  | Education |
| EDCI | 6327 | ESL Techniques in the Content Area |
| EDCI | 6325 | ESL for International and Intercultural |
|  |  | Settings |
| EDCI | 6326 | Current Practices in Adult ESL Settings <br> EDCI <br> 6328 |
|  |  | Problems in Teaching English as a <br> Second Language |

EDCI 6320 Practicum in Teaching English as a Second Language

## Electives: 9 hours

Nine hours of coursework in education, business, or the liberal arts. A certified teacher can add an ESL or bilingual endorsement by completing 12 hours of specific courses, and taking certification appropriate tests. Contact the Graduate Advisor for information. For students in the thesis option, EDCI 7300 and 7301 will be taken in lieu of six hours of electives.

## M.Ed. - Reading Specialist

## 36-Hour Program

## All-Level Professional Reading Specialist Certification

This program is intended to prepare individuals for a leadership role by mentoring other teachers in research-based literacy instruction for all learners in grades Kindergarten through 12. Also, reading specialists will learn to advise administrators in issues concerning the school literacy program.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Reading Specialist are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 450
- GRE Quantitative score of 450
- GRE Analytical score of 4.0
- Must have a valid teaching certificate.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department.
Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

## Block I

EDCI 6300 Introduction to Research
EDLI 6301 Foundations of Language and Literacy
EDLI 6351 Reading for Linguistics \& ESL
EDCI 6301 Instructional Technology
Block II
EDCI 6324 Second Language Teaching: Theory and Methodology
EDLI 6310 Beginning and Developing Literacy
EDLI 6320 Adolescent Literacy Instruction
EDLI 6330 Literacy Issues and Instruction for Special Populations

## Block III

EDLI 6340
EDLI 6350
Child and Adolescent Literature

EDLI 6360 Assessment Issues and Practices in Literacy
EDCI 6312 Educational Measurement

## Master Reading Teacher Certification Program

Candidates must hold a valid teaching certificate and be a certified reading specialist or have a minimum of 3 years teaching experience to be accepted into the program. The purpose of the program is to provide schools with teachers who can provide leadership In the area of literacy development. Students take 15 hours of graduate teaching courses followed by a TExES exam to become a Master Reading Teacher.

Requirements
EDLI 6310 Beginning and Developing Literacy
EDLI 6320 Adolescent Literacy Instruction
EDLI 6330 Literacy Issues and instruction for Special Populations
EDLI 6350 Language Arts
EDLI 6360 Assessment Issues and Practices in Literacy
TExES for the Master Reading Teacher Program

## Graduate Courses Descriptions

## Educational Literacy

EDLI 6301 Foundations of Language and Literacy This course examines sociocultural and cognitive theories of language and literacy development, along with
theoretical models of the reading and writing processes and instruction. Also included are the historical and philosophical aspects of literacy education and the interconnection among all areas of literacy. Prerequisite: Program of study must be on file in department office.

EDLI 6310 Beginning and Developing Literacy Participants will learn about the developmental nature of literacy including factors that may affect it, such as the learning environment and parental involvement. Participants must learn to implement research based instructional strategies that address all the elements of a beginning and developing literacy program according to state standards. Lec. 3, Cr. 3

## EDLI 6320 Adolescent Literacy Instruction

 Participants learn strategies to address the diverse literacy needs of adolescents across all content areas according to state standards. Issues and characteristics of the adolescent reader are addressed. Lec. 3, Cr. 3
## EDLI 6330 Literacy Issues and Instruction for Special Populations

This course addresses issues and instruction for English language learners, students with literacy difficulties (including dyslexia), and students of all backgrounds according to state standards. Participants will explore ways to ensure that all learners receive equitable instruction. Lec. 3, Cr. 3

## EDLI 6340 Child and Adolescent Literature

This course exposes participants to a wide range of a narrative and expository literature as authentic resource for instruction. Participants select, adapt, and create materials, activities, and strategies to meet the needs of all students according to state standards. Lec. 3, Cr. 3

## EDLI 6350 Language Arts

This course investigates current trends and issues in teaching all aspects of language arts across content areas. Participants apply research-based practices in classroom settings to meet the needs of all students, according to state standards and current trends. Lec. 3, Cr. 3

## EDLI 6351 Reading for Linguistics and ESL

 This course explores the linguistics basis of the reading process. Students will consider the implications of the basic concepts from phonology, orthography, morphology and syntax for teaching reading and for the English language learners.EDLI 6360 Assessment Issues and Practice in Literacy The content focuses on current trends and issues in
assessment practices along with the role it plays in guiding instruction. Participants learn to assess all areas of literacy including: emergent and developing literacy, spelling, writing, oral language, comprehension, use of study strategies, viewing listening and speaking. Lec. 3, Cr. 3

## EDLI 6370 Topics in Literacy

This course is concerned primarily with innovations and current issues in reading instruction. Trainees will select topics of particular interest and concern for intensive study. Experiences of the trainee may include action research, working with classroom teachers and other adults in the school community to enhance the reading program. May be repeated once, when emphasis is on study in resource areas or professional areas related to the field of reading. Lec $3, \mathrm{Cr} 3$

## READ 6109 Topics in Literacy

This course emphasizes current innovations and research in literacy instruction. Credit may be applied toward professional development credit or the graduate programs in education as appropriate. May be repeated for credit as topics change for a maximum of six semester credit hours towards the graduate degree. Lec 1, Cr 1

READ 6323 Problems in the Teaching of Reading This course is concerned with problems encountered in the teaching of reading as it relates to the reader, the reading context, and reading material in the literacy environment. Prerequisite: READ 6301 Lec 3, Cr 3

## Ed.D. - Curriculum and Instruction 66-Hour Program

The Doctor of Education (Ed. D. degree) in Curriculum and Instruction prepares educators to assume leadership positions in institutions of higher education, local, regional, and independent school districts at multiple levels. The Doctor of Education in Curriculum and Instruction at The University of Texas at Brownsville and Texas Southmost College provides school districts throughout Texas and nationwide with individuals with sufficient and specific expertise to formulate and lead P-16 programs. In addition, the degree enables successful candidates to teach in colleges and universities, many of which are faced with a shortage of qualified faculty. To this end, the degree provides a qualified pool of teacher educators for institutions of higher education throughout Texas and the nation.

## Admission Requirements

Standards for admission to The University of Texas at Brownsville and Texas Southmost College Doctor of Education (Ed. D. Degree) in Curriculum and Instruction are based on multiple sources of evidence of an applicant's qualifications, commitment to the program, and are comparable to those for doctoral programs in other disciplines and for Curriculum and Instruction in other universities. All applicants must hold a baccalaureate and master's degree from a regionally accredited U.S. institution or a recognized international equivalent plus have three years of teaching experience. The proposed Doctor of Education program does not allow a candidate to go directly from a baccalaureate degree to an extended doctoral program.

Interested individuals need to consider the following to begin the admission process:

1. Completed application form.
2. Verification of a master's degree in Education or related field.
3. Official transcripts from all colleges and universities attended.
4. GPA of 3.25 or higher on all graduate coursework.
5. Submission of satisfactory GRE scores originating within the past five years.
6. Five years of experience in education or related field.
7. Verification of three years of classroom teaching experience at an accredited institution.
8. TOEFL passing score of 600 for the paper test and 100 for the internet based test for foreign applicants from non-English speaking countries.
9. Statement of the applicant's professional goals, experience and scholarly accomplishments, why they want to pursue this degree, possible research questions or topics of interest for pursuing research.
10. A resume or vita.
11. Letters of recommendation and completed forms from three professionals with first hand knowledge of the applicant, professional qualities, and scholarly potential.

All final candidates for admission will be required to participate in the following:
A. An interview with the Faculty Selection

Committee.
B. Writing sample (in English). Candidates will need to write a reaction paper on site. A rubric will be available in advance so applicants will know how the sample(s) will be reviewed.
Note to Applicants: The Doctor of Education (Ed. D. Degree) in Curriculum and Instruction will be with a specialization in Bilingual Studies. Preference will be given to those who can demonstrate a strong background in Bilingual/ESL in the following areas:
Master's Degree
Interview Process
Professional experience
Scholarly accomplishments
Admission will be considered for applicants who do not meet the customary GPA/GRE or other requirements but whose credentials indicate a good probability of success in doctoral study.

To be considered for admission, the student must file a completed admissions packet with the Office of Graduate Studies by March 30, 2007. Final admission to the Doctoral program will be made by a selection committee comprised of School of Education Curriculum and Instruction faculty members. Applicants will be notified June 1, 2007.

The student, upon admission to the program, is assigned to an advisor from the specialization area that the student is applying who has agreed to work with them. Upon acceptance the student becomes a member of the Doctor of Education (Ed. D. Degree) Cohort.

The Cohort is intended to be a cohesive, supportive, interactive group of individuals engaged in intellectual inquiry with each other, their professors, and selected educational practitioners. The courses, seminars, field experiences, and other academic opportunities offered within the program are the vehicles through which this intellectual inquiry takes place. Each member is required to participate in activities and to contribute as a member of this community of scholars. The Cohort proceeds as a group through a sequence of coursework, and research endeavors. Approval of a change from this policy and/or a leave of absence may be made only upon written request of the candidate to the advisor and the Program Director. The Program Director,
with faculty advisor input, reserves the right to approve or disapprove the request.

## Degree Requirements

The components of the doctoral program are as follows:

## 1. Leveling Courses

Prior to entering the proposed doctoral program, all students must have completed a master's program in education or a related field and three graduate semester credit hours in introductory educational research that may be part of the master's program. Other courses to provide needed background may be required upon review and design of the program of study with an advisor.

## 2. Research Courses, 12 SCH

Required: 9 SCH
EDCI 8300 Research Methods in Education
EDCI 8301 Qualitative Research
EDCI 8302 Quantitative Research
Research Elective: $\mathbf{3} \mathbf{~ S C H}$
EDCI 8303 Statistical Analysis in Educational Research
EDCI 8304 Ethnographic Methods
EDCI 8305 Multivariate Analysis in Educational Research

EDCI 8306 Field Methods
EDCI 8307 Program Evaluation
EDCI 8308 Selected Topics in Research
3. Curriculum Core, 21 SCH

EDCI 8320 Advanced Curriculum Instructional Design and Development
EDCI 8321 Adult Learning Strategies
EDCI 8322 Sociological Applications for Education
EDCI 8323 Advanced Models of Teaching
EDCI 8324 Literacy Across the Curriculum
EDCI 8325 Mentoring, Induction and Professional Development
EDCI 8326 Teacher Leadership in Education

## 4. Bilingual Studies Specialization: 15 SCH

 Required 9 SCHEDCI 8340 History, Politics, and Models of Bilingual Education
EDCI 8341 Bilingualism and Second Language Acquisition
EDCI 8342 Content Area Instruction in Bilingual Programs

## Bilingual Studies Electives: 6 SCH

EDCI 8343 Literacy and Biliteracy Development, OR
EDCI 8344 Language Use in Bilingual Classrooms
EDCI 8345 Seminar in Bilingual Studies, OR EDCI 8346 Issues and Assessment in Bilingual/ESL Programs

## 5. Prescribed Electives, 6 SCH

EDAD 7338 The Superintendency
EDAD 7384 Educational, Social Political Problems and the Superintendency
EDAD 7389 Texas Public School Finance
EDAD 7390 Administration of School Facilities
EDAD 7393 Administration of Programs for Special Populations
EDCI 6325 ESL for International and Intercultural Settings
EDCI 6336 Problems in Education (Topics)
EDLI 6301 Foundations of Language and Literacy EDLI 6310 Beginning and Developing Literacy EDLI 6340 Child and Adolescent Literature EDLI 6350 Language Arts
EDEC 6301 Major Theories in Early Childhood Education
EDEC 6302 Instructional Planning/Curriculum
Development for the Early Childhood Classroom
EDEC 6307 Emergent Literacy in Early Childhood Education
EDEC 6310 Problems in Early Childhood Education
6. Dissertation, 12 SCH

EDCI 8380 Thematic Dissertation Seminar I
EDCI 8381 Thematic Dissertation Seminar II
EDCI 8390 Dissertation
EDCI 8391 Dissertation

## Graduate Courses Descriptions

## Curriculum and Instruction

EDCI 8300 Research Methods in Education An in-depth study and analysis of researhc processes that focus on various quantitative and qualitative inquiry strategies including the epistemological differences between the two strategies. Attention is given to formulating the problem statements, posing research questions and hypotheses, devising appropriate research designs, acquiring and summarizing data and appreciating probabilistic thinking. Lec. 3, Cr. 3

## EDCI 8301 Qualitative Research

This course introduces qualitative methods of inquiry and interpretation in educational investigations. Students will examine and compare qualitative research perspectives and epistemologies, and become familiar with the fundamentals of qualitative methods. These will include writing field notes, participation observation, interviewing, and document analysis. Strategies for data analysis will be explored. Prerequisite: EDCI 8300. Lec. 3

## EDCI 8302 Quantitative Research Methods

This course is an introduction to quantitative research methods in education, including survey design, descriptive, experimental, quasi-experimental, correlational, and inferential inquiry. The strengths, weaknesses and uses of inquiry will be the focus of the course. Prerequisite: EDCI 8300. Lec. 3, Cr. 3

EDCI 8303 Statistical Analysis in Educational Research Computer applications, using appropriate statistical software packages, will be used to analyze data relevant to educational research. Prerequisite: EDCI 8302.

## EDCI 8304 Ethnographic Methods

This course develops student's understanding of ethnographic methods of inquiry and interpretation in educational research. Students will examine theoreies and epistemologies underlying forms of ethnography and develop expertise in ethnographic methods. Students will engage in participant observation, writing field notes, and interviewing. Ethics, representation and interpretation will be addressed. Prerequisite: EDCI 8301.

## EDCI 8305 Multivariate Statistical Methods

 A study of the methods and procedures of multivariate data analysis for use in conducting educational research.Prerequisite: EDCI 8302. Lec. 3, Cr. 3

## EDCI 8306 Field Methods

The course will include an in-depth study of the design, data collection, and analysis techniques for field or empirical and non-experimental research. Course assignments will include surveys, observational studies, content analysis, and case studies. Prerequisite: EDCI 8301. Lec. 3, Cr. 3

## EDCI 8307 Program Evaluation

Methods related to planning and implementing evaluation of educational programs will be addressed, including formative and summative evaluation, decisionmaking, program modification, and performance-based models. National standards are examined for assessing the quality of evaluations relative to utility, feasibility, propriety, and accuracy. Prerequisite: EDCI 8300. Lec. 3.

## EDCI 8308 Selected Topics in Research

Group and individual projects in research design, research methodologies, and research execution in response to student needs, interests, and faculty expertise. Course may be repeated once for credit with approval of program director. Prerequisite: EDCI 8300.

EDCI 8320 Advanced Curriculum: Instructional Design and Development
This course includes a variety of approaches used to develop, implement and evaluate curricula. Student projects will include relevant principles, practices, problems, and evaluation of instruction. Lec. 3, Cr. 3

## EDCI 8321 Adult Learning Strategies

A study of learning in adulthood, how to facilitate that learning, and the characteristics of adult learners will be addressed. Particular emphasis will be placed on models, goals, organization, methodology, career development, and evaluation of adult learners in P -16 environments.

EDCI 8322 Sociological Applications for Education A sociological analysis of education as a social institution to include issues of inequality including gender, ethnicity, race, culture, language, religion and politics. Students will examine and critique the relationship between sociological theory and education practice. Lec. 3, Cr. 3

## EDCI 8323 Advanced Models of Teaching

 Social, information processing, personal, and behavioral systems models will be examined, synthesized and applied in this course. Students will engage in research, and projects of teacher effectiveness. Demonstration ofmodels is required. Lec. 3, Cr. 3
EDCI 8324 Literacy Across the Curriculum This course will focus on reading and writing across the curriculum. Emphasis will be placed on research and current classroom implementation. Lec. 3, Cr .

EDCI 8325 Mentoring, Induction, and Professional Development
Research and models of mentoring, induction, and professional development will be explored. Local, state, and national programs will be analyzed in terms of meeting the needs of adult learners, effecting change, and long term instructional improvement. Lec. 3, Cr. 3

EDCI 8326 Teacher Leadership in Education Focus on the theoretical and practical knowledge base in teacher leadership and the skills and processes needed for school and program improvement with emphasis on leadership for instruction and learning to meet the needs of a diverse community of learners. Lec. 3, Cr. 3

EDCI 8340 History, Politics, and Models of Bilingual Education
Historical, theoretical, and legal foundations of bilingual/
ESL education, including the evolution of program models will be investigated. Lec. 3, Cr. 3

EDCI 8341 Bilingualism and Second Language Acquisition
Theories and research in bilingualism, multiculturalism, and second language acquisition will be addressed. Specific emphasis will be given to the linguistic, cognitive, and motivational factors in language acquisition.

EDCI 8342 Content Area Instruction in Bilingual Programs
This course studies the rationale, theory, and research that supports content-based instruction in bilingual education. Student projects will include dual language and ESL research and practice.

## EDCI 8343 Literacy and Biliteracy Development

 This course is taught in Spanish, reviews literacy practices in bilingual education and addresses theory and research related to the develolpment of biliteracy. Students explore literacy in its broader sociocultural context and review the history of the teaching of reading and writing in both Spanish and English. Lec. 3, Cr. 3EDCI 8344 Language Use in Bilingual Classrooms Students will examine and compare the linguistic
structures of Spanish and English, including phonology, morphology, and syntax. Students will analyze discourse patterns in bilingual education such as dual language and ESL. Lec. 3, Cr. 3

EDCI 8345 Seminar in Bilingual Studies
The focus of this course will include such issues as assessment, advocacy, cultural studies, language policies, language planning, and bilingual education. Lec. 3, Cr. 3

## EDCI 8346 Issues and Assessment of Bilingual/ESL Programs

Students will be provided with the knowledge and strategies to evaluate Bilingual/ESL Programs, related materials, methods, and assessments. It addresses a number of issues in the assessment of English language learners, including purpose, validity, reliability, and bias. It also reviews guidelines for appropriate test selection and use. Lec. 3, Cr. 3.

## EDCI 8380 Thematic Dissertation Seminar I

Students with related interests will work with faculty to study a curriculum issue. The class culminates in a unique set of complementary dissertation questions. Students will complete online human subjects training, a dissertation proposal draft and a literature review draft.

EDCI 8381 Thematic Dissertation Seminar II
Students with complementary areas of interest will work collaboratively with faculty from their field to expand their knowledge of the subject and to continue the dissertation process. The seminar culminates with the successful proposal defense and "Human Subjects" approval. Lec. 3, Cr. 3

## EDCI 8390 Dissertation

Candidates will prepare a prospectus for approval by disseration committee. Candidates will prepare protocol for review and approval by Institutional Review Board. Permission of advisor is required to enroll in this course. Prerequisite: EDCI 8381. Lec. 3, Cr. 3.

## EDCI 8391 Dissertation

Candidates enrolled in this course will work on their dissertation toward completion. Candidates may enroll in this course more than once. Permission of their advisor is required to enroll in this course. Prerequisite: EDCI 8390

## School Specialties

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Graduate Faculty

Michelle H. Abrego, Assistant Professor
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Olivia Rivas, Associate Professor
Janet Shefelbine, Assistant Professor
Andrés N. Vallado, Associate Professor
Selma Yznaga, Assistant Professor
Manuel X. Zamarripa, Assistant Professor

## M.Ed. - Counseling \& Guidance 48-Hour Thesis/Non-Thesis Program

 Professional Counselor Certification - All-Level The Counseling and Guidance Program prepares qualified counselors who can work with diverse populations in a variety of settings. The program promotes the development and application of counseling and research skills applicable to the role of the school/professional counselor. The program also focuses on personal growth, the development of ethical behavior and professionalism, and a commitment to provide the best possible education in counseling services to graduate students.The curriculum of the program is for the preparation of school counselors and meets criteria of the Texas State Board for Educator Certification for endorsement as a school counselor.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for

Unconditional Admission for Master's degree seeking students in Counseling and Guidance are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified but with other strengths are also encouraged to apply. Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Oral Interview

Students are required to participate in an Oral Interview, after completion of or during the semester they are completing EDCI 6300, EPSY 6360, EPSY 6362, and EPSY 6363. The oral must be taken prior to completing 15 semester hours of coursework. The Oral Interview is an evaluative and diagnostic activity conducted by program faculty to assess student work and progress in the program. Interviews are held each Fall and Spring semester at times and locations announced in classes and posted on bulletin boards in the School of Education Annex Building. Students may not be allowed to enroll the following semester if they do not successful complete the Oral Interview.

## Degree Requirements

COUN 6310 Introduction to Guidance and Counseling
COUN 6313 Personal Growth
COUN 6301 Intro to Research Methods in Counseling
EPSY 6304 Human Growth and Development
COUN 6345 Career Counseling
COUN 6314 Psycho-Educational Assesment
COUN 6364 Multicultural Counseling
COUN 6327 Theories of Psychotherapy
COUN 6328 Techniques of Psychotherapy
COUN 6368 Group Counseling
COUN 6361 Intro to Marriage \& Family Therapy
COUN 6349 Child and Adolescent Counseling

COUN 6365 Practicum (after 30 hrs )
COUN 6344 School Counseling and Guidance
6 Hrs of Electives or 6 Hrs of Thesis
EPSY 6302 Advanced Educational Psychology
EPSY 6311 Advanced Child Psychology
EPSY 6341 Advanced Adolescent Psychology
PSYC 6313 Abnormal Psychology
COUN 6342 Topics in Counseling and Guidance
COUN 6305
COUN 6347
Group Dynamics
COUN 6351
Crisis Counseling Abuse Counseling
COUN $6367 \quad$ Foundations of Community and

Agency Counseling
COUN $6100-6105$ 1-Hour Seminars
EDCI 7300 \& 7301 Thesis
Other Approved Electives

A comprehensive examination is required. The TExES
in Counseling is required for students pursuing
Professional School Counselor Certification.

## M.Ed. - Counseling \& Guidance Community Counseling Option 48-Hour Thesis/Non-Thesis Program

The Community Counseling option in the Master of Education degree in Counseling and Guidance is designed to prepare individuals for direct entry into or advancement in counseling and related positions in a variety of public or private counseling agencies. Typical community programs or agencies include mental health centers, substance abuse programs, marriage and family counseling services. Graduates would also be eligible to apply for state licensure and could enter private practice.
The curriculum for the Community Counseling option contains a 48 semester hour program of didactic courses, skill development activities, and intensive supervised practical and internship experiences, once the student completes all required coursework and certification.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree
seeking students in Counseling and Guidance are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 4.0

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

COUN 6310 Introduction to Guidance and Counseling
COUN 6313 Personal Growth
COUN 6301 Intro to Research Methods in Counseling Human Growth and Development
EPSY 6304
COUN 6345 Career Counseling
COUN 6314 Psycho-Educational Assessment
COUN 6364 Multicultural Counseling
COUN 6327 Theories of Psychotherapy
COUN 6328 Techniques of Psychotherapy
COUN 6368 Group Counseling
COUN 6361 Intro to Marriage \& Family Therapy
COUN 6365 Practicum (after 30 hrs)
COUN 6369 Internship I
COUN 6370 Internship II
PSYC 6313 Abnormal Psych

## 6 Hrs of Electives or 6 Hrs of Thesis

COUN 6344 School Counseling and Guidance
COUN 6342 Topics in Counseling and Guidance
COUN 6305 Group Dynamics
COUN 6347 Substance Abuse and Counseling
COUN 6349 Child and Adolescent Counseling
COUN 6351 Crisis Counseling
COUN 6367 Foundations of Community and Agency Counseling
COUN 6100-6105 1-Hour Seminars
EDCI 7300 \$ 7301 Thesis
Other Approved Electives

# Graduate Course Descriptions 

## Counseling

COUN 6100-6105 Seminar in Counseling and Guidance
Through a series of six steps, develops skills related to helping professions. Primarily for in-service training with counselors and teachers. Prerequisite: Permission of instructor. Lec 1, Cr 1

## COUN 6301 Introduction to Research Methods in Counseling

Introduction to research methods and statistical analysis in counseling. Emphasizes data-gathering techniques in social and behavioral sicence databases; critical review of literature used in clinical assessment, intervention and evaluation; plannind and design of research proposal; and instruciton in APA style. Lec. 3, Cr. 3

COUN 6305 Interpersonal Group Dynamics This course provides an overview of interpersonal process and the field of group dynamics. It is designed to develop the individual's ability to understand and integrate various properties of group and interpersonal relationships into a personal and professional framework. This course cannot substitute for the Group Counseling for the Guidance \& Counseling majors. Lec 3, Cr 3

COUN 6310 Introduction to Guidance and Counseling
Philosophy, principles, and current practices of pupil guidance. Pupils' social, emotional, intellectual and attitudinal dimensions are explored. Group guidance and individual counseling techniques that apply in public schools are studied through lectures, discussions and class participation. This course also introduces the student to the field of counseling and guidance, as well as the major theories of counseling. The student will develop an awareness of the guidance services and the role identity of the counselor. Knowledge of the development of counseling and the present state of the profession will be acquired. The students will understand the importance of personal qualifications and professional preparation standards for counselors. Students will begin to evaluate the self in relation to these qualifications and standards. The course also presents an overview of the purposes and objectives of professional organizations. Also included in the course is an in-depth study of ethical standards and legal issues
pertaining to the counseling profession. Lec 3, Cr 3
COUN 6313 Personal Growth
Discussions and practical application of group dynamics within a framework of group therapy.

COUN 6314 Psycho-educational Assessment I This course explores the theory and techniques of administering, scoring, and interpreting educational and psychological tests. Includes test selection, administration, and the dynamics of test interpretation to enable the counselor to synthesize, integrate, and evaluate appraisal data for use in guidance and counseling. In the last segment of the course, students will practice taking, administering and interpreting a variety of educational and psychological tests. Prerequisite: COUN 6301 Lec 3, Cr 3

## COUN 6327 Theories of Psychotherapy

 A survey of prominent theories in psychotherapy and counseling. Specialized approaches such as group therapy, play therapy and family therapy will be studied. Prerequisite: COUN 6310, COUN 6313 Lec 3, Cr 3COUN 6328 Techniques of Psychotherapy Primary focus is on techniques and interviewing skills utilized during counseling sessions. In addition, this course addresses how these techniques are applied to special topics and issues such as career counseling, group counseling, and family counseling. Prerequisite: COUN 6310, COUN 6313, can be taken concurrently with COUN 6327. Lec. 3 Cr. 3

COUN 6342 Topics in Counseling and Guidance A course involving study in topics related to counseling and guidance. This course may be repeated when topic varies. Lec 3, Cr 3. Prerequisite: Approval of Graduate Advisor

COUN 6344 School Counseling and Guidance Students will learn the essential roles and responsibilities of school counselors as they relate to planning, implementation and evaluation of counseling and guidance programs. Students learn research-based practices in school counseling. Ethical, legal, and multicultural issues are emphasized. Prerequisites: COUN 6310. Lec 3, Cr 3

COUN 6345 Career Counseling
A survey and analysis of the processes of assisting people to choose, prepare for, enter, and progress in an occupation. The course trains leaders who can help people make decisions and choices in planning a future
and building a career. Lec 3, Cr 3
COUN 6347 Substance Abuse Counseling
This course will prepare individuals to counsel drug users, addicts and family members using various preventive strategies and treatment regimes. Includes instruction in outreach; patient education; therapeutic intervention methods; diagnostic procedures and addiction symptomology. Prerequisite: COUN 6327. Lec 3. Cr 3

COUN 6349 Child and Adolescent Counseling This course is an introduction to counseling theories and techniques applied to children and adolescent. Appropriate developmental and cultural issues will be presented. The course is designed to help students become more knowledgeable about current research and approaches for working with this population. Prerequisite: COUN 6327 and COUN 6328. Lec. 3, Cr 3.

## COUN 6351 Crisis Counseling

The course provides an overview of the psychology of crisis and contemporary theory and practice of crisis intervention. Special emphasis is given to basic features of normative and extreme psychological reactions to crisis and trauma, and the process of successful crisis resolution counselors and emergency first-responders actively promote. Prerequisite: COUN 6327. Lec 3, Cr 3.

COUN 6361 Introduction to Marriage and Family Therapy
This course introduces students to the study of individual and family development, family dynamics, interpersonal relationships and marriage and family systems. The course will include selected theories, methods, and techniques of marriage and family therapy with particular emphasis on multicultural, legal and ethical issues in the practice of marriage and family counseling. Prerequisite: COUN 6310, 6327. Lec 3, Cr. 3

COUN 6364 Multicultural Counseling This course will provide an understanding of the characteristics and needs of culturally diverse clients. The course will include issues related to ethnic groups, gender, family systems, differing lifestyles, and the impact of social, political, and economic factors on specific populations. Techniques for counseling culturally diverse populations will also be covered.
Prerequisite: COUN 6310. Lec 3, Cr 3
COUN 6365 Counseling Practicum I
A study of selected counseling theories and supervised experience in individual counseling. Cases assigned off campus in schools and community agencies. This course
must be taken within last nine hours of program. Prerequisites: After 30 hours in Counseling and Guidance, including COUN 6327 and 6328 Lec 3, Cr 3

## COUN 6367 Foundations of Community and Agency Counseling

This course helps students gain knowledge and understanding of community counseling issues including historical foundations, the role and function of the community counselor, and working with specific populations. The administration and function of community counseling agencies are studied with emphasis on the ethical issues confronting various agencies. Prerequisite: COUN 6327, COUN 6364. Lec 3, Cr 3

COUN 6368 Group Counseling
This course develops an understanding of group processes, theories and techniques. Demonstrated competence in this knowledge and in applying group procedures will be required.
Prerequisites: COUN 6327 and 6328 Lec 3, Cr 3

COUN 6369 Counseling Internship I
Supervised internship in counseling in an approved agency and/or school setting. Prerequisites: COUN 6365. Lec. 3, Lab 10, Cr. 3

COUN 6370 Counseling Internship II Supervised internship in counseling in an approved agency and/or school setting. Prerequisites: COUN 6369. Lec. 3, Lab 10, Cr. 3

## Educational Psychology

EPSY 6302 Advanced Educational Psychology
A research approach to teaching and learning. Human learning, conditions for effective learning, interference with learning and behavioral objectives will be emphasized. Prerequisite: $\operatorname{EDCI} 4302,4303$ or equivalent. Lec 3, Cr 3

EPSY 6304 Human Growth and Development Advanced study in the application of life-span developmental theories to human behavior, learning and personality. Includes understanding the nature and needs of people at all developmental levels from prenatal through old age. Lec 3, Cr 3

EPSY 6311 Advanced Child Psychology
This is an advanced study of children from conception to
puberty, or from the preschool through the elementary level, with emphasis on the roles played by maturation and learning. The course includes a study of recent research dealing with theories of cognitive unfolding and personality integration.
Prerequisite: EDCI 4302 or 4303 . Lec 3, Cr 3
EPSY 6315 Psycho-Educational Assessment for Diagnosticians
Each student will experience performance-based training on the administration, scoring and interpretation of the basic, individually administered "intelligence" or "ability" assessment procedures currently in use in the public school, e.g., Wechsler scales, Stanford Binet 4, WoodcockJohnson (Cognitive), and other selected specialty procedures/tests. Bilingual students will also master the Spanish versions when appropriate. Comprehensive case studies and the dissemination of this information through diagnostic report formats will also be covered. Lec 3, Cr 3

EPSY 6341 Advanced Adolescent Psychology The history and systems of adolescent psychology. Modern theories and current research in learning and pupil motivation, especially in relation to various aspects of the educational process. Lec 3, Cr 3

EPSY 6362 Theories and Techniques in Counseling A survey of psychotherapy, comparing the contributions of psychoanalysis, nondirective therapy and behavior therapy. Specialized approaches such as group therapy, play therapy and family therapy will be studied. Local facilities using a variety of therapeutic techniques will be visited. Prerequisite: EPSY 6360 and instructor's consent. Lec 3, Cr 3

## M.Ed. - Special Education 36 to 39 Hour Thesis/Non-Thesis Program

The major in special education offers two options for graduate students: Option I offers a balanced curriculum in the advanced study of the special education field with a focus on the bilingual child. Candidates will develop knowledge and skills in the theory, research and practice of special education so as to become master special education teachers or to serve as consultants, trainers, and/or curriculum directors for other teachers, support personnel or parents. Option II offers advanced study of non-discriminatory assessment and methods of remediation of special needs children, with a focus on the bilingual child. Candidates will develop
knowledge and skills in administering standardized and non-standardized assessment instruments as well as the interpretation of test data. Candidates will become skilled in diagnostic procedures, and knowledgeable on relevant laws. Candidates will learn about remediation needs of school age children, and conducting mandatory meetings with parents and other school personnel.
Students in both options will gain knowledge and develop skills in the following program elements:

- normal and abnormal child development
- major issues and trends within special education
- historical and philosophical foundations of special education
- legal aspects of special education
- perspectives of leaders in the field
- nonbiased testing and evaluation techniques
- language acquisition issues relevant to border population
- remediation and intervention strategies
- curriculum, instruction and classroom management in special education, and
- the application of assistive technology in the assessment and instructional process.
Courses in both options are sequenced with prerequisites and must be taken in the order listed (Foundations Courses, Core Courses and finally Advanced Courses). Students are required to meet with their advisor each semester before registering. It is necessary that students take two courses each semester in order to finish within a 2-year period. Students who choose to take one course at a time or students who must dropout of a course in sequence will need 3 or 4 years to complete the program. Since courses are offered only once a year, it is not possible to complete this program in less than 2 years.
A comprehensive written examination is required of all students in both options. An ExCET is required by the state for candidates seeking new certification. It is recommended that students take both exams during their practicum semester.


## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree
seeking students in Special Education are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 3.5
- Students must possess a teaching certificate to demonstrate knowledge of the field of education.
- Students must also demonstrate knowledge of special education, either through state certification in special education, or through 3 hours of undergraduate coursework (i.e. SPED 3390, SPED 4386 , or an equivalent course) with a grade of " $B$ " or better.

Applicants with an undergraduate GPA of at least 2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.

## Degree Requirements

## Required Course Sequence (36): Option I-Generic Special Education

Foundation Courses:
EDCI 6300 Introduction to Research
SPED 6301 Psychology of the Exceptional Child
SPED 6303 The Bilingual Child with Exceptional Needs
*A foundation elective from minor
Core Courses:
SPED 6305 Measurement and Test Interpretation
SPED 6302 Educating Children with Learning and Behavior Problems
SPED 6307 Educating Children with Mental Retardation
*A core elective from minor
Advanced Courses:
SPED 6306 Selected Topics in Special Education (May be taken twice)
SPED 6309 Diagnosing Academic Problems
*Two advanced courses from minor (or 6 hours of thesis, which must be successfully defended to his/ her Thesis Committee)
*Electives may be chosen in one of these related fields: Educational Administration, Counseling, or Elementary Curriculum and Instruction_. These courses could apply toward a temporary certificate in the minor. Students must speak with an advisor from the chosen minor and follow the preferred sequence of courses.

## Required Course Sequence (39): Option IIEducational Diagnostician Foundation Courses:

EDCI 6300 Introduction to Research
SPED 6301 Psychology of the Exceptional Child
EPSY 6304 Human Growth and Development
SPED 6303 The Bilingual Child with Exceptional Needs

## Core Courses:

SPED 6305 Measurement and Test Interpretation
SPED 6302 Educating Children with Learning and Behavior Problems
SPED 6307 Educating Children with Mental Retardation
SPED 6306 Selected Topics in Special Education Advanced Courses:
EDLI 6330 Literacy Issues and Instruction for Special Programs
SPED 6309 Diagnosing Academic Problems
EPSY 6315 Psycho-Educational Assessment for Special Populations**
Practicum:
SPED 6600 Practicum in Diagnostic and Intervention Procedures***
There are no electives in this option. Both the Comprehensive Examinations and ExCETs should be scheduled during the practicum semester.
**EPSY 6315 is intended as the last course before the practicum. Students must speak with their advisor each semester in order to maintain the appropriate sequence of courses.
*** Students enrolling in SPED 6600 must have completed all other courses in the program.

## Graduate Course Descriptions

## Special Education

SPED 6301 Psychology of the Exceptional Child This course will discus methods for understanding
children with exceptional differences. The course will survey the teaching/learning process of special populations. Characteristics of various exceptionalities and strategies that enhance student learning, are an integral part of the course. Ideally, first course taken must be taken in the first 12 semester hours. Lec 3, Cr 3

## SPED 6302 Educating Children with Learning and Behavior Problems

This course will include etiology, characteristics and conditions of children with learning and behavior problems. Methodology and instructional techniques will be studied and applied to individual and classroom settings. Lec 3, Cr 3

SPED 6303 The Bilingual Child with Special Education Needs
This course will examine the needs of the bilingual, special education child. The course will provide an understanding of the problems and strengths of a bilingual child with special needs and explore effective strategies for instruction. Lec 3, Cr 3

SPED 6305 Measurement \& Test Interpretation This course emphasizes application of basic statistical procedures, item analysis, and norming of standardized, individually administered tests. Will also cover basic knowledge and information pertinent to the interpretation of selected, commonly used, individually administered, standardized as well as informal tests/ instruments in terms of their respective instructional implications. Lec 3, Cr 3

SPED 6306 Selected Topics in Special Education This course is designed to explore trends, issues, best practices, and current literature in the areas of special education. Topics will vary. Course may be repeated once for credit when the topic varies.
Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

SPED 6307 Educating Children with Mental Retardation
This course is designed to examine the problems of mental retardation and the theory and techniques for interventions. Emphasis will be placed on psychological aspects of persons with mental retardation and community work programs which can assist them in becoming active members of society. Lec 3, Cr 3

SPED 6309 Diagnosing Academic Problems This course will include instruction for administering and interpreting norm referenced, criterion referenced, and curriculum based individual tests of academic
achievement. Models of unbiased assessment of children from diverse cultures, socioeconomic, and linguistic backgrounds will be examined. Participants will be taught to analyze data and document results and recommendations in written reports. Lec 3, Cr 3

## SPED 6600 Practicum in Diagnostic and Intervention Procedures

This course will provide field experience in implementing psychoeducational individualized assessment. In addition to administering standardized measures, participants will be instructed on procedures relating to informal assessment, student observation, collecting/recording data, and interviewing parents, teachers, and students. Participants will be trained to recommend and activate instructional and behavioral interventions. Consultations/ collaboration methods and curricular modifications procedures to assist students with disabilities will be reviewed. Participants will practice individualized assessment procedures data interpretation and report writing. Lec 6, Cr 6

## M.Ed. - Educational Leadership 36-Hour Program

The educational administrator's program is designed to produce change-oriented administrators who can provide administrative leadership and are competent in site-based school management, organization, school law, finance, and contemporary personnel practices. Upon completion of the degree and the additional 15 semester hours, the student may earn the Principal Certificate. An oral interview and written comprehensive examination are required.

## Admission Requirements

Evidence of academic achievement and potential for advanced study and research is required for graduate admission. Specific criteria for Unconditional Admission for Master's degree seeking students in Educational Administration are:

- Undergraduate GPA of 3.0
- GRE Verbal score of 400
- GRE Quantitative score of 400
- GRE Analytical score of 3.5
- Students must possess a teaching certificate to demonstrate knowledge of the field of education.
Applicants with an undergraduate GPA of at least
2.5 and/or GRE scores lower than those specified are also encouraged to apply as all completed applications are considered for admisison.
Notification of decisions on graduate admission is made by the Office of Graduate Studies based on the admission criteria and recommendation of the academic department. Information related to application procedures and deadlines is available through the Office of Graduate Studies.


## Degree Requirements

Required Courses: 36 hours
Block One: 6 hours
EDCI 6300 Introduction to Research
EDLR 6384 Introduction to Educational Leadership
Block Two: $\mathbf{1 2}$ hours
EDLR 6338 The Principalship
EDLR 6385 Public School Law
EDLR 6394 Curriculum Leadership for School Improvement (new course)
Choice of:
EDCI 6330 Curriculum in the Elementary
School or
EDCI 6331 Curriculum in the Secondary School
EDCI 6300 and EDLR 6384 are prerequisites to Block 2 courses
Block Three: $\mathbf{1 2}$ hours
EDLR 6337 Administration of Special Instruction Programs
EDLR 6386 Administration of Pupil Personnel Services
EDLR 6393 Administration of School Staff Personnel

## Choice of:

EDLR 6336 Topics in Educational Leadership, or
C \& I Elective
EDCI 6330 or 6331, EDLR 6338, EDLR 6385, EDLR 6394 are prerequisites to Block 3 courses.

## Block Four: 6 hours

EDLR 6389 Administration of School Business Services
EDLR 6398 Internship for Principals I
EDLR 6336, C \& I Elective, EDLR 6337, EDLR 6386 and EDLR 6393 are prerequisites for Block 4 courses.

## Professional Principal Certification for Students with a M.Ed. in Educational Leadership

Students with a Master's Degree in an education field other than Educational Leadership may seek certification through the completion of a deficiency plan. Please see the next page for theses deficiency plan requirements.

EDLR 6370 and EDLR 6397 are required of all students seeking principal certification who already hold a Master's Degree in Educational Leadership. These two courses are the state of Texas requirements for students seeking to be certified as teacher appraisers. Educational Service Centers in the state of

Texas also offer these two courses for certification of teacher appraisers. Our students may choose to take the courses through the Regional Education Service Center and bring us there completion certificates in order to meet this requirement.

EDLR 6370 Instructional Leadership Development (Prerequisites: EDLR 6398)

EDLR 6397 Analysis of Teaching Behavior (Prerequisites: EDLR 6370)

## Probationary Principal Certificate

Current Texas regulations permit issuance of a probationary principal certificate to persons being employed as administrators prior to their completing the requirements for full certification.

The probationary certificate is valid for one year but can be reissued for two additional years provided this individual is enrolled in an appropiate administrative position Mentoring and supervision are required for the Probatinary Principal Certificate.

To be eligible for the Probationary Principal Certificate a person must:
Be employed by an accredited Texas public or private school in a position appropiate for the certificate sought.
A). Have completed a minimum of a bachelor's degree from an accredited university.
B). Clear admission into the graduate school and the

## Principal Program

C). Two years of creditable classroom teaching experience
D). Have a valid Texas teaching certificate
E). Completed a minimum of eighteen semester hours of graduate coursework in educational leadership
F). Qualify and be continously enrolled in a supervised intership each semester while employed under the Probationary Certificate
G). File required forms with the UTB Certification office/Texas education Agency and pay the required fee (\$52/year) for issuance of the Probationary Principal Certificate. A student applying for such certificate will be issued a letter and a statement of eligibility to carry to the employing school district and returned to the Teacher Certification Office.

## Professional Superintendent Certificate Program

The Professional Superintendent Program is designed to prepare individuals with needed skills and abilities to focus effectively on creating schools for a rapidly changing modern multicultural society. The program has been planned for individuals who have demonstrated administrative skills, who exhibit leadership
potential, and who desire to work in central office administrative positions.

## Admission Requirements

Admission to the Professional Superintendent Program will be determined by the Department Admissions Committee for the Superintendent Certificate based on the following:

- Submission of admittance form
- Master's degree
- Professional Mid-Management Certificate
- Minimum GPA of 3.6 based on all graduate courses
- Submission of recent GRE scores.
- Portfolio of professional experience (to be developed in consultation with Faculty Advisor)
- Three letters of reference from persons who have supervised applicant or have recent knowledge of applicant's professional performance
- Letter of recommendation from Superintendent, Deputy Superintendent or equivalent of applicant's
employing, or last employing, school district
- Approval by the Department Admissions Committee for the Superintendent Certificate following the oral interview.


## Probationary Superintendent Certificate

Current Texas regulations permit issuance of a Probationary Superintendent certificate to persons employed as administrators prior to their completing the requirements for full certification. The probationary certificate is valid for one year but can be reissued for two additional years provided this individual is enrolled in an appropriate administrative position.
Mentoring and supervision are required for the Probationary Superintendent Certificate.
To be eligible for the Probationary Superintendent Certificate a person must be employed or pending employment as a superintendent (verified by completion and return of a Statement of Eligibility form). Continuous enrollment in the superintendency program is required for the probationary certificate:

- Hold a Master's Degree
- Hold a Professional Principal Certificate
- Have admission to the Superintendent Certificate Program
- Complete six semester hours at UTB from a list of courses offered for the Superintendency.

A student applying for such certificate will be issued a letter and a statement of eligibility to carry to the employing school district to apply for the position. The statement of eligibility will need to be signed by the employing school district and returned to the Teacher Certification Office. The required fee will need to be paid to the Texas Education Agency for issuance of certificate.

## Professional Superintendent Certificate

To be eligible for recommendation for the Professional Superintendent Certificate a student must complete the courses ( 15 hours) as outlined below, pass the ExCET for the Superintendent Certificate (ExCET Test 64), complete the application for certification form and furnish a money order or cashier's check for the required fee.

## Required courses: 6 hours

EDAD 7338 The Superintendency EDAD 7398 Internship for the Superintendent
Electives: Select 9 hours from the following
EDAD 7384 Educational, Social, Political Problems for the Superintendency
EDAD 7389 Texas Public School Finance
EDAD 7390 Administration of School Facilities
EDAD 7393 Administration of Programs for Special Populations

## Principal Certification Plan (Deficiency Plan)

Certification seeking students who complete the required coursework in sequence as specified below in Blocks One, Two, and Three and who also meet state certification requirements will be eligible for Texas Principal Certification. Students who complete the required coursework but do not meet certification requirements will take up to an additional six semester credit hours of coursework as outlined in Block Four**.

Block One: 9 semester credit hours
EDLR 6385 Public School Law
EDLR 6338 Principalship
EDLR 6394 Curriculum Leadership for School Improvement
Block One courses are prerequisites to Block Two courses

Block Two: 6 semester credit hours
EDLR 6394 Curriculum Leadership for School Improvement
EDLR 6337 Administration of Special Instructional Programs
EDLR 6398 Internship for principals
Block Two courses are prerequisites to Block Three courses.

## Block Three: 9 semester credit hours

EDLR 6370 Instructional Leadership Development
EDLR 6397 Analysis of Teaching Behavior
Chooses one elective from the following:
EDLR 6386 Administration of Pupil Personnel Services -or-
EDLR 6393 Administration of School Staff Personnel -or-
EDLR 6389 Administration of School Business Services
Block Three courses are prerequisites to Block Four
courses.
Block Four: 6 semester credit hours
(Required of students who did not meet state certification requirements**)
Choose two electives from the following:
EDLR 6386 Administration of Pupil Personnel Services -or-
EDLR 6393 Administration of School Staff Personnel OR
EDLR 6389 Administration of School Business Services Block Three courses are prerequisites to Block Four courses. Note: Modifications may be made pending advisor approval.

## Graduate Course Descriptions

## Educational Leadership

EDLR 6336 Topics in Educational Leadership This course presents and examines current topics in public school administration. Topics will focus on current best practices in school administration. Examples of topics include, but are not limited to, grant writing, conducting hearings for student discipline cases, teacher terminations, curriculum issues, and developing effective school public relations. This course may be repeated once when the topic changes. Prerequisites: EDLR 6338, EDLR 6385, EDLR 6394 and EDCI 6330 or 6331. Lec 3, Cr 3

EDLR 6337 Administration of Special Instructional Programs
Emphasis is placed on the administration of special elementary and secondary school programs including career, vocational, special, compensatory, bilingual, and gifted and talented education. Prerequisites: EDLR 6338, EDLR 6385, EDLR 6394 and EDCI 6330 or 6331 . Lec 3, Cr 3

## EDLR 6338 The Principalship

A study of the unique functions of a principal in administering elementary, middle, junior and secondary schools. Special emphasis is on the principal's leadership in management and instruction. Prerequisites: EDLR 6384 and EDCI 6300 Lec 3, Cr 3

EDLR 6370 Instructional Leadership Development Overseeing and coordinating the instructional program with state mandates (i.e. TEKS, TAKS, PDAS), utilizing systems to make decisions, utilizing the continuous improvement process, utilizing the ILD's four critical elements in understanding and making decisions about teaching and
learning. Includes credit for TEA's required Instructional Leadership Development, a prerequisite to EDAD 6397. Prerequisite: EDLR 6398. Lec. 3, Cr. 3

EDAD 6381 Problems in Organization and Administration of Public Schools Research, readings and study of the organization and administration of elementary and secondary schools; analysis of the role of middle management personnel in improving instruction; analyses of administrative functions and leadership styles are emphasized.

EDLR 6384 Introduction to Educational Leadership An overview of public school administration introducing such topics as processes of organization and administration of instructional staff, personnel, finance, leadership roles, curriculum, physical plant operation, maintenance, and legal aspects. Lec 3, Cr 3

EDLR 6385 Public School Law
Constitutional provisions, statutory laws, court decisions, torts and regulations governing public schools with special reference to their influence upon the administration and function of public schools. Prerequisite: EDLR 6384 and EDCI 6300. Lec 3, Cr 3

EDLR 6386 Administration of Pupil Personnel Services This course focuses on all areas of pupil personnel with special emphasis on student discipline management. Other areas such as health services, food services, counseling, PEIMS, facilities management, etc. will be explored. Prerequisite: EDLR 6338, EDLR 6385, EDLR 6394, and EDCI 6330 or 6331 . Lec $3, \mathrm{Cr} 3$

EDLR 6389 Administration and Organization of School Business Services
Principles and procedures of developing and managing a sound financial plan for local school districts with emphasis on Texas Educational Agency financial and accounting procedures. Emphasis on school law, taxation, property management and maintenance, school transportation and managing business personnel. Prerequisite: EDLR 6336 or C\&l elective, EDLR 6337, EDLR 6386, EDLR 6393. Lec 3, Cr 3

EDLR 6393 Administration of School Staff Personnel Analysis of personnel organization, administration and function in school systems; relationships of various school positions; a study of ethics, welfare, security and professional improvement. Prerequisite: EDLR 6338, EDLR

6385, EDLR 6394 and EDCI 6330 or 6331 . Lec 3, Cr 3

## EDLR 6394 Curriculum Leadership for School Improvement

Concepts of curriculum and curriculum issues with emphasis focused on literacy and numeracy will be explored and instructional leadership models for schools will be developed. Specific attention will be given to the creation of campus learning environments that are conductive to all student's learning and the professional growth of staff. Prerequisite: EDCI 6330 and EDLR 6384.

## EDLR 6397 Analysis of Teaching Behavior

Methods of gathering, analyzing and interpreting data in leadership conferences with student teachers, interns and teachers; applying technology in evaluating skills to show effective behavior. Required of all principals. Emphasis is placed on the Texas Teacher Appraisal System (TTAS). A pass/fail grade will be assigned. Prerequisite: EDLR 6370.

EDLR 6398 Internship for Principals I
A field-based course in which students receive practical experience as an intern principal/assistant principal/ curriculum specialist position in an area public school. Students must take the internship fall/spring, spring/ summer or summer/fall. Two semesters of any combination are required. A pass/fail grade will be assigned. Prerequisite: EDLR 6336 or C \& I Elective, EDLR 6337, EDLR 6386, EDLR 6393. Lec 3, Cr 3

## EDLR 6399 Internship for Principals II

A field-based course in which students receive practical experience as an intern principal/assistant principal/ curriculum specialist position in an area public school. Students must take the internship fall/spring, spring/ summer or summer/fall. Two semesters of any combination are required. A pass/fail grade will be assigned. Prerequisite: Must be taken in the last 12 hours of the certificate with advisor approval. Approval of Department.

## Educational Administration

## EDAD 7338 The Superintendency

Using field-based applications, as appropriate, to study the unique roles, duties, and responsibilities of the superintendency. Successful students will exhibit competence in strategic planning, collaborative decision making, public information, student activities, community involvement, personnel management, instructional leadership, financial management, board relations, school governance, and other areas of importance to the superintendency. This will be the first course taken for the

## Superintendent's Endorsement.

Prerequisite: Approval of Department Lec 3, Cr 3

EDAD 7384 Educational Social Political Problems and the Superintendency
This course deals with the interrelationships of the local district with other political subdivisions in the community and a study of the impact of power structures upon the district. Professional and nonprofessional organizations, power structures, diverse cultural and ethnic groups, demographic trends, sociological issues, and community expectations are studied to determine their influences upon educational decisions. Prerequisite: Approval of Department Lec 3, Cr 3

## EDAD 7389 Texas Public School Finance

 Participants will engage in advanced studies on the impact of school districts in equity issues, taxation, statutory mandates, district budget preparation and approval, fiscal management, and business operations of school systems. Prerequisite: Approval of DepartmentEDAD 7390 The Administration of School Facilities Candidates will study the roles of the superintendent and board of trustees in developing and implementing finance programs for capital outlay. Topics include the following: communications, planning new building programs, conducting needs assessments, developing educational specifications, selecting and working with architects, maintaining school facilities, and arranging for supervision of construction and installations. Prerequisite: Approval of Department Lec 3, Cr 3

EDAD 7393 Administration of Programs for Special Pop. This course deals with competencies required to administer, from a district-wide perspective, programs for special populations, such as students in special education, at-risk, with limited English proficiency, in gifted and talented programs, and in vocational education. The requirements of state and federal legislation, such as ADA and Section 504, will be reviewed. Cooperation with community agencies, selection and assignment of personnel, allocation of resources, pupil personnel management and other instructional programs will be emphasized.
Prerequisite: Approval of Department Lec 3, Cr 3
EDAD 7398 Internship for the Superintendent This course is designed to provide future superintendents with competence in such areas as instructional leadership, resource management, human resource development, and systematic evaluation through on-thejob experiences under the guidance of an experienced practicing superintendent, assistant superintendent or
other central office administrator and under the supervision of a faculty member of the School of Education, Educational Administration program. Prerequisite: Approval of Graduate Advisor Lec 3, Cr 3

## Additional Courses in Education

EDGE 6301 Educating the Gifted and Talented This course includes a historical survey of the field, definitions, basic terminology, theories, models, state requirements, and characteristics of the gifted and talented. Review and analysis of identification and assessment procedures, models for interactions with gifted persons, and effective program prototypes. Prerequisite: Must be taken as first course in the program. May be taken with EDGE 6302

EDGE 6302 Creativity:Theories, Models and Applications A study of creativity in relation to development of programs for gifted and talented students. Topics include instruments and techniques for identifying creativity, instructional strategies for enhancing creativity, problems of creativity gifted, and evaluation of creative performance and product. Prerequisite: May be taken with EDGE 6301. Lec. 3, Cr. 3

## EDGE 6303 Curriculum Development for Gifted and Talented Learners

This course provides the foundation for the development of differentiated and interdisciplinary curricula for gifted students. Review and analyze curriculum models for gifted students. Other topics include effective teaching strategies for gifted students, curriculum modification, classroom organization, and the teaching of higher level cognitive skills. Prerequisite: EDGE 6301, EDGE 6302

EDGE 6304 Issues and Research in the Social-
Emotional Development of the Gifted and Talented Students will review current research on the affective characteristics, personality traits, and affective growth and adjustment of gifted children. Emphasis on self-concept, career concerns, peer relationships, and family interactions. (This course must be taken with Graduate Advisor approval.) Prerequisite: EDGE 6301, EDGE 6302. May be taken with EDGE 6303. Lec. 3, Cr. 3

EDGE 6319 Practicum in Gifted and Talented Education This course provides a field experience in a gifted and talented program. Students will apply application of knowledge, skills, and competencies from basic courses in a supervised field experience. This practicum may be waived for teachers with two years of successful classroom teaching experience in an approved program for gifted and talented students. Prerequisite: EDGE 6301, EDGE 6302, EDGE 6303 and EDGE 6304. Lec. 3, Cr. 3

## School of Health Sciences

Dr. Eldon Nelson, Dean<br>Life \& Health Sciences Building \#2.404<br>882-5000<br>eldon.nelson@utb.edu

The School of Health Sciences is committed:

- to educate health care personnel in specific areas of need and in sufficient numbers to contribute significantly
- to the improvement of health care in the Rio Grande Valley and surrounding areas,
- to demand the mastery of identified entry level competencies in the respective health careers and the pursuit of academic excellence, and
- to promote career mobility and educational advancement for the students in health sciences.

To carry out the stated purpose, the School plans:

- to develop policies and curriculum that encourage an interdisciplinary approach to health care and lateral articulation in the health sciences,
- to provide state-of-the-art laboratory and classroom facilities and resources to develop skills and competencies,
- to offer students a wide variety of programs in health care sciences,
- to encourage extracurricular activities that provide service to the community and are conducive to the development of social responsibility, and
- to coordinate the continuing professional education offered through Division of Continuing Education and through community resources.


## Graduate Programs

M.S.N in Nursing<br>Nursing Education Certificate<br>Nursing Administration Certificate

$\square$ Nursing

Dr. Katherine Dougherty, Chair LHSB \#2.720 • 882-5071 kdougherty@utb.edu

Graduate Faculty
Penny Bennett-Baird, Assistant Professor Margie C. Chavez, Associate Professor Katherine Dougherty, Associate Professor Edna Garza-Escobedo, Professor Emerita Ava Miller, Associate Professor Eloisa G. Taméz, Associate Professor

## Master of Science in Nursing (M.S.N.)

## 36-41 Hour Program

The School of Health Sciences offers a graduate program of study leading to the Master of Science in Nursing which produces a nursing leader in the areas of public health, nursing education, or nursing administration. The program curriculum is offered in collaboration with The University of Texas Health Science Center Houston School of Public Health and The University of Texas at Brownsville School of Business and School of Education.

## Master of Science in Nursing: Public Health Nursing Option

The public health option is designed to prepare nurses at the master's level for leadership in traditional and nontraditional public health and other health care settings to meet the needs of a changing health care system. . It has been developed to meet professional standards and guidelines of the Texas Board of Nurse Examiners, the National League for Nursing Accreditation Commission, and the American Association of

Colleges of Nursing.

The graduate public health nursing option area of study provides students with a foundation of knowledge and experiences in the following areas: principles of public health and conceptual models of nursing
organization and administration of health services strategies to work with culturally diverse high risk population groups
development and evaluation of health promotion and disease prevention programs
applied research

The graduates will be able to provide:
leadership in administration and supervision of public health programs education and consultation client advocacy, policy analysis and development at the local, state, and federal level core public health competencies, assessment, assurance and policy development

These are evidenced by program outcomes and competency statements. A three-credit field experience will be provided as a graduate project in order to facilitate integration of learning and provide a capstone experience.

## Master of Science in Nursing: Nursing Education Option

The nursing education option will prepare nurses at the master's degree level for educational leadership in teaching traditional and non-traditional nursing programs to meet the needs of a diverse student population. It has been developed to meet professional standards and guidelines of the Texas Board of Nurse Examiners, the National League for Nursing Accreditation Commission, and the American Association of Colleges of Nursing.

The graduate nursing education option area of study provides students with a foundation of knowledge and experiences in the following areas:
principles of nursing education and conceptual
models of nursing
organization and administration of educational programs
strategies to work with culturally diverse nursing education groups
development and evaluation of nursing education programs
applied nursing education research

The graduates will be able to:
participate as a leader in the development and administration of nursing education programs
utilize a variety of teaching strategies and educational resources to facilitate learning in the classroom and clinical areas.
participate knowledgeably in the development, implementation, and evaluation of nursing curricula and nursing programs.
analyze the issues and trends in higher education, and specifically in education, and their impact on the development of nursing education.

## Master of Science in Nursing: Nursing Administration Option

The nursing administration option will developed to prepare nurses at the master's degree level for nursing administration for leadership in traditional and non-traditional health care setting to meet the needs of a changing health care system. It has been developed to meet professional standards and guidelines of the Texas Board of Nurse Examiners, the National League for Nursing Accreditation Commission, and the American Association of Colleges of Nursing.

The graduate nursing administration option area of study provides students with a foundation of knowledge and experiences in the following areas:
principles of nursing administration and conceptual models of nursing organization and administration of nursing organizations and departments strategies to work with culturally diverse nursing groups
development and evaluation of nursing administration
applied nursing administration research

The graduates will be able to:
identify nursing administration's role in strategic planning, resource management and development of supportive practice environment for staff
promote the inclusion of a culturally diverse staff and provide culturally sensitive client care.
apply nursing and organizational theories and strategies to enhance the delivery of quality, costeffective nursing care to clients.
promote an evidence based practice, nursing and interdisciplinary research and educational opportunities for staff.

## Admission

Registered nurses who have an earned baccalaureate degree in a field other than nursing may qualify for application to the MSN program by completing the nursing bridge courses. The following three courses, which are in the Bachelor's of Science in Nursing (BSN) program, will serve as Bridge Courses for the MSN program.

| Number | Credit | Course |
| :--- | :--- | :--- |
| NURS 4610 | 6 | Professional Nursing <br> in the Community |
| NURS 4309 | 3 | Research in <br> Professional Nursing |
| NURS 4612 | 6 | Leadership in <br> Professional Nursing |

Upon successful completion of these three courses, the student will be eligible to apply to the MSN Program. Other criteria for admission are included in the Admission Standards. The bridge courses, required courses in the BSN curriculum are taught by the BSN faculty.

A student must meet all requirements for admission to the Graduate School to be admitted to the MSN program (see Admissions section). In addition, the student must have a GPA of 3.0 for the last 60 hours of undergraduate work, have a BSN from a nationally
accredited school of nursing and be licensed to practice nursing in the state of Texas. The student, electing the Public Health Option, must complete an enrollment form in order to register for the UT School of Public Health core public health courses. Conditional admission may be granted to students according to graduate school policy. Conditions may be placed on students receiving conditional admission, and subsequent registration will be barred if conditions are not met. Conditions will be in relation to individual deficiencies. All conditions must meet the approval of the Admissions Committee of the MSN program. International students must meet all requirements for admission in addition to those of the MSN program (see International Students section).

## Admission Requirements for the MSN Program

To be eligible for admission to the graduate nursing program the following criteria shall be met:
Admission to the UTB Graduate School. The MSN program will accept conditional admission to the graduate school according to the criteria set forth in the categories of admission;
An officially reported Graduate Record Examination (GRE) score;
Two letters of recommendation;
An officially reported transcript of TOEFL scores for foreign students.
An official transcript (in English or translated into English) indicating either an earned baccalaureate degree in nursing from a NLNAC accredited institution; or an earned baccalaureate degree in a area other than nursing plus successful completion of the three baccalaureate nursing bridge courses; Successful completion of an undergraduate statistics course;
Current license to practice nursing in Texas;
Immunizations required by the Texas Department of Health for students in health-related programs.
GPA of 3.0 or higher on a 4.0 scale for the last 60 hours of previous college work.
Criminal Background Check
All student transcripts will be reviewed for currency of science-based coursework. Students with
transcripts demonstrating science-based coursework that is over five years old will be advised of the manner in which they might demonstrate or update their knowledge. Students requiring additional coursework will be assisted in selecting and enrolling in the appropriate course(s) at the University.

## Degree and Graduation Requirements

Each student will be assigned an advisor to assist in preparing the Graduate Program of Study before or during their first semester in the program. Advisors will be available throughout the program of study for guidance. Students must complete all course work prior to graduation. Students who have been suspended may apply for readmission into the MSN program by the procedures outlined in the Academic Probation and Suspension section of the Graduate Catalog. Such applications will be considered on a case by case basis, and readmission will be granted at the discretion of the MSN program admissions committee and the Dean of the School of Health Sciences. Transfer courses from other Graduate Nursing programs will be evaluated on an individual basis for acceptance.

## Curriculum

## MSN Foundation/Core Courses

The MSN Program contains a six course Core Curriculum that all students are required to complete.

| Number | Credit | Course |
| :---: | :---: | :---: |
| NURS 6322 | 3 | Moral \& Ethical Issues in Nursing |
| NURS 6333 | 3 | Research Nursing |
| NURS 6353 | 3 | Community-Based Public Health Nursing Interventions OR |
| NURS 6354 |  | Advanced Community Nursing |
| NURS 6351 | 3 | Nursing Leadership, Theory, \& Health Care Politics in a Changing World |
| NURS 7300 | 3 | Field Experience Masters Project |
| Degree Options |  |  |
| Public Health Nursing Option: |  |  |
| Number | Cred | dit Course |


| NURS 6321 | 3 | Introduction to Public <br> Health Nursing |
| :--- | :--- | :--- |
| NURS 6334 | 3 | Advanced Public Health <br> Nursing |
| PHB 2610 | 4 | Introduction to <br> Epidemiology |
| PHB 1610 | 4 | Introduction to Biometry |
| PHB 7115 | 3 | Health Promotion Theory <br> and Methods I |
| PHB 3720 | 3 | Social Determinants of <br> Health |
| PHB 2110 | 3 | Overview of <br> Environmental Health |
| Total SCH | 23 |  |

Nursing Education Option:

| Number | Credit | Course |
| :---: | :---: | :---: |
| NURS 6363 | 3 | Curriculum Development in Nursing |
| NURS 6464 | 4 | Teaching Roles and Strategies |
| NURS 6365 | 3 | Educational Evaluation in Nursing |
| EDCI 6304 | 3 | Learning and Cognition |
| EDCI 6301 | 3 | Instructional Technology |
| EDCI 6388 | 3 | Socio-Cultural Foundations of Education |
| Total SCH | 19 |  |

Nursing Administration Option:

| Number | Credit | Course |
| :--- | :--- | :--- |
| NURS 6370 | 3 | Nursing Administration <br> Concepts and Theory |
| NURS 6371 | 3 | Health Care Change, <br> Negotiation, and Conflict <br> Resolution |
| NURS 6372 | 3 | Healt Care Finance <br> MANA 6301 <br> MANA 6331 <br> 3 |
| BMIS 6350 | 3 | Hanagement Theory <br> Admin Resources <br> Admistration and |
| Total SCH | 18 | Informatrial Relations Technology <br> for Managers |

## Total Program Hours

The MSN with a Public Health Option contains 41 semester credit hours. The MSN with a Nursing Education Option contains 37 semester credit hours. The MSN with a Nursing Administration Option contains 36 semester credit hours. Students are required to take an elective course of their choice with the approval of the advisor.

## Nursing Education Certificate

The Nursing Education Certificate would be offered to BSN or Graduate prepared registered nurses. A three course sequence would be offered online during the First and Second Summer Sessions. Affiliation agreements with area nurse educator facilities would be obtained for the purpose of providing a pool of preceptors to work with students. Typical students would consist of BSN graduates seeking a teaching certificate to enhance teaching skills and post-masters nurses seeking a teaching career. The nursing education certificate is developed to prepare nurses for educational leadership in teaching traditional and nontraditional nursing programs to meet the needs of a diverse student population.

NURS 6363 Curriculum Development in Nursing (3SCH)
NURS 6464 Teaching Roles and Strategies
NURS 6365 Educational Evaluation in Nursing

## Nursing Administration Certificate

The Nursing Administration Certificate is important for several reasons. Many baccalaureate prepared nurses have careers in nursing administration. Some nurses work in acute care facilities and others work in the community setting or educational administration and leadership. Many of these nurses are masters prepared and other are baccalaureate prepared.

The nursing administration option is developed to prepare nurses at the master's degree level for nursing administration for leadership in traditional and non-traditional health care setting to meet the needs of a changing health care system. It has been developed to meet professional standards and guidelines of the Texas Board of Nurse Examiners, the National League for Nursing Accreditation Commission, and the American Association of Colleges of Nursing.

The graduate nursing administration option area of study provides students with a foundation of knowledge and experiences in the following areas:

- Principles of nursing administration and conceptual models of nursing
- Organizational and administration of nursing organizations and departments
- Strategies to work with culturally diverse nursing groups
- Development and evaluation of nursing administration
- Applied nursing administration research


## Number Course

NURS 6370 Nursing Administration Concepts and Theory
NURS 6371 Health Care Change, Negotiation and Conflict Resolution
NURS 6372 Health Care Finance

## Graduate Course Descriptions

## Nursing

NURS 6321 Introduction to Public Health Nursing The structure and discipline of nursing will be examined, distinguishing Public Health Nursing from other nursing specialties. Purposes, characteristics, and kinds of structures will be explored, with emphasis on theories, models, and conceptual frameworks. The changes in health care delivery and its implications on nursing are explored. Lec 3, Cr 3

NURS 6322 Moral and Ethical Issues in Nursing This course provides a study of ethical issues in nursing. Emphasis is placed_on the influence of moral and ethical positions on behavior and decision making in policy formulation and practice. This course helps the student identify action that reflects amoral or ethical positions in various nursing contexts, understand how moral and ethical beliefs influence behavior, relate selected moral and ethical theories to position-taking, specify a personal position on moral and ethical issues in nursing, and identify the consequences of taking a position. Lec 3, Cr 3

## NURS 6333 Research in Nursing

This course introduces students to the procedures and methods utilized in conducting clinical and epidemiological population based research. The planning and design of research proposals and projects are undertaken. The various types of nursing research are examined; and critical analysis of research articles and research design are stressed. Students prepare research
proposals during the course and focus on problem identification, literature review and analysis, project description and evaluation, and measurement of health care outcomes. The implementation of the students research project is completed in NURS 7400 Field Experience Masters Project. Lec 3, Cr 3

NURS 6334 Advanced Public Health Nursing This course provides an overview of factors related to public health nursing with special emphasis on development of conceptual frameworks for advanced practice. The focus is on national health priorities and assessment strategies. Lec 3, Cr 3

NURS 6343 Nursing and the Politics of Health Care Analysis of social policy from health care formulation to appropriation and allocation of funding (federal, state, local); its impact on health status and on nursing education, research, and service. Lec 3, Cr 3

NURS 6351 Nursing Leadership, Theory and Health Care Politics in a Changing World
This course examines leadership and role theory within the context of nursing and the enactment of the leadership role. The structure and discipline of nursing will be examined with particular emphasis on theories, models, and conceptual frameworks. Changes in health care delivery and implication for health status, nursing education, research and service are explored. This course also involves the process for analysis of social policy from health care formulation to appropriation and allocation of funding (local, state, federal) Lec 3, Cr 3

## NURS 6354 Advanced Community Nursing

In this course students analyze the theory and role of nurses working with aggregates, includeing assessing communities through use of epistemologies methods; defining and prioritizing health problems; and developing proposals for resolution of diagnosed problems. Course content is designed to build on baccalaureate education to further promote critical thinking skills necessary to perform autonomously in community health environments. Students will use the course concepts in a clinical application project. Lec. 3, Cr. 3

## NURS 6452 Public Health Nursing Leadership Practicum

Focusing on the development of knowledge and skills of a specific leadership role within the field of public health nursing, this course facilitates the examination of leadership and role theory within the enactment of a leadership role. This 120-hour Practicum experience
involves a precepted public health nursing leadership placement, a journaled analysis of leadership experiences as they relate to leadership and role theory, and the completion of a project such as development of a new program initiative, planning for a change in the organization's activities, analyzing a leadership or policy issue, assisting with development or management of a component of a budget, planning a quality assurance program, evaluating an activity, and developing an education offering. Cr 4.

NURS 6353 Community-Based Public Health Nursing Intervention
Systematic inquiry into community-based intervention models that integrate knowledge, clinical research, and public health knowledge. Emphasis on community organization and social change models and the development of community-based nursing intervention models for practice. Lec 3, Cr 3

NURS 6363 Curriculum Development in Nursing Focuses on the curriculum development process in nursing. Examines the philosophy, conceptual framework, objectives and program evaluation in curriculum development. Explores the relationship and significance of these elements and their Impact on curriculum implementation. Examines external factors that Impact decisions about curriculum design.

NURS 6464 Teaching Roles and Strategies
This course focuses on the roles of nursing faculty. It includes an analysis of teaching/learning theories, teaching strategies, classroom climate, learning environments and evaluation of teaching/learning. Examination of distance education is included. The course involves the application of teaching/learning theories, strategies and evaluation in an actual educational situation.

NURS 6365 Educational Evaluation in Nursing This role support course introduces the student to the evaluation process in nursing education. The course provides basic knowledge of evaluation design and strategies for evaluating learning outcomes in nursing education along with overall curriculum and program evaluation. Lec. 3, Cr. 3

NURS 6370 Nursing Administration Concepts and Theory
Concepts and theories related to organizational structure and the administrative process are used to examine the roles and responsibilities of the nurse manager in healthcare organizations. The influence
of environmental, technological, and professional forces on the structure and functions of healthcare and nursing service organization and on the role of the nurse manager is explored. Lec. 3, Cr. 3

## NURS 6372 Healthcare Finance

This course presents students will the financial aspects of management across health care settings. Students examine the financial issue in delivery models in such areas as managed cared and explore techniques of cost analysis, strategic planning in budgeting and marketing, and forecasting. Analysis of staffing and case mix, regulatory impacts, and financial interactions with resource allocations are also included. Lec. 3, Cr. 3.

NURS 7400 Field Experience Masters Project Building upon the research skills learned in NURS 6333 (Research in Nursing) the student is given the opportunity to implement their research proposal in a field setting. A total of 320 hours will be spent in an agency of the student's choice and will culminate in the submission of a scholarly research report. Teachinglearning methods include discussing aspects of process with other students and the instructor, working individually on the project, doing peer reviews of report drafts of two student colleagues, and meeting one-toone with the instructor. Students work in a self-paced manner to meet course deadlines by completing a series of steps necessary to finish the project and final written report.

## Graduate Faculty

Abrego, Michelle, Assistant Professor in Educational<br>Administration; B.S. Michigan State University; M.A. Michigan State University; M.Ed. Texas A\&M University-Corpus Christi; Ed.D. University of Texas at Austin

Adams, William L., Professor in History B.A. Central Oklahoma State University; M.A. University of North Dakota; M.A. State University of New York-Binghamton; D.A. University of North Dakota

Adams, Russell, Lecturer in International Business Management B.S. University of Texas at San Antonio; M.I.M. ThunderbirdAmerican Graduate School of International Management

Adomaitis, Ray Assistant Professor in School Specialties B.A., University of Illinois; Ph.D., Northwestern University

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[^0]:    1 By an area in Mathematics we mean Algebra, Geometry, Analysis, or Applied Mathematics and Statistics.

[^1]:    BILC 6361 Issues in Dual Language Education This course focuses on the psychological, sociocultural, cognitive, and cultural factors that shape bilingual education programs. Students will analyze trends, issues

